Appendix L

Phase I Environmental Site Assessment

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Hydrogen Energy California (HECA) Project Site

Kern County, California

Prepared for

Hydrogen Energy California LLC

April 2012

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ACRONYMS

AOCs	Areas of Concern
API	American Petroleum Institute
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
bgs	below ground surface
CalARP	California Accidental Release Prevention Program
Cal-EPA	California Environmental Protection Agency
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CHHSL	California Human Health Screening Level
CORRACTS	Corrective Action RCRA TSDFs
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DTSC	California Department of Toxic Substances Control
EDR	Environmental Data Resources, Inc.
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
U.S. EPA	United States Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Subject Property Assessment
FEMA	Federal Emergency Management Agency
FINDS	Facility Index System
HECA	Hydrogen Energy California
HECA LLC	Hydrogen Energy California LLC
HEI LLC	Hydrogen Energy International, LLC
HIST	historical
HMBP	Hazardous Materials Business Plan
KCEHSD	Kern County Environmental Health Services Department
KCFD	Kern County Fire Department
LUST	leaking underground storage tank
mg/kg	milligrams per kilogram
NOVs	Notices of Violations
NPL	National Priority List

ACRONYMS

PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PG&E	Pacific Gas and Electric Company
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RSL	Regional Screening Level
RWQCB	Regional Water Quality Control Board
TPH	total petroleum hydrocarbons
TSDF	treatment, storage, and disposal facility
URS	URS Corporation
UST	underground storage tank
VOCs	volatile organic compounds

1.1 PURPOSE

The purpose of this Phase I Environmental Site Assessment (ESA) is to provide a professional opinion on the potential presence of current recognized environmental conditions (RECs) at the Subject Property, which is more fully defined in Section 2.1, Location and Property Description. The Subject Property is defined as the Hydrogen Energy California (HECA) Project Site, or Project Site, and consists of approximately 453 acres.

Figure 1, Subject Property Location Map, and Figure 2, Site Plan, illustrate the location and features of the Subject Property. The parcels comprising the Subject Property are listed in Table 2-1, Subject Property Parcels.

REC, as defined by American Society for Testing and Materials (ASTM) Designation E 1527-05, means "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

This ESA was performed according to the recommended guidelines established by ASTM Designation E 1527-05, "Standard Practice for Environmental Subject Property Assessments: Phase I Environmental Subject Property Assessment Process." Because there are multiple federal and state definitions of hazardous materials, for the purpose of this report, hazardous substances and petroleum products are jointly referred to as "hazardous materials."

1.2 DETAILED SCOPE-OF-SERVICES

URS Corporation (URS) was retained by Hydrogen Energy California LLC (HECA LLC) to conduct a Phase I ESA for the Subject Property. URS performed the following work:

1. Reviewed available geologic maps and literature for information on the physical and hydrogeologic settings of the Subject Property.
2. Contracted with Environmental Data Resources, Inc. (EDR), to conduct a regulatory database search of known aboveground storage tanks (ASTs); underground storage tanks (USTs); landfills; hazardous waste generation or treatment, storage, and disposal facilities (TSDFs); and subsurface contamination in the surrounding area up to within 1 mile of the Subject Property (see Appendix D). Based on ASTM Practice, the following search distances from the Subject Property boundaries were used to assess potential environmental impacts:
    - 0.75-mile radius for registered ASTs, underground storage tanks (USTs), Resource Conservation and Recovery Act (RCRA) waste generators, and mines.

- 1-mile radius for leaking underground storage tanks (LUSTs); landfills; Non-Corrective Action RCRA TSDFs; and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites.
- 1.5-mile radius for Corrective Action RCRA TSDFs (CORRACTS), state sites with potential or confirmed hazardous substance releases, and United States Environmental Protection Agency (U.S. EPA) Superfund sites.

3. Researched the history of the Subject Property by reviewing a chronological series of historical aerial photographs and a chronological series of historic topographic maps for the Subject Property and surrounding properties. Copies of these documents are presented in Appendix B.
4. Performed a reconnaissance of the Subject Property and publicly accessible adjacent areas on February 8, 2012, for obvious evidence of potential contamination sources such as current hazardous materials storage or use; unusually stained soils, slabs, and pavements; drains, sumps, drums, tanks, and electrical transformers; stressed vegetation; and discarded hazardous materials containers. Photographs taken during Subject Property reconnaissance are included in Appendix B of this report.
5. Interviewed Mr. John Cauzza III and Mr. Sam Ackerman regarding their former respective properties.
6. Interviewed Mr. Dane Peacock of BP as representative of the current property owner (Hydrogen Energy International [HEI], LLC).
7. Reviewed records available from HEI LLC, HECA LLC, and Mr. John Cauzza III.
8. Requested supplemental records for information regarding the Subject Property from the Kern County Environmental Health Services Department (KCEHSD), the Kern County Fire Department (KCFD), the California Environmental Protection Agency (Cal-EPA), the Regional Water Quality Control Board (RWQCB), and the U.S. EPA.
9. Evaluated the information collected to prepare this report.
10. Prepared this report.

1.3 LIMITATIONS AND EXCEPTIONS

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, expressed or implied.

No evaluation for the presence of asbestos-containing building materials, urea-formaldehyde foam insulation, or other hazardous building materials; mold; methane; radon gas; lead in drinking water; wetlands; industrial hygiene and health and safety; ecological resources and endangered species; indoor air quality; or high-voltage power lines is included in this assessment.

These findings and opinions are based on information available from public sources on specific dates (historical photographs, maps, and regulatory agency files, lists, and databases), more

specifically set forth in Appendix A and Appendix B. Although this information is updated continually, it can be incomplete. Information obtained from interviews or provided to URS by Mr. John Cauzza III, Mr. Sam Ackerman, Mr. Dane Peacock, or HEI LLC is assumed to be correct and complete. URS does not assume any liability for information obtained that has been misrepresented, or for items not visible, accessible, or present on the Subject Property at the time of the field reconnaissance. All areas of the Subject Property were accessible during the February 8, 2012, site visit; however, respect for the crops precluded close-up inspection of the drainage ditches and selected agricultural fields which were observed from roads and other accessible areas.

There is no investigation that is thorough enough to preclude the presence of materials on the Subject Property that currently, or in the future, may be considered hazardous. URS cannot warrant or guarantee that not finding indicators of hazardous materials means that hazardous materials do not exist on the Subject Property.

Opinions and judgments expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions.

1.4 USER RELIANCE

This report has been prepared for the sole use of HECA LLC. This report shall not be relied upon by any other party without written authorization from HECA LLC and URS Corporation (URS).

2.1 LOCATION AND PROPERTY DESCRIPTION

The Subject Property is situated in the western-central portion of Kern County, in Section 10 of Township 30 South, Range 24 East, as shown on Figure 1. The Subject Property is west of Tupman Road and south of Adohr Road. The street address of the Project Site is 7361 Adohr Road.

The Subject Property is approximately 1.5 miles northwest of the unincorporated community of Tupman, California; approximately 1 mile south of Stockdale Highway; and approximately 2 miles southwest of Interstate 5 (which extends generally from the southeast to northwest, east of the Subject Property). The Tule Elk State Reserve is approximately 0.25 mile east of the Subject Property, east of Tupman Road.

The Subject Property consists of agricultural fields bisected by irrigation and drainage canals. Figures 1 and 2 show the Subject Property location and layout. The Subject Property is bounded by the following:

- North: Agricultural fields, a Farm Operations Area, two occupied residences, the Ackerman Property, with Adohr Road beyond (see Photos 1 and 2 in Appendix B).
- South: Agricultural fields and an irrigation canal.
- East: Tupman Road, with agricultural fields beyond.
- West: A dirt farm road (herein referred to as Dairy Road right-of-way) (see Photo 3).

For purposes of clarification, and because of recent changes to property ownership, the following parcels north of the Subject Property are referred to as follows:

- The 4.72-acre parcel containing a residence located northwest of the Subject Property is herein referred to as the Ackerman Property. For the purposes of the HECA Project, this is within the area referred to as the Controlled Area, which consists of property adjacent to the Project Site that will be owned and controlled by HECA LLC.

- The approximately 30-acre area containing storage barns, a maintenance shop, a disused rice elevator, and a residence is referred to as the Farm Operations Area. This area is also within the Controlled Area.

The Subject Property includes portions of three parcels listed in Table 2-1. The majority of the Subject Property is currently comprised of agricultural land as shown in Figure 2 and Photos 4 through 7 in Appendix B).

According to Mr. John Cauzza III and Mr. Sam Ackerman, the Subject Property parcels were purchased from Palm Farms, Inc., in 1995 and subsequently sold to HECA LLC in February 2011. According to Mr. Dane Peacock of BP, ownership of the parcels was transferred from HECA LLC to HEI LLC in September 2011.

Table 2-1
Subject Property Parcels

APN	Current Owner	Approximate Size (acres)
Part of 159-040-02	HEI LLC	75
Part of 159 040-16	HEI LLC	376.5
Part of 159-040-18	HEI LLC	1.5
Total		**453**

2.2 SITE CHARACTERISTICS

The Subject Property is approximately 453 acres, with the majority currently comprised of agricultural land, including cultivation of cotton, alfalfa, and onions. There are no buildings on the Subject Property.

The Subject Property includes portions of irrigation and drainage canals, which generally extend from north to south.

The West Side Canal (and the Outlet Canal), Kern River Flood Control Channel, and the California Aqueduct (State Water Project) are approximately 500, 700, and 1,900 feet south of the Project Site, respectively.

2.3 CURRENT AND HISTORICAL USES OF THE SITE

According to historical aerial photographs and topographic maps, the Subject Property has historically been and currently remains primarily in agricultural use. According to Mr. John Cauzza III, the Subject Property was purchased in 1995. Under the previous owners, Palm Farms, Inc., the Subject Property was used for agricultural production.

HEI LLC purchased the Subject Property in 2011 and leased it back to Cauzza Farms for agricultural use.

2.4 LOCAL GEOLOGY AND HYDROGEOLOGY

The elevation of the Subject Property is approximately 288 feet above mean sea level. The Subject Property is located in the San Joaquin Valley. The San Joaquin Valley is California's leading agricultural producing region, and five of its counties (Fresno, Kern, Tulare, Merced, and Stanislaus) rank among the state's top 10 counties in farm production value. Oil and gas is also an important industry in the San Joaquin region. The deepest wells and about half of the largest oil fields are found in Kern County, as is the Elk Hills Oil Field (formerly named the Elk Hills Naval Petroleum Reserve). The Subject Property is generally flat, and the topographic gradient generally slopes to the west.

2.4.1 Geology

The San Joaquin Valley is bordered to the east by the Sierra Nevada Mountain Range or batholith. The Sierra Nevada batholith is composed of granitic rocks variously described as granite, quartz-monzonite, granodiorite, and quartz diorite. The Coastal Ranges border the San Joaquin Valley to the west. The Coastal Ranges were formed in the Late Pliocene age, and major deformation of the ranges and adjacent parts of the San Joaquin Valley occurred. Surface anticlines such as Elk Hills, Kettleman Hills, and Wheeler Ridge quickly became major surface features rising from the valley floor. This deformation and uplift continues today and is measured at places such as Buena Vista Hills.

The valley that formed between the Sierras to the east and the Coastal Ranges to the west is an asymmetrical synclinal trough with an axis centered to the west. The elongate lowland known as the Great Valley is in size 400 miles long and 50 miles wide and rises from slightly below sea level in the delta area to 400 feet in elevation at the northern and southern ends. The southern portion is called the San Joaquin Valley. Bakersfield and Tupman, California, are located on the southeastern end. Over 30,000 feet of sediments ranging in age from Cretaceous to recent have accumulated within the San Joaquin Basin. The basin was formed from compressive forces between the North American and Pacific continental plates. As the basin sank, sediments from the rising mountains to the east (ancestral Sierra Nevada) and lesser amounts from the west accumulated in a thick wedge in the valley. The valley was once a great inland sea basin that was inundated or flooded periodically. The last large lake to occupy the Valley was Lake Corcoran about 600,000 years ago. The lake occupied approximately the western half of the Valley from the Stockton arch south to the bend in the San Joaquin River.

Kern County is located in the southern Central Valley and extends east beyond the southern slope of the Eastern Sierra Nevada range into the Mojave Desert and includes parts of the Indian Wells Valley and the Antelope Valley. From the Sierras, the county extends across the floor of the San Joaquin Valley to the eastern edge of the Temblor Range, part of the Coastal Ranges. To the south, the county extends over the ridge of the Tehachapi Mountains.

The EDR report included soil data for two locations in the vicinity of the Subject Property. Data for the first location indicated a soil component name of Lokern with surficial deposits generally less than 7 inches deep. These soils are moderately well drained and have slow infiltration rates. There are two subsurface layers in this soil. The upper layer exists at a depth from 7 to 48 inches, and the lower (deeper) layer exists at a depth between 48 to 66 inches. Although no soil texture classes were reported by EDR for these soils, bedrock occurs at a depth greater than 66 inches below ground surface (bgs). The second location indicated a soil component name of Buttonwillow with surficial deposits generally less than 27 inches deep. These soils are moderately well-drained and have slow infiltration rates. There are two subsurface layers in this soil. The upper layer exists at a depth from 27 to 55 inches, and the lower (deeper) layer exists at a depth between 55 to 64 inches. Although no soil texture classes were reported by EDR for these soils, bedrock occurs at a depth greater than 64 inches bgs.

2.4.2 Hydrology

Surface Water

Surface water exists south of the Subject Property in canals and on the Subject Property in a few drainage ditches and irrigation ditches. Water is not constantly present in the Outlet Canal on the southern boundary of the Subject Property or in the drainage ditches but would be present during periods of time when crops are being irrigated. At the approximate east–west center of the Subject Property, an irrigation canal briefly extends to the southwest before intersecting with the West Side and Outlet Canals. The drainage ditch extends from the northwest to the southeast. Several smaller irrigation ditches traverse the Subject Property from north to south and east to west around crop fields. The irrigation ditches are fed by the West Side Canal, lying southwest of the Subject Property, and the East Side Canal, which lies approximately 0.25 mile east of the northeastern corner of the Subject Property (at the intersection of Adohr and Tupman Roads).

The Subject Property generally slopes to the west, toward the West Side Canal. From observation of the Subject Property and input provided by Mr. John Cauzza III, it appears that any surface water runoff caused by storm precipitation events would flow to the west and drain into the West Side Canal.

The Kern River Flood Control Channel is located approximately 700 feet south of the Project Site. This channel conveys overflows from the Kern River during flood events. The floodplain associated with this channel does not extend onto the Project Site. The California Aqueduct, which supplies agricultural and municipal areas in Southern California, is located parallel to and west of the West Side and Outlet canals, approximately 500 feet south of the Project Site.

According to Federal Emergency Management Agency (FEMA) data provided by EDR, the Subject Property is not situated within a 100-year or 500-year flood zone.

Groundwater and Oil and Gas Wells

The EDR report (Appendix D) mapped two groundwater wells on the Subject Property (in the central portion of the Subject Property), and an additional nine wells located within 0.5 mile of the property boundary. The two wells mapped in agricultural fields on the Subject Property were not visible during the URS 2012 site visit.

The EDR report lists two California Division of Oil, Gas, and Geothermal Resources (DOGGR)-registered oil and gas wells within a 1-mile radius from the boundary of the Subject Property. It appears that one of these wells (American Petroleum Institute [API] well number 02952932) was located in the central portion of the Subject Property. API well number 02937474 was located approximately 0.5 mile south of the Subject Property. These former wells are shown in the EDR Report in Appendix D. The DOGGR database entry stated that these wells were plugged and abandoned (dry hole), as of November 18, 1950. URS visited the locations of the two DOGGR wells and saw no evidence of the wells in the cultivated fields.

Wetlands

There are no mapped wetlands located on the Subject Property. According to the National Wetland Inventory map included in the EDR report, the nearest national and state wetlands are a small area approximately 0.1 mile east of the Subject Property border near the intersection of Tupman Road and Station Road. In addition, more extensive wetlands are mapped generally extending from the southeast to the northwest, in the Kern River Flood Control Channel.

3.1 SITE AND ADJOINING PROPERTY HISTORICAL USE INFORMATION

URS reviewed aerial photographs, historical topographic maps, and city directories to compile the historical site information presented in Table 3-1 below. URS requested historical Sanborn™ fire insurance maps for the Subject Property; however, none were available.

3.1.1 Aerial Photographs

URS reviewed 29 aerial photographs for the Subject Property and the surrounding areas available through EDR. Photographs were dated from 1946 (two photos), 1956 (two photos), 1967, 1974, 1984, 1994, 2005, and 2006. Each of the aerial photographs depicts the Subject Property as undeveloped and in use for agricultural production; primarily, crop production. These aerial photographs are included in Appendix C, and the descriptions of the photos are presented in Table 3-1.

3.1.2 Topographic Maps

URS reviewed five historic topographic maps of the Subject Property and surrounding properties available through EDR representing the years 1912, 1933, 1954, 1968, and 1973. The topographic maps reviewed are included in Appendix C, and the descriptions of the maps are presented in Table 3-1.

3.1.3 City Directories

URS requested historic city directories for the Subject Property from EDR through their collection of Haines Criss-Cross Directories for the years 1971 through 2006. EDR found no properties listed at the Subject Property address of Dairy Road/Adohr Road; Buttonwillow, California 93206.

URS requested historic city directories for surrounding properties from EDR using their Haines Criss-Cross Directories for the years 1971 through 2006 (although these years are not necessarily inclusive). EDR reported that city directories were available for the following properties surrounding the source:

- 2001: Residence at 7345 Adohr Road, Buttonwillow, CA 93206
- 2001: Port Organic Products, Inc., at 7361 Adohr Road, Buttonwillow, CA 93206
- 2006: Residence at 7345 Adohr Road, Buttonwillow, CA 93206
- 2006: Port Organic Products, Inc., at 7361 Adohr Road, Buttonwillow, CA 93206

Although these properties are located in unincorporated Kern County, they have Buttonwillow addresses for mailing and directory purposes.

3.1.4 Sanborn™ Fire Insurance Maps

EDR reported that there were no Sanborn™ Fire Insurance Maps available for the Subject Property. Sanborn Fire Insurance Maps typically include information pertaining to fire risk and may provide details related to buildings and other structures located on a specified property. It is not uncommon for these maps to be unavailable for these reports, and it is not an indication of potential environmental risk if no maps are available for the Subject Property.

Table 3-1
Historic Site Information

Date	Location	Finding	Source
1912	Subject Property	The 1912 topographic map does not contain section numbers, which makes it difficult to accurately identify the Subject Property. The Subject Property appears to be undeveloped, and no features are shown on the site itself.	USGS Topo map, 1912 Buena Vista Lake, California
	Adjacent Properties	Surrounding area features include the Elk Hills, the town of Buttonwillow, the West Side Canal, Buena Vista and Lake sloughs, North and Coles levees, the Southern Pacific Railroad (approximately 4.5 miles to the north), and two oil pumping stations (approximately 5.5 miles to the northwest and 6 miles to the west).	
1933	Subject Property	The 1933 topographic map shows the eastern edge of the Subject Property. No features or buildings are visible on the site, and it appears undeveloped.	USGS Topo map, 1933 Tupman, California
	Adjacent Properties	The 1933 topographic map shows the Mesquite Hunting Club directly to the northeast of the Subject Property (northeast of what is now the intersection of Tupman Road and Station Road). The East Side Canal runs along the eastern edge of the Subject Property. The Buena Vista Slough is about 3 miles to the south, and the town of Tupman is about 6 miles to the south of the Subject Property.	
1946	Subject Property	The 1946 aerial photographs show the majority of the Subject Property in use as agricultural fields; however, several narrow, long buildings are present in the north-central portion of the Subject Property. A ditch or levee generally parallel to the west of the drainage ditch is also visible north-south across the Subject Property.	Aerial Photograph, 1946
	Adjacent Properties	There are several buildings north of the Subject Property (in the Farm Operations Area) that match the current storage barns and additional long narrow buildings that are no longer present. A ditch matching the current drainage ditch runs across the Farm Operations Area from the northwest to the southeast. The areas to the north, east, and west of the Subject Property appear to be undeveloped except for agricultural fields. The area to the south of the Subject Property, past the canals, appears to be undeveloped.	
1954	Subject Property	The Subject Property appears without any structures in the 1956 topographic map.	USGS Topo map, 1954 East Elk Hills, California
	Adjacent Properties	The 1954 topographic map shows Dairy and Adohr roads (the intersection north of the Subject Property) and Tupman Road. Dairy and Tupman roads run north/south, and Adohr Road runs east/west. The map shows small structures north of the Subject Property, and a landing field east of the structures. To the south of the Subject Property, two wells are near a levee that runs east/west. Based on their labels, these wells are presumed to be water wells.	

Table 3-1
Historic Site Information (Continued)

Date	Location	Finding	Source
		There are three wells in the surrounding area: one about 500 feet to the northeast, one 0.25 mile to the east, and one less than 0.5 mile to the northwest. Based on their labels, these wells are presumed to be water wells. The West Side and Outlet canals are south of the Subject Property, with a narrow reservoir running northwest to southeast along the edge of the Outlet Canal. A levee runs south of the Subject Property and connects to a main drain from the north. A pipeline appears north of the Subject Property, originating at the intersection of Tupman and Adohr roads, and extending to the east. The topographic map labels do not identify the nature or content of the pipeline. About 5 miles southwest of the Subject Property, there are numerous oil wells and oil tanks in the east Elk Hills. The area is labeled *Naval Petroleum.*	
1956	Subject Property	The 1956 aerial photos do not show any of the long narrow structures shown on the 1946 aerial photo. The irrigation ditch or canal seen in the 1946 aerial photograph along the eastern edge of the Subject Property does not appear in the 1956 aerial photograph.	Aerial Photograph, 1956
	Adjacent Properties	The 1956 aerial photos do not show any significant changes in the surrounding areas from the 1946 aerial photos. What appears to be the West Side and Outlet canals are shown south of the Subject Property. An irrigation ditch or canal east of the Subject Property does not appear to be as prominent as in the 1946 aerial photograph.	
1967	Subject Property	The 1967 aerial photos do not show any significant changes in the Subject Property (agricultural fields and undeveloped); however, the two ditches have been replaced by a single north-south ditch that matches the current configuration of the drainage ditch.	Aerial Photograph, 1967
	Adjacent Properties	The 1967 aerial photos do not show any significant changes in the surrounding areas, with the exception of the construction of a new, large canal (the California Aqueduct). Canals and ditches that were apparent in the 1946 and 1956 aerial photos no longer appear on the Subject Property.	
1968	Subject Property	The 1968 map shows only the eastern edge of the Subject Property, which shows no change from the 1933 or 1954 maps for that area.	USGS Topo map, 1968 Tupman, California
	Adjacent Properties	The 1968 map shows only the eastern edge of the Subject Property, which shows no change from the 1933 or 1954 maps for the surrounding areas.	
1973	Subject Property	The 1973 map does not show any significant changes in the Subject Property (agricultural fields and undeveloped land).	USGS Topo map, 1973 Tupman, California
	Adjacent Properties	The 1973 map shows new, large buildings in the Farm Operations Area near the landing field. The 1973 map shows no other significant changes from the 1933, 1954, or 1968 maps of the surrounding areas except for the California Aqueduct, located south of the Subject Property.	

Table 3-1
Historic Site Information (Continued)

Date	Location	Finding	Source
1974	Subject Property	The 1974 aerial photos do not show any significant changes in the Subject Property (agricultural fields and undeveloped land).	Aerial Photograph, 1974
	Adjacent Properties	The 1974 aerial photos do not show any significant changes in the surrounding areas (agricultural fields and relatively undeveloped), with the exception of the completed California Aqueduct.	
1984	Subject Property	The 1984 aerial photos do not show any significant changes in the Subject Property (agricultural fields and undeveloped) from the 1974 aerial photos.	Aerial Photograph, 1984
	Adjacent Properties	The 1984 aerial photos do not show any significant changes in the surrounding areas, with the exception of the completed California Aqueduct south of the site.	
1994	Subject Property	The 1994 aerial photos do not show any significant changes in the Subject Property (agricultural fields and undeveloped) from the 1984 aerial photos.	Aerial Photograph, 1994
	Adjacent Properties	The 1994 aerial photos do not show any significant changes in the surrounding areas (agricultural fields and relatively undeveloped land) from the 1984 aerial photos.	
2001	Subject Property	The 2001 City Directory lists 7361 Adohr Road, Buttonwillow, CA 93206 as Port Organic Products Ltd.	City Directory, 2001
	Adjacent Properties	The 2001 City Directory lists 7345 Adohr Road, Buttonwillow, CA 93206 as residential.	
2005	Subject Property	The 2005 aerial photos does not show any significant changes in the Subject Property (agricultural production and undeveloped land) from the 1994 aerial photos.	Aerial Photograph, 2005
	Adjacent Properties	The 2005 aerial photo does not show any significant changes in the surrounding area with the exception of the addition of equipment, containers, and/or debris on the adjacent parcel to the north (Farm Operations Area) southeast of the rice drying barn.	
2006	Subject Property	The 2006 aerial photo does not show any significant changes in the Subject Property.	Aerial Photograph, 2006
		The 2006 aerial photo does not show any significant changes in the surrounding area.	
	Adjacent Properties	The 2006 City Directory lists 7361 Adohr Road, Buttonwillow, CA 93206 as Port Organic Products, Ltd., and Cauzza Brothers.	
2006	Subject Property	The 2006 City Directory lists 7361 Adohr Road, Buttonwillow CA 93206 as Port Organic Products, Ltd., and Cauzza Brothers.	City Directory, 2006
	Adjacent Properties	The 2006 City Directory lists 7345 Adohr Road, Buttonwillow, CA 93206 as residential.	

Source: EDR Report, 2012.

3.1.5 Environmental Lien and Activity Use Limitation Search

URS requested an environmental lien search from EDR, and the results of this search are provided in Appendix C. No environmental liens or Activity Use Limitations were recorded for the Subject Property, according to EDR. According to the Lien Search report the Subject Property is currently owned by HEI LLC.

3.2 PREVIOUS REPORTS

URS reviewed the following previous reports in preparing this Phase I ESA. According to Mr. Dane Peacock with BP, the AECOM Phase II ESA of the Subject Property and adjacent areas is the most recent environmental report that was commissioned by HECA LLC.

- The URS Phase I ESA of the HECA Project Site, dated April 6, 2009 (URS, 2009), describes a portion of the current Subject Property; it was based on a 2009 site visit conducted when the Port Organics plant was in operation north of the current Subject Property. This report concluded that RECs were present. Some of the RECs presented in the 2009 Phase I ESA of the 2009 HECA Project Site are applicable to the current Subject Property and are presented in the conclusion section of this report.

- A sampling report prepared by AECOM in September 2009 for samples collected from the interior and exterior fertilizer tailings piles at the former Port Organics plant is provided in Appendix E (AECOM, 2009). Although the samples were labeled as soil, the report indicates that the samples were collected from the tailings piles themselves. During 2009, the Port Organics interior tailings pile was located north and west of the 2009 HECA Project Site boundary, and the exterior tailings pile was located within the 2009 HECA Project Site boundary. These areas are north of the current Subject Property boundaries. The AECOM report indicates that the fertilizer tailing piles are characterized as "Non-RCRA hazardous waste" based on the analytical results. The term "Non-RCRA hazardous waste" means the waste does not meet the federal (RCRA) definition of hazardous waste, but it meets the more-stringent California definition of hazardous waste, as presented in Title 22 of the California Code of Regulations.

- A URS Phase I ESA of the HECA Project Site, dated August 24, 2010 (URS, 2010), describes a portion of the current Subject Property and areas that are adjacent to the current Subject Property, including the Farm Operations Area and the Ackerman Residence. This Phase I ESA was based on a 2010 site visit conducted when Port Organics was no longer operating in the Farm Operations Area. The report concluded that RECs were present; however, only one was located on the Subject Property: the soil staining adjacent to the airstrip and the drainage ditch. In addition, the Phase I ESA report discussed the unknown USTs and the use of pesticides on agricultural fields. These issues are discussed below and in the 2010 Phase II ESA that followed the Phase I ESA report.

- A December 2010, Phase II ESA conducted by AECOM reported on the results of their September 2010 field investigation on and adjacent to the Subject Property. The field investigation included a geophysical investigation to identify potential buried tanks, and

surface and subsurface soil sampling to evaluate the potential extent of contamination from past activities. The areas investigated by AECOM were based on nine RECs identified in the URS Phase I ESA report, and four additional Areas of Concern (AOCs). No buried tanks were located by the geophysical survey in the areas investigated north of the Subject Property. The survey identified one area of backfilled excavation adjacent to the Barn east of the Ackerman Parcel and a few hundred feet north of the Subject Property boundary. This location was not further investigated by AECOM.

- Soil samples were collected from soil borings at 5-, 10-, and 15-feet bgs. The soil sampling conducted generally did not identify elevated levels of contaminants, with the following exceptions.
  - Borings GP-18 and GP-20 were advanced adjacent to the former wash pad area east of the Ackerman Parcel and west of the South farm storage building in the Farm Operations Area. This location is approximately 250 feet north of the Subject Property boundary (see Photos 8 and 9 in Appendix B). Soil at this location was found to have elevated levels of petroleum hydrocarbons up to 25,000 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons (TPH) in the mineral oil range, exceeding the 1,000 mg/kg screening levels. It appears that the contamination may be in the top 5 feet at this location. In addition, the washwater was historically discharged to a ditch at this location and a sample collected from the sediment at this location had TPH as mineral oil levels up to 93,000 mg/kg.
  - Soil boring GP-10 and sediment sample SS-4 were collected near the stained area adjacent to the southeast end of the crop duster airstrip (see photos 10 to 12 in Appendix B). No petroleum hydrocarbons or volatile organic compounds (VOCs) were detected at this location with the exception of benzene detected in sediment sample SS-4 at a concentration of 2.1 micrograms per kilogram. Low concentrations of several pesticides were detected in sediment sample SS-4, but not in GP-10. Concentrations of potassium, nitrate, sulfate, and phosphate were detected above background in the soil samples collected from boring GP-10 and sediment sample SS-4. In addition, the 5-foot sample collected at GP-10 had a pH of 3.85.
  - In order to evaluate pesticide concentrations in surficial soil, AECOM collected nine sets of 5-point composite samples, including five sets on the Subject Property and four in adjacent parcels. These samples were analyzed for organochlorine pesticides by U.S. EPA Method 8081, and were not analyzed for organophosphorous pesticides or herbicides. Endrin, endosulfan, and dieldrin are present in composite samples SC-1, SC-4, and SC-8 at concentrations that exceed the RWQCB Environmental Screening Levels (ESLs), but did not exceed the California Human Health Screening Levels (CHHSL) or Regional Screening Levels (RSL). SC-1 and SC-4 were located on the Subject Property, and SC-8 on the agricultural fields to the south. These results are consistent with the historical agricultural use. No consistent spatial pattern of pesticides above ESLs was observed.

- AECOM identified and investigated an additional AOC along Adohr Road due to a historical spill from the oil pipeline adjacent to the north side of the road, which was verbally reported by Mr. Sam Ackerman. No evidence of significant contamination was noted, and the historical spill location is approximately 0.5 mile north of the Subject Property
- The AECOM Phase II ESA noted heavy metals concentrations in soil that generally appear to be consistent with naturally occurring heavy metal concentrations in soil.
- Groundwater was not encountered during the Phase II ESA; however, AECOM was not able to advance borings beyond approximately 40 feet bgs. In addition, groundwater was not encountered at depths of up to 101 feet bgs by URS in January 2009.
- The Phase II investigation collected at least one sample at 5 feet bgs from each of the 9 areas identified as RECs in the URS 2010 Phase I ESA. The results from the soil samples collected in the vicinity of the RECs indicate that soil impacts are generally confined to the upper 5 feet. Based on this information, AECOM's investigation concluded that no other significant contamination was detected, in addition to the issues described above. The majority of the investigation covered the Farm Operations Area north of the Subject Property.

4.1 REGULATORY RECORDS

4.1.1 Regulatory Database Search Report

An EDR Radius Map Report was prepared for the Subject Property on March 19, 2012, in accordance with ASTM recommended guidelines, and is included as Appendix D. The EDR report presents the results of a search of federal and state databases, along with a description of each database, that list addresses of sites with known USTs; landfills; hazardous waste generation or TSDFs; and subsurface contamination in the surrounding area.

The goal of reviewing the database report is to identify facilities that have known and documented environmental conditions that may negatively impact the Subject Property.

Table 4-1 summarizes the database information provided by EDR with respect to hazardous substances and wastes on or near the Subject Property. Appendix D includes the complete regulatory database search report, which presents larger search radii because additional coverage was requested from EDR to provide additional information about the Subject Property vicinity. Table 4-1 lists sites within the ASTM search radii from the boundary of the Subject Property identified in the respective databases searched by EDR.

Table 4-1
Federal Databases Searched by EDR

Type of Database	Description of Database/Effective Date	Search Radius	Number of Sites Identified
NPL	NPL of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the U.S. EPA Superfund program.	1.5 mile	0
CORRACTS	RCRA TSDF ordered to implement corrective actions.	1.5 mile	0
CERCLIS	The CERCLIS database identifies hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment.	1 mile	0
FINDS	The Facility Index System (FINDS) database contains both facility information and pointers to other sources that contain more detail.	0.5 mile	1
RCRA TSDFs	Identifies RCRA TSDFs.	1 mile	0
ERNS	U.S. EPA's ERNS list contains reported spill records of oil and hazardous substances.	Target Property	0
RCRA Generators	RCRA regulated hazardous waste generator list; both Large- and Small-Quantity Generators are included in this list.	0.75 mile	0
MINES	Federal database containing all mine identification numbers issued for mines opened since 1971.	0.75 mile	0
DOD	Federal database for Department of Defense sites consisting of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres.	1.5 mile	1
LUST	List of information pertaining to reported LUST investigations.	1 mile	0
UST	State database of active USTs.	0.75 mile	0
AST	State database of registered ASTs.	0.75 mile	1
CA BOND EXP. PLAN	Bond Expenditure Plan – Department of Health Services expenditure plan for appropriation of Hazardous Substance Cleanup Bond Act funds.	1.5 mile	0
HIST UST	Hazardous Substance Storage Container Database – historical listing of UST sites.	0.75 mile	2

Table 4-1
Federal Databases Searched by EDR (Continued)

Type of Database	Description of Database/Effective Date	Search Radius	Number of Sites Identified
SWEEPS UST	Statewide Environmental Evaluation and Planning System – underground storage tank listing updated and maintained by a State Water Resources Control Board contractor in the early 1990s.	0.75 mile	1
SCH	School Property Evaluation Program – proposed and existing school sites evaluated by California Department of Toxic Substances Control (DTSC) for possible hazardous materials contamination.	0.75 mile	0
TOXIC PITS	Toxic Pits Cleanup Act Sites – identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.	1.5 mile	0
SWF/LF	State inventory of solid waste disposal facilities or landfill sites, includes both active and inactive historical landfills.	1 mile	0
WMUDS/ SWAT	Waste Management Unit Database System – used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units.	1 mile	0
CA WDS	Waste Discharge System – addresses sites which have been issued waste discharge requirements.	Target Property	0
CORTESE	Hazardous Waste & Substances Sites List – listed sites are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	1 mile	0
SWRCY	Recycler Database – listing of recycling facilities in California.	1 mile	0
CA FID UST	Facility Inventory Database – contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board.	0.75 mile	0
SLIC	Statewide SLIC Cases (Spills, Leaks, Investigations and Cleanup) – designed to protect and restore water quality from spills, leaks, and discharges.	1 mile	0
ENVIRO-STOR	EnviroStor Database DTSC's Subject Property Mitigation and Brownfields Reuse Program – database that identifies sites that have known contamination or sites for which there may be reasons to investigate further.	1.5 mile	0
LIENS	Environmental Liens Listing – listing of property locations with environmental liens for California.	Target Property	0
CHMIRS	California Hazardous Material Incident Report System – information on reported hazardous material incidents (accidental releases or spills).	Target Property	0
Notify 65	Proposition 65 Records – facility notifications about releases that could impact drinking water.	1.5 mile	0

Table 4-1
Federal Databases Searched by EDR (Continued)

Type of Database	Description of Database/Effective Date	Search Radius	Number of Sites Identified
DEED	Deed Restriction Listing Subject Property Mitigation and Brownfields Reuse Program – sites cleaned up under the program's oversight.	1 mile	0
VCP	Voluntary Cleanup Program Properties – low threat level properties with confirmed or unconfirmed releases and requested that DTSC oversee investigation and/or cleanup activities.	1 mile	0
DRY CLEANERS	Cleaner Facilities – drycleaner related facilities with U.S. EPA ID numbers.	0.75 mile	0
WIP	Well Investigation Program Case List – cases in the San Gabriel and San Fernando Valley area.	0.75 mile	0
CDL	Clandestine Drug Labs – drug lab locations.	Target Property	0
RESPONSE	State Response Sites – identifies confirmed release sites where DTSC is involved in remediation.	1.5 mile	0
HAZNET	Facility and Manifest Data – data extracted from hazardous waste manifests received by the DTSC.	0.5 mile	0
EMI	Emissions Inventory Data – toxics and criteria pollutant emissions data collected by the Air Review Board and local air pollution agencies.	0.5 mile	2
HAULERS	Registered Waste Tire Haulers Listing – listing of registered waste tire haulers.	0.5 mile	0

Source: EDR Report, 2012.

Each database searched by EDR is referenced in Appendix D. The results of the records review are presented in the EDR report and are summarized below.

Subject Property

No database listings were mapped for the Subject Property by EDR.

Subject Property

No database listings were mapped for the Subject Property by EDR.

Adjacent Property

The EDR report identified the following listings adjacent to the Subject Property; however, it should be noted that database listings may be incorrectly plotted due to the poor address accuracy in the area:

- Two historical (HIST) USTs are listed in the HIST UST database near (vicinity of Adohr Road and Tupman Road), with the listed owner as "Palm Farms." From information

provided in the HIST UST database by EDR, Palm Farms, Inc., was listed as having five tanks, storing diesel fuel in two of the tanks, and unleaded, regular, and premium (each in single tanks) for the purposes of farming. Due to limited address information in the HIST UST database, the location of these historical USTs could not be determined from the database, and the historical aerial photographs showed only crops and roadway in this area. The UST database identified Mr. Sam Ackerman as the contact name for the historical USTs at Palm Farms. Therefore, HECA LLC subsequently contacted Mr. Sam Ackerman on July 18, 2010, and HECA LLC provided the following information to URS: Mr. Ackerman recalled that three USTs were previously located on the portion of the Subject Property that is owned by Mr. John Cauzza III, east of the fenceline between the Ackerman and Cauzza properties. He recalled that in 1984, these three tanks were removed due to the federally mandated upgrade requirements for all USTs. Mr. Ackerman did not know of any records regarding the removal of the USTs. Mr. Ackerman also recalled two USTs near the airstrip, located partially on the northeastern corner of the Subject Property and partially on the adjacent property. Mr. Ackerman did not know if these two tanks had been removed. The suspected locations of these tanks were investigated during the 2010 AECOM Phase II ESA as described in Section 3.2.

- The SWEEPS UST database lists five 5,000-gallon diesel USTs registered to Palm Farms in 1985. This listing is likely to be a duplicate of the historical USTs described above.

- The AST database lists a 31,120-gallon unspecified AST registered to Cauzza John & Laura. No further details on the type, contents, or condition of this AST are provided in the database listing. This listing is likely to be for the diesel AST located in the Farm Operations Area.

Surrounding Properties

In addition to the above listings, the following nearby listings were identified during the database review:

- Three listings on the EMI and FINDS databases for Western Milling and Shanco Commodities at 7361 Adohr Road appear to refer to air permits for particulate matter. These listings were mapped approximately 371 feet south of the Subject Property; however, no permanent structures are apparent in the area. This air emissions listing is not considered to be an environmental concern to the Subject Property.

- The Department of Defense (DOD) list, as provided to EDR, revealed that there is one DOD site located at a higher elevation and within approximately 1 mile southwest of the Subject Property boundary. This site is the Elk Hills Oil Field, which was formerly known as the Naval Petroleum Reserve. No details of the potential nature of contamination are available from the database; however, the site is not cross-listed on contaminated site databases. Based on the lack of known releases, the distance, and the location across the Kern River flood control channel, this site is not likely to pose an environmental threat to the Subject Property.

- A HIST UST listing is identified as Martin Snow Farm (EDR address: "Station Rd, ¼ Mile east of"), located approximately 0.1 mile east of the northeastern corner of the Subject Property. This location is consistent with the location of a small farmhouse located near the intersection of Tupman Road and Station Road. The database lists Martin Snow Farm as having two tanks installed in 1970 that were used to store diesel fuel and unleaded gasoline for the purposes of farming. The site is not listed on UST release databases. Based on the lack of known releases, the distance, and the cross-gradient location, this site is not likely to pose a significant environmental threat to the Subject Property.

Orphan Sites

Due to poor or inadequate address information, EDR is not always able to map all sites that have environmental concerns. These listed, but unmapped, properties are referred to as orphan sites. Although the orphan sites are not mapped, EDR searches the same databases that they do for mapped sites, and provides relevant information if an orphan site is found on one of the databases. EDR identified 57 orphan sites in the database report. URS attempted to locate the orphan sites listed and measure their distance from the Subject Property. Based on partial address information, URS concluded that 51 orphan sites identified by EDR were located outside the ASTM recommended survey radius in reference to the Subject Property. Two addresses were located at unmapped locations on Tupman Road: a Chevron pipeline company listing for hazardous waste shipments, and Weatherford listing for a 3,000-gallon AST. Neither listing is indicative of a release, and no Chevron or Weatherford sites were noted along Tupman Road in the vicinity of the Subject Property during the site visit. The four remaining sites could not be located based on partial information.

4.2 USER-PROVIDED INFORMATION

As part of the ASTM 1527-05 standard, the following additional inquiries were made to HECA LLC representatives as the report "users":

1. Identification of environmental cleanup liens against the subject property;
2. Specialized knowledge or experience regarding the subject property;
3. Relationship of the purchase price to the fair market value if the subject property was not contaminated;
4. Commonly known or reasonably ascertainable information regarding the subject property; and
5. Degree of obviousness of the presence or likely presence of contamination at the subject property.

According to HECA LLC representatives, no environmental issues, environmental cleanup liens, or previous reports exist except for those discussed in this 2010 Phase I ESA of the HECA Controlled Area and Ackerman Property prepared by URS and the 2010 Phase II Investigation Report prepared by AECOM.

5.1 LOCAL GOVERNMENT/REGULATORY AGENCY REPRESENTATIVES

URS contacted the KCEHSD, Hazardous Materials Division, and the KCFD for information regarding the Subject Property. In addition, URS requested files from Cal-EPA and performed searches of the online site databases for the Cal-EPA and RWQCB to identify any files regarding the Subject Property. Information and files obtained during the URS 2009 Phase I ESA of the HECA Project Site are also presented in this section.

5.1.1 Kern County Environmental Health Services Department

URS conducted a file review at the KCEHSD, Hazardous Materials Division, on July 8, 2010. URS contacted the KCEHSD in March 2012 concerning any new information regarding hazardous materials and hazardous waste activity at the Subject Property. No response has been received to date regarding new information available from the KCEHSD. If material information is received by URS, it will be provided in an addendum to this report. The reviewed files confirmed the results of the file review performed as part of the URS 2009 Phase I ESA of the adjacent Farm Operations Area; however, no files or information were available regarding the hazardous materials or hazardous waste at the Subject Property.

The KCEHSD files for the adjacent site to the North (Port Organics) can generally be summarized as follows:

- The Port Organics fertilizer manufacturing operation included the use of hazardous materials, including acids, bases, heavy metals, and petroleum hydrocarbons. Based on an April 12, 2005 inspection, KCEHSD concluded that the operations were generally not in compliance with applicable hazardous materials and hazardous waste regulations. The inspection report included photographs of the facility taken during the inspection. The photographs illustrate the relatively poor chemicals management practices and the fragmented state of the concrete catch basin in the storage area. Subsequently, Notices of Violations (NOVs) were issued to Port Organics.

- Follow-up inspections by California Accidental Release Prevention Program (CalARP) and KCEHSD on January 25, 2007, and KCEHSD on November 12, 2008, resulted in a reduced list of compliance issues.

- February 2006 and February 2008 HMBPs for Port Organics detail the amounts of stored chemicals at the site, which included over 12,000 pounds of aqueous ammonia, over 90,000 pounds of sulfuric acid, over 32,000 pounds of phosphoric acid, over 300,000 pounds of various inorganic salts, 40,000 gallons of liquid fish base, and over 40,000 gallons of liquid organic fertilizer product ("Agrolizer" and "Fishilizer"). A list of 73 notes, prepared by Port Organics, was also on file, detailing the nature and uses of various on-site storage and transfer equipment.

- In March 2008, KCEHSD issued a Consent Order with a proposed settlement fee of $9,238.50 for the just-described compliance issues. The Consent Order was signed by KCEHSD and a Port Organics representative.

The KCEHSD files for "Palm Farms" and "Palm Ranch" appear to be for the Farm Operations Area north of the Subject Property. These files describe the 1989 and 2010 hazardous materials storage at the Farm Operations Area, including the following:

- An August 1989 survey drawing showing four tanks labeled diesel (2×), gasoline, and propane. No indication is given as to whether these tanks were aboveground or belowground. However, the largest diesel tank shown matches the current diesel AST south of the maintenance shop.

- A February 2010 HMBP for the Farm Operations Area, indicating maximum on-site storage of 2 × 500 gallons waste oil, 3 × 1,000 gallons and 1 × 10,000 gallons propane, 2 × 5,000 gallons and 4 × 1,000 gallons diesel, 500 gallons gasoline, 4,800 pounds fungicide Vitavax, and 3,100 pounds red seed dye.

- The KCEHSD also noted that a wastewater drain pipe in the southeastern area of the Farm Operations Area was discharging into a nearby drainage ditch used by other farmers (see Section 6.3.4, below).

Copies of files obtained from the KCEHSD during the URS 2009 and 2010 Phase I ESAs are provided in Appendix G.

5.1.2 Kern County Fire Department

URS contacted the KCFD on June 7, 2010, concerning potential hazardous materials and hazardous waste activity at the Subject Property. In a July 5, 2010, telephone call, KCFD Deputy Fire Marshall Mike Cody stated that KCEHSD was the appropriate place to investigate for the requested information, rather than his department. URS contacted the KCFD in March 2012, concerning any new information regarding hazardous materials and hazardous waste activity at the Subject Property. No response has been received to date regarding new information available from the KCFD. If material information is received by URS, it will be provided in an addendum to this report.

5.1.3 Cal-EPA Department of Toxic Substances Control

On January 29, 2009, URS contacted Mr. Alex Baillie, Hazardous Substance Scientist with the California Department of Toxic Substances Control (DTSC) Statewide Compliance and Oversight Enforcement Branch, who stated that the DTSC did not have information on the Subject Property and was not aware of any hazardous material incident or oil spill reported at the Subject Property. URS contacted the DTSC in March 2012, concerning any new information regarding hazardous materials and hazardous waste activity at the Subject Property. The DTSC responded that there was no new information on the Subject Property.

URS searched the Cal-EPA DTSC EnviroStor database for any records on the Subject Property. There were no records found for the Subject Property when searched by county (Kern), town (Buttonwillow), zip code (93206), or using the names/phrases "Cauzza," "Port Organics Products, LTD," or "Palm Farms, Inc."

5.1.4 Regional Water Quality Control Board

URS contacted the RWQCB concerning any files for the Subject Property. As of the date of this report, no response was received from the agency. URS will provide any information received by the agency in an addendum to this report.

URS searched the RWQCB GeoTracker database for any records on the Subject Property. There were no records found for the Subject Property when searched by county (Kern), town (Buttonwillow), zip code (93206), or using the names/phrases "Cauzza," "Port Organics Products, Ltd," or "Palm Farms, Inc."

5.1.5 U.S. Environmental Protection Agency

URS contacted the U.S. EPA concerning any files for the Subject Property. On March 19, 2012, the U.S. EPA responded that they had no file for the Subject Property.

6.1 METHODOLOGY AND LIMITING CONDITIONS

URS performed a site reconnaissance at the Subject Property on February 8, 2012 and interviewed Mr. John Cauzza III and Mr. Sam Ackerman during the site visit. URS staff were not accompanied during the majority of the site visit. The Subject Property was observed by walking the perimeter and internal areas on established roadways. URS staff did not walk through cultivated fields; however, all portions of the fields were visible from the roadways. Areas inaccessible during the site visit are listed in Section 1.3. Appendix B includes photographs taken during site reconnaissance.

6.2 GENERAL SETTING

The Subject Property is between the intersections of Dairy Road, Adohr Road, and Tupman Road in Kern County, California.

The elevation of the Subject Property is approximately 288 feet above mean sea level. The Subject Property occupies an area of approximately 453 acres. The Subject Property primarily consists of cultivated agricultural land with irrigation ditches. No buildings were noted on the Subject Property during the site reconnaissance.

The properties surrounding the Subject Property include a Farm Operations Area to the north, followed by Adohr Road; to the east Tupman Road; and to the west the Dairy Road right-of-way that forms the western border of the Subject Property. An operating ranch and ranch house are east of the Subject Property across Tupman Road. The West Side and Outlet canals are south of the Subject Property, generally extending from the southeast to northwest. Beyond these is the Kern River Flood Control Channel, which appeared as arid vegetation during the site visit. The California Aqueduct lies to the south of this flood channel. The Aqueduct extends generally from the southeast to northwest and is positioned parallel to and south of the West Side and Outlet canals. The Tule Elk State Reserve is located approximately 0.25 mile east of the Subject Property, east of Tupman Road. The reserve extends generally from the north to the south, with Station Road forming the northern boundary. The reserve's southern boundary is just east of the community of Tupman, California. The locations of several of these features are shown on Figure 2.

The Farm Operations Area north of the Subject Property extends over approximately 30 acres and houses the only structures adjacent to the Subject Property. The former Port Organics fertilizer manufacturing plant (comprising approximately 3.5 acres) is on the eastern side of the Farm Operations Area. The area used for the fertilizer manufacturing plant was leased to Port Organics in the past, and their operations ceased at the beginning of 2009. At the time of this Phase I ESA, no documentation of closure or decommissioning was found in the KCEHSD records; however, all containers and the majority of the tailings piles had been removed from the site prior to the URS 2012 site visit.

6.3 INTERIOR AND EXTERIOR OBSERVATIONS

6.3.1 Structures, Grounds, and Subject Property Access

Access to the Subject Property is via Dairy, Adohr, Station, and Tupman Roads. Numerous dirt roads are established on the Subject Property, traversing and bordering the cultivated fields and irrigation ditches.

There are no structures on the Subject Property.

6.3.2 Water, Utilities, Pipelines

Pacific Gas and Electric Company (PG&E) provides electricity to the areas adjacent to the Subject Property. Overhead electrical lines and pole-mounted transformers serve buildings in the Farm Operations Area, and stand-alone well pumps south of the Subject Property. No overhead lines and pole-mounted transformers were noted on the Subject Property itself; but the EDR report identifies on high-voltage transmission line over the Subject Property.

No public water or sewer service is provided to the Subject Property. According to Mr. John Cauzza III, irrigation water is provided by the Buena Vista Water Storage District. Several wells are located adjacent and in close proximity to the Subject Property and are used to replenish water in the irrigation canals. Three wells plugged with concrete were noted south of the Subject Property. Two domestic water supply wells are currently present on the Farm Operations Area north of the Subject Property, as described in Section 6.3.3, below. According to Mr. John Cauzza III a water line traverses the Subject Property to the east towards an offsite well in the Station Road area. In addition, an unknown 2-inch steel pipe was noted in the embankment for the drainage canal on the northernmost portion of the Subject Property.

An oil pipeline runs north of the Subject Property (originating at the intersection of Adohr and Tupman Roads, and extending to the east from the point of origination. A lone pipeline marker was noted during site visit on the northern side of Adohr Road, east of the landing strip and west of Tupman Road.

6.3.3 Wells

As noted in Section 6.3.2, several wells are located adjacent to the south of the Subject Property and are used for irrigation.

Domestic water wells serve the adjacent parcels to the north.

According to the EDR report, two groundwater wells are located on the Subject Property (in the central portion of the Subject Property), and an additional nine wells are located within 0.5 mile of the property boundary. The two wells mapped in agricultural fields on the Subject Property were not visible during the URS site visit.

The EDR report listed two DOGGR-registered oil and gas wells that are located within a 1-mile radius of the Subject Property. One of these wells is located on the Subject Property, to the south-southeast of the center point of the Subject Property, as shown in Appendix D. EDR reported that the wells on the Subject Property were plugged and abandoned (dry holes).

The former well locations were approached during the site reconnaissance and observed from the nearest roadway to avoid damaging crops. No evidence of these former wells was noted during the 2010 or 2012 site visits.

6.3.4 Wastewater Discharge

No public sewer is provided to the Subject Property. According to Mr. John Cauzza III, no septic tanks and associated leach fields are present on the Subject Property; however, four are present in the adjacent Farm Operations area to the north. In addition, Mr. Ackerman stated that his residence is served by a septic tank and leach field north of the Subject Property.

No wastewater discharges from the Subject Property were noted. Agricultural irrigation runoff is collected in the drainage canal that runs through the center of the Subject Property.

No surface water discharges from the Farm Operations Area adjacent to the north were noted during the URS 2012 site visit, with the exception of agricultural irrigation runoff.

6.3.5 Stormwater Drainage/Discharge

Generally, stormwater generated on site would sheet flow to the nearest irrigation or drainage ditch or to the West, East, or Outlet canals. No stormwater permits are held by Mr. John Cauzza III for the farm operations. Mr. John Cauzza III stated that the Buena Vista Storage Water District holds a discharge permit for the drainage canals, and conducts water testing.

The Subject Property is generally flat and gently slopes to the west, toward the West Side Canal. From observation of the Subject Property, it does not appear that stormwater is generated in concentrated flows.

6.3.6 Drains and Sumps

No drains or sumps were noted on the Subject Property during the site reconnaissance. Irrigation drainage canals are described in Section 6.3.5, and shown on Figure 2.

6.3.7 Solid Waste Disposal

There are no designated waste storage areas established in the Subject Property. Agricultural wastes generated by crop planting and harvesting activities are removed from the areas upon generation. Solid wastes are also generated and stored in the Farm Operations Area adjacent north of the Subject Property. In addition, broken concrete and debris were observed in the irrigation ditches used to prevent scouring and reinforce the ditches.

6.3.8 Process Equipment

No process equipment was present on the Subject Property.

6.3.9 Underground Storage Tanks

As described in the “Subject Property” subsection of Section 4.1.1, the EDR report did not identify any existing or historical USTs associated with the Subject Property; however, the EDR report noted 5 historical USTs reported as owned by Palm Farms on Adohr Road, with no

address specified. Based on conversations with Mr. Sam Ackerman, at least three of these five tanks were on the Farm Operations Area north of the Subject Property, and the other two tanks may have been near the airstrip north of the Subject Property. Mr. Sam Ackerman reported that three of the USTs were removed in the 1980s, and he is not aware if the remaining two tanks were removed or are still present. Mr. Sam Ackerman was not aware of any current or historical USTs on the Subject Property. Mr. John Cauzza III reported that he was not aware of any current or historical USTs on his former portion of the Subject Property. As discussed in Section 3.2 AECOM performed a geophysical survey in 2010 to attempt to locate the potential USTs and could not find them in the areas searched (AECOM, 2010).

During the site reconnaissance, URS did not note any fill or vent pipes suggesting the potential presence of USTs on the Subject Property.

Two unknown large concrete covers were noted west of the south storage building, and Mr. John Cauzza III could not provide any information regarding the nature or former use of these structures. There is a potential that these covers are associated with USTs or septic tanks. According to Mr. Sam Ackerman, they may have been used as part of the equipment maintenance and washing operations that were historically conducted in this area. As discussed in Section 3.2, AECOM advanced a single boring adjacent to these features in 2010 to assess potential impacts from them, and no petroleum hydrocarbons were detected in the soil samples collected (AECOM, 2010).

6.3.10 Aboveground Storage Tanks

No ASTs were noted on the Subject Property.

6.3.11 Other Hazardous Materials/Waste Storage

No hazardous materials or wastes were noted on the Subject Property during the URS 2012 site visit.

6.3.12 Pits, Ponds, and Lagoons

There are no pits, ponds, or lagoons on the Subject Property. Irrigation and drainage canals operated by the Buena Vista Storage Water District are present on and adjacent to the Subject Property.

6.3.13 Stained/Discolored Soil or Pavement

Stained soils were observed at the following location on the Subject Property during the February 2012 site visit:

- In the apparent pesticide loading or washing area on the southeastern end of the crop duster landing strip (Photo 11).

No other stained soils were observed on the Subject Property; however, soil staining was noted on adjacent properties to the south (associated with water pump oil and diesel) and north (associated with operations at the Farm Operations Area, the former crop duster hangar, and water pumps in this area).

6.3.14 Evidence of Fill or Illegal Dumping

No evidence of unauthorized or potentially illegal dumping was observed on the Subject Property during the 2012 site visit.

Mr. John Cauzza III was not aware of any fill that had been brought on site in the past. Mr. Ackerman noted that sandy fill was imported as a foundation for the Ackerman residence north of the Subject Property.

6.3.15 Transformers/PCB Items

Numerous pole-mounted transformers were observed on parcels adjacent to the Subject Property, but none were noted on the Subject Property. No other potential polychlorinated biphenyl (PCB)-containing items were observed on the Subject Property.

6.3.16 Air Emissions

Air emission sources include farm tractors and other mobile farm equipment, and diesel-powered irrigation pumps. No permits exist for this equipment. According to San Joaquin Valley Air Pollution Control District rules, farm tractors and other off-road mobile equipment do not require an air permit. Permits are not required for stationary diesel-powered irrigation pumps that are under 50 horsepower. The air permit status of these small emission sources is not considered a significant environmental issue for the purpose of this Phase I ESA. No significant issues were noted with respect to air emissions at the Subject Property.

6.3.17 Asbestos-Containing Materials

URS did not conduct an asbestos survey at the Subject Property, as explained in Section 1.3; however, during the 2012 site visit, URS did not note building materials on the Subject Property, with the exception of concrete rubble placed in the irrigation ditches.

6.3.18 Lead-Based Paint

No painted surfaces were noted on the Subject Property.

6.3.19 Radon

There are no federal or state standards regulating radon exposure; however, the U.S. EPA recommends a maximum exposure level of 4.0 picocuries per liter (pCi/L). Mr. John Cauzza III and Mr. Ackerman were not aware of any radon testing conducted at the Subject Property. URS did not conduct radon sampling during the Subject Property visit. The Subject Property is located in Kern County within U.S. EPA Radon Zone 2, according to the EDR. Properties located in U.S. EPA Radon Zone 2 have a moderate potential to have radon concentrations greater than 2 but less than 4 pCi/L.

The Subject Property consists of approximately 453 acres of land described in Section 2.1, located west of Tupman Road and south of Adohr Road in unincorporated Kern County near Buttonwillow, California.

In performing this ESA and based on the site reconnaissance, review of available documents, and interviews with Mr. John Cauzza III, Mr. Sam Ackerman, and Mr. Dane Peacock, URS identified the following environmental conditions in connection with this Subject Property:

- EDR reported a record of five USTs in the HIST UST database described as Palm Farms, Inc., including two diesel fuel tanks, an unleaded gasoline tank, a regular gasoline tank, and a premium gasoline tank. The address reported for Palm Farms, Inc., is Adohr Road, mapped by EDR as approximately 0.985 mile north-northeast of the Subject Property, according to the EDR HIST UST list from 1990. Based on a conversation with Mr. Sam Ackerman, at least three of these USTs were located on the Farm Operations Area north of the Subject Property, and were removed in 1984. Mr. Ackerman reported that two USTs may be on the adjacent crop duster hangar area, and might not have been removed. These potential UST areas were investigated in 2010, and the USTs could not be located, as discussed in Section 3.2.
- Although the former property owner, Mr. John Cauzza III, reported that he was not aware of any USTs being historically located at the Subject Property, a pipe that may be a UST fill or vent pipe was reported by URS in the 2009 and 2010 Phase I ESAs in the Farm Operations Area north of the Subject Property (as discussed in Section 6.3.9). In addition, two unknown large concrete covers were noted west of the south storage building. Mr. John Cauzza III was aware of these underground structures, but he does not know their nature or details on their former use. Both of these areas were investigated in 2010 and no evidence of releases was found as discussed in Section 3.2.
- Stained soils were observed adjacent to the crop duster landing strip during the Subject Property visit, as detailed in Section 6.3.13. The soil staining is likely to derive from handling of fuels, lubricating oils, and/or pesticides. This area was investigated in 2010 and no significant contamination was found; however, the extent of subsurface impacts does not appear to be defined vertically or horizontally.
- A portion of the Subject Property has been used for agriculture, and agricultural chemicals such as pesticides and herbicides were applied to crops over time. URS noted no specific evidence of stains or storage related to agricultural chemicals, with the exceptions noted in the stained soils above. Surface soils in five areas on the Subject Property were sampled in 2010 to evaluate concentrations of pesticides. The organochlorine pesticides dieldrin, endrin, and endosulfan were detected above industrial screening levels (RWQCB ESLs) in selected samples, but did not exceed other state or federal screening levels (CHHSLs or RSLs). The pesticide results are discussed in more detail in Section 3.2.
- The EDR database search identified one former oil and gas well on the Subject Property that was reported as abandoned in the 1950s. URS visited the reported location of the well during the June 2010 and February 2012 site visits and found no evidence of the well. The history and abandoned status of these wells is documented by DOGGR.

URS did not encounter significant data gaps in performing this ESA, with the exception of the following:

- Time intervals greater than 5 years between historical maps and resources; however, based on the nature of the site use as agricultural fields and the site history available from sources dating back to 1912, this data gap does not appear to be significant.

- Selected environmental agencies have not provided updates on their files regarding the Subject Property at the time this report was prepared. Since the agency files were last reviewed in 2010, it is unlikely that significant new information is available; however, an addendum to this report will be issued if significant information is received from these agencies.

URS has performed an ESA of the Subject Property described in Section 1, located on Adohr Road in unincorporated Kern County, California. Our work was conducted in conformance with the scope and limitations of ASTM Practice E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 1.3, Limitations and Exceptions. This ESA identified the following RECs:

- The 2010 Phase II investigation identified elevated concentrations of petroleum hydrocarbons and other contaminants on the former equipment wash area immediately north of the Subject Property boundary. Because the vertical and horizontal extent of contamination were not defined by the Phase II ESA, and this wash area discharged into a ditch south of the Farm Operations Area boundary, the contamination is considered a potential offsite REC to the Subject Property.
- Stained soils were observed during the Subject Property visit, as detailed in Section 6.3.13. The soil staining is likely to derive from handling of fuels, lubricating oils, and/or pesticides. The AECOM 2010 Phase II ESA sampled in the vicinity of the stained soil and identified selected contaminants; however the extent of any subsurface impacts is not defined.

In addition to the above RECs the following potential environmental issues were noted: in the opinion of URS, they are not considered RECs:

- Surficial samples collected from the agricultural fields on the Subject Property identified levels of pesticides dieldrin, endrin, and endosulfan at concentrations that exceed the RWQCB ESLs, but did not exceed the state CHHSL or federal RSLs. These results are consistent with the historical agricultural use, and no consistent spatial pattern of pesticides above ESLs was observed
- An agency database lists five former USTs located at Palm Farms, Inc., on Adohr Road. Because the Subject Property is also located on Adohr Road, and the property was purchased from Palm Farms, Inc., the USTs may have historically been located on or adjacent to the Subject Property. The 2010 AECOM Phase II ESA investigated selected potential locations for these USTs and identified no USTs and no contamination associated with USTs.

AECOM, 2009. *Results of Soil Sampling Activities Proposed Subject Property near the Intersection of Dairy Road and Adohr Road, Buttonwillow, California*, September 9.

AECOM, 2010. *Phase II Environmental Site Assessment Report, Proposed Hydrogen Energy California Project Site, Adohr and Dairy Roads, Kern County, California*, December.

American Society for Testing Materials (ASTM). 2005. Standard Practice for Environmental Subject Property Assessments: Phase I Environmental Subject Property Assessment Process: Designation E 1527-05.

Cal-EPA GeoTracker database. http://www.geotracker.waterboards.ca.gov/. Searched on March 16, 2012.

Environmental Data Resources, Inc. (EDR), 2012. *Radius Map with GeoCheck®: Inquiry Number: 3251004.1s*, EDR, Inc., Milford, Connecticut. March 19.

Environmental Data Resources, Inc. (EDR), 2010. *Historic Topographic Map Report: Report Number 2755337.44.* EDR, Inc., Milford, Connecticut. May 6.

Environmental Data Resources, Inc. (EDR), 2010. *Sanborn Map Report: Report Number 2755383.3s.* EDR, Inc., Milford, Connecticut. April 27.

Environmental Data Resources, Inc. (EDR), 2012. *Aerial Photograph Decade Package: Report Number* 3293634.1. EDR, Inc., Milford, CT. April 4.

Environmental Data Resources, Inc. (EDR). 2010. *City Directory Abstract: Report Number 2785218.6.* EDR, Inc., Milford, Connecticut. June 4.

Environmental Data Resources, Inc. (EDR), 2012. *Lien Search: Inquiry Number: 3251004.2S.* EDR, Inc., Milford, Connecticut. February 24.

Cal/EPA Envirostor database. http://www.envirostor.dtsc.ca.gov/. Accessed on March 16, 2012.

URS, 2009. *Phase I Environmental Site Assessment, HECA Project Site, Kern County, California*, April 6.

URS, 2010. *Phase I Environmental Site Assessment, HECA Project Site, Kern County, California*, August 24.

10.1 CORPORATE

URS, a Nevada Corporation, provides professional services in engineering and sciences applied to the earth and its environment. One of the main areas of practice is Environmental Property Investigation and Remediation, which involves the application of science and engineering to contamination assessment and cleanup; the management, minimization, treatment, and disposal of hazardous, solid and industrial waste; and regulatory compliance. Phase I ESAs are a part of this practice area and have been conducted by URS globally for several decades.

10.2 INDIVIDUAL

The qualifications of the Project Manager and of the other Environmental Professionals involved in this ESA meet the URS corporate requirements for performing ESAs.

Mr. Giorgio Molinario and Mr. Zenis Walley of the URS San Francisco office performed the site reconnaissance, and Mr. Molinario authored the Phase I ESA report.

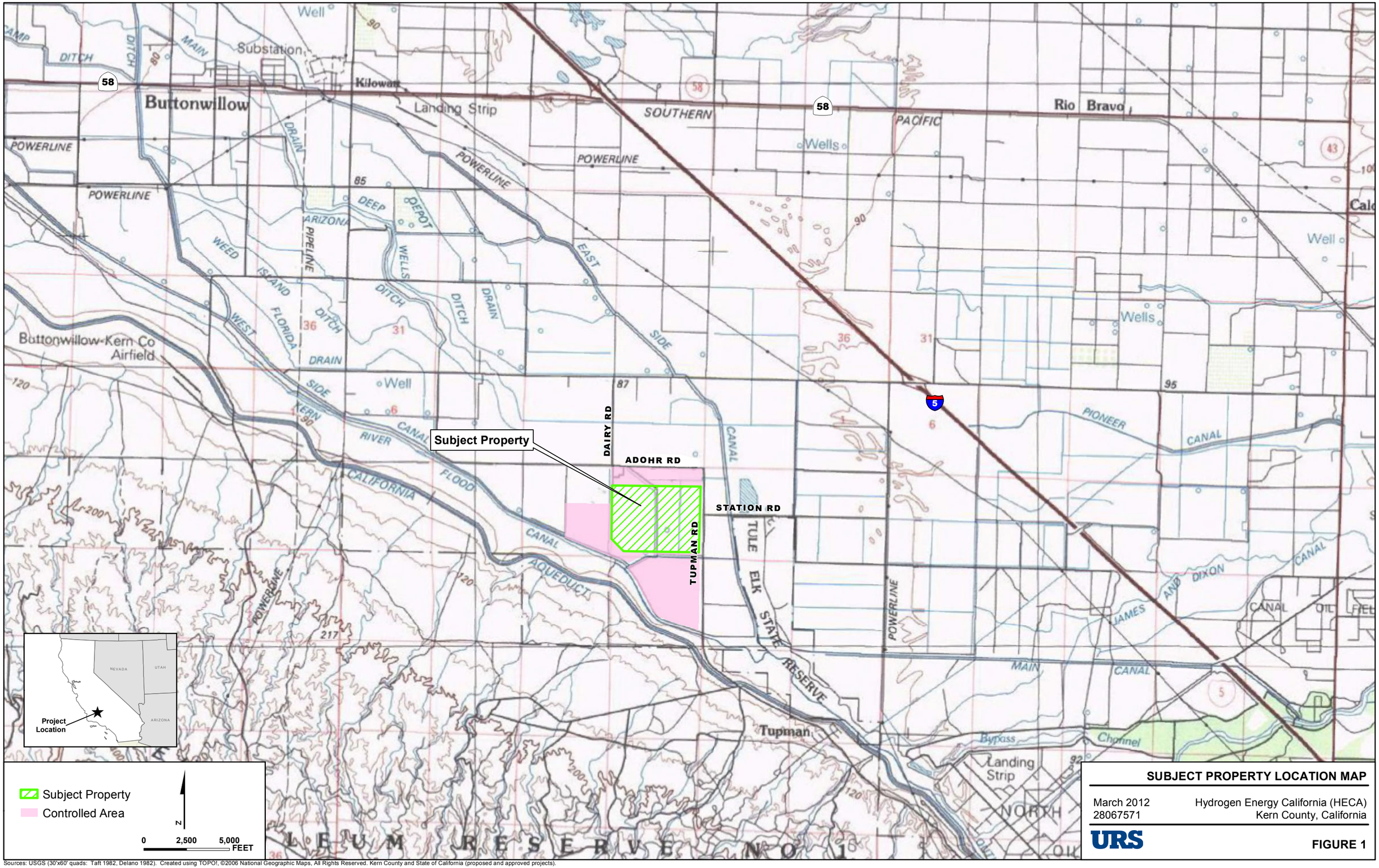
Mr. Molinario is an Environmental Chemist with more than 16 years of environmental compliance and due diligence experience. He has conducted a number of Phase I ESAs in California, the U.S., and internationally. His curriculum vitae is presented in Appendix A.

Mr. Walley is an experienced environmental compliance specialist with significant experience in Phase I ESAs at power generation facilities.

Ms. Cindy Fischer of the URS Denver office performed the internal technical review of this ESA. Ms. Fischer has over 20 years of relevant environmental professional experience.

April 27, 2012

Giorgio Molinario, REA 07436



SUBJECT PROPERTY LOCATION MAP

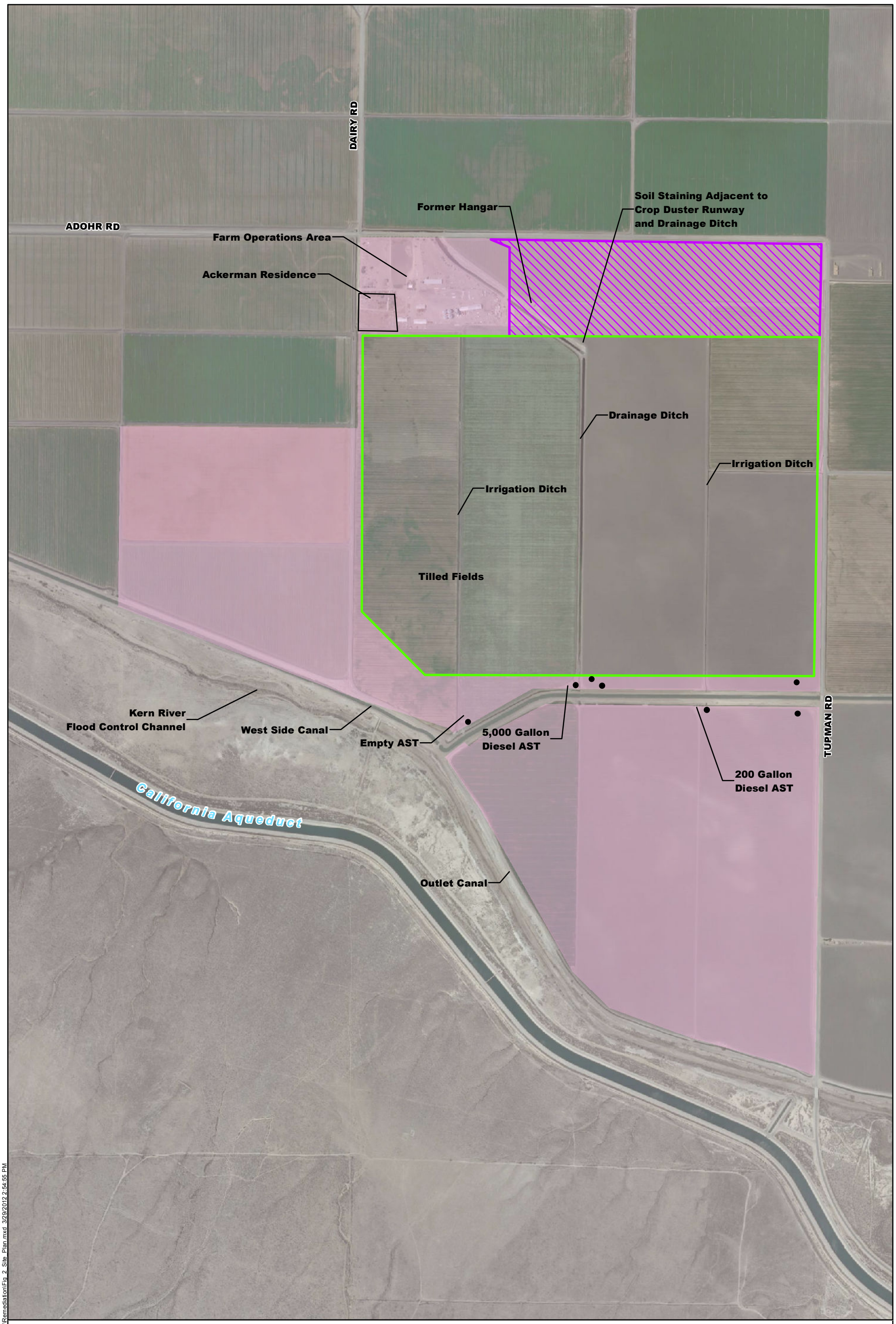
March 2012
28067571

Hydrogen Energy California (HECA)
Kern County, California

URS

FIGURE 1

Sources: USGS (30'x60' quads: Taft 1982, Delano 1982). Created using TOPO!, ©2006 National Geographic Maps, All Rights Reserved. Kern County and State of California (proposed and approved projects).



Irrigation Pump
Subject Property (HECA Project Site)
Construction Staging Area
Controlled Area

N

0 500 1,000 Feet

SITE PLAN

March 2012
28068052

Hydrogen Energy California (HECA)
Kern County, California

URS

FIGURE 2

U:\GIS\HECA\Projects\HECA_2012\Remediation\Fig_2_Site_Plan.mxd 3/29/2012 2:54:55 PM

Source: Aerial Photo, Digital Globe, 2008.

URS

Giorgio Molinario, REA

Senior Environmental Chemist / Project Manager

Overview

Mr. Molinario has 16 years of site investigation, auditing, and regulatory compliance experience. His experience includes due diligence and environmental compliance audits for purchase/sale of individual industrial plants or entire companies. He is well versed with complex numerical analysis of data including cost estimating and the use of probabilistic tools such as Crystal-Ball™ to forecast outcomes and costs. He has extensive experience with the U.S. Environmental Protection Agency, Cal-EPA Department of Toxic Substances Control, and private sites and has constructively interacted with complex groups of regulators and stakeholders.

Areas of Expertise

Site Investigations and Remediation
Environmental Due Diligence
Regulatory Compliance

Education

M.A. (Thesis Pending)/ Environmental Studies/Brown University
B.Sc./Chemistry/1992/Brown University

Registration/Certification

Registered Environmental Assessor / CA / 07436

Training

40-Hour OSHA HAZWOPER
8-hour OSHA HAZWOPER Supervisor
8-hour OSHA HAZWOPER Refresher (2010)
8-Hour Mine Safety and Health Administration Miner Safety Training
5-Day EPA/AHERA Asbestos-Contractor Supervisor
5-Day EPA/AHERA Asbestos-Surveyor and Management Planner
FEMA incident Command System Level 200
USEP Level-A and Readiness Training (2007)
American Red Cross Adult CPR and First Aid

Project Experience

Project Manager, Environmental Site Assessments (Phase I ESAs and Due Diligence), 1996 - ongoing: Mr. Molinario Managed and assisted with numerous ESAs for private and public clients. He conducted ESAs for buyer and vendor sides, in the U.S. and abroad including numerous fast-turnaround multi-site projects. In addition to Phase I ESAs, Mr. Molinario has performed numerous Phase II investigations and compliance audits in the U.S. and abroad targeting specific issues and working under a variety of regulatory regimes. A brief listing of some representative projects includes:

- Managed numerous multi-site Phase I and II ESAs and limited compliance audits of industrial, commercial, and residential site portfolios across the U.S. and abroad;
- Co-wrote the site assessment guidance document for a major oil company and implemented it on several site assessments.
- Managed Phase I and II ESAs of upstream oil and gas sites, petroleum storage sites, manufacturing plants, chemical plants, warehouses and distribution facilities, and landfills;
- Performed due diligence assessments in the US, UK, Italy, France, Israel, and Dem. Rep. of Congo, and managed projects with due diligence in Canada, Mexico, Germany, China, and India.
- Managed several Phase I and II ESAs of proposed power plant sites in California incorporating environmental due diligence, lender-specific requirements, and strategic data collection to incorporate into the California Energy Commission Application for Certification.
- Managed several Brownfield site assessments for the U.S. EPA including multi-parcel sites, former industrial sites, and tribal land.

URS

Giorgio Molinario

Project Manager, Environmental Due Diligence (divestiture) guidance document project, Confidential Major Oil Client, California, 2004: In preparation for a major asset divestiture program Mr. Molinario co-authored a due diligence guidance document incorporating existing internal company protocols and industry best practices. The guidance document includes different levels of due diligence and sample checklists for assets ranging from retail portfolios to upstream facilities. Mr. Molinario worked with company HES staff and counsel to prepare the guidance that was later adopted as a company-wide document. Following the preparation of the guidance document Mr. Molinario 'field tested' the guidance on divestiture due diligence of the upstream assets in the Democratic Republic of Congo and on divestiture of two asphalt plants in the southwestern US.

Project Manager, Pre-acquisition Phase I and baseline Phase II site investigations of two proposed power plant sites, Confidential Client, California: Conducted environmental due diligence meeting client and lender standards at these two proposed power plant sites prior to site acquisition. Managed the baseline site investigation consisting of soil and groundwater investigation. Integrated data collection with the Application for Certification (AFC) team including collection of additional surface water and groundwater data, and collaboration with the biological survey teams.

Project Manager, Pre-acquisition due diligence and environmental liability cost estimating for an underwater power cable project, Confidential Client, California, 2007: Conducted environmental due diligence on parcels identified for use as AC to DC converter stations at the cable terminus. Prepared standard due diligence reports, as well as a detailed environmental remediation/liability cost estimate for use in planning potential remediation and redevelopment options.

Project Manager, Pre-acquisition due diligence of proposed innovative hydrogen power plant site, Confidential Client, California, 2010: This proposed power plant included over 1,000 acres of buffer agricultural land and existing farm and industrial operations on the proposed footprint. Mr. Molinario planned the site due diligence to include additional items required for the power plant Application for Certification (AFC). Mr. Molinario also planned the due diligence of the proposed pipeline and power line linears serving the site. He authored the environmental due diligence reports under an extremely aggressive project schedule.

Project Manager, International Aluminum, due diligence, compliance, and site investigation and remediation consulting 2006-present, $1M: Mr. Molinario was the project manager for the private equity acquisition of this vertically integrated industrial company. He managed resources from multiple URS offices to conduct expedited site audits. He advised the client, external counsel, and advisors on selecting a subset of the sites for a securitized leaseback transaction that would require additional due diligence and environmental compliance upgrades.

URS

Giorgio Molinario

He is currently overseeing environmental compliance and site investigation and remediation tasks on multiple sites across the US for this company.

Senior Auditor, Fluoropolymer and Fluorocarbon manufacturer, due diligence and strategic acquisition consulting: Mr. Molinario was a key player in the high-level due diligence and strategic acquisition consulting for the proposed acquisition of a 900 million dollar fluoropolymer and fluorocarbon manufacturing company with facilities in U.S., Italy, and Germany. Mr. Molinario visited manufacturing plants and interviewed plant management, and senior environmental management to identify due diligence issues, potential for catastrophic failures from to the storage of hydofluoric acid, and future regulatory issues with the continued production of CFCs, HCFCs, and the use of mercury cells in the production of chlorine.

Task Manager, Pre-Acquisition Assessment, Former Oak Knoll Naval Medical Center, Confidential Client, Oakland, CA, 2006 : Mr. Molinario was tasked to review and assess existing environmental reports for this 180-acre navy hospital to prepare a strategy and probabilistic cost estimate for environmental remediation in support of redevelopment. Mr. Molinario prepared an inventory of environmental issues and a probabilistic cost model to integrate environmental remediation into the planning and redevelopment components of the project. The cost model was used by the developer to determine the bidding price for this asset.

Project Manager/Group Manager, U.S. EPA Region IX START Contract, 2006-2008. Managed URS' environmental response group during this contract that included over 150 task orders totaling over $12M. In addition to managing the group Mr. Molinario managed and performed a range of projects including emergency responses, Brownfields site assessments, and expedited removals at CERCLA and petroleum sites.

Project Manager/Project Chemist, State Superfund Sites, Cal-EPA Department of Toxic Substances Control, 1997- ongoing: Managed and performed a range of sampling, remedial, and report-writing tasks at numerous state Superfund sites ranging from mercury recycling facilities to former industrial facilities. Wrote sampling plans and Remedial Investigation Reports, and site investigation and in situ remediation projects.

Task Manager, San Francisco International Airport Runway Safety Area CEQA/NEPA Permitting, San Francisco, CA, San Francisco International Airport, 2011-present: Mr. Molinario managed the hazardous material assessment of the Environmental Assessment (EA) and Initial Study (IS) for this Runway Safety Area project. He assisted the project team and client in evaluating contaminated sites that may pose significant impacts to the construction, and preparing strategies to address the impacts without impacting the project schedule.

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo 1	
Direction Photo Taken: West	
Description: View of the northwest portion of the Subject Property (left) and the adjacent Farm Operations Area (right) across the drainage ditch.	

Photo 2	
Direction Photo Taken: Northwest	
Description: View of the adjacent property to the north. This adjacent portion of the Farm Operations Area that was formerly used as a storage area for the Port Organics fertilizer plant.	

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo 3	
Direction Photo Taken: Northwest	
Description: View of the adjacent property to the west (across Dairy Road right of way) which consists of cultivated fields.	

Photo 4	
Direction Photo Taken: Southwest	
Description: View of the Subject Property from the northeast.	

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo 5	
Direction Photo Taken: West	
Description: View of the northeast portion of the Subject Property (upper left), the Farm Operations Area (background)and adjacent fields to the north (foreground).	

Photo 6	
Direction Photo Taken: Southwest	
Description: View of the eastern portion of the Subject Property from the northeast edge.	

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo 7	
Direction Photo Taken: North	
Description: View of the southern portion of the Subject Property taken from one of the water wells on the adjacent parcel to the south.	

Photo 8	
Direction Photo Taken: South-southwest	
Description: View of the former equipment wash area on the Farm Operations Area north of the Subject Property. The Subject Property is visible in the background.	

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo. 9

Direction Photo Taken:

Southwest

Description:

Close-up view of the former equipment wash area discharge point into the ditch that lies north of the Subject Property. The Subject Property is in the background.

Photo 10

Direction Photo Taken:

West

Description:

View to the west of north central portion of the Subject Property with the drainage ditch in the foreground and the Farm Operations Area on the right.

URS	PHOTOGRAPHIC LOG	
Hydrogen Energy California LLC	HECA Subject Property Kern County, CA	Date: 2/8/2012

Photo 11	
Direction Photo Taken: Southwest	
Description: Close-up of the soil staining adjacent to the drainage ditch at the end of the former crop duster runway located on the eastern portion of the Subject Property.	

Photo. 12	
Direction Photo Taken: West-northwest	
Description: View of the drainage ditch adjacent to the former runway on the northeast portion of the Subject Property and the north adjacent parcel to the north.	

HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 3251004.2S
February 24, 2012

The EDR Environmental LienSearch™ Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

RESEARCH SOURCE

Source 1: Kern County, California Assessor

Source 2: Kern County, California Recorder

PROPERTY INFORMATION

Deed 1:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: John B. Cauzza, III and Laura K. Cauzza, husband and wife, Michael A. Cauzza and Lori Cauzza, husband and wife, Steven P. Cauzza and Antoinette M. Cauzza, husband and wife, and Ronald C. Cauzza, a married man as his sole and separate property and Jornistro Properties, LLC, a California limited liability company

Deed Dated: 02/03/2011

Deed Recorded: 02/03/2011

Instrument: 0211015825

Deed 2:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: Hydrogen Energy California, LLC, a Delaware limited liability company

Deed Recorded: 09/08/2011

Instrument: 0211117643

Legal Description: All that certain piece or parcel of land being a portion of the East Half of the Southeast Quarter of Section 10, Township 30 South, Range 24 East, M.D.M., in the unincorporated area, situate and lying in the County of Kern, State of California.

Legal Current Owner: Hydrogen Energy International, LLC, a Delaware limited liability company

Property Identifiers: 159-040-02

Deed 3:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: John B. Cauzza, III and Laura K. Cauzza, husband and wife, Michael A. Cauzza and Lori Cauzza, husband and wife, Steven P. Cauzza and Antoinette M. Cauzza, husband and wife, and Ronald C. Cauzza, a married man as his sole and separate property and Jornistro Properties, LLC, a California limited liability company

Deed Dated: 02/03/2011

Deed Recorded: 02/03/2011

Instrument: 0211015825

Deed 4:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: Hydrogen Energy California, LLC, a Delaware limited liability company

Deed Recorded: 09/08/2011

Instrument: 0211117643

Legal Description: All that certain piece or parcel of land being Parcel B of Lot Line Adjustment No. 63-94, in Certificate of compliance recorded 01/20/1995 as Instrument No. 7612 of Official Records, being that portion of Parcel 2 of Parcel Map Waiver No. 604, as evidenced by that certain Certificate of Compliance recorded 04/15/1985, in Book 5751, Page 519 of Official Records, being all those portions of Sections 9 and 10, Township 30 South, Range 24 East, M.D.M., and that portion of Section 15, Township 30 South, Range 24 East, M.D.M, together with all those portions of the West Half of the Southeast Quarter and the East Half of the Southwest Quarter of Section 10, Township 30 South, Range 24 East, situate and lying in the County of Kern, State of California.

Legal Current Owner: Hydrogen Energy International, LLC, a Delaware limited liability company

Property Identifiers: 159-040-16

Deed 5:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: Hydrogen Energy California, LLC, a Delaware limited liability company

Deed Recorded: 09/08/2011

Instrument: 0211117643

Legal Description: All that certain piece or parcel of land being a 4.28 acre parcel, more or less, being Parcel A of Parcel Map 10341, filed 08/29/1997 in Book 49, Pages 7 and 8 of Parcel Maps, situate and lying in an unincorporated area of the County of Kern, State of California.

Legal Current Owner: Hydrogen Energy International, LLC, a Delaware limited liability company

Property Identifiers: 159-040-17

EDR Environmental LienSearch™ Report

Deed 6:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: John B. Cauzza, III and Laura K. Cauzza, husband and wife, Michael A. Cauzza and Lori Cauzza, husband and wife, Steven P. Cauzza and Antoinette M. Cauzza, husband and wife, and Ronald C. Cauzza, a married man as his sole and separate property and Jornistro Properties, LLC, a California limited liability company

Deed Dated: 02/03/2011

Deed Recorded: 02/03/2011

Instrument: 0211015825

Deed 7:

Type of Deed: Grant Deed

Title is vested in: Hydrogen Energy International, LLC, a Delaware limited liability company

Title received from: Hydrogen Energy California, LLC, a Delaware limited liability company

Deed Recorded: 09/08/2011

Instrument: 0211117643

Legal Description: All that certain piece or parcel of land being Certificate of Compliance No. 1948, recorded 08/29/1997, as Instrument No. 97-115072, of Official Records, being a portion of Parcel A of Lot Line Adjustment No. 63-64, in Certificate of Compliance recorded 01/20/1995, as Instrument No. 7612 of Official records, being that portion of Parcel 2 of Parcel Map Waiver No. 604, as evidenced by that certain Certificate of Compliance recorded 04/15/1985, in Book 5751, Page 519 of Official Records, being all those portions of Sections 9 and 10, Township 30 South, Range 24 East, M.D.M., situate and lying in an unincorporated area of the County of Kern, State of California.

Legal Current Owner: Hydrogen Energy International, LLC, a Delaware limited liability company

Property Identifiers: 159-040-18

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:
Recorded:
Book:
Page:
Docket:
Volume:
Instrument:
Comments:
Miscellaneous:

EDR Environmental LienSearch™ Report

DEED EXHIBIT

James W. Fitch, Assessor – Recorder
Kern County Official Records

JASON
2/03/2011
1:28 PM

Recorded at the request of
Public

DOC#: 0211015825

Stat Types: 1 Pages: 11

Fees	39.00
Taxes	** Conf **
Others	0.00
PAID	$39.00

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL THIS DEED
AND TAX BILLS TO:

Manatt, Phelps & Phillips, LLP
11355 West Olympic Boulevard
Los Angeles, California 90064
Attn: Keith Allen-Niesen, Esq.

(SPACE ABOVE THIS LINE FOR RECORDER'S USE)

APN: 159-040-02, 159-040-04, 159-040-11, 159-040-16, 159-040-18, 159-190-09

GRANT DEED

PURSUANT TO SECTION 11932 OF THE REVENUE & TAXATION CODE THE AMOUNT OF TRANSFER TAX WILL BE SHOWN ON A SEPARATE STATEMENT.

THE UNDERSIGNED GRANTORS DECLARE FOR GOOD AND VALUABLE CONSIDERATION, the receipt and adequacy of which is hereby acknowledged,

John B. Cauzza, III and Laura K. Cauzza, husband and wife, Michael A. Cauzza and Lori Cauzza, husband and wife, Steven P. Cauzza and Antoinette M. Cauzza, husband and wife, and Ronald C. Cauzza, a married man as his sole property and Jomistro Properties, LLC, a California limited liability company (collectively, "***Grantor***")

hereby GRANTS to HYDROGEN ENERGY CALIFORNIA LLC, a Delaware limited liability company ("***Grantee***"), the following described real property in the County of Kern, State of California:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Together with all improvements thereon and all the estate and rights of Grantor in and to any easements, rights, privileges, appurtenances, water rights and other hereditaments appurtenant to the real property.

EXCEPTING AND RESERVING THEREFROM, for the benefit of Grantor and its assigns, heirs and successors and assigns, all oil, gas and other hydrocarbon rights and also all mineral rights (including, without limitation, all rock, sand, gravel and other earthen and alluvial materials) in, on or underlying the surface thereof, not otherwise reserved in deeds of record; provided, however, the exercise of any such mineral or other right(s) shall be in accordance with that certain Accommodation Agreement which is being recorded substantially concurrently herewith in the Official Records of the County of Kern, State of California.

[SIGNATURES ON THE NEXT PAGE]

DATED: February 3, 2011

JOHN B. CAUZZA, III, and LAURA K. CAUZZA, as community property

JOHN B. CAUZZA, III

LAURA K. CAUZZA

DATED: February 3, 2011

MICHAEL A. CAUZZA and LORI CAUZZA, as community property

MICHAEL A. CAUZZA

LORI CAUZZA

[SIGNATURES CONTINUED ON THE NEXT PAGE]

DATED: February 3, 2011

STEVEN P. CAUZZA and ANTOINETTE M. CAUZZA, as community property

STEVEN P. CAUZZA

ANTOINETTE M. CAUZZA

DATED: February 3, 2011

RONALD C. CAUZZA, a married man as his sole property

RONALD C. CAUZZA

DATED: February 3, 2011

JOMISTRO PROPERTIES, LLC,
a California limited liability company

By:
Name: John B. Cauzza, III
Its: President

[ACKNOWLEDGMENTS ON FOLLOWING PAGE]

300181001.3

STATE OF CALIFORNIA)
) ss.
COUNTY OF KERN)

On February 3, 2011 before me, CONNIE D. SEATON, Notary Public, personally appeared JOHN B. CAUZZA, III and LAURA K. CAUZZA who proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public (Seal)

CONNIE D. SEATON
COMM. #1821878
NOTARY PUBLIC • CALIFORNIA
KERN COUNTY
My Comm. Exp. Nov. 21, 2012

STATE OF CALIFORNIA)
) ss.
COUNTY OF KERN)

On February 3, 2011 before me, CONNIE D. SEATON, Notary Public, personally appeared MICHAEL A. CAUZZA and LORI CAUZZA, who proved to me on the basis of satisfactory evidence—to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public (Seal)

CONNIE D. SEATON
COMM. #1821878
NOTARY PUBLIC • CALIFORNIA
KERN COUNTY
My Comm. Exp. Nov. 21, 2012

STATE OF CALIFORNIA)
) ss.
COUNTY OF KERN)

On February 3, 2011 before me, CONNIE D. SEATON, Notary Public, personally appeared STEVEN P. CAUZZA and ANTOINETTE M. CAUZZA, who proved to me on the basis of satisfactory evidence to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (Seal)
Notary Public

CONNIE D. SEATON
COMM. #1821878
NOTARY PUBLIC • CALIFORNIA
KERN COUNTY
My Comm. Exp. Nov. 21, 2012

STATE OF CALIFORNIA)
) ss.
COUNTY OF KERN)

On February 3, 2011 before me, CONNIE D. SEATON, Notary Public, personally appeared RONALD C. CAUZZA, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ (Seal)
Notary Public

CONNIE D. SEATON
COMM. #1821878
NOTARY PUBLIC • CALIFORNIA
KERN COUNTY
My Comm. Exp. Nov. 21, 2012

EXHIBIT A

CAUZZA PROPERTY

Real property located in the unincorporated area of the County of Kern, State of California, more particularly described as follows:

PARCEL A: (APN: 159-190-09)

ALL THAT PORTION OF SECTION 15, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING NORTH AND EAST OF THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL AND SOUTH OF THE SOUTHERLY RIGHT OF WAY LINE OF BUENA VISTA WATER STORAGE DISTRICT MAIN CANAL, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NE CORNER OF SECTION 15, THENCE ALONG THE EAST LINE OF SAID SECTION 15, SOUTH 00° 07' WEST, 4,380.90 FEET TO A POINT ON THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL; THENCE ALONG THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL, THE FOLLOWING COURSES AND DISTANCES, TO WIT: NORTH 68° 39' WEST, 422.70 FEET; THENCE NORTH 74° 55' WEST, 1,527.70 FEET, NORTH 69° 31' WEST 581.30 FEET; THENCE NORTH 47° 04' WEST 584.20 FEET; NORTH 32° 23' WEST, 1,441.00 FEET; NORTH 26° 25' WEST, 849.20 FEET; NORTH 35° 54' WEST, 662.50 FEET TO A POINT; THENCE LEAVING CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL NORTH 47° 33' EAST, 240.50 FEET TO A POINT ON THE CENTER LINE OF THE MAIN CANAL; THENCE SOUTH 41° 50' EAST, 70.00 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE MAIN CANAL; THENCE ALONG THE SOUTHERLY LINE OF THE MAIN CANAL OF THE FOLLOWING COURSES AND DISTANCES, TO WIT:

NORTH 48° 10' EAST, 172.40 FEET AND NORTH 60° 33' EAST 972.80 FEET TO A POINT ON THE NORTHERLY LINE OF SAID SECTION 15; THENCE LEAVING THE MAIN CANAL AND RUNNING ALONG THE NORTH LINE OF SECTION 15, NORTH 89° 49' EAST, 3,187.40 FEET TO THE POINT OF BEGINNING.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED ½ OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND AS RESERVED IN DEED DATED MARCH 26, 1948 RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74 OF OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600 OF OFFICIAL RECORDS.

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ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT OF ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL B: (APN: 159-040-02 AND 159-040-04)

THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT CERTAIN STRIP OF LAND AS CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT IN DEED RECORDED JULY 1, 1929 IN BOOK 304, PAGE 16 OF OFFICIAL RECORDS, SAID STRIP BEING 140 FEET IN WIDTH, 70 FEET ON EITHER SIDE OF A CENTER LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY RIGHT OF WAY LINE OF EAST SIDE CANAL, 100 FEET, NORTH MEASURED AT RIGHT ANGLES FROM THE SOUTH LINE OF SAID SECTION 11, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., THENCE WEST PARALLEL TO AND 100 FEET DISTANT FROM THE SOUTH LINE OF SAID SECTION 11, 1857.3 FEET TO A POINT ON THE WEST LINE OF SECTION 11, 100 FEET NORTH OF THE SOUTHWEST CORNER THEREOF; THENCE CONTINUING WEST PARALLEL TO AND 100 FEET DISTANT FROM THE SOUTH LINE OF SAID SECTION 10, 1321.1 FEET TO A POINT ON THE WESTERLY LINE OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 10.

ALSO EXCEPTING THEREFROM ALL MINERALS, PETROLEUM, OIL, ASPHALTUM, GAS AND OTHER HYDROCARBON SUBSTANCES, INCLUDING HELIUM, WITHIN OR UNDERLYING SAID LAND, TOGETHER WITH THE EXCLUSIVE RIGHT OF INGRESS AND EGRESS AT ALL TIMES FOR THE PURPOSE OF PROSPECTING FOR, DRILLING FOR AND/OR PRODUCING THE SAME THEREFROM OR THEREUNDER BY FACILITIES LOCATED ON THE SURFACE THEREOF OR ON ADJOINING OR ADJACENT LAND AS RESERVED BY BELRIDGE OIL COMPANY, A CALIFORNIA CORPORATION, IN DEED RECORDED MAY 31, 1944 IN BOOK 1195, PAGE 133, OFFICIAL RECORDS.

PARCEL C: (APN: 159-040-11 and 159-040-16)

PARCEL B OF LOT LINE ADJUSTMENT NO. 63-94, IN CERTIFICATE OF COMPLIANCE RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 7612 OF OFFICIAL RECORDS BEING THAT PORTION OF PARCEL 2 OF PARCEL MAP WAIVER NO. 604 AS EVIDENCED BY THAT CERTAIN CERTIFICATE OF COMPLIANCE RECORDED APRIL 15, 1985 IN BOOK 5751, PAGE 519 OF OFFICIAL RECORDS, BEING ALL THOSE PORTIONS OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, KERN COUNTY, CALIFORNIA, AND THAT PORTION OF SECTION 15, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, KERN COUNTY, CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 10, FROM WHICH POINT THE NORTHWEST CORNER OF SAID SECTION 10 BEARS N 89° 21' 55" W, 929.36 FEET; THENCE ALONG SAID NORTH LINE, S 89° 21' 55" E, 1714.76 FEET TO THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER; THENCE ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 10, S 89° 21' 45" E, 2643.65 FEET TO THE NORTHEAST CORNER OF SAID SECTION 10; THENCE ALONG THE EAST LINE OF SAID NORTHEAST QUARTER, S 00° 45' 43" W, 2640.11 FEET TO THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF SAID SOUTHEAST QUARTER, N 89° 24' 15" W, 1321.11 FEET TO THE NORTHWEST CORNER OF THE EAST HALF OF SAID SOUTHEAST QUARTER; THENCE ALONG THE WEST LINE OF SAID EAST HALF, S 00° 44' 00" W, 2469.88 FEET TO THE NORTH LINE OF THAT CERTAIN 140.00 FOOT WIDE STRIP OF LAND CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT IN BOOK 329, PAGE 453 OF OFFICIAL RECORDS;

THENCE ALONG SAID NORTH LINE THE FOLLOWING COURSES:

(1) N 89° 27' 40" W, 1831.54 FEET;

(2) S 60° 54' 20" W, 343.82 FEET TO THE NORTH LINE OF SAID SECTION 15;

(3) S 60° 54' 20" W, 740.04 FEET;

(4) S 48° 31' 20" W, 200.02 FEET TO THE CENTERLINE OF THE WEST SIDE CANAL;

THENCE ALONG SAID CENTERLINE THE FOLLOWING COURSES:

(1) N 51° 32' 40" W, 178.91 FEET;

(2) N 64° 09' 31" W, 912.16 FEET TO THE NORTH LINE OF SAID SECTION 15;

(3) N 67° 46' 19" W, 81.17 FEET TO THE WEST LINE OF SAID SECTION 10;

(4) N 67° 46' 19" W, 2838.88 FEET TO THE WEST LINE OF THE EAST HALF OF SAID SECTION 9;

THENCE ALONG SAID WEST LINE, S 00° 40' 52" W, 3.52 FEET TO SAID CENTERLINE OF THE WEST SIDE CANAL; THENCE ALONG SAID CENTERLINE, N 67° 38' 28" W, 19.35 FEET; THENCE N 00° 34' 36" E, 2037.03 FEET; THENCE S 89° 25' 15" E, 2619.93 FEET; THENCE N 00° 46' 41" E, 1108.72 FEET; THENCE S 89° 14' 01" E, 1205.04 FEET; THENCE N 00° 23' 43" W, 56.24 FEET; THENCE S 89° 51' 55" E, 369.39 FEET; THENCE N 00° 58' 27" W, 359.53 FEET; THENCE S 54° 20' 18" E, 1215.43 FEET; THENCE N 64° 12' 24" E, 75.09 FEET; THENCE N 2° 38' 35" W, 70.34 FEET; THENCE N 53° 45' 12" W, 1805.07 FEET; THENCE N 43° 21' 49" W, 261.03 FEET TO THE POINT OF BEGINNING BEING PARCEL B OF LOT LINE ADJUSTMENT NO. 63-94 RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 007612 OFFICIAL RECORDS.

TOGETHER WITH ALL THOSE PORTIONS OF THE WEST 1/2 OF THE SOUTHEAST 1/4 AND THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING SOUTHERLY AND EASTERLY OF THAT CERTAIN 140.00 FOOT STRIP OF LAND CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT, RECORDED DECEMBER 26, 1929 IN BOOK 329, PAGE 453 OF OFFICIAL RECORDS.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND AS RESERVED IN DEED DATED MARCH 26, 1948 RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74, OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600, OF OFFICIAL RECORDS.

ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT TO ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL D: (APN: 159-040-18)

CERTIFICATE OF COMPLIANCE NO. 1948, RECORDED AUGUST 29, 1997 AS INSTRUMENT NO. 97-115072 OF OFFICIAL RECORDS, BEING A PORTION OF PARCEL A OF LOT LINE ADJUSTMENT NO. 63-94, IN CERTIFICATE OF COMPLIANCE RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 7612 OF OFFICIAL RECORDS, BEING ALL THAT PORTION OF PARCEL 2 OF PARCEL MAP WAIVER NO. 604 IN CERTIFICATE OF COMPLIANCE RECORDED APRIL 15, 1985 IN BOOK 5751, PAGE 519 OF OFFICIAL RECORDS, BEING PORTIONS OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF SAID SECTION 10, SOUTH 89°21'55" EAST, 929.36 FEET; THENCE SOUTH 43°21'49" EAST, 261.03 FEET; THENCE SOUTH 53°45'12" EAST, 1805.07 FEET; THENCE SOUTH 2°38'35" EAST, 70.34 FEET; THENCE SOUTH 64°12'24" WEST, 75.09 FEET; THENCE NORTH 54°20'18" WEST, 1215.43 FEET; THENCE SOUTH 00°58'27" EAST, 359.53 FEET; THENCE NORTH 89°51'55" WEST, 369.39 FEET; THENCE SOUTH 00°23'43' EAST, 56.24 FEET; THENCE NORTH 89°14'01" WEST, 1205.04 FEET TO THE WESTERLY LINE OF SAID PARCEL A; THENCE ALONG SAID WESTERLY LINE, NORTH 00°46'41" EAST, 1060.94 FEET TO THE NORTHWEST CORNER OF SAID PARCEL A; THENCE ALONG THE NORTH LINE OF SAID PARCEL A, SOUTH 89°23'30" EAST, 41.00 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT CERTAIN PARCEL OF LAND DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 10; THENCE NORTH 89°23'30" WEST ALONG THE NORTH LINE OF SAID SECTION 9, A DISTANCE OF 41.00 FEET TO THE WEST LINE OF THE ABOVE DESCRIBED PARCEL "A"; THENCE SOUTH 00°46'41" WEST ALONG SAID WEST LINE A DISTANCE OF 640.93 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 89°13'19" EAST, A DISTANCE OF 444.00 FEET; THENCE SOUTH 00°46'41" WEST, A DISTANCE OF 419.92 FEET TO THE SOUTH LINE OF SAID PARCEL "A"; THENCE NORTH 89°14'01" WEST ALONG SAID SOUTH LINE A DISTANCE OF 444.00 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL "A"; THENCE NORTH 00°46'41" EAST ALONG THE WEST LINE OF SAID PARCEL "A", A DISTANCE OF 420.01 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND, AS RESERVED IN DEED RECORDED APRIL 29, 1948 IN BOOK 1481, PAGE 74 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL,

GAS, AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, AS GRANTED TO JOE BANDUCCI, ET AL, BY DEED RECORDED JULY 6, 1960 IN BOOK 3281, PAGE 600 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT TO ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL D1:

AN EASEMENT FOR INGRESS AND EGRESS OVER AND ACROSS THAT PORTION OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 9; THENCE NORTH 89°23'30" WEST, ALONG THE NORTH LINE OF SAID SECTION 9, A DISTANCE OF 26.15 FEET; THENCE SOUTH 00°36'30" WEST, A DISTANCE OF 30.00 FEET TO THE SOUTH LINE OF ADOHR ROAD; THENCE SOUTH 44°18'24" EAST, A DISTANCE OF 28.33 FEET; THENCE SOUTH 00°46'41" WEST, A DISTANCE OF 590.98 FEET TO THE POINT OF BEGINNING; THENCE (1) SOUTH 00°46'41" WEST, A DISTANCE OF 74.83 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 50.00 FEET; THENCE (2) SOUTHEASTERLY, NORTHEASTERLY, AND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 266°10'39", AN ARC DISTANCE OF 232.98 FEET TO A POINT OF REVERSE CURVATURE (A RADIAL THROUGH SAID POINT BEARS NORTH 04°36'02" EAST) SAID POINT BEING THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 25.00 FEET; THENCE (3) NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 86°10'39", AN ARC DISTANCE OF 37.60 FEET; THENCE (4) NORTH 89°13'19" WEST, A DISTANCE OF 30.00 FEET TO THE TRUE POINT OF BEGINNING.

James W. Fitch, Assessor – Recorder
Kern County Official Records
Recorded at the request of
Public

SOFIR
9/08/2011
1:42 PM

DOC#: 0211117643

Stat Types: 1 Pages: 12

Fees	48.00
Taxes	** Conf **
Others	0.00
PAID	$48.00

RECORDING REQUESTED BY,
WHEN RECORDED MAIL TO,
AND MAIL TAX STATEMENTS TO:
c/o BP Alternative Energy
Attn: Dane Peacock
700 Louisiana St., 32nd Fl.
Houston, Texas 77002

GRANT DEED

PURSUANT TO SECTION 11932 OF THE REVENUE & TAXATION CODE THE AMOUNT OF TRANSFER TAX WILL BE SHOWN ON A SEPARATE STATEMENT.

FOR VALUABLE CONSIDERATION,

receipt of which is hereby acknowledged,

HYDROGEN ENERGY CALIFORNIA LLC, a Delaware limited liability company (***"Grantor"***)

hereby GRANTS to **HYDROGEN ENERGY INTERNATIONAL LLC,** a Delaware limited liability company (***"Grantee"***), the following described real property in the County of Kern, State of California (the ***"Property"***):

(a) The land described on Exhibit "A" attached hereto (the ***"Land"***); and

(b) All right, title and interest of Grantor in and to the buildings, structures, and improvements, if any, situated on the Land and all fixtures and other property affixed thereto.

Together with the estate and rights of Grantor, if any, in and to: (i) any and all mineral, water and/or subterranean rights now or hereafter pertaining to the Land, to the extent owned by Grantor, (ii) any ingress/egress or other easements or agreements evidencing the same and other recorded or unrecorded instruments benefiting the Property, (iii) development rights, entitlements, governmental

approvals, licenses, permits, and similar such documents related to the Property, (iv) any and all right, title and interest of Grantor in and to any roads, streets, and ways public and/or private, now or hereafter serving the Property, and (v) the rights of landlord or lessor in and to existing leases of the Property or any portion thereof.

The conveyance of the Property made by this Deed is accepted Grantee subject to the following, which are exceptions to such conveyance and to any warranty of title by Grantor hereunder: all valid and subsisting encumbrances, conditions, covenants, restrictions, reservations, mineral/royalty reservations or mineral/royalty interest conveyances, exceptions, rights-of-way, and easements presently affecting the Property, rights, privileges, appurtenances, and hereditaments described in this Deed, and all laws, regulations, and restrictions applicable to the Property or the use of the Property by applicable governmental authorities.

SIGNATURES TO FOLLOW

GRANTOR:

HYDROGEN ENERGY CALIFORNIA LLC

By: Marilyn Wade
Name: MARILYN WADE
Title: Secretary

STATE OF California }

COUNTY OF Los Angeles }

On September 2, 2011 before me, Debbie L. Foster, Notary Public (here insert name and title of the officer), personally appeared Marilyn Wade, who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

DEBBIE L. FOSTER
Commission # 1838438
Notary Public - California
Los Angeles County
My Comm. Expires Mar 25, 2013

Debbie L. Foster
(Signature)
Printed Name: DEBBIE L. FOSTER
Notary Public, State of: California

(NOTARY SEAL)

EXHIBIIT "A"
Legal Description

Real property in the City of Button Willow, County of Kern, State of California, described as follows:

PARCEL A:

PARCEL A IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, AS PER PARCEL MAP NO. 10341, FILED AUGUST 29, 1997 IN BOOK 49 PAGE(S) 7 AND 8 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND AS RESERVED IN DEED DATED MARCH 26, 1948 RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74, OR.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600, OF OFFICIAL RECORDS.

ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT TO ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852 PAGE 2322, OFFICIAL RECORDS.

ALSO EXCEPTING ALL REMAINING MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND, LYING BELOW A DEPTH OF 500 FEET, BUT WITHOUT THE RIGHT OF SURFACE ENTRY TO EXPLORE, REMOVE, MARKET, MINE OR DRILL FOR SAME, RESERVED BY PALM FARMS, INC., A CALIFORNIA CORPORATION, BY DEED RECORDED SEPTEMBER 15, 1997, AS INSTRUMENT NO. 97-120757, OF OFFICIAL RECORDS.

PARCEL A-1:

AN EASEMENT FOR INGRESS, EGRESS AND PRIVATE ROAD PURPOSES OVER AND ACROSS THE FOLLOWING DESCRIBED PROPERTY:

ALL THAT PORTION OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 9; THENCE NORTH 89° 23' 30" WEST, ALONG THE NORTH LINE OF SAID SECTION 9, A DISTANCE OF 26.15 FEET; THENCE SOUTH 00° 36' 30" WEST, A DISTANCE OF 30.00 FEET TO THE SOUTH LINE OF ADOHR ROAD AND THE POINT OF BEGINNING.

THENCE (1) SOUTH 44° 18' 24" EAST, A DISTANCE OF 28.33 FEET;

THENCE (2) SOUTH 00° 46' 41" WEST, A DISTANCE OF 590.98 FEET;

THENCE (3) SOUTH 89° 13' 19" EAST, A DISTANCE OF 30.00 FEET;

THENCE (4) NORTH 00° 46' 41" EAST, A DISTANCE OF 591.17 FEET;

THENCE (5) NORTH 45° 42' 23" EAST, A DISTANCE OF 28.25 FEET TO THE SOUTH LINE OF ADOHR ROAD;

THENCE (6) NORTH 89° 22' 30" WEST, A DISTANCE OF 70.01 FEET MORE OR LESS TO THE TRUE POINT OF BEGINNING.

PARCEL B:

ALL THAT PORTION OF SECTION 15, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING NORTH AND EAST OF THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL AND SOUTH OF THE SOUTHERLY RIGHT OF WAY LINE OF BUENA VISTA WATER STORAGE DISTRICT MAIN CANAL, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NE CORNER OF SECTION 15, THENCE ALONG THE EAST LINE OF SAID SECTION 15, SOUTH 00° 07' WEST, 4,380.90 FEET TO A POINT ON THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL; THENCE ALONG THE CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL, THE FOLLOWING COURSES AND DISTANCES, TO WIT: NORTH 68° 39' WEST, 422.70 FEET; THENCE NORTH 74° 55' WEST, 1,527.70 FEET, NORTH 69° 31' WEST 581.30 FEET; THENCE NORTH 47° 04' WEST 584.20 FEET; NORTH 32° 23' WEST, 1,441.00

FEET; NORTH 26° 25' WEST, 849.20 FEET; NORTH 35° 54' WEST, 662.50 FEET TO A POINT; THENCE LEAVING CENTER LINE OF THE KERN VALLEY WATER COMPANY CANAL NORTH 47° 33' EAST, 240.50 FEET TO A POINT ON THE CENTER LINE OF THE MAIN CANAL; THENCE SOUTH 41° 50' EAST, 70.00 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF THE MAIN CANAL; THENCE ALONG THE SOUTHERLY LINE OF THE MAIN CANAL OF THE FOLLOWING COURSES AND DISTANCES, TO WIT:

NORTH 48° 10' EAST, 172.40 FEET AND NORTH 60° 33' EAST 972.80 FEET TO A POINT ON THE NORTHERLY LINE OF SAID SECTION 15; THENCE LEAVING THE MAIN CANAL AND RUNNING ALONG THE NORTH LINE OF SECTION 15, NORTH 89° 49' EAST, 3,187.40 FEET TO THE POINT OF BEGINNING.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED ½ OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND AS RESERVED IN DEED DATED MARCH 26, 1948 RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74 OF OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600 OF OFFICIAL RECORDS.

ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT OF ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL C:

THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT CERTAIN STRIP OF LAND AS CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT IN DEED RECORDED JULY 1, 1929 IN BOOK 304, PAGE 16 OF OFFICIAL RECORDS, SAID STRIP BEING 140 FEET IN WIDTH, 70 FEET ON EITHER SIDE OF A CENTER LINE DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY RIGHT OF WAY LINE OF EAST SIDE CANAL, 100 FEET, NORTH MEASURED AT RIGHT ANGLES FROM THE SOUTH LINE OF SAID SECTION 11, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., THENCE WEST PARALLEL TO AND 100 FEET DISTANT FROM THE SOUTH LINE OF SAID SECTION 11, 1857.3 FEET TO A POINT ON THE WEST LINE OF SECTION 11, 100 FEET NORTH OF THE SOUTHWEST CORNER THEREOF; THENCE CONTINUING WEST PARALLEL TO AND 100 FEET DISTANT FROM THE SOUTH LINE OF SAID SECTION 10, 1321.1 FEET TO A POINT ON THE WESTERLY LINE OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SAID SECTION 10.

ALSO EXCEPTING THEREFROM ALL MINERALS, PETROLEUM, OIL, ASPHALTUM, GAS AND OTHER HYDROCARBON SUBSTANCES, INCLUDING HELIUM, WITHIN OR UNDERLYING SAID LAND, TOGETHER WITH THE EXCLUSIVE RIGHT OF INGRESS AND EGRESS AT ALL TIMES FOR THE PURPOSE OF PROSPECTING FOR, DRILLING FOR AND/OR PRODUCING THE SAME THEREFROM OR THEREUNDER BY FACILITIES LOCATED ON THE SURFACE THEREOF OR ON ADJOINING OR ADJACENT LAND AS RESERVED BY BELRIDGE OIL COMPANY, A CALIFORNIA CORPORATION, IN DEED RECORDED MAY 31, 1944 IN BOOK 1195, PAGE 133, OFFICIAL RECORDS.

PARCEL D:

PARCEL B OF LOT LINE ADJUSTMENT NO. 63-94, IN CERTIFICATE OF COMPLIANCE RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 7612 OF OFFICIAL RECORDS BEING THAT PORTION OF PARCEL 2 OF PARCEL MAP WAIVER NO. 604 AS EVIDENCED BY THAT CERTAIN CERTIFICATE OF COMPLIANCE RECORDED APRIL 15, 1985 IN BOOK 5751, PAGE 519 OF OFFICIAL RECORDS, BEING ALL THOSE PORTIONS OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, KERN COUNTY, CALIFORNIA, AND THAT PORTION OF SECTION 15, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, KERN COUNTY, CALIFORNIA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 10, FROM WHICH POINT THE NORTHWEST CORNER OF SAID SECTION 10 BEARS N 89° 21' 55" W, 929.36 FEET; THENCE ALONG SAID NORTH LINE, S 89° 21' 55" E, 1714.76 FEET TO THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER; THENCE ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 10, S 89° 21' 45" E, 2643.65 FEET TO THE NORTHEAST CORNER OF SAID SECTION 10; THENCE ALONG THE EAST LINE OF SAID NORTHEAST QUARTER, S 00° 45' 43" W, 2640.11 FEET TO THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF SAID SOUTHEAST QUARTER, N 89° 24' 15" W, 1321.11 FEET TO THE NORTHWEST CORNER OF THE EAST HALF OF SAID SOUTHEAST QUARTER; THENCE ALONG THE WEST LINE OF SAID EAST HALF, S 00° 44' 00" W, 2469.88 FEET TO THE NORTH LINE OF THAT CERTAIN 140.00 FOOT WIDE STRIP OF LAND

CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT IN BOOK 329, PAGE 453 OF OFFICIAL RECORDS;

THENCE ALONG SAID NORTH LINE THE FOLLOWING COURSES:

(1) N 89° 27' 40" W, 1831.54 FEET;

(2) S 60° 54' 20" W, 343.82 FEET TO THE NORTH LINE OF SAID SECTION 15;

(3) S 60° 54' 20" W, 740.04 FEET;

(4) S 48° 31' 20" W, 200.02 FEET TO THE CENTERLINE OF THE WEST SIDE CANAL;

(5) THENCE ALONG SAID CENTERLINE THE FOLLOWING COURSES:

(1) N 51° 32' 40" W, 178.91 FEET;

(2) N 64° 09' 31" W, 912.16 FEET TO THE NORTH LINE OF SAID SECTION 15;

(3) N 67° 46' 19" W, 81.17 FEET TO THE WEST LINE OF SAID SECTION 10;

(4) N 67° 46' 19" W, 2838.88 FEET TO THE WEST LINE OF THE EAST HALF OF SAID SECTION 9;

THENCE ALONG SAID WEST LINE, S 00° 40' 52" W, 3.52 FEET TO SAID CENTERLINE OF THE WEST SIDE CANAL; THENCE ALONG SAID CENTERLINE, N 67° 38' 28" W, 19.35 FEET; THENCE N 00° 34' 36" E, 2037.03 FEET; THENCE S 89° 25' 15" E, 2619.93 FEET; THENCE N 00° 46' 41" E, 1108.72 FEET; THENCE S 89° 14' 01" E, 1205.04 FEET; THENCE N 00° 23' 43" W, 56.24 FEET; THENCE S 89° 51' 55" E, 369.39 FEET; THENCE N 00° 58' 27" W, 359.53 FEET; THENCE S 54° 20' 18" E, 1215.43 FEET; THENCE N 64° 12' 24" E, 75.09 FEET; THENCE N 2° 38' 35" W, 70.34 FEET; THENCE N 53° 45' 12" W, 1805.07 FEET; THENCE N 43° 21' 49" W, 261.03 FEET TO THE POINT OF BEGINNING BEING PARCEL B OF LOT LINE ADJUSTMENT NO. 63-94 RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 007612 OFFICIAL RECORDS.

TOGETHER WITH ALL THOSE PORTIONS OF THE WEST 1/2 OF THE SOUTHEAST 1/4 AND THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, MOUNT DIABLO MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, LYING SOUTHERLY AND EASTERLY OF THAT CERTAIN 140.00 FOOT STRIP OF LAND CONVEYED TO THE BUENA VISTA WATER STORAGE DISTRICT, RECORDED DECEMBER 26, 1929 IN BOOK 329, PAGE 453 OF OFFICIAL RECORDS.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND AS RESERVED IN DEED DATED MARCH 26, 1948 RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74, OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600, OF OFFICIAL RECORDS.

ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT TO ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL E:

CERTIFICATE OF COMPLIANCE NO. 1948, RECORDED AUGUST 29, 1997 AS INSTRUMENT NO. 97-115072 OF OFFICIAL RECORDS, BEING A PORTION OF PARCEL A OF LOT LINE ADJUSTMENT NO. 63-94, IN CERTIFICATE OF COMPLIANCE RECORDED JANUARY 20, 1995 AS INSTRUMENT NO. 7612 OF OFFICIAL RECORDS, BEING ALL THAT PORTION OF PARCEL 2 OF PARCEL MAP WAIVER NO. 604 IN CERTIFICATE OF COMPLIANCE RECORDED APRIL 15, 1985 IN BOOK 5751, PAGE 519 OF OFFICIAL RECORDS, BEING PORTIONS OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 10; THENCE ALONG THE NORTH LINE OF SAID SECTION 10, SOUTH 89°21'55" EAST, 929.36 FEET; THENCE SOUTH 43°21'49" EAST, 261.03 FEET; THENCE SOUTH 53°45'12" EAST, 1805.07 FEET; THENCE SOUTH 2°38'35" EAST, 70.34 FEET; THENCE SOUTH 64°12'24" WEST, 75.09 FEET; THENCE NORTH 54°20'18" WEST, 1215.43 FEET; THENCE SOUTH 00°58'27" EAST, 359.53 FEET; THENCE NORTH 89°51'55" WEST, 369.39 FEET; THENCE SOUTH 00°23'43' EAST, 56.24 FEET; THENCE NORTH 89°14'01" WEST, 1205.04 FEET TO THE WESTERLY LINE OF SAID PARCEL A; THENCE ALONG SAID WESTERLY LINE, NORTH 00°46'41" EAST, 1060.94 FEET TO THE NORTHWEST CORNER OF SAID PARCEL A; THENCE ALONG THE NORTH LINE OF SAID PARCEL A, SOUTH 89°23'30" EAST, 41.00 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT CERTAIN PARCEL OF LAND DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 10; THENCE NORTH 89°23'30" WEST ALONG THE NORTH LINE OF SAID SECTION 9, A DISTANCE OF 41.00 FEET TO THE WEST LINE OF THE ABOVE DESCRIBED PARCEL "A"; THENCE SOUTH 00°46'41" WEST ALONG SAID WEST LINE A DISTANCE OF 640.93 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 89°13'19" EAST, A DISTANCE OF 444.00 FEET; THENCE SOUTH 00°46'41" WEST, A DISTANCE OF 419.92 FEET TO THE SOUTH LINE OF SAID PARCEL "A"; THENCE NORTH 89°14'01" WEST ALONG SAID SOUTH LINE A DISTANCE OF 444.00 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL "A"; THENCE NORTH 00°46'41" EAST ALONG THE WEST LINE OF SAID PARCEL "A", A DISTANCE OF 420.01 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND, AS RESERVED IN DEED RECORDED APRIL 29, 1948 IN BOOK 1481, PAGE 74 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AN UNDIVIDED 1/8TH OF ALL MINERALS, OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, AS GRANTED TO JOE BANDUCCI, ET AL, BY DEED RECORDED JULY 6, 1960 IN BOOK 3281, PAGE 600 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A", ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT TO ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 14, 1986 IN BOOK 5852, PAGE 2322 OF OFFICIAL RECORDS.

PARCEL E1:

AN EASEMENT FOR INGRESS AND EGRESS OVER AND ACROSS THAT PORTION OF SECTIONS 9 AND 10, TOWNSHIP 30 SOUTH, RANGE 24 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 9; THENCE NORTH 89°23'30" WEST, ALONG THE NORTH LINE OF SAID SECTION 9, A DISTANCE OF 26.15 FEET; THENCE SOUTH 00°36'30" WEST, A DISTANCE OF 30.00 FEET TO THE SOUTH LINE OF ADOHR ROAD; THENCE SOUTH 44°18'24" EAST, A DISTANCE OF 28.33 FEET; THENCE SOUTH 00°46'41" WEST, A DISTANCE OF 590.98 FEET TO THE POINT OF BEGINNING; THENCE (1) SOUTH 00°46'41" WEST, A DISTANCE OF 74.83 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 50.00 FEET; THENCE (2) SOUTHEASTERLY, NORTHEASTERLY, AND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 266°10'39", AN ARC DISTANCE OF 232.98 FEET TO A POINT OF REVERSE CURVATURE (A RADIAL THROUGH SAID POINT BEARS NORTH 04°36'02" EAST) SAID POINT BEING THE BEGINNING OF A CURVE, CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 25.00 FEET; THENCE (3) NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 86°10'39", AN ARC DISTANCE OF 37.60 FEET; THENCE (4) NORTH 89°13'19" WEST, A DISTANCE OF 30.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL F:

A EASEMENT ESTATE AS CREATED BY THAT CERTAIN "GRANT OF EASEMENT & EASEMENT AGREEMENT" EXECUTED BY JOHN B. CAUZZA III AND LAURA K. CAUZZA HUSBAND AND WIFE AS COMMUNITY PROPERTY, MICHAEL A. CAUZZA AND LORI CAUZZA, HUSBAND AND WIFE AS COMMUNITY PROPERTY, STEVEN P. CAUZZA AND ANTOINETTE M. CAUZZA, HUSBAND AND WIFE AS COMMUNITY PROPERTY, RONALD C. CAUZZA, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY, EACH AS TO AN UNDIVIDED 1/4TH INTEREST, AS GRANTORS AND HYDROGEN ENERGY CALIFORNIA LLC, A DELAWARE LIMITED LAIBILITY COMPANY, AS GRANTEE, RECORDED MAY 3, 2011 AS INSTRUMENT NO. 201157636 OF OFFICIAL RECORDS OF KERN COUNTY, CALIFORNIA, ENCUMBERING THE FOLLOWING REAL PROPERTY IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALFORNIA, DESCRIBED AS FOLLOWS:

THE NORTH ONE HUNDERED FEET (100') OF PARCEL 2 AS SHOWN ON PARCEL MAP WAIVER NO. 603 (CERTIFICATE OF COMPLIANCE), AS EVIDENCED BY DOCUMENT RECORDED APRIL 15, 1985 AS INSTRUMENT NO. 85-36822 OF OFFICIAL RECORDS.

EXCEPT A PERMANENT AND PERPETUAL UNDIVIDED 1/2 OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES WITHIN AND UNDERLYING SAID LAND, AS RESERVED IN DEED DATED MARCH 26, 1948, RECORDED APRIL 29, 1948 IN BOOK 1481 PAGE 74 OF OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 1/8TH OF ALL, MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, AS GRANTED TO JOE G. BANDUCCI, ET AL, BY DEED DATED MAY 19, 1960, RECORDED JULY 6, 1960 IN BOOK 3281 PAGE 600, OFFICIAL RECORDS.

ALSO EXCEPT AS A MINERAL INTEREST AND NOT A ROYALTY INTEREST, 18.75% OF THE OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES IN, UNDER, OR PRODUCED AND SAVED FROM THE PROPERTY FULLY DESCRIBED ON EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF, WITH THE RIGHT OF ENTRY TO THE SURFACE OF SAID REAL PROPERTY FOR THE PURPOSE OF EXPLORING FOR, DEVELOPING AND

REMOVING SUCH OIL, GAS, HYDROCARBONS AND ASSOCIATED SUBSTANCES AS CONVEYED TO EDITH BANDUCCI, A WIDOW, ET AL, IN DEED RECORDED MARCH 18, 1986.

APN: 159-040-17-00-9 and 159-190-09-00-0 and 159-040-18-00-2 (Affects:Parcel D) and 159-190-09-00-0 (Affects:Parcel A) and 159-040-17 and 159-040-02-00 and 159-040-0

HECA
7345 Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 2785218.1
June 04, 2010

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

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Executive Summary

Findings

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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2009 Enhancements to EDR City Directory Abstract

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City Directory Report. Three important enhancements have been made to the EDR City Directory Abstract:

1. *Executive Summary.* The report begins with an Executive Summary that lists the sources consulted in the preparation of the report. Where available, a parcel map is also provided within the report, showing the locations of properties researched.

2. *Page Images.* Where available, the actual page source images will be included in the Appendix, so that you can review them for information that may provide additional insight. EDR has copyright permission to include these images.

3. *Findings Listed by Location.* Another useful enhancement is that findings are now grouped by address. This will significantly reduce the time you need to review your abstracts. Findings are provided under each property address, listed in reverse chronological order and referencing the source for each entry.

Options for Selecting Adjoining Properties. Ensuring that the right adjoining property addresses are searched is one of the biggest challenges that environmental professionals face when conducting city directory historical research. EDR's new enhancements make it easier for you to meet this challenge. Now, when you place an order for the EDR City Directory Abstract, you have the following choices for determining which addresses should be researched.

1. *You Select Addresses and EDR Selects Addresses*. Use the "Add Another Address" feature to specify the addresses you want researched. Your selections will be supplemented by addresses selected by EDR researchers using our established research methods. Where available, a digital map will be shown, indicating property lines overlaid on a color aerial photo and their corresponding addresses. Simply use the address list below the map to check off which properties shown on the map you want to include. You may also select other addresses using the "Add Another Address" feature at the bottom of the list.

2. *EDR Selects Addresses.* Choose this method if you want EDR's researchers to select the addresses to be researched for you, using our established research methods.

3. *You Select Addresses.* Use this method for research based solely on the addresses you select or enter into the system.

4. *Hold City Directory Research Option.* If you choose to select your own adjoining addresses, you may pause production of your EDR City Directory Abstract report until you have had a chance to look at your other EDR reports and sources. Sources for property addresses include: your Certified Sanborn Map Report may show you the location of property addresses; the new EDR Property Tax Map Report may show the location of property addresses; and your field research can supplement these sources with additional address information. To use this capability, simply click "Hold City Directory research" box under "Other Options" at the bottom of the page. Once you have determined what addresses you want researched, go to your EDR Order Status page, select the EDR City Directory Abstract, and enter the addresses and submit for production.

Questions? Contact your EDR representative at 800-352-0050. For more information about all of EDR's 2009 report and service enhancements, visit www.edrnet.com/2009enhancements

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2006	Haines Criss-Cross Directory	X	X	X	-
2001	Haines Criss-Cross Directory	X	X	X	-
1996	Haines Criss-Cross Directory	X	X	X	-
1990	Haines Criss-Cross Directory	-	X	X	-
1985	Haines Criss-Cross Directory	-	X	X	-
1976	Haines Criss-Cross Directory	-	X	X	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

7345 Adohr Road
Buttonwillow, CA 93206

FINDINGS DETAIL

Target Property research detail.

Year	Uses	Source
2006	Residential	Haines Criss-Cross Directory
2001	Residential	Haines Criss-Cross Directory
1996	No Return	Haines Criss-Cross Directory

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

Adohr Road

Adohr Road

Year	*Uses*	*Source*
2006	No address listings beyond (7361) Adohr Road	Haines Criss-Cross Directory
	No other addresses (7200-7499) block Adohr Road	Haines Criss-Cross Directory
2001	No address listings beyond (7361) Adohr Road	Haines Criss-Cross Directory
	No other addresses (7200-7499) block Adohr Road	Haines Criss-Cross Directory
1996	No address listings beyond (7361) Adohr Road	Haines Criss-Cross Directory
	No other addresses (7200-7499) block Adohr Road	Haines Criss-Cross Directory
1990	No address listings Adohr Road	Haines Criss-Cross Directory
1985	No address listings Adohr Road	Haines Criss-Cross Directory
1976	No address listings Adohr Road	Haines Criss-Cross Directory

7361 Adohr Road

Year	*Uses*	*Source*
2006	Cauzza Brothers	Haines Criss-Cross Directory
	Port Organic Products Ltd	Haines Criss-Cross Directory
2001	Port Organic Products Ltd	Haines Criss-Cross Directory
1996	No Return	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY: ADDRESS NOT LISTED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not listed in the research source.

Address Researched	Address Not Listed in Research Source
7345 Adohr Road	1990, 1985, 1976

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The following Adjoining Property addresses were researched for this report, and the addresses were not listed in research source.

Address Researched	Address Not Listed in Research Source
Adohr Road	No Years Found
7361 Adohr Road	1990, 1985, 1976

HECA
7361 Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 2785214.1
June 04, 2010

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
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1996	Haines Criss-Cross Directory	X	X	X	-
1990	Haines Criss-Cross Directory	-	X	X	-
1985	Haines Criss-Cross Directory	-	X	X	-
1976	Haines Criss-Cross Directory	-	X	X	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

7361 Adohr Road
Buttonwillow, CA 93206

FINDINGS DETAIL

Target Property research detail.

Year	Uses	Source
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	Port Orga nic Products Ltd	Haines Criss-Cross Directory
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1990	No address listings Adohr Road	Haines Criss-Cross Directory
1985	No address listings Adohr Road	Haines Criss-Cross Directory
1976	No address listings Adohr Road	Haines Criss-Cross Directory

7345 Adohr Road

Year	Uses	Source
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Adohr Road	No Years Found
7345 Adohr Road	1990, 1985, 1976

HECA
Dairy Road/Adohr Road
Tupman, CA 93276

Inquiry Number: 2755383.3
April 27, 2010

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EDR® Environmental Data Resources Inc

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Milford, CT 06461
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4/27/10

Site Name:
HECA
Dairy Road/Adohr Road
Tupman, CA 93276

Client Name:
URS Corporation
One Montgomery Street
San Francisco, CA 94104-0000

EDR Inquiry # 2755383.3

Contact: Kali Futnani

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Cross Street:
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Project: HECA
Certification # 280E-4FFD-886C

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HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 2755337.3
April 27, 2010

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4/27/10

Site Name:
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Buttonwillow, CA 93206

EDR Inquiry # 2755337.3

Client Name:
URS Corporation
One Montgomery Street
San Francisco, CA 94104-0000

Contact: Kali_futnani

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City, State, Zip: Buttonwillow, CA 93206
Cross Street:
P.O. # 28067571.800041
Project: HECA
Certification # B907-481B-B008

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HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 2755371.3
April 26, 2010

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4/26/10

Site Name:
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Dairy Road/Adohr Road
Buttonwillow, CA 93206

EDR Inquiry # 2755371.3

Client Name:
URS Corporation
One Montgomery Street
San Francisco, CA 94104-0000

Contact: Kali Futnani

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City, State, Zip: Buttonwillow, CA 93206
Cross Street:
P.O. # 28067571.800041
Project: HECA
Certification # D847-42C0-A70C

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HECA
Dairy Road/Adohr Road
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Inquiry Number: 2755337.4
May 06, 2010

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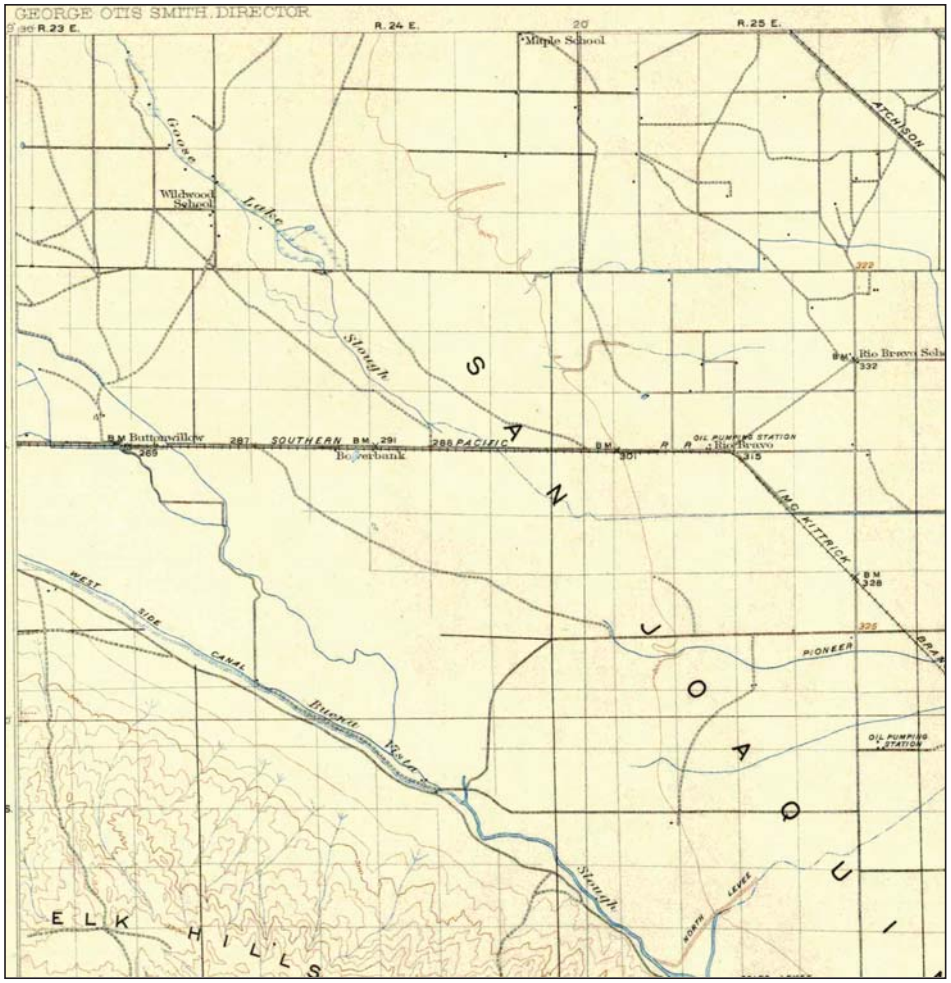
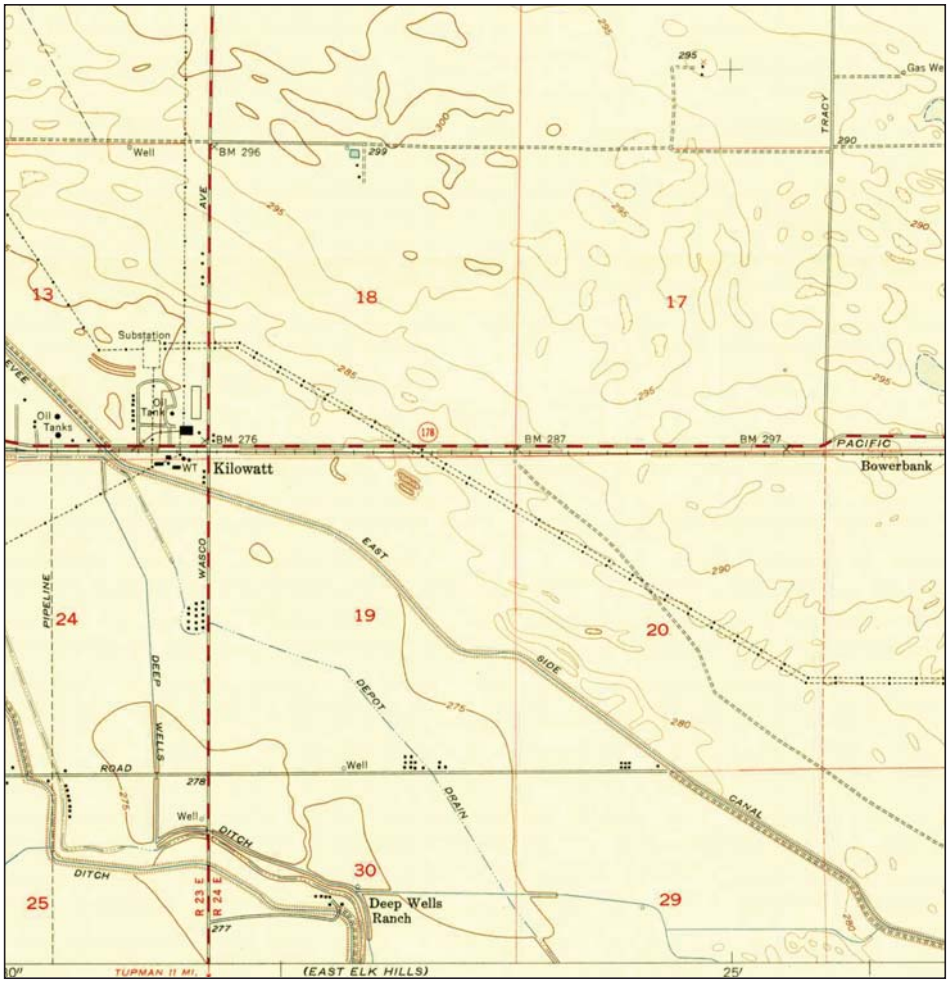
Historical Topographic Map



N	TARGET QUAD NAME: BUENA VISTA LAKE MAP YEAR: 1912 SERIES: 30 SCALE: 1:125000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow, CA 93206 LAT/LONG: 35.3547 / 119.4453	CLIENT: URS Corporation CONTACT: Kali_futnani INQUIRY#: 2755337.4 RESEARCH DATE: 05/06/2010

Historical Topographic Map



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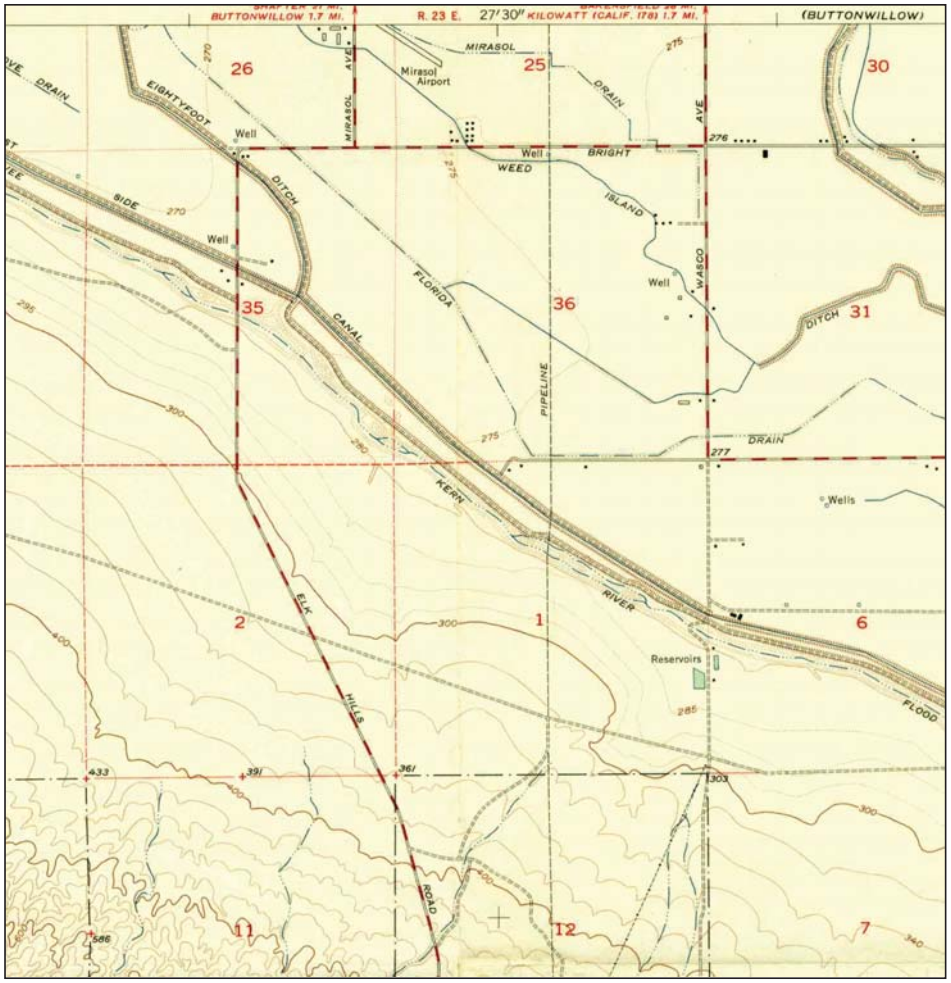

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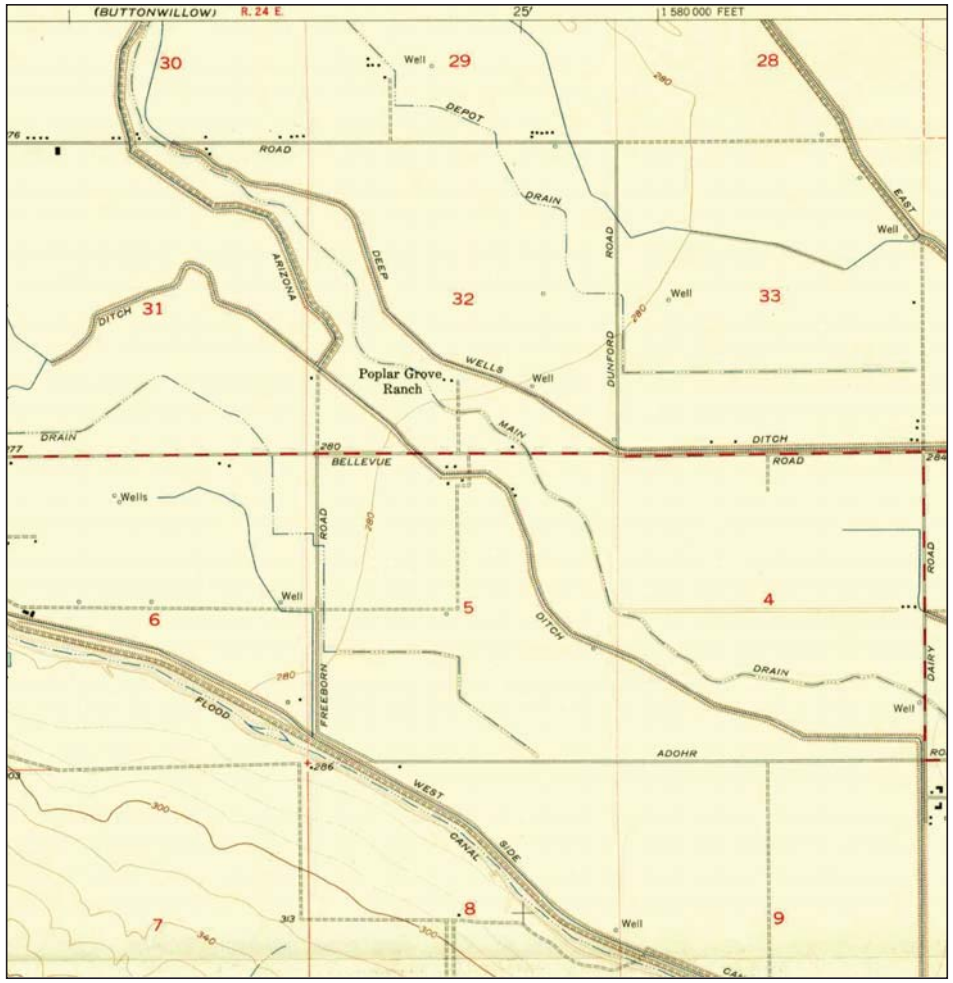

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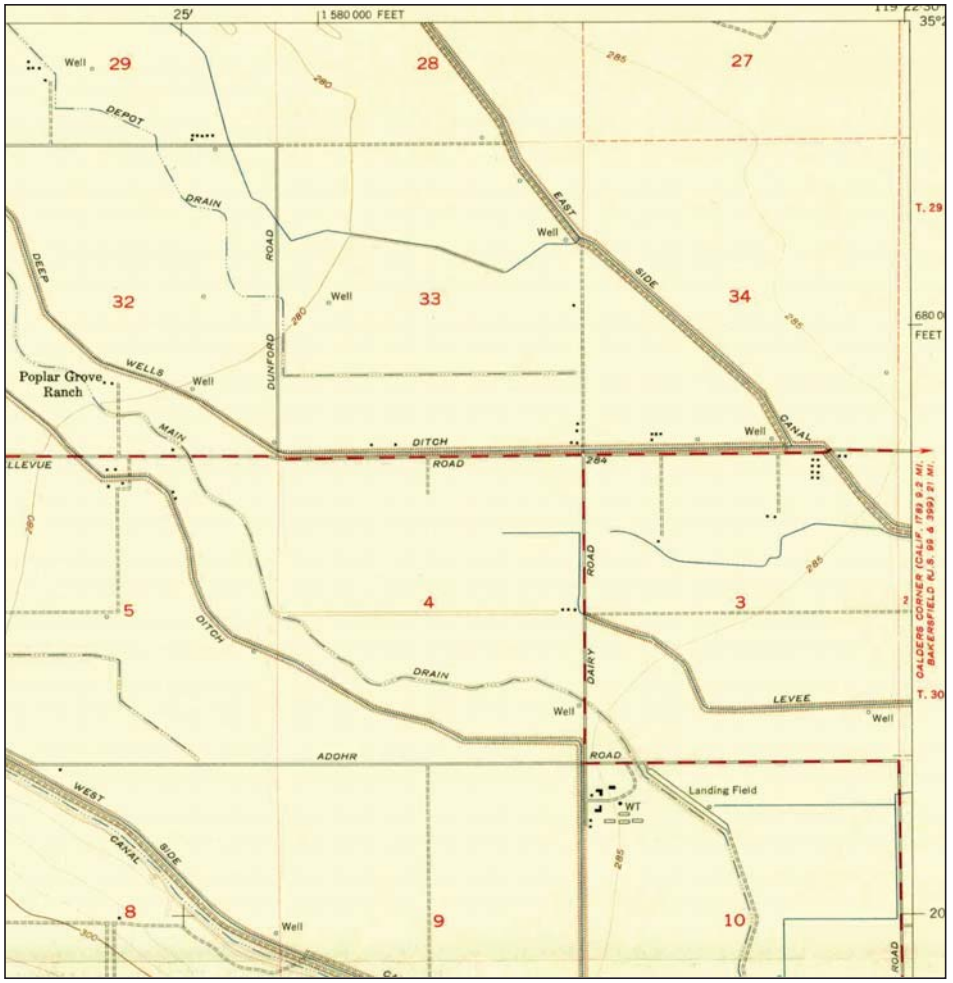

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N	TARGET QUAD NAME: EAST ELK HILLS MAP YEAR: 1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow, CA 93206 LAT/LONG: 35.3547 / 119.4453	CLIENT: URS Corporation CONTACT: Kali_futnani INQUIRY#: 2755337.4 RESEARCH DATE: 05/06/2010

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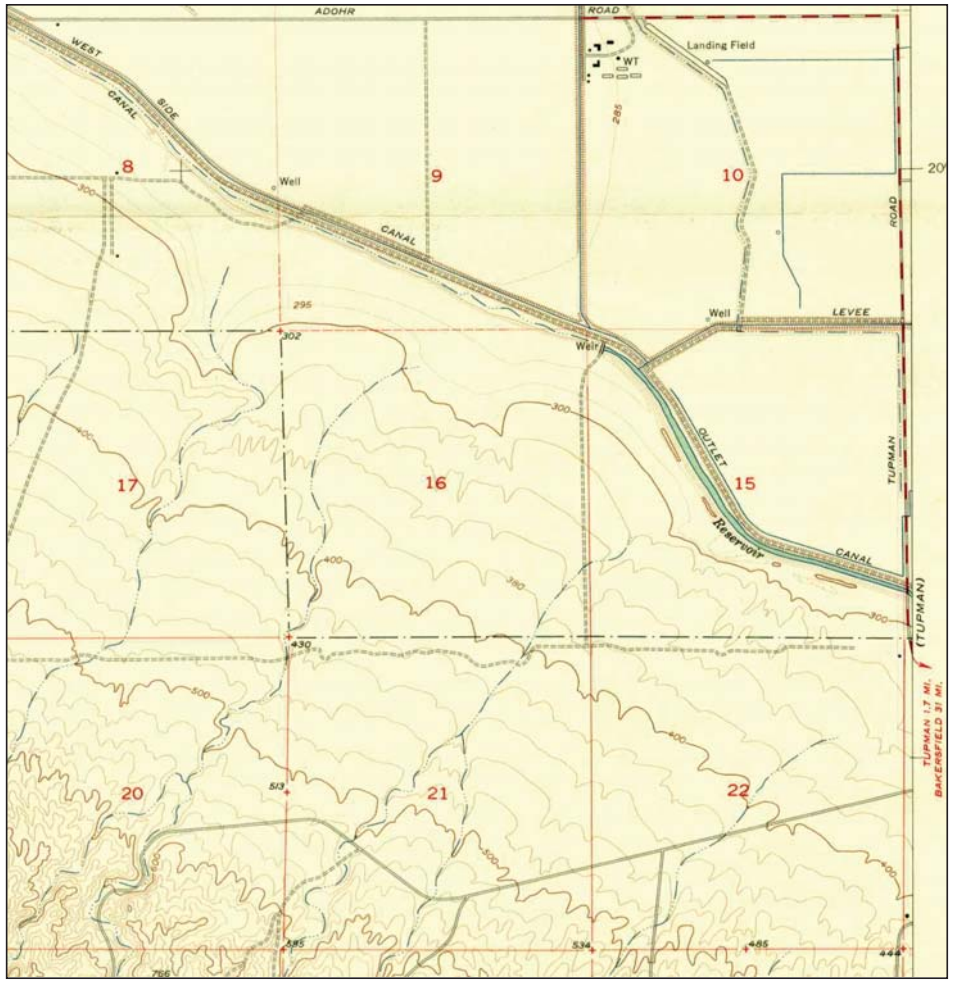

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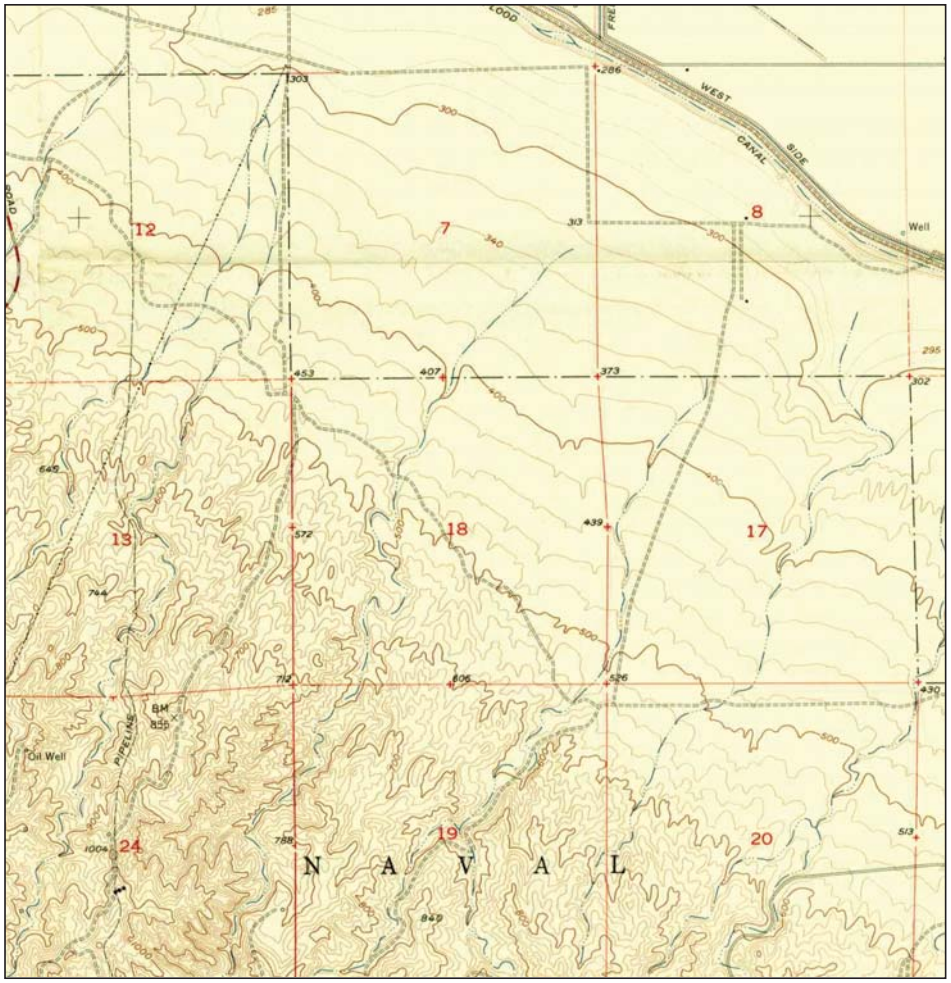

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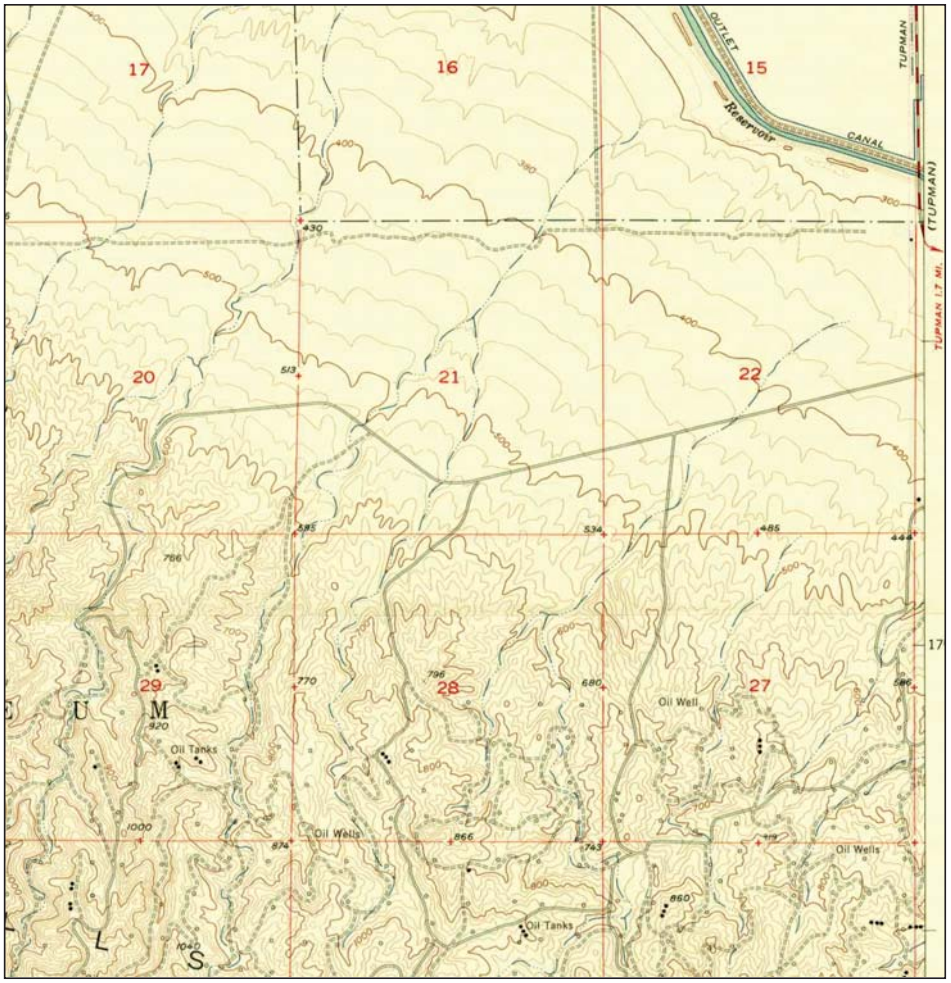

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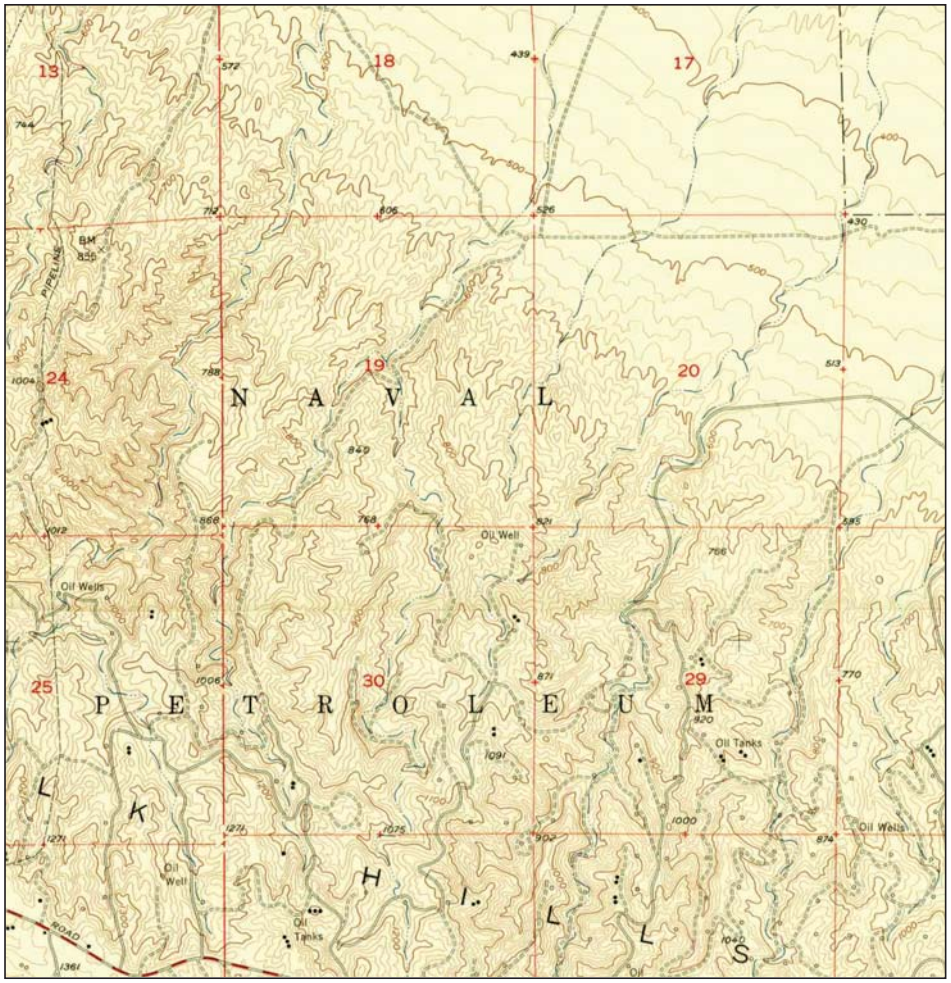

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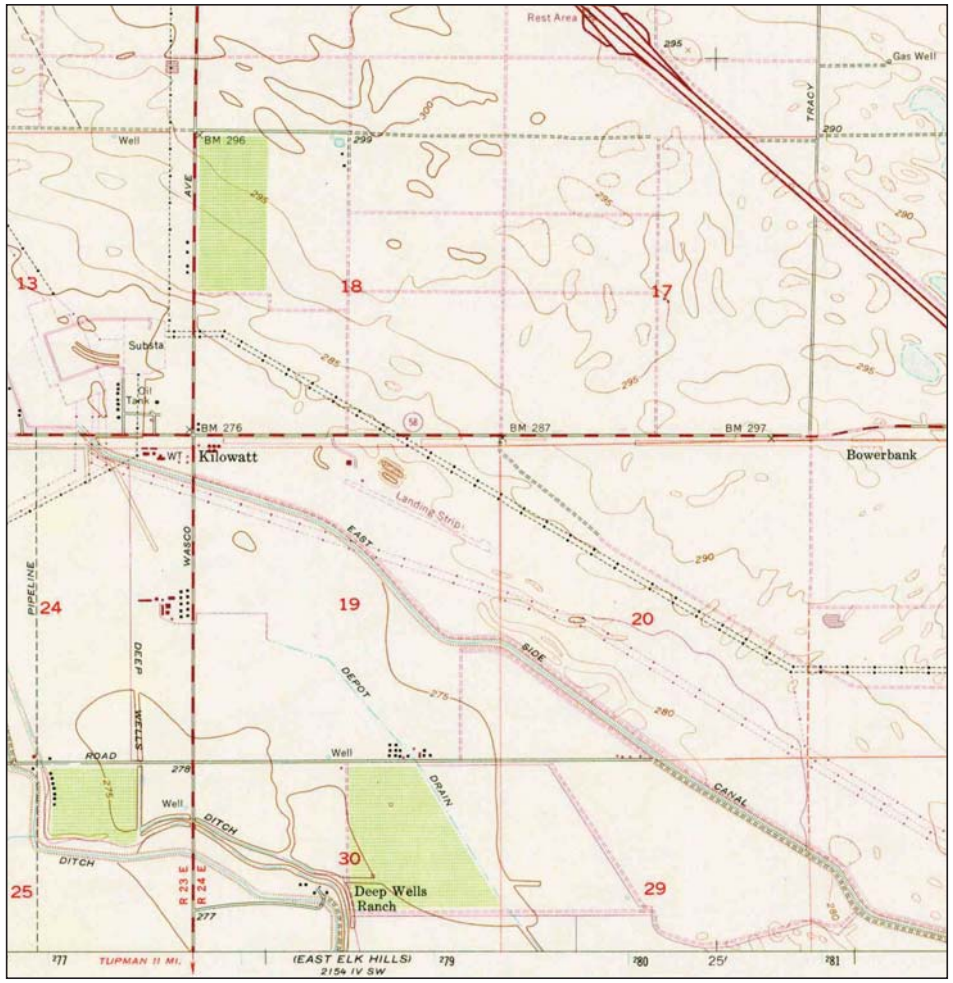

N	TARGET QUAD NAME: BUTTONWILLOW MAP YEAR: 1973 PHOTOREVISED FROM:1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow, CA 93206 LAT/LONG: 35.3547 / 119.4453	CLIENT: URS Corporation CONTACT: Kali_futnani INQUIRY#: 2755337.4 RESEARCH DATE: 05/06/2010

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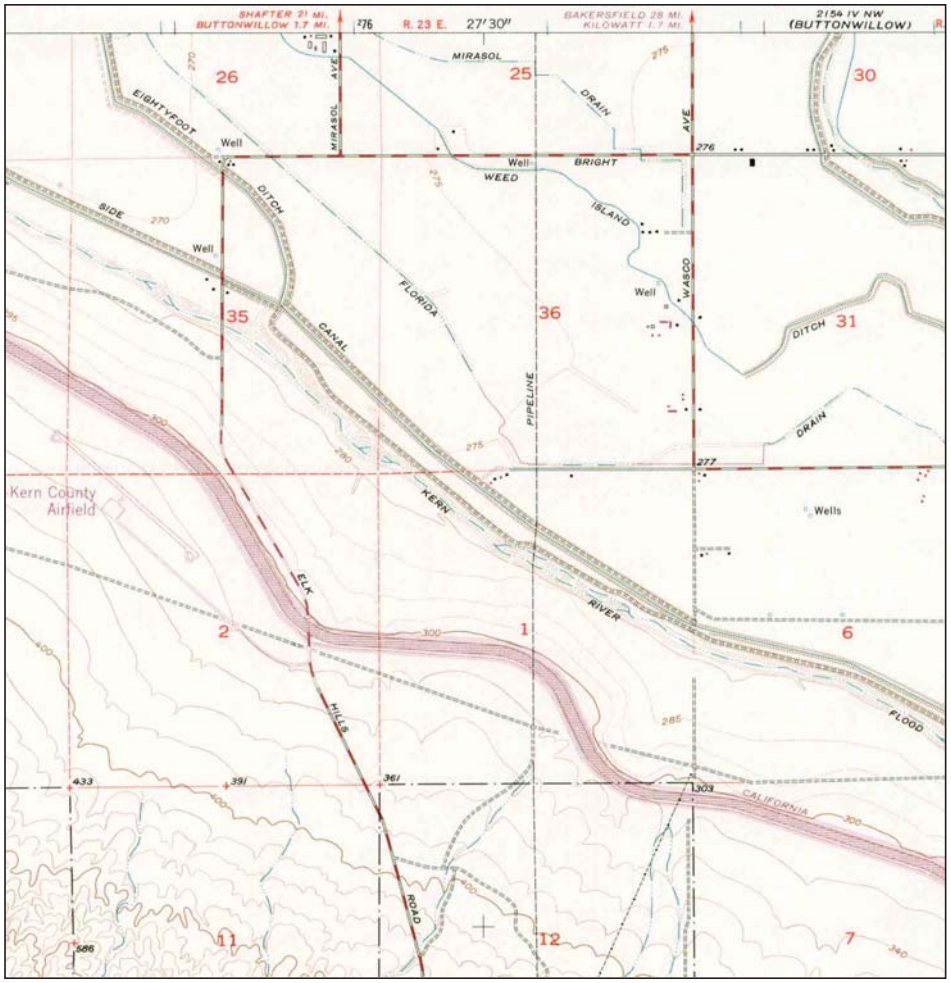

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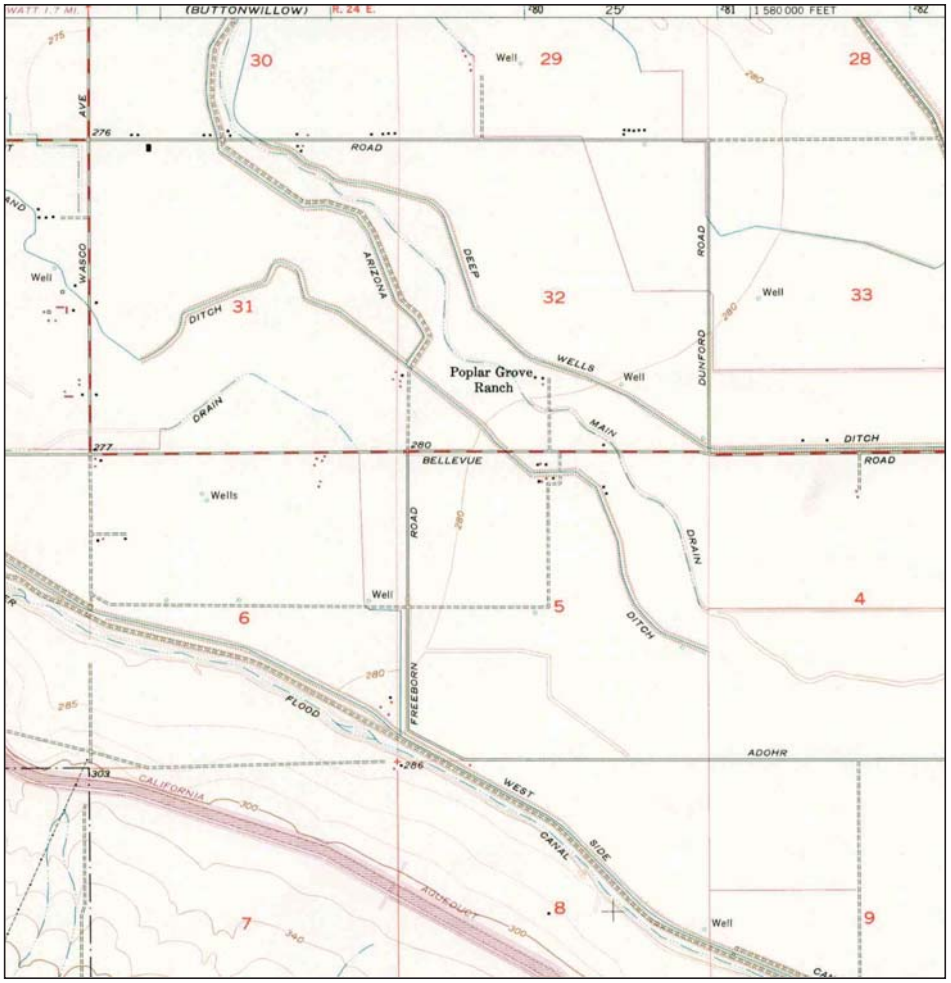

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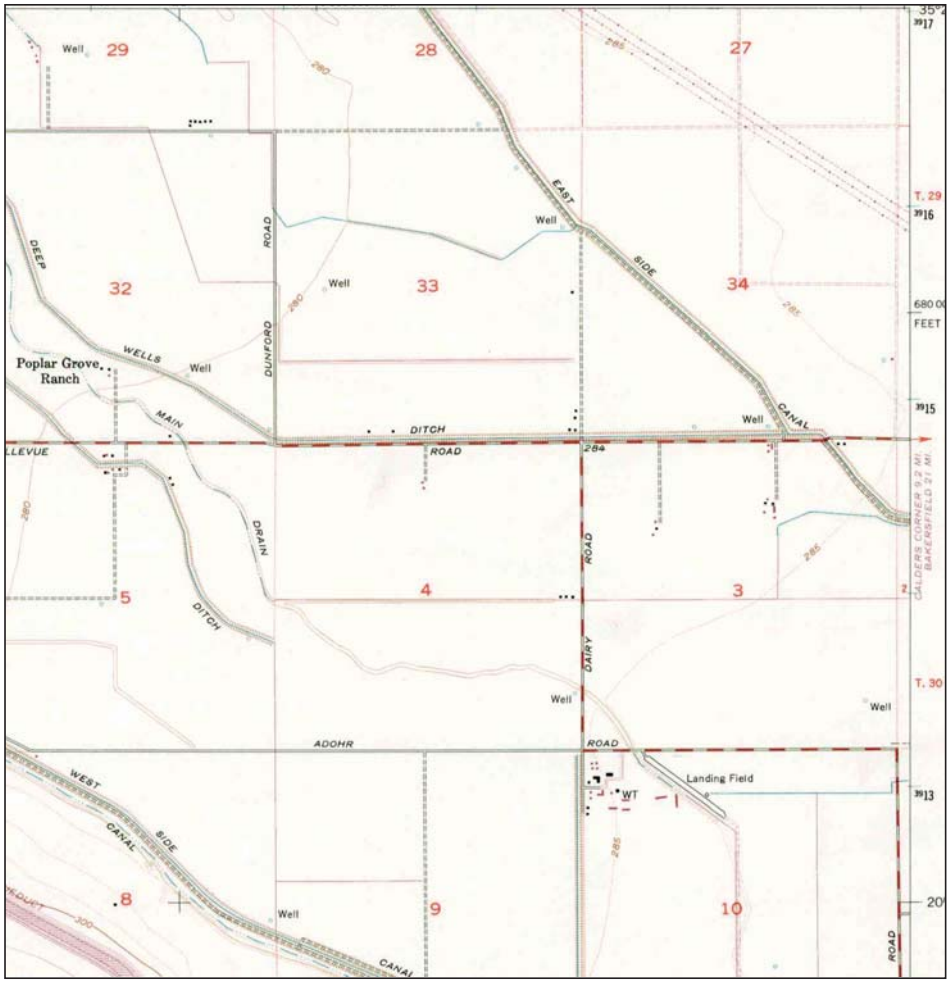

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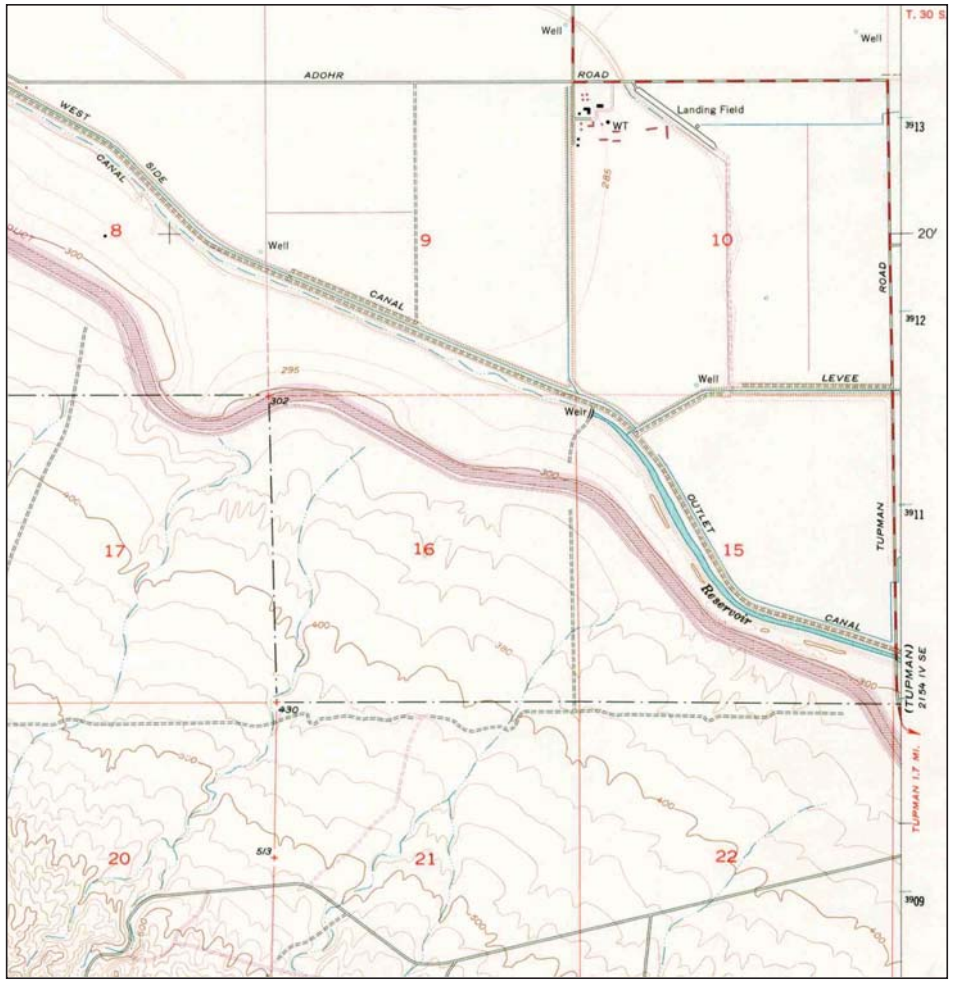

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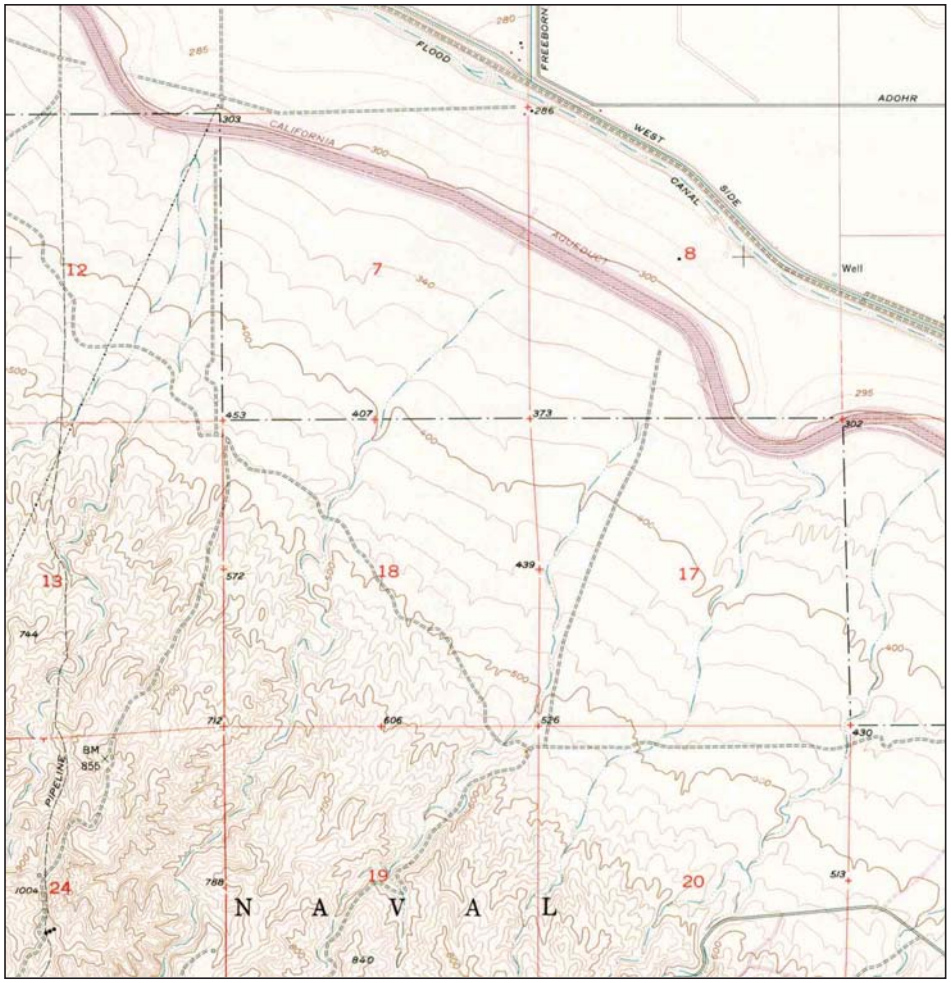

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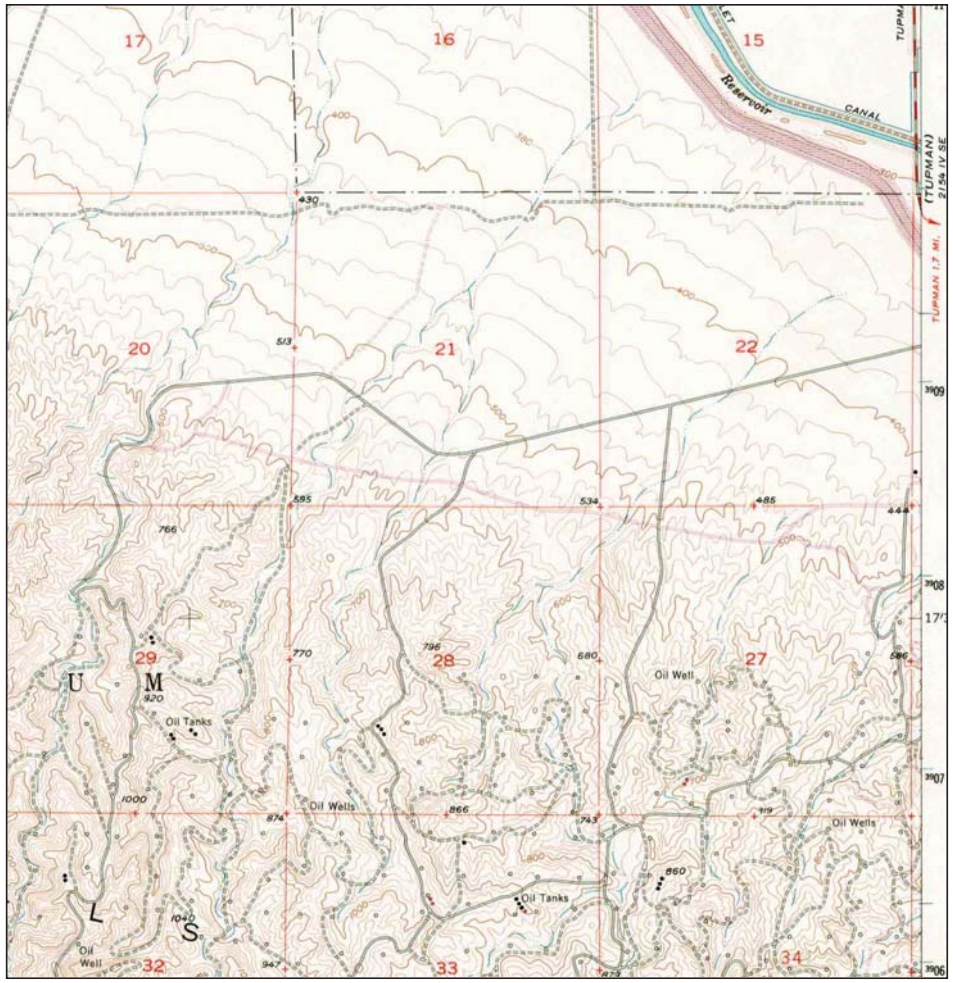

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HECA
Dairy Road/Adohr Road
Tupman, CA 93276

Inquiry Number: 2755383.4
May 06, 2010

The EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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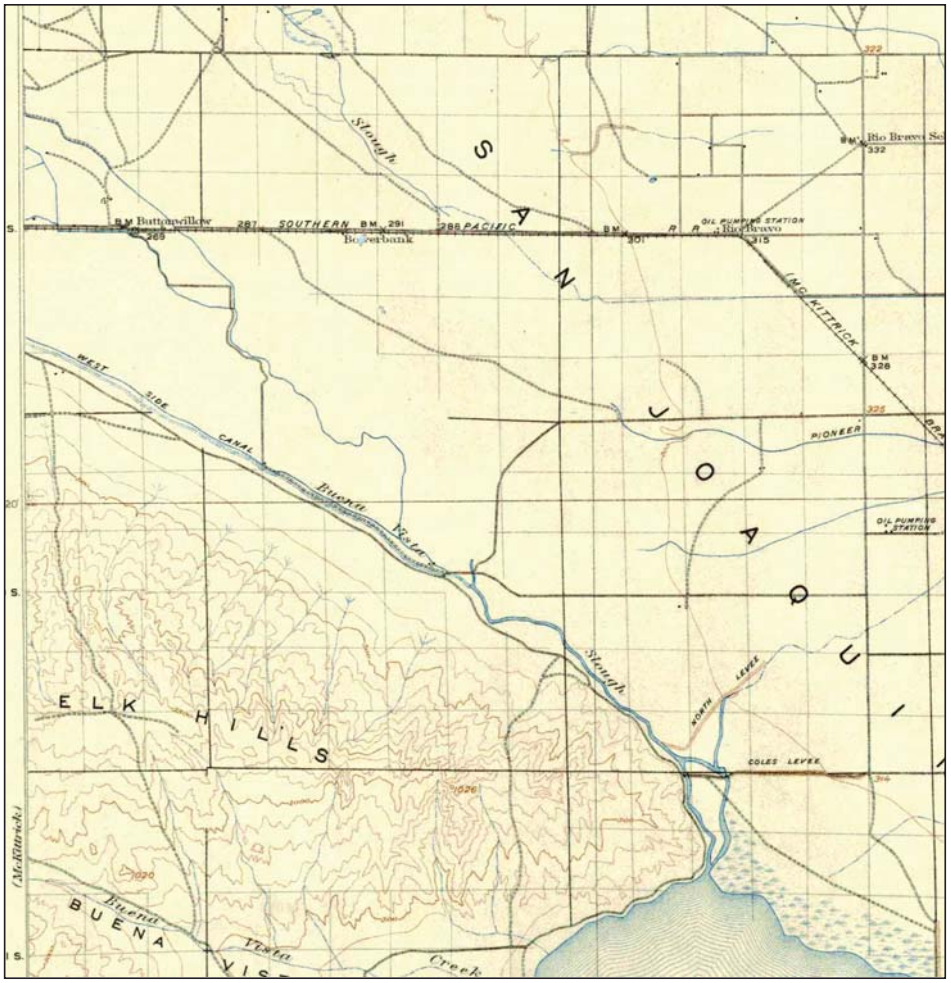

N	TARGET QUAD NAME: BUENA VISTA LAKE MAP YEAR: 1912 SERIES: 30 SCALE: 1:125000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Tupman, CA 93276 LAT/LONG: 35.304 / 119.355	CLIENT: URS Corporation CONTACT: Kali Futnani INQUIRY#: 2755383.4 RESEARCH DATE: 05/06/2010

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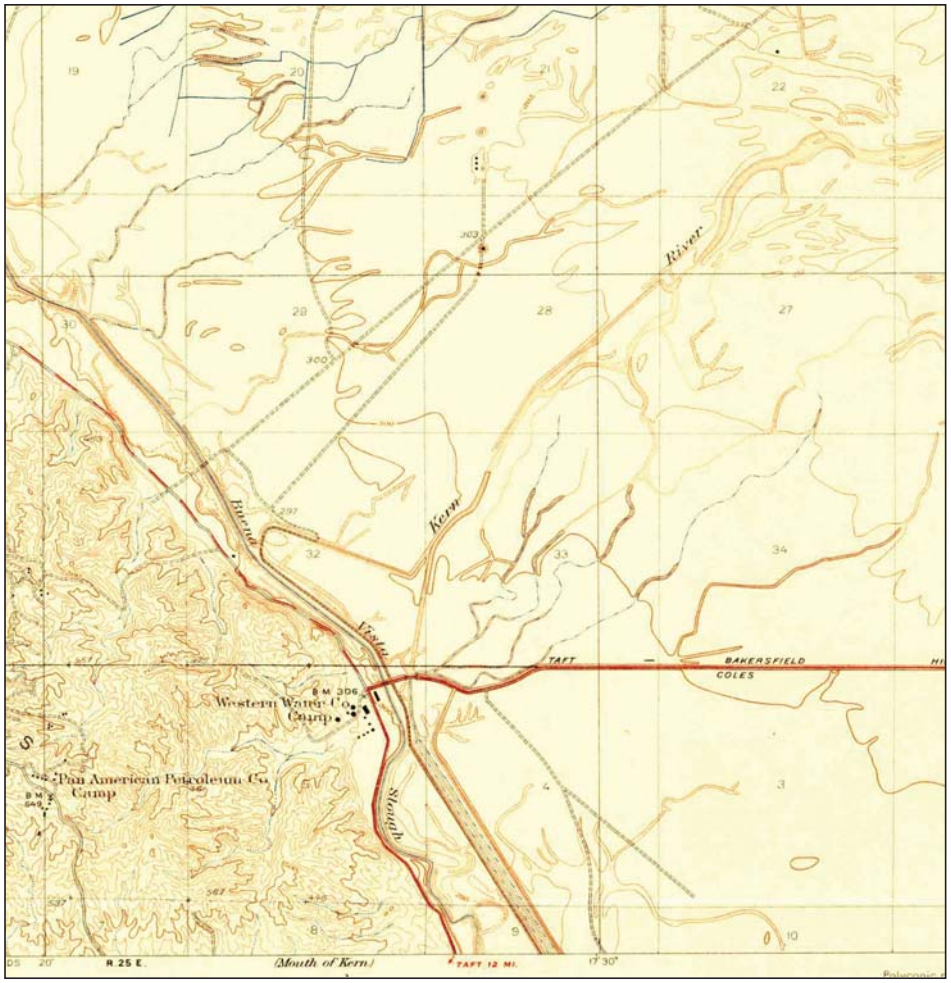

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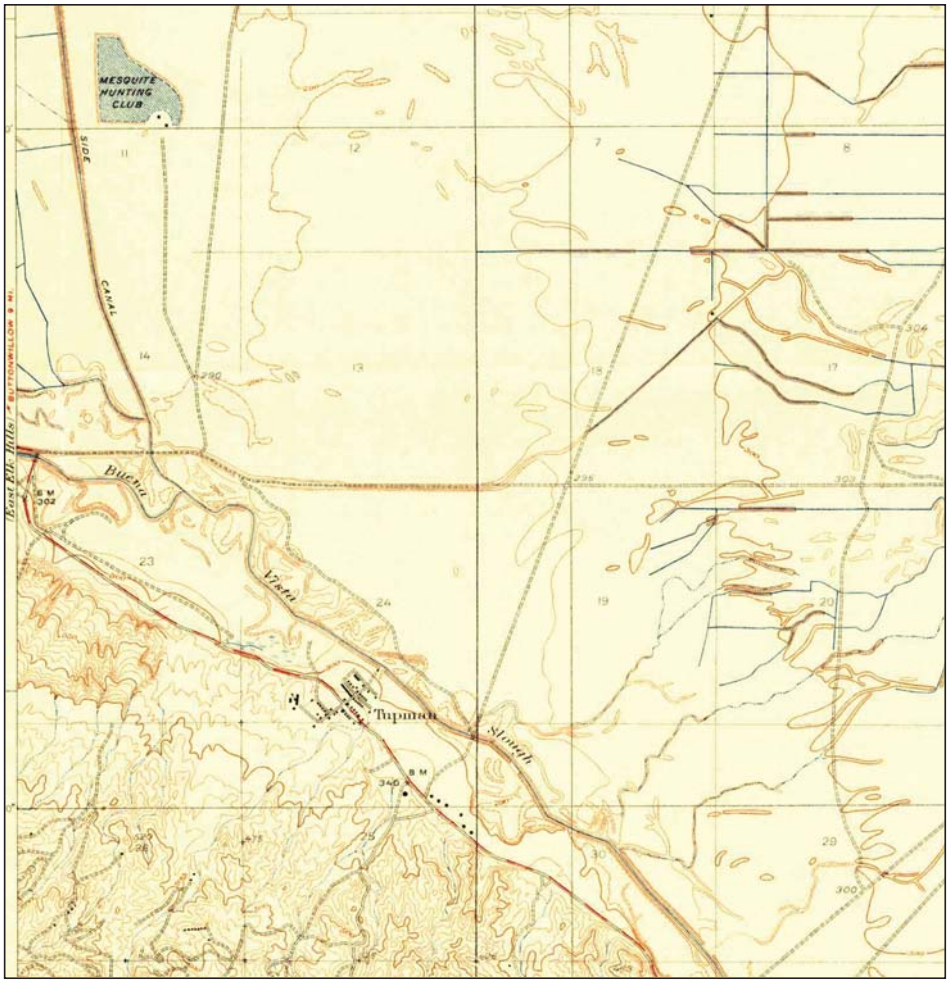

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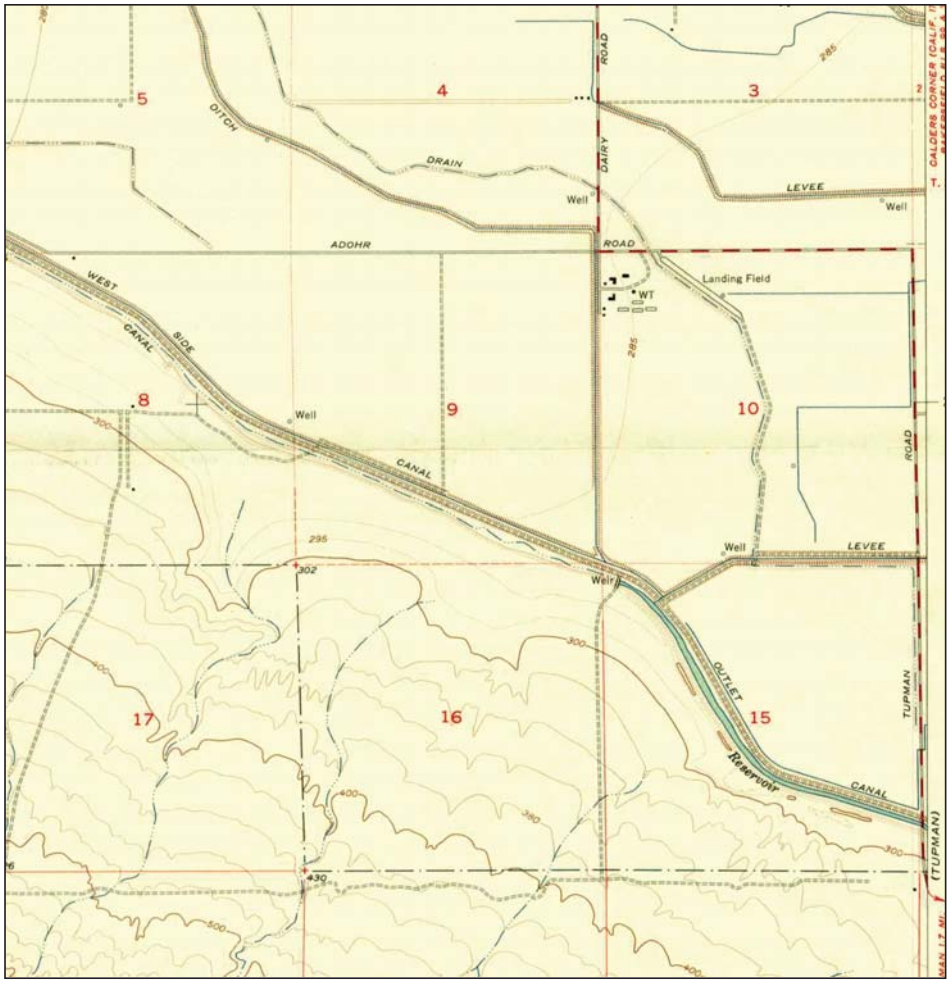

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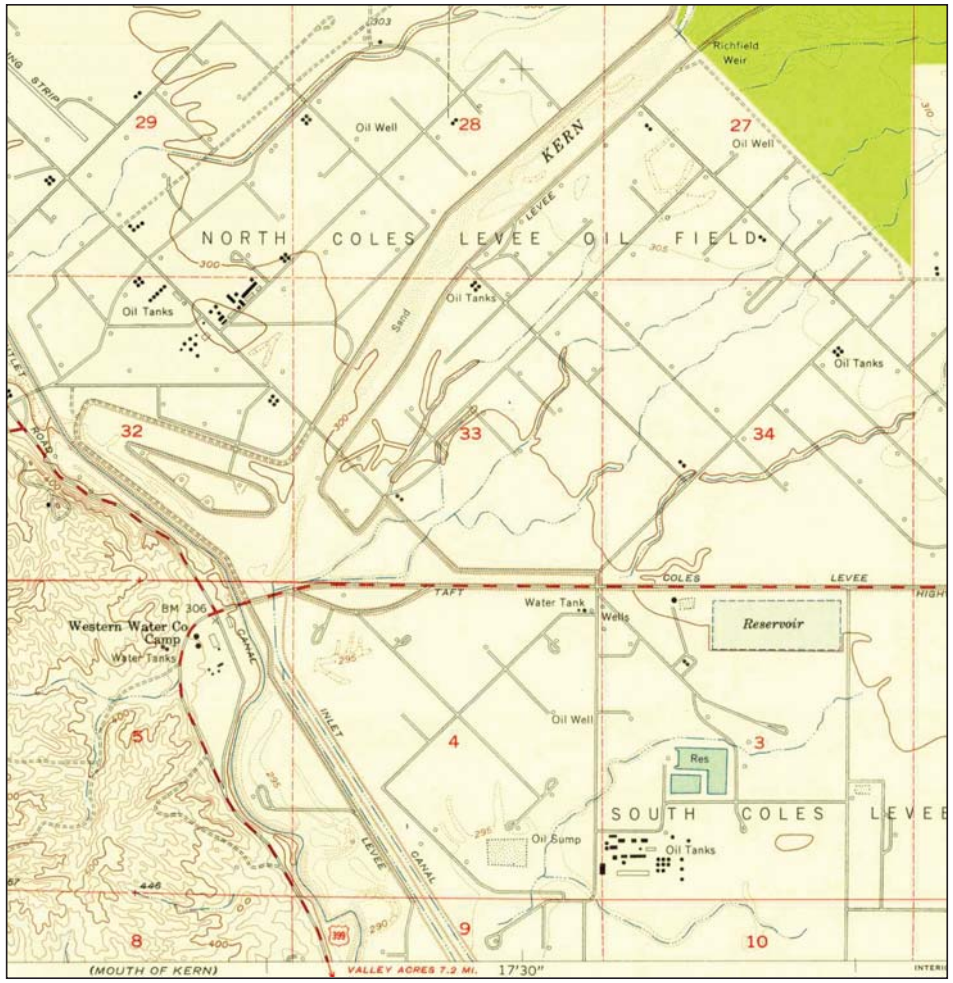

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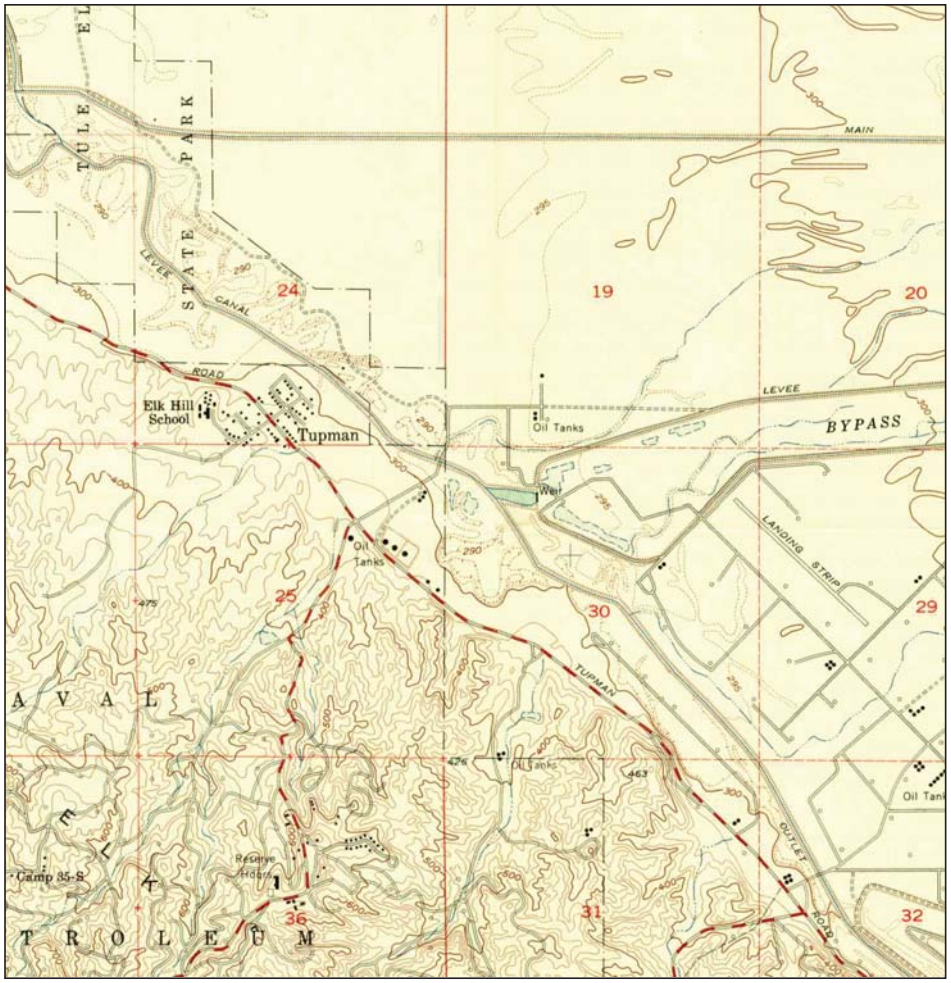

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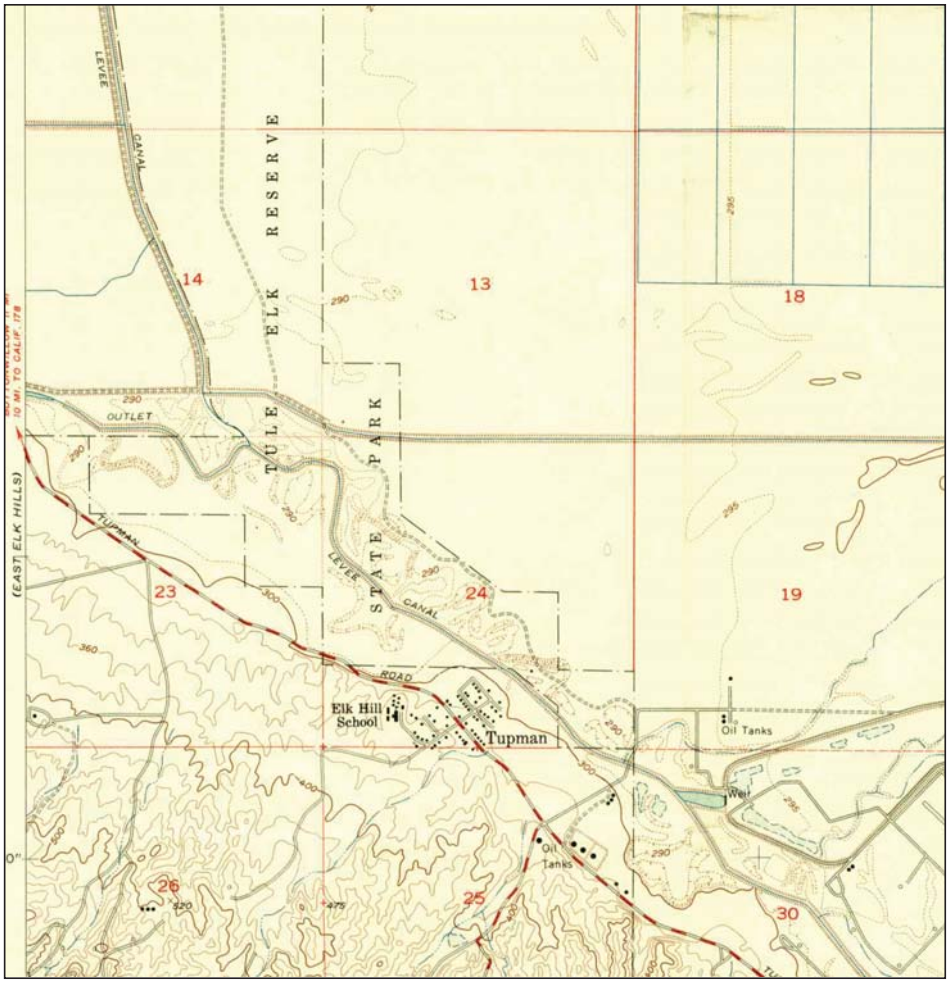

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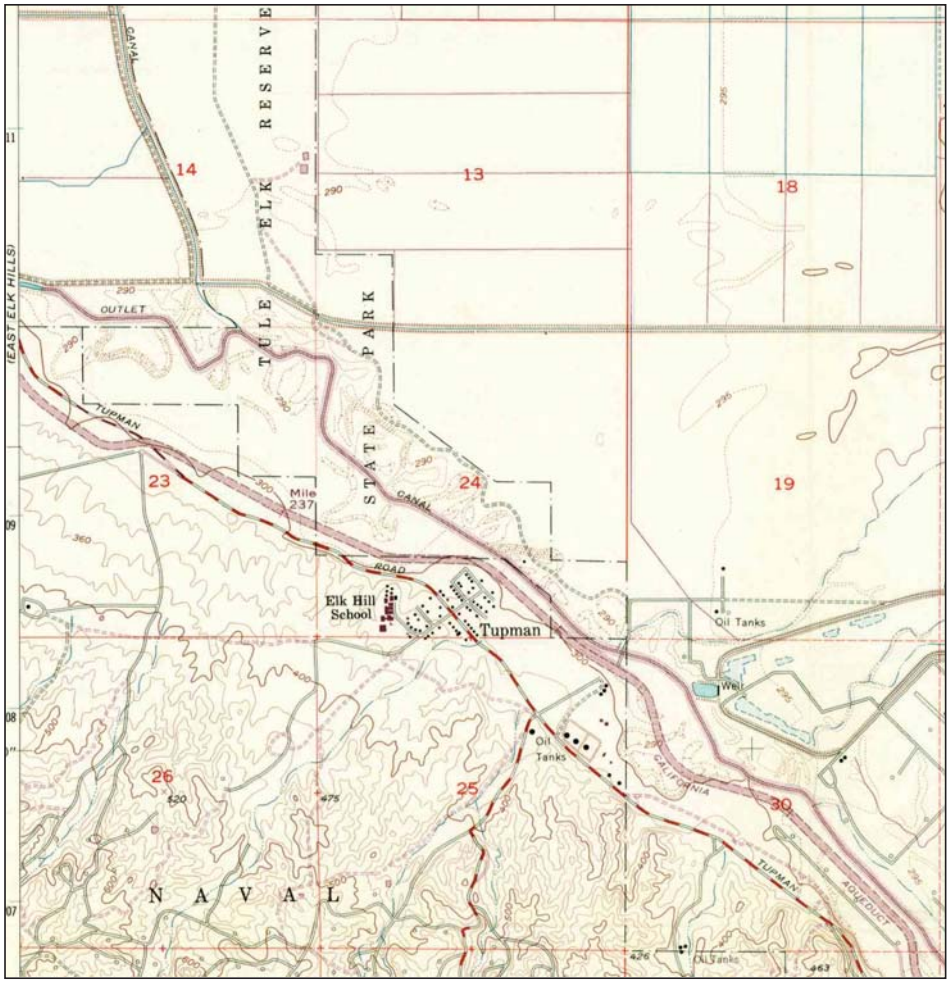

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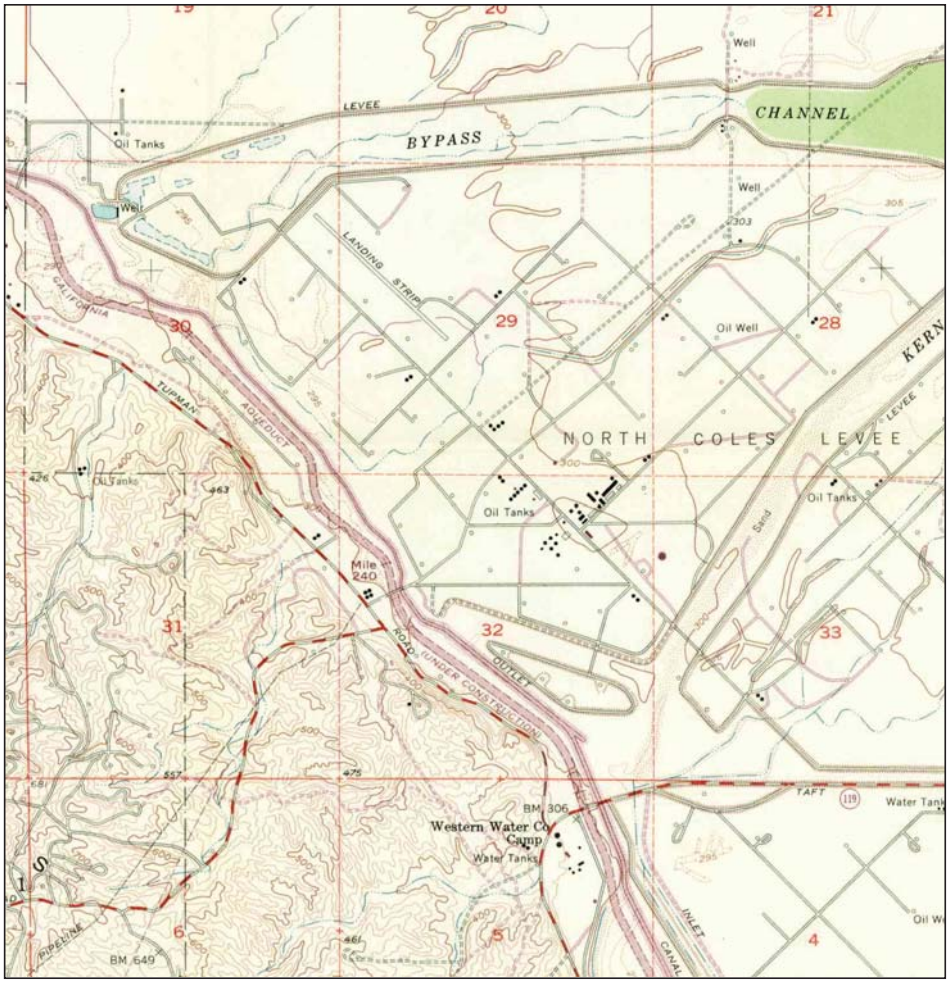

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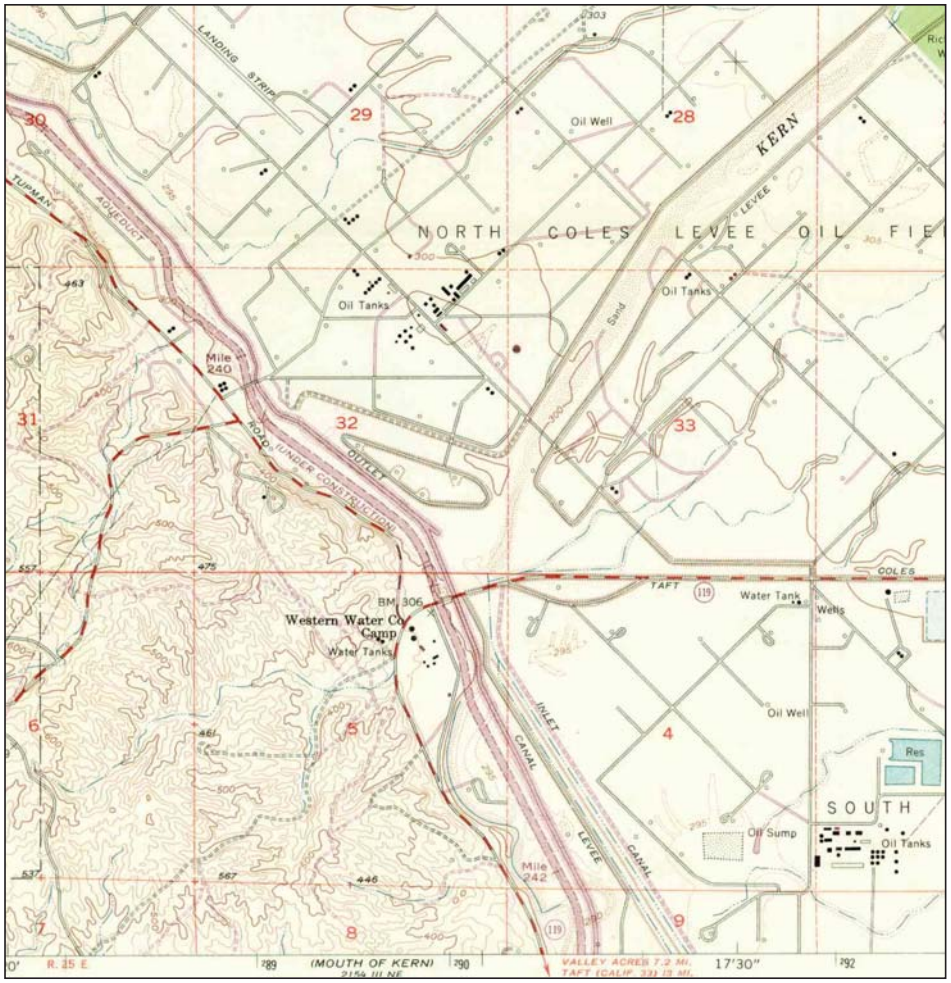

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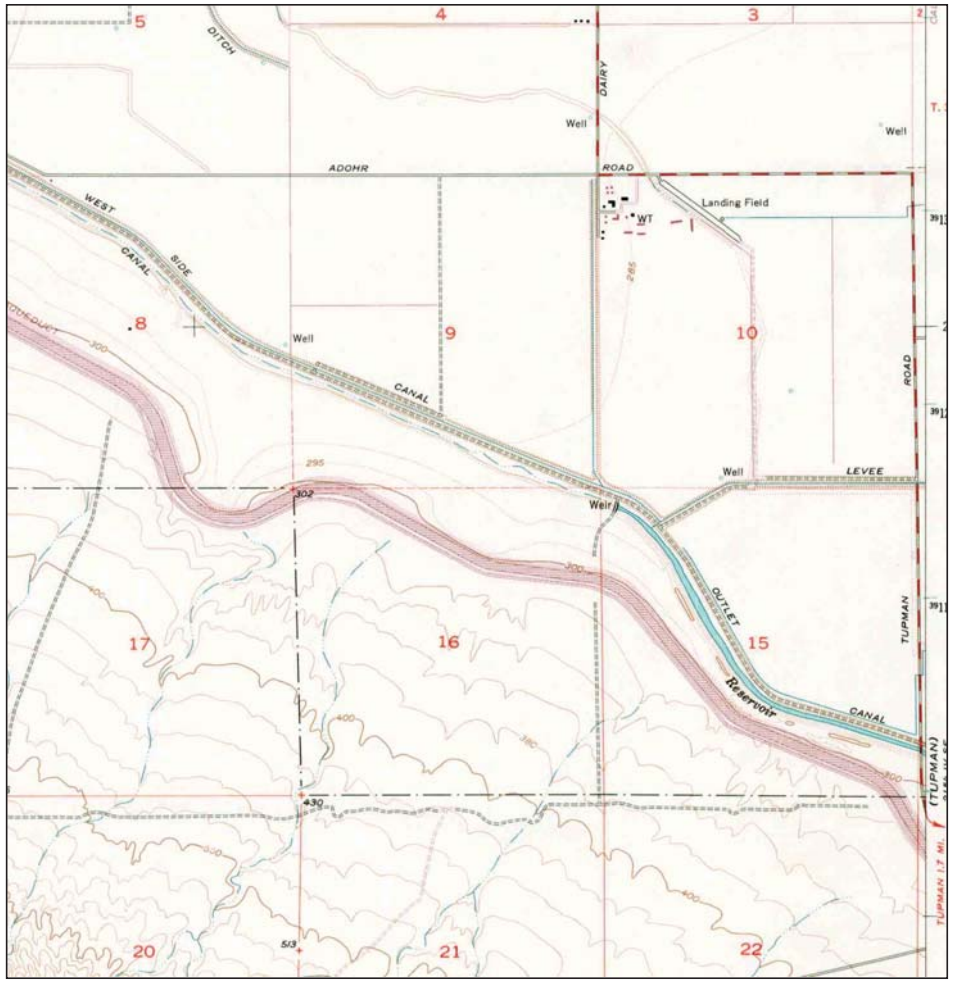

N	TARGET QUAD NAME: EAST ELK HILLS MAP YEAR: 1973 PHOTOREVISED FROM:1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Tupman, CA 93276 LAT/LONG: 35.304 / 119.355	CLIENT: URS Corporation CONTACT: Kali Futnani INQUIRY#: 2755383.4 RESEARCH DATE: 05/06/2010

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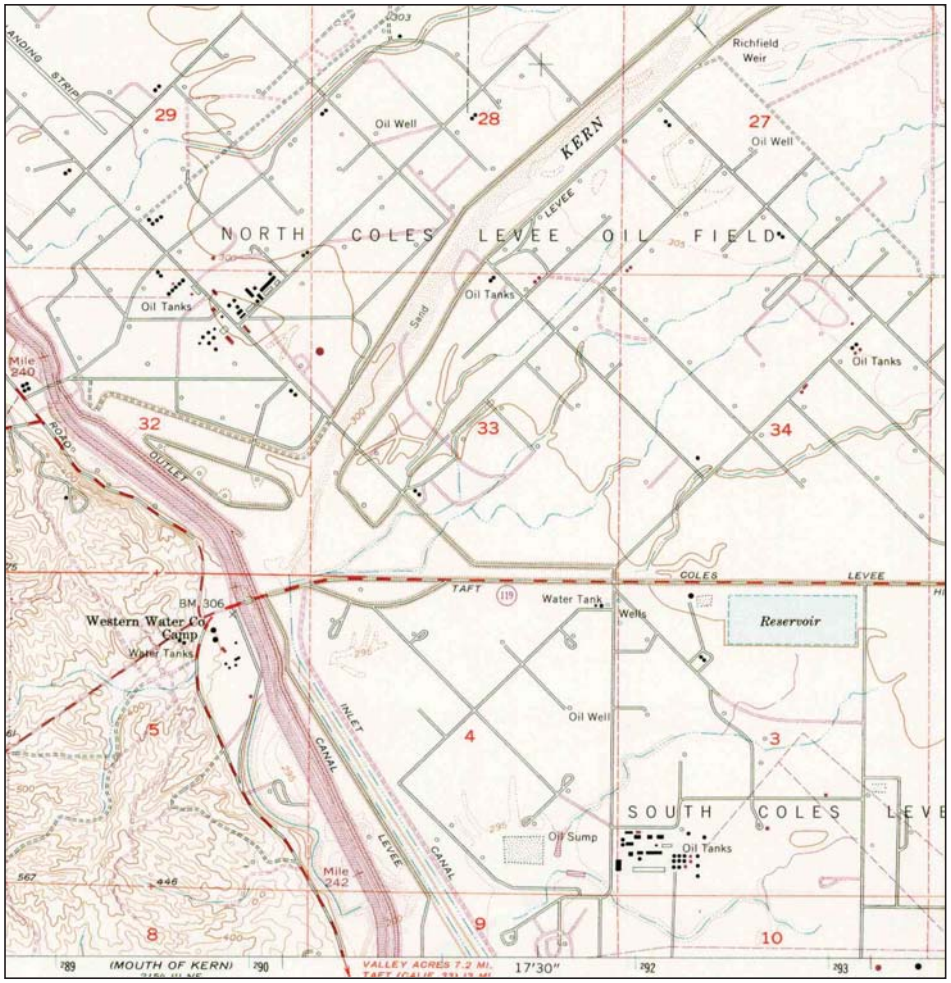

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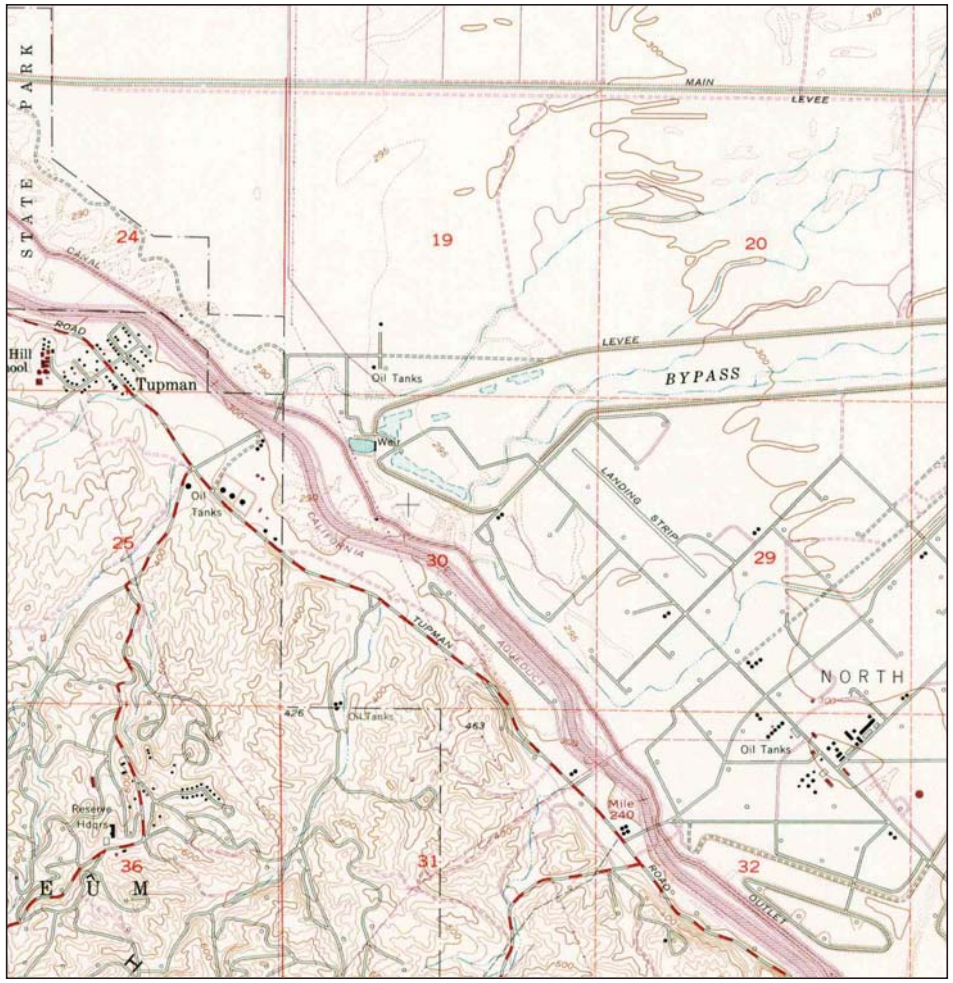

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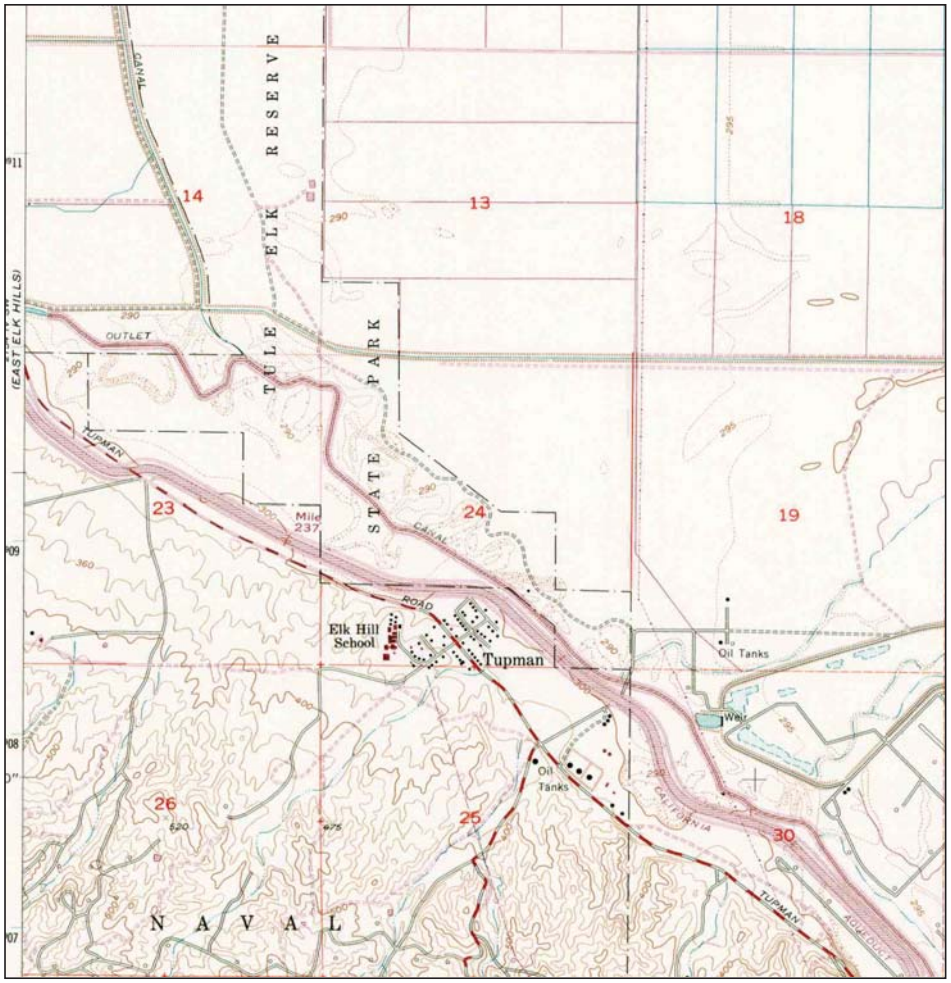
Historical Topographic Map



N	TARGET QUAD NAME: TUPMAN MAP YEAR: 1973 PHOTOREVISED FROM:1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Tupman, CA 93276 LAT/LONG: 35.304 / 119.355	CLIENT: URS Corporation CONTACT: Kali Futnani INQUIRY#: 2755383.4 RESEARCH DATE: 05/06/2010

HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 3293634.1
April 04, 2012

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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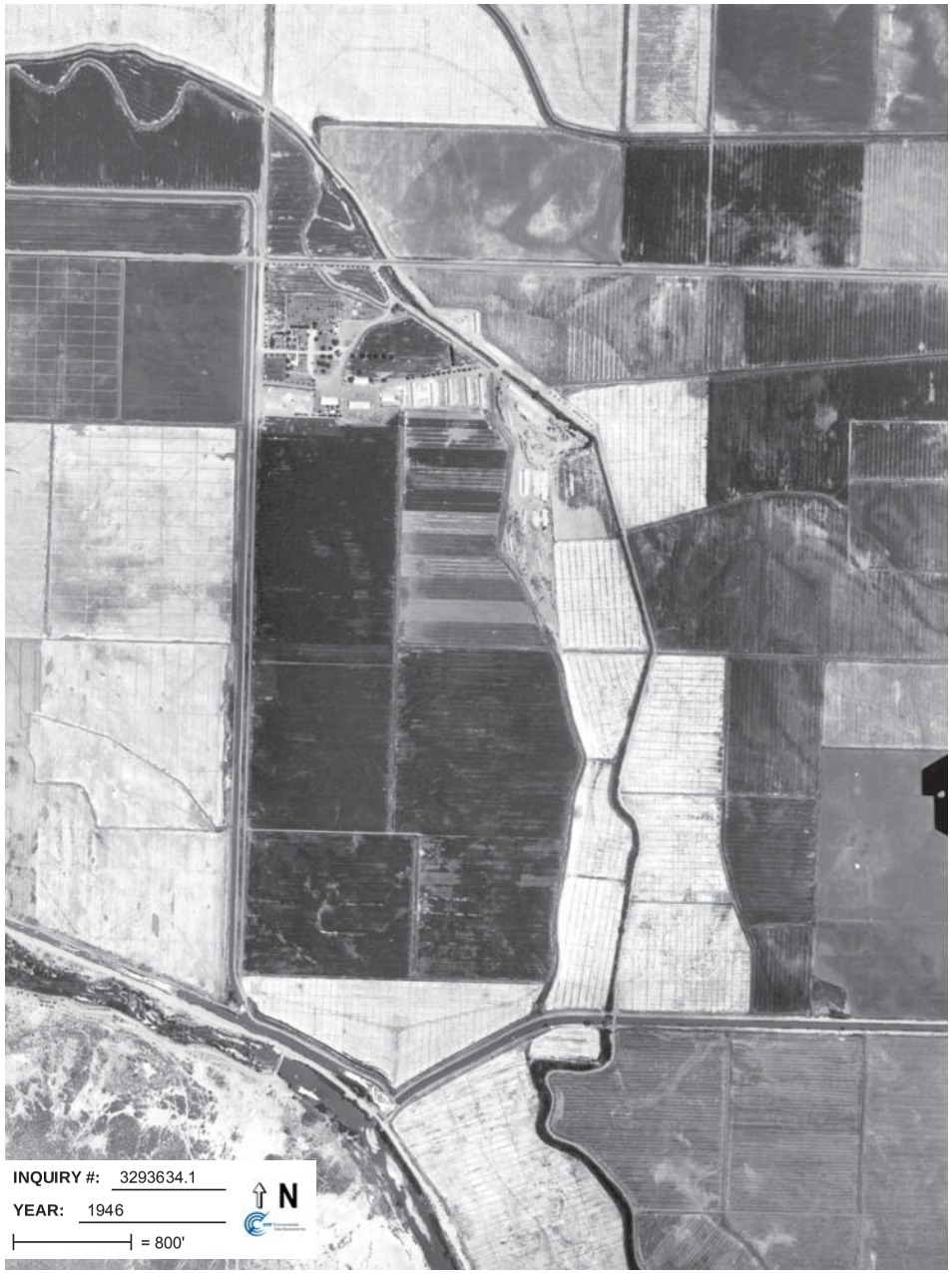
Date EDR Searched Historical Sources:
Aerial Photography April 04, 2012

Target Property:
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Year	***Scale***	***Details***	***Source***
1946	Aerial Photograph. Scale: 1"=800'	Flight Year: 1946	Fairchild
1946	Aerial Photograph. Scale: 1"=800'	Flight Year: 1946	Fairchild
1956	Aerial Photograph. Scale: 1"=800'	Flight Year: 1956	Robinson
1956	Aerial Photograph. Scale: 1"=800'	Flight Year: 1956	Robinson
1967	Aerial Photograph. Scale: 1"=800'	Flight Year: 1967	Western
1974	Aerial Photograph. Scale: 1"=800'	Flight Year: 1974	NASA
1984	Aerial Photograph. Scale: 1"=800'	Flight Year: 1984	USGS
1994	Aerial Photograph. Scale: 1"=500'	/Composite DOQQ - acquisition dates: 1994	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR


INQUIRY #: 3293634.1
YEAR: 1946
= 800'
N

INQUIRY #: 3293634.1
YEAR: 19□6
= 800'
N

INQUIRY #: 3293634.1
YEAR: 19□6
= 800'
N

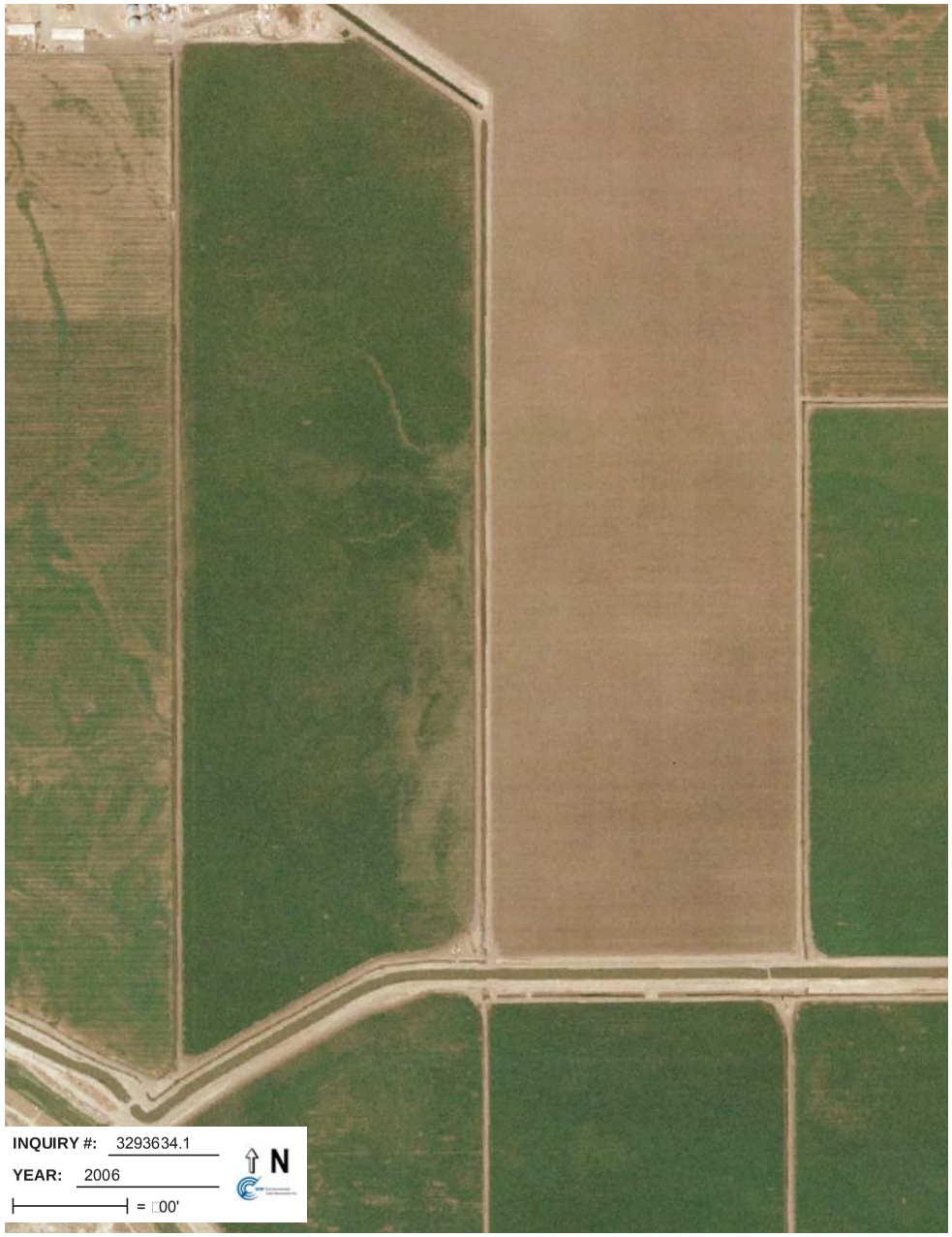
INQUIRY #: 3293634.1
YEAR: 196□
= 800'
N

INQUIRY #: 3293634.1
YEAR: 19□4
= 800'
N

INQUIRY #: 3293634.1
YEAR: 1984
= 800'
N

INQUIRY #: 3293634.1
YEAR: 1994
= □00'
N

INQUIRY #: 3293634.1
YEAR: 200□
= □00'
N


INQUIRY #: 3293634.1
YEAR: 2006
= 00'
N

Appendix D
Regulatory Database Search Report

URS

HECA
Dairy Road/Adohr Road
Buttonwillow, CA 93206

Inquiry Number: 3251004.1s
March 19, 2012

The EDR Radius Map™ Report with GeoCheck®

Prepared using the EDR FieldCheck® System

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

FORM-NULL-SPM

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Thank you for your business.
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EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). URS CORPORATION used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by URS CORPORATION. The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

DAIRY ROAD/ADOHR ROAD
BUTTONWILLOW, CA 93206

COORDINATES

Latitude (North):	35.3304000 - 35˚ 19' 49.44''
Longitude (West):	119.3857000 - 119˚ 23' 8.52''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	283153.6
UTM Y (Meters):	3912097.2
Elevation:	288 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	35119-C4 EAST ELK HILLS, CA
Most Recent Revision:	1973
East Map:	35119-C3 TUPMAN, CA
Most Recent Revision:	1973

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2009, 2010
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL National Priority List

Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-CESQG ..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST ..... Geotracker's Leaking Underground Fuel Tank Report
SLIC ..... Statewide SLIC Cases

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

UST ..... Active UST Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land
FEMA UST ..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing
VCP ..... Voluntary Cleanup Program Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
Toxic Pits ..... Toxic Pits Cleanup Act Sites
CDL ..... Clandestine Drug Labs
US HIST CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS 2 ..... CERCLA Lien Information
LUCIS ..... Land Use Control Information System
LIENS ..... Environmental Liens Listing
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing

Other Ascertainable Records

RCRA-NonGen	RCRA - Non Generators
DOT OPS	Incident and Accident Data
FUDS	Formerly Used Defense Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
CA BOND EXP. PLAN	Bond Expenditure Plan
NPDES	NPDES Permits Listing
WDS	Waste Discharge System
Cortese	"Cortese" Hazardous Waste & Substances Sites List
HIST CORTESE	Hazardous Waste & Substance Site List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
FINANCIAL ASSURANCE	Financial Assurance Information Listing
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
PCB TRANSFORMER	PCB Transformer Registration Database
PROC	Certified Processors Database
MWMP	Medical Waste Management Program Listing
COAL ASH DOE	Sleam-Electric Plan Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations	EDR Proprietary Historic Gas Stations
EDR Historical Cleaners	EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State and tribal registered storage tank lists

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

An online review and analysis by URS CORPORATION of the AST list,
as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site
within approximately 0.75 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAUZZA AG PARTNERS - PALM RANC	ADOHR AND DAIRY	N 1/8 - 1/4 (0.175 mi.)	B6	12

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

An online review and analysis by URS CORPORATION of the HIST UST list,
as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites
within approximately 0.75 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PALM FARMS, INC.	ADOHR RD.	W 0 - 1/8 (0.016 mi.)	1	8
MARTIN SNOW FARM	STATION RD, 1/4 MILE EA	E 0 - 1/8 (0.081 mi.)	5	11

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

An online review and analysis by URS CORPORATION of the SWEEPS UST list,
as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site
within approximately 0.75 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PALM FARMS INC.	ADOHR RD	N 1/8 - 1/4 (0.184 mi.)	B7	12

Other Ascertainable Records

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

An online review and analysis by URS CORPORATION of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NAVAL PETROLEUM RESERVE NUMBER		WSW 1 - 2 (1.096 mi.)	0	8

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

An online review and analysis by URS CORPORATION of the FINDS list, as provided by EDR, and dated 10/23/2011 has revealed that there is 1 FINDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN MILLING LLC	7361 ADOHR RD	S 0 - 1/8 (0.070 mi.)	A4	11

EMI: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

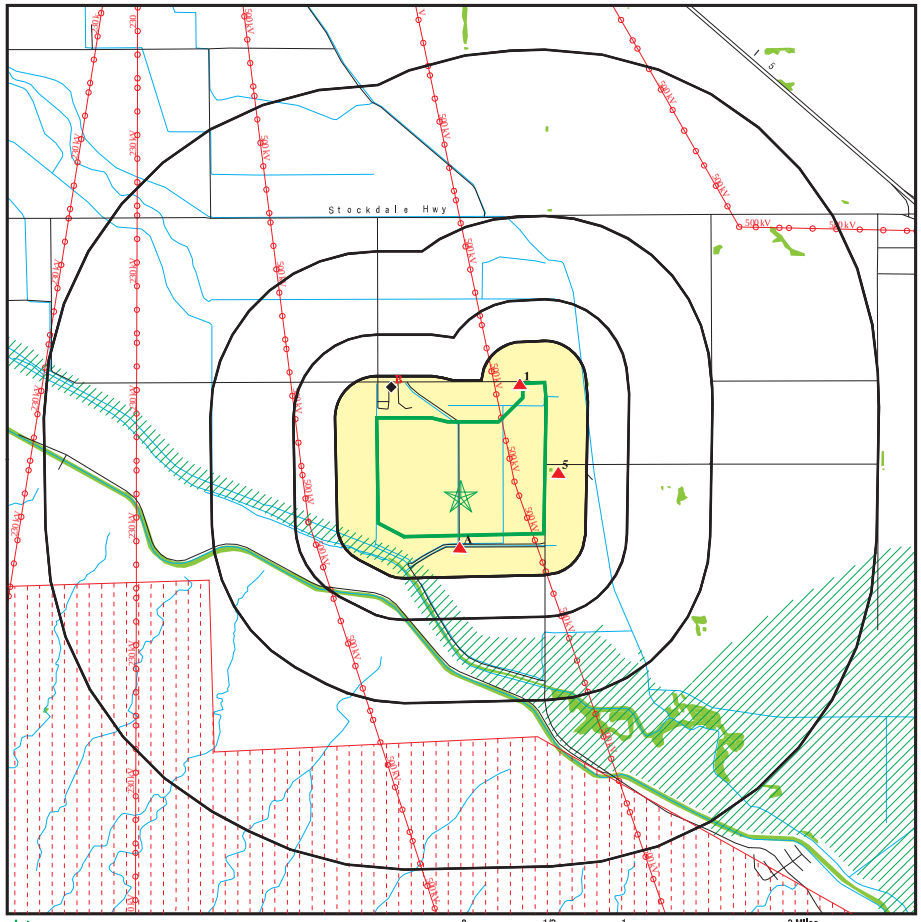
An online review and analysis by URS CORPORATION of the EMI list, as provided by EDR, and dated 12/31/2008 has revealed that there are 2 EMI sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WESTERN MILLING LLC	7361 ADOHR RD	S 0 - 1/8 (0.070 mi.)	A2	9
SHANCO COMMODITIES COMPANY INC	7361 ADOHR ROAD	S 0 - 1/8 (0.070 mi.)	A3	10

Due to poor or inadequate address information, the following sites were not mapped. Count: 57 records.

Site Name	Database(s)
CARRIZO TO MIDWAY 230 KV RECONDUCT	NPDES
TUPMAN SUBSTATION TRANSMISSION REL	NPDES
LOKERN FARMS COMPOSTING	LDS
OASIS' LIQUOR'S	SWEEPS UST
BANDUCCI & SON	SWEEPS UST
JENNIE RICCOMINI RESIDENCE	SWEEPS UST
J & R ROMANINI FARMS	SWEEPS UST
BUTTONWILLOW DEPOT	SWEEPS UST
SHELL OIL COMPANY	SWEEPS UST
GIN # 3 & 5	SWEEPS UST
ARCO GAS PLANT #8	SWEEPS UST
NORTH COLES LEVEE	SWEEPS UST
NORTH COLES LEVEE #3 WATER INJ	HIST UST, SWEEPS UST
ARCO OIL & GAS CO	LUST, CHMIRS
BUTTONWILLOW DUSTERS INC	CERC-NFRAP
SPICER CITY MARKET	LUST
PGE EAST MIDWAY SUBSTATION	UST
CHICCA BROS - BUTTONWILLOW	UST
ALVIDRES UNION 76	UST
WEST KERN MACHINERY, INC	UST
J & R ROMANINI FARMS	HIST UST
ARCO GAS PLANT #8	HIST UST
ARCO GAS PLANT #21	HIST UST
NORTH COLES LEVEE	HIST UST
DON POLLARD HAY SERVICE INC	AST
P G AND E - MIDWAY	AST
ROY AND JELSEY ROMANINI FARMS	AST
A J TORRIGIANI AND SON	AST
KOSAREFF FARMS	AST
OCCIDENTAL OF ELK HILLS INC	AST
WEATHERFORD US LP	AST
ELK HILLS POWER, LLC	WMUDS/SWAT
MONTEZ TRUCKING INC	HAZNET
URIEL GOMEZ ANGUILANO	HAZNET
CHEVRON PIPE LINE COMPANY	HAZNET
PACIFIC GAS & ELECTRIC/ MIDWAY SUB	HAZNET
WAYNE GEFFRIES	HAZNET
SOUTHERN CALIFORNIA EDISON	HAZNET
SHAWN SHIRALIAN	HAZNET
FARMER CO-OP GIN INC	HAZNET
ALVIDRES UNION 76	HAZNET
ALVIDRES AUTO SERVICE	HAZNET
SOUTHERN CALIFORNIA EDISON	HAZNET
EXXONMOBIL OIL CORP.	HAZNET
AERA ENERGY LLC	HAZNET
CENTRAL RESOURCES INC	HAZNET
HAN OVER COMPRESSION	HAZNET
GILLIAM & SONS INC	HAZNET
CHEVRON PIPE LINE COMPANY	HAZNET
KOCH OIL CO	HAZNET
BUTTONWILLOW AIRPORT	SLIC
J.R. SIMPLOT	SSTS
J.R. SIMPLOT	SSTS
J R SIMPLOT CO	SSTS
BUTTONWILLOW LAND & CATTLE CO	EMI
SEMITROPIC WATER STORAGE DIST	EMI
EXXONMOBIL OIL CORPORATION	EMI

OVERVIEW MAP - 3251004.1s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow CA 93206 LAT/LONG: 35.3304 / 119.3857	CLIENT: URS Corporation CONTACT: Giorgio Molinario INQUIRY #: 3251004.1s DATE: March 19, 2012 4:51 pm

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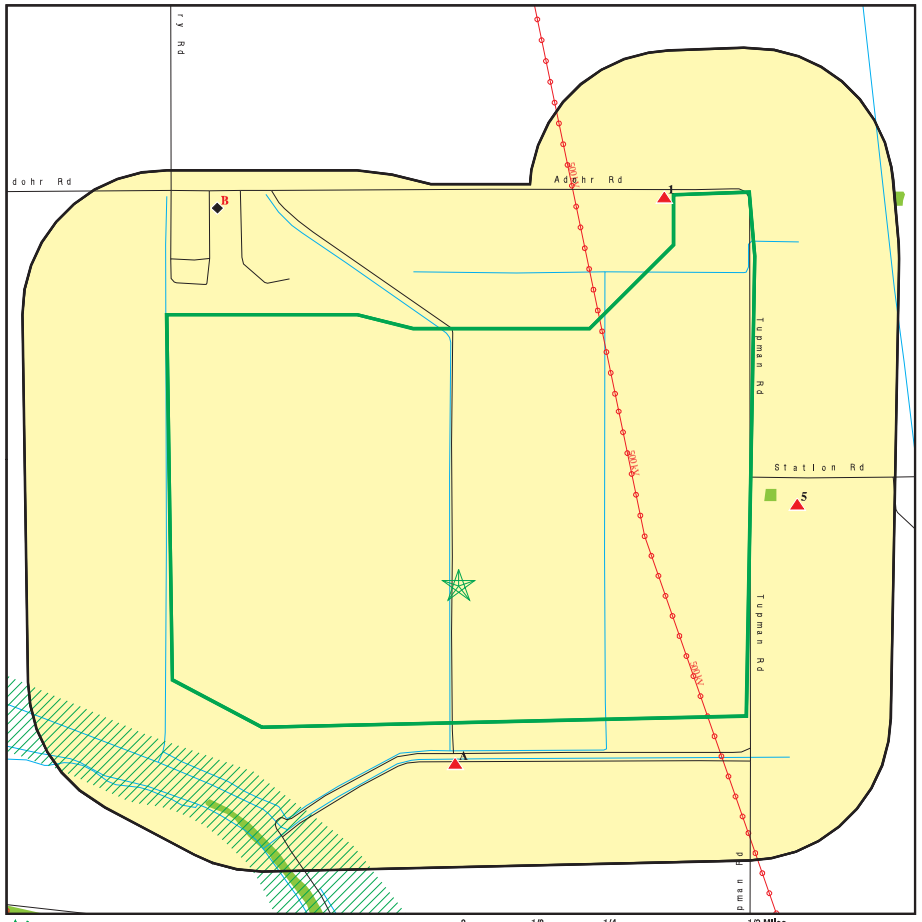
DETAIL MAP - 3251004.1s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
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This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow CA 93206 LAT/LONG: 35.3304 / 119.3857	CLIENT: URS Corporation CONTACT: Giorgio Molinario INQUIRY #: 3251004.1s DATE: March 19, 2012 4:53 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.500		0	0	0	0	0	0
Proposed NPL	1.500		0	0	0	0	0	0
NPL LIENS	0.500		0	0	0	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.500		0	0	0	0	0	0
Federal CERCLIS list								
CERCLIS	1.000		0	0	0	0	NR	0
FEDERAL FACILITY	1.500		0	0	0	0	0	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	1.000		0	0	0	0	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.500		0	0	0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	1.000		0	0	0	0	NR	0
Federal RCRA generators list								
RCRA-LQG	0.750		0	0	0	0	NR	0
RCRA-SQG	0.750		0	0	0	0	NR	0
RCRA-CESQG	0.750		0	0	0	0	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	1.000		0	0	0	0	NR	0
US INST CONTROL	1.000		0	0	0	0	NR	0
Federal ERNS list								
ERNS	0.500		0	0	0	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.500		0	0	0	0	0	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.500		0	0	0	0	0	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	1.000		0	0	0	0	NR	0
State and tribal leaking storage tank lists								
LUST	1.000		0	0	0	0	NR	0
SLIC	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	1.000		0	0	0	0	NR	0
State and tribal registered storage tank lists								
UST	0.750		0	0	0	0	NR	0
AST	0.750		0	1	0	0	NR	1
INDIAN UST	0.750		0	0	0	0	NR	0
FEMA UST	0.750		0	0	0	0	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	1.000		0	0	0	0	NR	0
VCP	1.000		0	0	0	0	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	1.000		0	0	0	0	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	1.000		0	0	0	0	NR	0
ODI	1.000		0	0	0	0	NR	0
WMUDS/SWAT	1.000		0	0	0	0	NR	0
SWRCY	1.000		0	0	0	0	NR	0
HAULERS	0.500		0	0	0	NR	NR	0
INDIAN ODI	1.000		0	0	0	0	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	0.500		0	0	0	NR	NR	0
HIST Cal-Sites	1.500		0	0	0	0	0	0
SCH	0.750		0	0	0	0	NR	0
Toxic Pits	1.500		0	0	0	0	0	0
CDL	0.500		0	0	0	NR	NR	0
US HIST CDL	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.750		0	0	0	0	NR	0
HIST UST	0.750		2	0	0	0	NR	2
SWEEPS UST	0.750		0	1	0	0	NR	1
Local Land Records								
LIENS 2	0.500		0	0	0	NR	NR	0
LUCIS	1.000		0	0	0	0	NR	0
LIENS	0.500		0	0	0	NR	NR	0
DEED	1.000		0	0	0	0	NR	0
Records of Emergency Release Reports								
HMIRS	0.500		0	0	0	NR	NR	0
CHMIRS	0.500		0	0	0	NR	NR	0
LDS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	0.500		0	0	0	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen	0.750		0	0	0	0	NR	0
DOT OPS	0.500		0	0	0	NR	NR	0
DOD	1.500		0	0	0	0	1	1
FUDS	1.500		0	0	0	0	0	0
CONSENT	1.500		0	0	0	0	0	0
ROD	1.500		0	0	0	0	0	0
UMTRA	1.000		0	0	0	0	NR	0
MINES	0.750		0	0	0	0	NR	0
TRIS	0.500		0	0	0	NR	NR	0
TSCA	0.500		0	0	0	NR	NR	0
FTTS	0.500		0	0	0	NR	NR	0
HIST FTTS	0.500		0	0	0	NR	NR	0
SSTS	0.500		0	0	0	NR	NR	0
ICIS	0.500		0	0	0	NR	NR	0
PADS	0.500		0	0	0	NR	NR	0
MLTS	0.500		0	0	0	NR	NR	0
RADINFO	0.500		0	0	0	NR	NR	0
FINDS	0.500		1	0	0	NR	NR	1
RAATS	0.500		0	0	0	NR	NR	0
CA BOND EXP. PLAN	1.500		0	0	0	0	0	0
NPDES	0.500		0	0	0	NR	NR	0
WDS	0.500		0	0	0	NR	NR	0
Cortese	1.000		0	0	0	0	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
Notify 65	1.500		0	0	0	0	0	0
DRYCLEANERS	0.750		0	0	0	0	NR	0
WIP	0.750		0	0	0	0	NR	0
ENF	0.500		0	0	0	NR	NR	0
HAZNET	0.500		0	0	0	NR	NR	0
EMI	0.500		2	0	0	NR	NR	2
INDIAN RESERV	1.500		0	0	0	0	0	0
SCRD DRYCLEANERS	1.000		0	0	0	0	NR	0
FINANCIAL ASSURANCE	0.500		0	0	0	NR	NR	0
HWP	1.500		0	0	0	0	0	0
HWT	0.750		0	0	0	0	NR	0
PCB TRANSFORMER	0.500		0	0	0	NR	NR	0
PROC	1.000		0	0	0	0	NR	0
MWMP	0.750		0	0	0	0	NR	0
COAL ASH DOE	0.500		0	0	0	NR	NR	0
COAL ASH EPA	1.000		0	0	0	0	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants	1.500		0	0	0	0	0	0
EDR Historical Auto Stations	0.750		0	0	0	0	NR	0
EDR Historical Cleaners	0.750		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD
Region WSW
> 1
5787 ft.

NAVAL PETROLEUM RESERVE NUMBER ONE — **DOD** — **CUSA139675** / **N/A**

NAVAL PETROLEUM RESERVE N (County), CA

DOD:

Feature 1:	Navy DOD
Feature 2:	Not reported
Feature 3:	Not reported
URL:	Not reported
Name 1:	Naval Petroleum Reserve Number One
Name 2:	Not reported
Name 3:	Not reported
State:	CA
DOD Site:	Yes
Tile name:	CAKERN

1
West
< 1/8
0.016 mi.
85 ft.

PALM FARMS, INC. — **HIST UST** — **U001580887** / **N/A**
ADOHR RD.
BUTTONWILLOW, CA 93206

Relative: Higher

Actual: 288 ft.

HIST UST:

Region:	STATE
Facility ID:	00000042966
Facility Type:	Other
Other Type:	FARMING
Total Tanks:	0005
Contact Name:	SAM ACKERMAN
Telephone:	8053274693
Owner Name:	PALM FARMS, INC.
Owner Address:	P.O. BOX 1118
Owner City,St,Zip:	BAKERSFIELD, CA 93302
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	5
Year Installed:	Not reported
Tank Capacity:	00003000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR

PALM FARMS, INC. (Continued) — **U001580887**

Tank Construction:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00003000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Stock Inventor

A2
South
< 1/8
0.070 mi.
371 ft.

WESTERN MILLING LLC — **EMI** — **S108433824** / **N/A**
7361 ADOHR RD
BUTTONWILLOW, CA 94578

Site 1 of 3 in cluster A

Relative: Higher

Actual: 288 ft.

EMI:

Year:	2005
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	.9938425643605206896
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.288214343664551
Year:	2006
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

WESTERN MILLING LLC (Continued) **S108433824**

SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.080588793103448275
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.31337075

Year:	2007
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.080588793103448275
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.31337075

Year:	2007
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1.080588793103448275
Part. Matter 10 Micrometers & Smllr Tons/Yr:	.31337075

A3 South < 1/8 0.070 mi. 371 ft. — **SHANCO COMMODITIES COMPANY INC** — **EMI** — **S106839184** / **N/A**
7361 ADOHR ROAD
BUTTONWILLOW, CA

Site 2 of 3 in cluster A

Relative: Higher

Actual: 288 ft.

EMI:

Year:	2000
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

SHANCO COMMODITIES COMPANY INC (Continued) **S106839184**

SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	8
Part. Matter 10 Micrometers & Smllr Tons/Yr:	2

Year:	2003
County Code:	15
Air Basin:	SJV
Facility ID:	3355
Air District Name:	SJU
SIC Code:	4221
Air District Name:	SAN JOAQUIN VALLEY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

A4 South < 1/8 0.070 mi. 371 ft. — **WESTERN MILLING LLC** — **FINDS** — **1011991231** / **N/A**
7361 ADOHR RD
BUTTONWILLOW, CA 93206

Site 3 of 3 in cluster A

Relative: Higher

Actual: 288 ft.

FINDS:

Registry ID:	110038028461

Environmental Interest/Information System
The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

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5 East < 1/8 0.081 mi. 429 ft. — **MARTIN SNOW FARM** — **HIST UST** — **U001580882** / **N/A**
STATION RD, 1/4 MILE EAST OF
BUTTONWILLOW, CA 93206

Relative: Higher

Actual: 288 ft.

HIST UST:

Region:	STATE
Facility ID:	00000012669
Facility Type:	Other
Other Type:	FARMING
Total Tanks:	0000
Contact Name:	MARTIN SNOW
Telephone:	8053257779
Owner Name:	MARTIN SNOW
Owner Address:	3344 EL ENCANTO CT.
Owner City,St,Zip:	BAKERSFIELD, CA 93301

MARTIN SNOW FARM (Continued) **U001580882**

Tank Num: 001
Container Num: 2
Year Installed: 1970
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 1
Year Installed: 1970
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

B6 **CAUZZA AG PARTNERS - PALM RANCH** **AST** **A100323375**
North **ADOHR AND DAIRY** **N/A**
1/8-1/4 **BUTTONWILLOW, CA 93206**
0.175 mi.
923 ft. **Site 1 of 2 in cluster B**

Relative:
Lower

Actual:
285 ft.

AST:
Owner: CAUZZA JOHN & LAURA
Total Gallons: 31,120
Certified Unified Program Agencies: Kern

B7 **PALM FARMS INC.** **SWEEPS UST** **S106930448**
North **ADOHR RD** **N/A**
1/8-1/4 **BUTTONWILLOW, CA 93206**
0.184 mi.
974 ft. **Site 2 of 2 in cluster B**

Relative:
Lower

Actual:
286 ft.

SWEEPS UST:
Status: A
Comp Number: 42966
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 09-30-89
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 15-000-042966-000001
Actv Date: 07-01-85
Capacity: 5000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: 5

Status: A
Comp Number: 42966
Number: 9

PALM FARMS INC. (Continued) **S106930448**

Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 09-30-89
Tank Status: A
Owner Tank Id: 5
Swrcb Tank Id: 15-000-042966-000002
Actv Date: 07-01-85
Capacity: 3000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 42966
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 09-30-89
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 15-000-042966-000003
Actv Date: 07-01-85
Capacity: 5000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 42966
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 09-30-89
Tank Status: A
Owner Tank Id: 4
Swrcb Tank Id: 15-000-042966-000004
Actv Date: 07-01-85
Capacity: 3000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 42966
Number: 9
Board Of Equalization: Not reported
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 09-30-89
Tank Status: A
Owner Tank Id: 2

PALM FARMS INC. (Continued) **S106930448**

Swrcb Tank Id:	15-000-042966-000005
Actv Date:	07-01-85
Capacity:	5000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Count: 57 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BUTTONWILLOW	1005431572	J.R. SIMPLOT	HWY 58 FRONT ST	93206	SSTS
BUTTONWILLOW	S106930076	OASIS' LIQUOR'S	I5 & 58 27736 HWY 58	93206	SWEEPS UST
BUTTONWILLOW	U004112573	PGE EAST MIDWAY SUBSTATION	I-5 & HWY 58	93206	UST
BUTTONWILLOW	S106923074	BANDUCCI & SON	RR 1 BOX 85 MCKITTRI HWY	93206	SWEEPS UST
BUTTONWILLOW	S106927755	JENNIE RICCOMINI RESIDENCE	RR 1 BOX 84 HWY 58	93206	SWEEPS UST
BUTTONWILLOW	S111079345	MONTEZ TRUCKING INC	INTERSTATE 5 S OF HWY 58	93206	HAZNET
BUTTONWILLOW	S103678965	URIEL GOMEZ ANGUILANO	HWY 5 AT BUTTONWILLOW EXIT	93206	HAZNET
BUTTONWILLOW	1009305689	J.R. SIMPLOT	41335 HWY 58	93206	SSTS
BUTTONWILLOW	U004111323	CHICCA BROS - BUTTONWILLOW	HWY 58 2.5 M W	93206	UST
BUTTONWILLOW	A100339708	DON POLLARD HAY SERVICE INC	40948 HWY 58	93206	AST
BUTTONWILLOW	A100338197	P G AND E - MIDWAY	HWY 58 3 MI W OF I-5	93206	AST
BUTTONWILLOW	A100337614	ROY AND JELSEY ROMANINI FARMS	HWY 58 AND CORN CAMP	93206	AST
BUTTONWILLOW	1012195794	J R SIMPLOT CO	41335 HWY 58	93206	SSTS
BUTTONWILLOW	U001580874	J & R ROMANINI FARMS	HIGHWAY 58	93206	HIST UST
BUTTONWILLOW	S106927573	J & R ROMANINI FARMS	HIGHWAY 58	93206	SWEEPS UST
BUTTONWILLOW	S104573772	CHEVRON PIPE LINE COMPANY	HWY 58 2 MI S OF LOKERN RD	93206	HAZNET
BUTTONWILLOW	S109429940	PACIFIC GAS & ELECTRIC/ MIDWAY SUB	HWY 58	93000	HAZNET
BUTTONWILLOW	1003879066	BUTTONWILLOW DUSTERS INC	HWY 58	93206	CERC-NFRAP
BUTTONWILLOW	S106923687	BUTTONWILLOW DEPOT	HWY 58 ON SOUTHSIDE	93206	SWEEPS UST
BUTTONWILLOW	S103643582	WAYNE GEFFRIES	22736 HWY 58/I5	00000	HAZNET
BUTTONWILLOW	S107620341	BUTTONWILLOW LAND & CATTLE CO	CORNER OF WASCO WAY & HWY 58	93206	EMI
BUTTONWILLOW	S107139197	SOUTHERN CALIFORNIA EDISON	N.W. CORNER OF HWY 58 & WASCO	93206	HAZNET
BUTTONWILLOW	S106090100	SHAWN SHIRALIAN	6725 N GOLDEN STATE BLVD	93206	HAZNET
BUTTONWILLOW	S105722435	FARMER CO-OP GIN INC	39329 HIWAY 58	00000	HAZNET
BUTTONWILLOW	S106932093	SHELL OIL COMPANY	I-5 HWY 58/TRACY AVE	93206	SWEEPS UST
BUTTONWILLOW	S103619741	ALVIDRES UNION 76	100 W HWY 58	93206	HAZNET
BUTTONWILLOW	U004112557	ALVIDRES UNION 76	100 W HWY 58 & MAIN ST	93206	UST
BUTTONWILLOW	S111082227	ALVIDRES AUTO SERVICE	100 W HWY 58 & MAIN ST	93206	HAZNET
BUTTONWILLOW	S106926734	GIN # 3 & 5	LERDO HWY & MAIN DRA	93206	SWEEPS UST
BUTTONWILLOW	S110654331	SPICER CITY MARKET	LERDO HWY & MAIN DRAIN RD	93206	LUST
BUTTONWILLOW	S109287555	LOKERN FARMS COMPOSTING	LOKERN RD, EAST HWY 33		LDS
BUTTONWILLOW	S106921428	SEMITROPIC WATER STORAGE DIST	MERCED AVE & HWY 5		EMI
BUTTONWILLOW	S106485995	BUTTONWILLOW AIRPORT	ST. ROUTE 58	93206	SLIC
BUTTONWILLOW	A100339984	A J TORRIGIANI AND SON	N SIDE HWY 58 W OF PALOMAS	93206	AST
BUTTONWILLOW	A100338823	KOSAREFF FARMS	STOCKDALE HWY AND DUNFORD	93206	AST
BUTTONWILLOW	S108221055	SOUTHERN CALIFORNIA EDISON	N W CORNER OF HWY 58 & WASCO W	93206	HAZNET
BUTTONWILLOW	U004112556	WEST KERN MACHINERY, INC	1/4 M W/INT 5-LERDO HWY	93206	UST
BUTTONWILLOW	S111291251	CARRIZO TO MIDWAY 230 KV RECONDUCT	WASCO AND HIGHWAY 58	93206	NPDES
MCKITTRICK	S109426326	EXXONMOBIL OIL CORP.	19662 HWY 33	93206	HAZNET
TUPMAN	S103948871	AERA ENERGY LLC	25761 HIGHWAY 119	93276	HAZNET
TUPMAN	A100338159	OCCIDENTAL OF ELK HILLS INC	28590 HWY 119	93276	AST
TUPMAN	S105724360	CENTRAL RESOURCES INC	25761 HWY 119	93276	HAZNET
TUPMAN	S108748188	HAN OVER COMPRESSION	28590 HWY 119	93276	HAZNET

Count: 57 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
TUPMAN	S109934227	GILLIAM & SONS INC	28590 HIGHWAY 19	93276	HAZNET
TUPMAN	S103479930	ARCO OIL & GAS CO	NORTH COLES LEVEE	93276	LUST, CHMIRS
TUPMAN	S106830898	EXXONMOBIL OIL CORPORATION	EMIDIO PUMPING STATION	93276	EMI
TUPMAN	S106922801	ARCO GAS PLANT #8	25 MI OF BAKERSFIELD/TA HWY	93276	SWEEPS UST
TUPMAN	U001583279	ARCO GAS PLANT #8	25 MI OF BAKERSFIELD/TAFT HWY	93276	HIST UST
TUPMAN	U001583278	ARCO GAS PLANT #21	25 MI OF BAKERSFIELD/TAFT HWY	93276	HIST UST
TUPMAN	S110737006	TUPMAN SUBSTATION TRANSMISSION REL	OFF STOCKDALE HWY NEAR HWY 43	93276	NPDES
TUPMAN	S102806170	CHEVRON PIPE LINE COMPANY	TUPMAN RD.	93276	HAZNET
TUPMAN	A100337228	WEATHERFORD US LP	25890 TUPMAN	93276	AST
TUPMAN	S103680088	KOCH OIL CO	TUPMAN RD/HWY 119	93276	HAZNET
TUPMAN	S106929957	NORTH COLES LEVEE	23 MI W OF BAKERSFIELD HWY 119	93276	SWEEPS UST
TUPMAN	U001583282	NORTH COLES LEVEE	23 MI W OF BAKERSFIELD/HWY 119	93276	HIST UST
TUPMAN	U001583283	NORTH COLES LEVEE #3 WATER INJ	25 MI W OF BAKERSFIELD HWY 119	93276	HIST UST, SWEEPS UST
TUPMAN CA	S104384508	ELK HILLS POWER, LLC	PO BOX 1001	93276	WMUDS/SWAT

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 09/07/2011
Date Data Arrived at EDR: 10/12/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 141

Source: EPA
Telephone: N/A
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/07/2011
Date Data Arrived at EDR: 10/12/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 141

Source: EPA
Telephone: N/A
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 09/07/2011
Date Data Arrived at EDR: 10/12/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 141

Source: EPA
Telephone: N/A
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/27/2011
Date Data Arrived at EDR: 02/27/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 14

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/10/2010
Date Data Arrived at EDR: 01/11/2011
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/13/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/28/2011
Date Data Arrived at EDR: 02/27/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 14

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/19/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 132

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/10/2011
Date Data Arrived at EDR: 01/05/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/05/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/10/2011
Date Data Arrived at EDR: 01/05/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/05/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/10/2011
Date Data Arrived at EDR: 01/05/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/05/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/10/2011
Date Data Arrived at EDR: 01/05/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/05/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List
A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls
A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/30/2011
Date Data Arrived at EDR: 12/30/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 10/03/2011
Date Data Arrived at EDR: 10/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 38

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/18/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites
Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 02/07/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 15

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database
The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 02/07/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 15

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System
Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/21/2011
Date Data Arrived at EDR: 11/22/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/20/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/20/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22
Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/02/2011
Date Data Arrived at EDR: 11/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 7
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 11/01/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 10
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/03/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Semi-Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/07/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 34
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/01/2011
Date Data Arrived at EDR: 11/21/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 50
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/20/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 33

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 01/23/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/02/2011
Date Data Arrived at EDR: 11/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 7

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/28/2011
Date Data Arrived at EDR: 11/29/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 42

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/01/2011
Date Data Arrived at EDR: 11/21/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 50

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 07/01/2011
Date Data Arrived at EDR: 08/26/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 18

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 12/14/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 26

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 11/01/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 10

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/03/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/16/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 02/07/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 15

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 08/04/2011
Date Data Arrived at EDR: 10/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 38

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 01/06/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/27/2011
Date Data Arrived at EDR: 06/27/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/27/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 12/21/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/12/2011
Date Data Arrived at EDR: 12/19/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 31

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/19/2011
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/24/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 28

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/06/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 10/07/2011
Date Data Arrived at EDR: 12/09/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 32

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/06/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 02/07/2012
Date Data Arrived at EDR: 02/07/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 15

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/14/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/07/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/09/2011
Date Data Arrived at EDR: 09/16/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

LUCIS: Land Use Control Information System
LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Varies

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/16/2011
Date Data Arrived at EDR: 12/16/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/12/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/13/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 10/04/2011
Date Data Arrived at EDR: 10/04/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 38

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 05/03/2011
Date Made Active in Reports: 06/15/2011
Number of Days to Update: 43

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing
The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/20/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 32

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing
The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 01/20/2012
Date Data Arrived at EDR: 01/20/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/10/2011
Date Data Arrived at EDR: 01/05/2012
Date Made Active in Reports: 03/12/2012
Number of Days to Update: 67

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/05/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/29/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 94

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/07/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 01/25/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 36

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/27/2011
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/28/2011
Date Data Arrived at EDR: 12/14/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 27

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/14/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/28/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Varies

MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/07/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 131
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/28/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/27/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 12/21/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 60

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/10/2012
Date Data Arrived at EDR: 01/12/2012
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/12/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 79

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/13/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/27/2012
Next Scheduled EDR Contact: 06/11/2012
Data Release Frequency: Quarterly

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/21/2011
Date Data Arrived at EDR: 11/22/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 01/03/2012
Date Data Arrived at EDR: 01/03/2012
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 16

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 01/03/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/20/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 01/19/2012
Date Data Arrived at EDR: 01/19/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 33
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 01/23/2012
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 41
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/16/2011
Number of Days to Update: 28
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 19
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/30/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/06/2012
Next Scheduled EDR Contact: 05/07/2012
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/12/2011
Date Data Arrived at EDR: 12/19/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 31
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/19/2011
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/07/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 35
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/18/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/16/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/18/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 34
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/18/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/09/2010
Date Data Arrived at EDR: 08/11/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 9
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/02/2011
Next Scheduled EDR Contact: 03/12/2012
Data Release Frequency: Quarterly

FINANCIAL ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/29/2011
Date Data Arrived at EDR: 11/30/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 13
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Varies

FINANCIAL ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 06/01/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 28
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 02/03/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: N/A

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/03/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/12/2012
Date Data Arrived at EDR: 01/13/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 39
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/30/2011
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 01/12/2012
Date Data Arrived at EDR: 01/13/2012
Date Made Active in Reports: 02/24/2012
Number of Days to Update: 42
Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/30/2011
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/28/2011
Date Data Arrived at EDR: 11/29/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 14

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/07/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 03/16/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/20/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/29/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 35

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/23/2012
Date Data Arrived at EDR: 01/24/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 28

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/24/2012
Next Scheduled EDR Contact: 05/07/2012
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 11/17/2011
Next Scheduled EDR Contact: 03/05/2012
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/29/2011
Date Data Arrived at EDR: 02/02/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 19

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/23/2012
Next Scheduled EDR Contact: 05/07/2012
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/23/2012
Date Data Arrived at EDR: 01/25/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 28

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/23/2012
Next Scheduled EDR Contact: 04/06/2012
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 03/05/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/16/2012
Date Data Arrived at EDR: 01/18/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 35

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/16/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 01/13/2012
Date Data Arrived at EDR: 01/24/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/09/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 03/05/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/05/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: No Update Planned

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/01/2012
Date Data Arrived at EDR: 02/17/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 4

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/01/2012
Date Data Arrived at EDR: 02/17/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 4

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilties
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/02/2011
Date Data Arrived at EDR: 11/18/2011
Date Made Active in Reports: 12/14/2011
Number of Days to Update: 26

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/12/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 37

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/26/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 26

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/21/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/26/2012
Date Made Active in Reports: 02/24/2012
Number of Days to Update: 29

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/21/2011
Next Scheduled EDR Contact: 04/26/2012
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/02/2011
Date Data Arrived at EDR: 10/12/2011
Date Made Active in Reports: 11/08/2011
Number of Days to Update: 27

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/13/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2011
Date Data Arrived at EDR: 10/14/2011
Date Made Active in Reports: 11/08/2011
Number of Days to Update: 25

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/13/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 12/16/2011
Number of Days to Update: 15

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/09/2010
Date Data Arrived at EDR: 09/15/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 14

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/16/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2011
Date Data Arrived at EDR: 11/04/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 39
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 01/18/2012
Date Data Arrived at EDR: 01/18/2012
Date Made Active in Reports: 02/22/2012
Number of Days to Update: 35
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 01/09/2012
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/17/2012
Date Data Arrived at EDR: 01/17/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 35
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/19/2012
Next Scheduled EDR Contact: 07/02/2012
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/15/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 35
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/19/2012
Next Scheduled EDR Contact: 07/02/2012
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/09/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 41
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 03/05/2012
Next Scheduled EDR Contact: 06/18/2012
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/16/2012
Date Data Arrived at EDR: 02/17/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 4
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/13/2012
Next Scheduled EDR Contact: 05/28/2012
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/19/2011
Date Data Arrived at EDR: 01/06/2012
Date Made Active in Reports: 01/27/2012
Number of Days to Update: 21
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/19/2012
Next Scheduled EDR Contact: 07/02/2012
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/19/2011
Date Data Arrived at EDR: 01/17/2012
Date Made Active in Reports: 02/24/2012
Number of Days to Update: 38
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/19/2012
Next Scheduled EDR Contact: 07/02/2012
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/05/2011
Date Data Arrived at EDR: 04/06/2011
Date Made Active in Reports: 05/12/2011
Number of Days to Update: 36
Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/27/2011
Next Scheduled EDR Contact: 04/16/2012
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/12/2011
Date Data Arrived at EDR: 12/13/2011
Date Made Active in Reports: 01/17/2012
Number of Days to Update: 35
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/12/2012
Next Scheduled EDR Contact: 06/25/2012
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 10/27/2011
Date Data Arrived at EDR: 11/23/2011
Date Made Active in Reports: 12/13/2011
Number of Days to Update: 20
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/09/2012
Next Scheduled EDR Contact: 04/23/2012
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2011
Date Data Arrived at EDR: 02/03/2012
Date Made Active in Reports: 02/21/2012
Number of Days to Update: 18
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/30/2012
Next Scheduled EDR Contact: 05/14/2012
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/19/2011
Date Made Active in Reports: 01/17/2012
Number of Days to Update: 29
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/19/2011
Next Scheduled EDR Contact: 04/02/2012
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/28/2011
Date Data Arrived at EDR: 01/06/2012
Date Made Active in Reports: 01/17/2012
Number of Days to Update: 11
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 12/21/2011
Next Scheduled EDR Contact: 04/09/2012
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/20/2012
Date Data Arrived at EDR: 02/20/2012
Date Made Active in Reports: 03/15/2012
Number of Days to Update: 24
Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/20/2012
Next Scheduled EDR Contact: 06/04/2012
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 22
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/20/2012
Next Scheduled EDR Contact: 04/30/2012
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/10/2012
Date Data Arrived at EDR: 02/09/2012
Date Made Active in Reports: 03/09/2012
Number of Days to Update: 29
Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/09/2012
Next Scheduled EDR Contact: 05/21/2012
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2009	Source: Department of Environmental Protection
Date Data Arrived at EDR: 01/26/2012	Telephone: 717-783-8990
Date Made Active in Reports: 03/06/2012	Last EDR Contact: 01/23/2012
Number of Days to Update: 40	Next Scheduled EDR Contact: 05/07/2012
	Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2010	Source: Department of Environmental Management
Date Data Arrived at EDR: 06/24/2011	Telephone: 401-222-2797
Date Made Active in Reports: 06/30/2011	Last EDR Contact: 02/27/2012
Number of Days to Update: 6	Next Scheduled EDR Contact: 06/11/2012
	Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010	Source: Department of Natural Resources
Date Data Arrived at EDR: 08/19/2011	Telephone: N/A
Date Made Active in Reports: 09/15/2011	Last EDR Contact: 03/19/2012
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/02/2012
	Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HECA
DAIRY ROAD/ADOHR ROAD
BUTTONWILLOW, CA 93206

TARGET PROPERTY COORDINATES

Latitude (North):	35.3304 - 35˚ 19' 49.44''
Longitude (West):	119.3857 - 119˚ 23' 8.52''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	283153.6
UTM Y (Meters):	3912097.2
Elevation:	288 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	35119-C4 EAST ELK HILLS, CA
Most Recent Revision:	1973
East Map:	35119-C3 TUPMAN, CA
Most Recent Revision:	1973

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

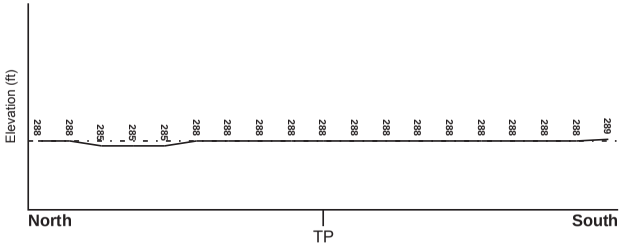
TOPOGRAPHIC INFORMATION

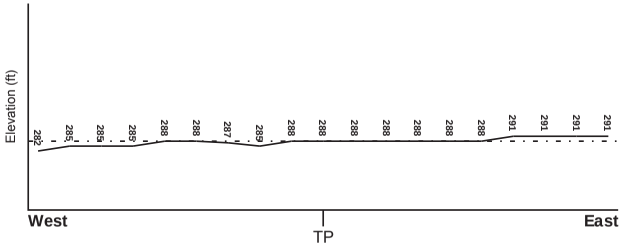
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 288 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
KERN, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06029C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EAST ELK HILLS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

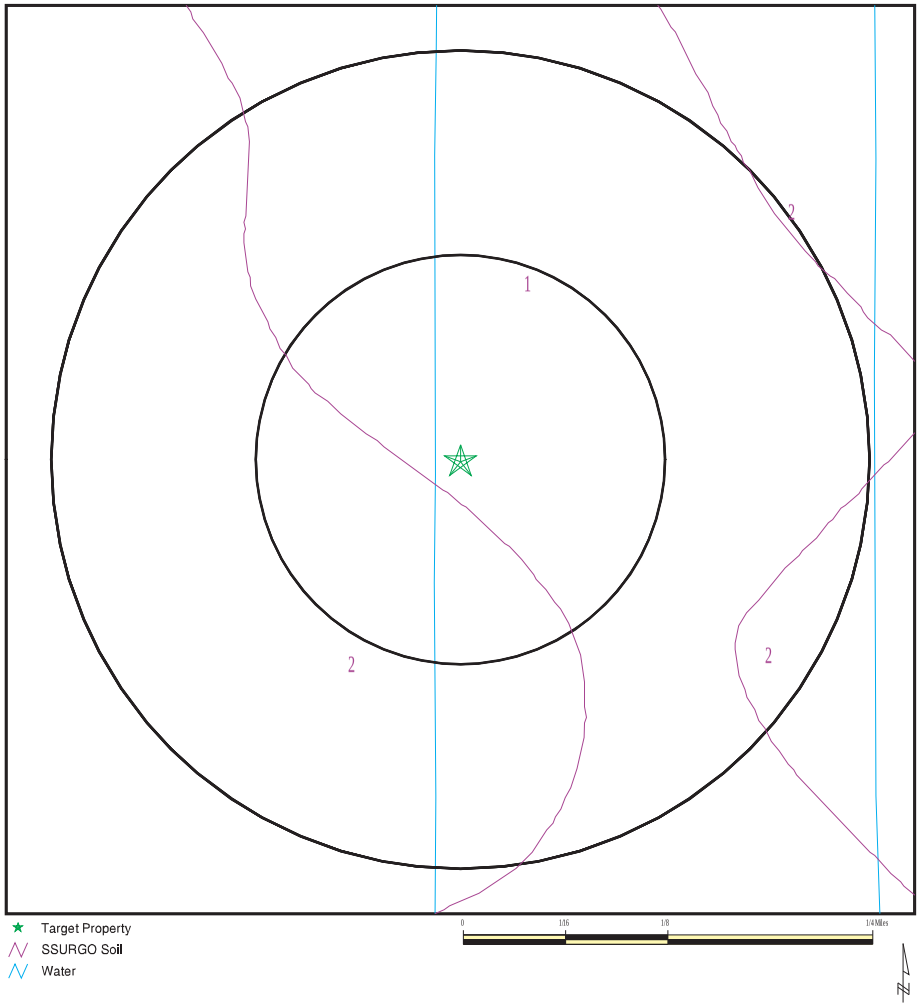
Era: Cenozoic
System: Quaternary
Series: Quaternary
Code: Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3251004.1s



★ Target Property
SSURGO Soil
Water

SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow CA 93206 LAT/LONG: 35.3304 / 119.3857	CLIENT: URS Corporation CONTACT: Giorgio Molinario INQUIRY #: 3251004.1s DATE: March 19, 2012 4:53 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: BUTTONWILLOW

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	27 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	27 inches	55 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	55 inches	64 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: LOKERN

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	7 inches	48 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9
3	48 inches	66 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS3175424	1/4 - 1/2 Mile NW
2	USGS3175401	1/4 - 1/2 Mile SSW
4	USGS3175386	1/2 - 1 Mile SW
6	USGS3175411	1/2 - 1 Mile East
B7	USGS3175402	1/2 - 1 Mile WSW
A8	USGS3175428	1/2 - 1 Mile ENE
10	USGS3175257	1/2 - 1 Mile NE
C12	USGS3175271	1/2 - 1 Mile North
D13	USGS3175248	1/2 - 1 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

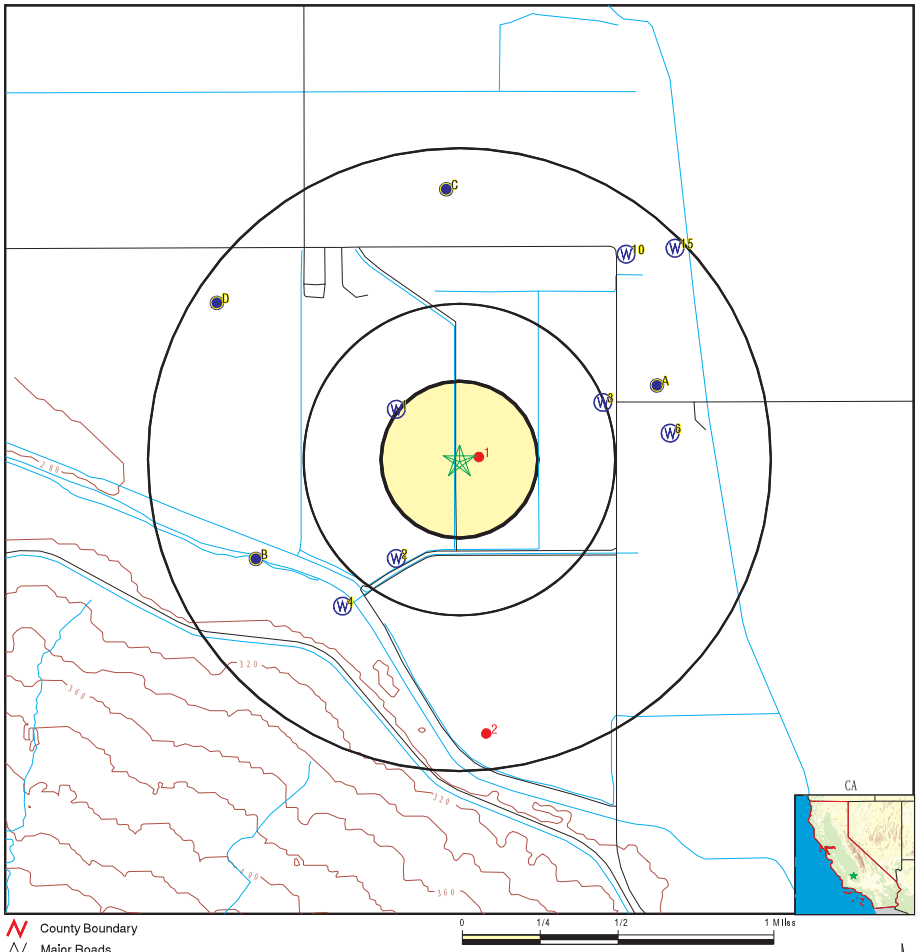
MAP ID	WELL ID	LOCATION FROM TP
3	CADW40000021752	1/4 - 1/2 Mile ENE
A5	CADW40000021761	1/2 - 1 Mile ENE
B9	CADW40000021665	1/2 - 1 Mile WSW
C11	CADW40000021850	1/2 - 1 Mile North
D14	CADW40000021799	1/2 - 1 Mile WNW
15	17492	1/2 - 1 Mile NE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG80000105543	0 - 1/8 Mile East
2	CAOG80000102967	1/2 - 1 Mile South

PHYSICAL SETTING SOURCE MAP - 3251004.1s



County Boundary
Major Roads
Contour Lines
Earthquake Fault Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
Oil, gas or related wells

SITE NAME: HECA ADDRESS: Dairy Road/Adohr Road Buttonwillow CA 93206 LAT/LONG: 35.3304 / 119.3857	CLIENT: URS Corporation CONTACT: Giorgio Molinario INQUIRY #: 3251004.1s DATE: March 19, 2012 4:53 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
1 NW 1/4 - 1/2 Mile Lower	FED USGS	USGS3175424

Agency cd:	USGS	Site no:	351958119231801
Site name:	030S024E10F001M		
Latitude:	351958	EDR Site id:	USGS3175424
Longitude:	1192318	Dec lat:	35.33274015
Dec lon:	-119.38928149	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S10 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360
Altitude:	286.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

2 SSW 1/4 - 1/2 Mile Lower	FED USGS	USGS3175401

Agency cd:	USGS	Site no:	351933119231801
Site name:	031S024E10P002M		
Latitude:	351933	EDR Site id:	USGS3175401
Longitude:	1192318	Dec lat:	35.32579584
Dec lon:	-119.38928152	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S10 T31S R24E M
Location map:	KERN RIVER F2	Map scale:	63360

Altitude:	300.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
ENE **CA WELLS** **CADW40000021752**
1/4 - 1/2 Mile
Higher

Longitude:	-119.3766
Latiude:	35.3331
Stwellno:	30S24E11E061M
Districtco:	8
Welluseco:	O
Countyco:	15
Gwcode:	502214
Site id:	CADW40000021752

4
SW **FED USGS** **USGS3175386**
1/2 - 1 Mile
Higher

Agency cd:	USGS	Site no:	351925119232901
Site name:	030S024E15D001M		
Latitude:	351925	EDR Site id:	USGS3175386
Longitude:	1192329	Dec lat:	35.32357368
Dec lon:	-119.3923372	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	SES15 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360

Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	Not Reported		
Altitude datum:	Not Reported		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	1954
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	502	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

A5
ENE **CA WELLS** **CADW40000021761**
1/2 - 1 Mile
Higher

Longitude:	-119.374
Latiude:	35.3339
Stwellno:	30S24E11E001M
Districtco:	3
Welluseco:	Z
Countyco:	15
Gwcode:	502214
Site id:	CADW40000021761

6
East **FED USGS** **USGS3175411**
1/2 - 1 Mile
Higher

Agency cd:	USGS	Site no:	351954119222201
Site name:	030S024E11L001M		
Latitude:	351954	EDR Site id:	USGS3175411
Longitude:	1192222	Dec lat:	35.33162899
Dec lon:	-119.37372536	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S11 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360

Altitude:	488.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

B7
WSW **FED USGS** **USGS3175402**
1/2 - 1 Mile
Lower

Agency cd:	USGS	Site no:	351933119234501
Site name:	030S024E09R001M		
Latitude:	351933	EDR Site id:	USGS3175402
Longitude:	1192345	Dec lat:	35.32579587
Dec lon:	-119.3967818	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S09 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360
Altitude:	285.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	1957
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	522	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-02-20	Ground water data end date:	1961-02-20
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1961-02-20	70.00	

A8
ENE **FED USGS** **USGS3175428**
1/2 - 1 Mile
Higher

Agency cd:	USGS	Site no:	352002119222301
Site name:	030S024E11E001M		
Latitude:	352002	EDR Site id:	USGS3175428
Longitude:	1192223	Dec lat:	35.33385117
Dec lon:	-119.37400313	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S11 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360
Altitude:	285.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-02-19	Ground water data end date:	1961-02-19
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1961-02-19	67.00	

B9
WSW **CA WELLS** **CADW40000021665**
1/2 - 1 Mile
Higher

Longitude:	-119.3968
Latiude:	35.3258
Stwellno:	30S24E09R001M
Districtco:	3
Welluseco:	Z
Countyco:	15
Gwcode:	502214
Site id:	CADW40000021665

10
NE
1/2 - 1 Mile
Higher

FED USGS **USGS3175257**

Agency cd:	USGS	Site no:	352024119223101
Site name:	030S024E11E002M		
Latitude:	352024	EDR Site id:	USGS3175257
Longitude:	1192231	Dec lat:	35.33996216
Dec lon:	-119.3762254	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	Not Reported
Location map:	EAST ELK HILLS	Map scale:	24000
Altitude:	287.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	1983
Date inventoried:	19890407	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	19.20	Hole depth:	Not Reported
Source of depth data:	other government (other than USGS)		
Project number:	470645674		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

C11
North
1/2 - 1 Mile
Higher

CA WELLS **CADW40000021850**

Longitude:	-119.386
Latiude:	35.343
Stwellno:	30S24E03Q001M
Districtco:	3
Welluseco:	Z
Countyco:	15
Gwcode:	502214
Site id:	CADW40000021850

C12
North
1/2 - 1 Mile
Higher

FED USGS **USGS3175271**

Agency cd:	USGS	Site no:	352035119230601
Site name:	030S024E03Q001M		
Latitude:	352035	EDR Site id:	USGS3175271
Longitude:	1192306	Dec lat:	35.3430177
Dec lon:	-119.38594797	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	S03 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360
Altitude:	286.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	1957
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	564	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-02-20	Ground water data end date:	1961-02-20
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1961-02-20	66.00	

D13
NW
1/2 - 1 Mile
Lower

FED USGS **USGS3175248**

Agency cd:	USGS	Site no:	352016119235301
Site name:	030S024E09A001M		
Latitude:	352016	EDR Site id:	USGS3175248
Longitude:	1192353	Dec lat:	35.33774009
Dec lon:	-119.39900404	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	029
Country:	US	Land net:	NES09 T30S R24E M
Location map:	KERN RIVER F2	Map scale:	63360
Altitude:	284.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	TulareBuena Vista Lakes. California. Area = 8510 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	168	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-02-21	Ground water data end date:	1961-02-21
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1961-02-21	53.00	

D14
WNW
1/2 - 1 Mile
Lower

CA WELLS **CADW40000021799**

Longitude:	-119.399
Latiude:	35.3377
Stwellno:	30S24E09A001M
Districtco:	3
Welluseco:	Z
Countyco:	15
Gwcode:	502214
Site id:	CADW40000021799

15
NE
1/2 - 1 Mile
Higher

CA WELLS **17492**

Water System Information:

Prime Station Code:	30S/24E-11D02 M	User ID:	15C
FRDS Number:	1500157001	County:	Kern
District Number:	45	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	352025.0 1192221.0	Precision:	0.5 Mile (30 Seconds)
Source Name:	WELL 01		
System Number:	1500157		
System Name:	PALM FARMS INC		
Organization That Operates System:	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance	Database	EDR ID Number

1
East
0 - 1/8 Mile

OIL_GAS **CAOG80000105543**

Districtnu:	4	Apinumber:	02952932
Activewell:	N	Well type:	OG
Wellsymbol:	DH	Confidenti:	Not Reported
Operatorna:	Quintana Production Co.		
Wellnumber:	56X-10	Leasename:	Union-Gamay
Blmwell:	N	Countyname:	Kern
Fieldname:	Any Field		
Areaname:	Any Area		
Section :	10	Township:	30S
Range:	24E	Basemeridi:	MD
Elevation:	286 MAT		
Locationde:	Fr SE cor 1750N 2450W		
Latitude83:	35.33052		
Longitude8:	-119.384598		
Gissourcec:	hud		
Comments:	Not Reported		
Operatorco:	06988	Cacountyco:	029
Fieldcode:	000	Areacode:	00
Td:	0		
Site id:	CAOG80000105543		

2
South
1/2 - 1 Mile

OIL_GAS **CAOG80000102967**

Districtnu:	4	Apinumber:	02937474
Activewell:	N	Well type:	OG
Wellsymbol:	DH	Confidenti:	Not Reported
Operatorna:	E. A. Bender, Operator		
Wellnumber:	55	Leasename:	Palm Farms
Blmwell:	N	Countyname:	Kern
Fieldname:	Any Field		
Areaname:	Any Area		
Section :	15	Township:	30S
Range:	24E	Basemeridi:	MD
Elevation:	299 KB		
Locationde:	Fr ctr 330S 330E		
Latitude83:	35.317644		
Longitude8:	-119.384176		
Gissourcec:	hud		
Comments:	Not Reported		
Operatorco:	B3300	Cacountyco:	029
Fieldcode:	000	Areacode:	00
Td:	0		
Site id:	CAOG80000102967		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93206	1	0

Federal EPA Radon Zone for KERN County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93206

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.900 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX E

Port Organics Products, LTD Tailing Piles Analyses

from 2009 (AECOM) and

2005 (Kern County Environmental Health Department)

Results from AECOM

AECOM

AECOM Environment
3995 Via Oro Avenue, Long Beach, CA 90810
T 562.420.2933 F 562.420.2915 www.aecom.com

September 9, 2009

Mr. Pete Kafalas
Hydrogen Energy International LLC
One World Trade Center
Long Beach, California 90831

Subject: Results of Soil Sampling Activities
Proposed Site near the Intersection of Dairy Rd and Adohr Rd
Buttonwillow, California

Dear Mr. Kafalas,

On behalf of Hydrogen Energy International LLC (HEI), AECOM Environment (AECOM) submits this report describing the sampling and analytical test results of soil samples collected from two tailings piles at the proposed project site in Kern County in order to facilitate waste characterization of the tailings piles in preparation for removal and disposal. Soil sampling was conducted and analytical testing of the collected soil samples for total petroleum hydrocarbons (TPH), Volatile Organic Compounds (VOC), CAM 17 Metals, pH, ammonia, and acute fish toxicity bioassay (96 hour).

Soil sampling activities

In accordance with the work plan, four soil samples were collected from the indoor tailings pile located inside a barn type structure at .5 feet below ground surface (bgs), one from West side of the pile, two from the North side, and one from the East side (South side of the pile is against the wall of the structure and is inaccessible). Four samples from an outdoor tailings pile (located east of the barn structure) were taken at .5 feet bgs, one from each cardinal side. Additionally, two background samples (from .5 feet bgs) were taken from areas near the perimeter of the site in areas distant from the former operations of the facility (fence line south of the barn) and were presumed unlikely to be contaminated. Sample locations are marked and designated in the attached Figure 1. The samples were collected for analyses of TPH, VOC, CAM 17 Metals, pH, ammonia, and acute fish toxicity bioassay using disposable sampling scoops and 32oz glass containers. Soil samples were placed in an ice-filled cooler and shipped via Federal Express to EMSL Analytical Inc, a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory, under standard chain-of-custody procedures. EMSL performed analysis of TPH, VOC, CAM 17 Metals, pH and ammonia. Acute fish toxicity bioassay was performed by Associated Laboratories, also a National Environmental Laboratory Accreditation Conference (NELAC) certified laboratory.

Analytical Results Review

Soil samples were analyzed for TPH as diesel-range organics (TPH-DRO), using EPA Method 8015B, VOCs using EPA Method 8260B, CAM 17 Metals using EPA Method 6010B (EPA Method 7471A for Mercury) and pH using EPA Method 9045C. EPA test method for acute fish toxicity analysis will be determined by Associated Laboratories. A summary of soil analytical results for constituents above regulatory limits is provided in Table 1. Attachment 1 contains the EMSL laboratory reports.

All soil samples (from inside tailings pile, the outside tailings pile, and the background samples) were within acceptable pH range for non-hazardous disposal. CAM 17 Metals analysis showed elevated

levels, above regulatory limits for land designated for commercial use, of Arsenic in 3 of the 4 indoor tailings pile samples (001, 003, and 004), 3 of 4 outdoor tailings pile samples (001, 003, and 004). Background samples, while below regulatory limits, showed elevated levels of Arsenic (4.8 mg/kg and 4.5 mg/kg respectively). Based on the Phase I Environmental Site Assessment conducted by URS in April 2009, elevated levels of Arsenic can be considered normal for the area and are likely due to the natural geology of the area. Other metals were also detected above limits; please refer to Table 1 for detailed results. TPH-DRO was detected at levels significantly above the reporting limits in all of the indoor soil samples. No VOCs were detected above their respective reporting limits in any of the soil samples. Samples from the indoor tailings pile (HECA-IN-001, 002, 003, and 004) failed the acute fish toxicity bioassay with an LC50 <500 mg/L, which classifies the material as Hazardous Waste. Samples from the outdoor tailings pile (HECA-OUT-001, 002, 003, and 004) as well as the two background samples (HECA-BG-001, and 002) passed the acute fish toxicity bioassay with an LC50>750 mg/L.

Waste Management

No waste was generated as result of the soil sampling activities. No waste manifests are included with this report.

Determinations

Due to the elevated TPH-DRO levels found in the indoor tailings pile and the elevated levels of metals and ammonia found in the outdoor tailings pile, and the results of the acute fish toxicity bioassay, the determination is that the tailings piles will have to be disposed of as non-RCRA hazardous waste pursuant to CCR Title 22. AECOM contacted the Clean Harbors disposal site in Buttonwillow, CA and a full waste categorization was completed, which concluded that the tailings can be disposed of as non-RCRA Hazardous Waste. Based on the analysis, AECOM secured estimates for transportation and disposal from Clean Harbors Inc. and Belshire Environmental. Clean Harbors, due to the proximity of their disposal site to the proposed project site (both in Buttonwillow, CA) estimated transportation costs of $380 per load (23-24 tons per truck, five total loads estimated) and disposal costs of $20 per ton ($36 per ton total cost for transportation and disposal). Belshire Environmental estimated costs for transportation and disposal at roughly $80 per ton.

Should you have any questions or need further information regarding the above, please contact Galen Cooter from AECOM at (562) 420-2933.

Sincerely yours,

Galen Cooter
Senior Staff Specialist
galen.cooter@aecom.com

cc: Aniekan Udobot – AECOM
Matthew George – AECOM

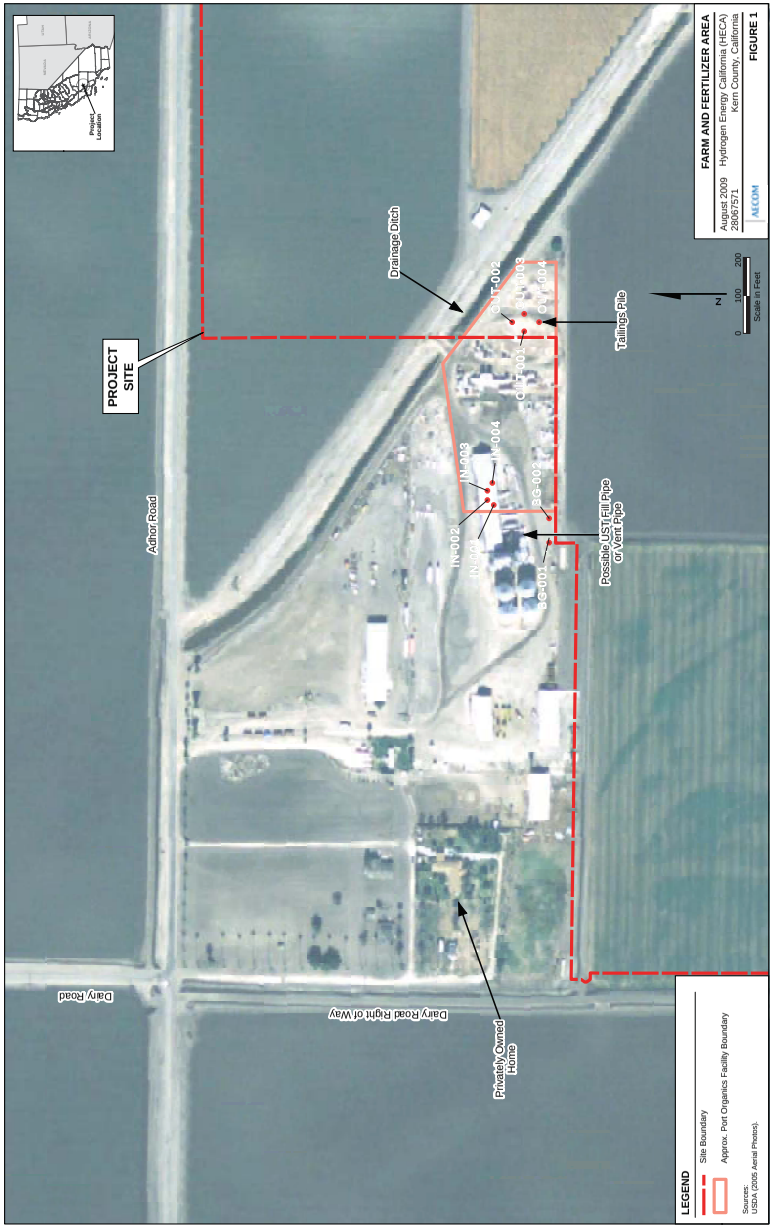
Enclosures: Table 1 – Constituents Above Regulatory Limits
Figure 1 – Sample Locations and Designations
Attachment 1 – Laboratory Reports

Table 1 – Constituents Above Regulatory Limits

Table 1

Sample Number	Constituent	Concentration (mg/kg)	Regulatory Limit (mg/kg)
HECA-IN-001	Arsenic	5.5	5
	TPH-DRO	4500	1000
	Fish Toxicity	LC50<500	LC50>500
HECA-IN-002	Mercury	0.31	0.2
	TPH-DRO	5400	1000
	Fish Toxicity	LC50<500	LC50>500
HECA-IN-003	Arsenic	5.6	5
	TPH-DRO	5900	1000
	Fish Toxicity	LC50<500	LC50>500
HECA-IN-004	Arsenic	6.1	5
	TPH-DRO	4600	1000
	Fish Toxicity	LC50<500	LC50>500
HECA-OUT-001	Arsenic	5.6	5
	Cadmium	2	1
	Chromium	10	5
	Ammonia	43000	410
HECA-OUT-002	Cadmium	2	1
	Chromium	8.7	5
	Ammonia	35000	410
HECA-OUT-003	Arsenic	8.6	5
	Cadmium	2.6	1
	Chromium	15	5
	Copper	30	25
	Lead	11	5
	Vanadium	31	24
	Zinc	250	250
	Ammonia	38000	410
HECA-OUT-004	Arsenic	6.4	5
	Cadmium	1.6	1
	Chromium	6.8	5
	Ammonia	36000	410
HECA-BG-001	Chromium	3.5	5
	Copper	30	25
	Vanadium	24	24
HECA-BG-002	Chromium	9.4	5
	Lead	6.1	5

Figure 1 – Sample Locations and Designations



Attachment 1 – Laboratory Reports

Asbestos • Lead • Environmental • Materials & Indoor Air Analysis

EMSL Analytical, Inc.

http://www.emsl.com

3 Cooper St.
Westmont, NJ 08108
Phone: (856) 858-4800
Fax: 8568584571

Attn: **Galen Cooter**
AECOM Environment
3995 Via Oro Avenue
Long Beach, CA 90810

Phone (562) 420-2933
Fax: (562) 420-2915

8/26/2009

The following report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 8/12/2009. The results are tabulated on the attached data pages for the following client designated project:

Project ID: 12903-001

The reference number for these samples is EMSL Order #010904102. Please use this reference when calling about these samples.

If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:

Julie Smith, Laboratory Director or
other approved signatory
NJ-NELAP Accredited:04653

ACCREDITED IN ACCORDANCE WITH nelac

The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

EMSL Analytical, Inc.
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4571 Email: jsmith@emsl.com

Attn: **Galen Cooter**
AECOM Environment
3995 Via Oro Avenue
Long Beach, CA 90810

Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-001 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0001

Method	*Parameter*	*Concentration*	*Reporting Limit*	*Units*	*Analysis Date*	*Analyst*
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.5	0.81	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.74	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	1.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	4.7	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	2.4	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.1	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	8.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	95	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.049	0.021	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	4500	210	mg/Kg	8/13/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	5.63	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-002 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0002

Method	*Parameter*	*Concentration*	*Reporting Limit*	*Units*	*Analysis Date*	*Analyst*
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	3.9	0.80	mg/Kg	8/15/2009	rferrer

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

EMSL Analytical, Inc.
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4571 Email: jsmith@emsl.com

Attn: **Galen Cooter**
AECOM Environment
3995 Via Oro Avenue
Long Beach, CA 90810
Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-002 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0002

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.45	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	2.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	8.2	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	2.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.1	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	1.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	89	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.31	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	5400	420	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria.. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	6.00	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-003 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0003

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.58	0.40	mg/Kg	8/13/2009	rferrer

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

EMSL Analytical, Inc.
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4571 Email: jsmith@emsl.com

Attn: **Galen Cooter**
AECOM Environment
3995 Via Oro Avenue
Long Beach, CA 90810
Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-003 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0003

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Chromium	2.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	11	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	1.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	4.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	87	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.14	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	5900	420	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria.. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	6.14	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-004 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0004

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	6.1	0.81	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.41	0.41	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.80	0.41	mg/Kg	8/13/2009	rferrer
6010B	Chromium	1.8	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	4.4	2.0	mg/Kg	8/13/2009	rferrer

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

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Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-004 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0004

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Lead	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	2.7	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	9.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	98	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.050	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	4600	210	mg/Kg	8/13/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria.. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	5.62	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-001 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0005

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	93	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	47	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.0	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	10	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	2.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	18	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	12	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	6.8	2.0	mg/Kg	8/13/2009	rferrer

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Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-001 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0005

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Selenium	<10	10	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	23	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	210	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.13	0.021	mg/Kg	8/13/2009	jhess
9045C	pH	6.27	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	43000	130	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-002 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0006

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	84	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.2	2.2	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.9	0.90	mg/Kg	8/15/2009	rferrer
6010B	Barium	24	11	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.45	0.45	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.0	0.45	mg/Kg	8/13/2009	rferrer
6010B	Chromium	8.7	1.1	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Copper	12	2.2	mg/Kg	8/13/2009	rferrer
6010B	Lead	3.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Nickel	7.5	2.2	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<11	11	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	13	1.1	mg/Kg	8/13/2009	rferrer
6010B	Zinc	220	2.2	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.16	0.023	mg/Kg	8/13/2009	jhess

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Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-002 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0006

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
9045C	pH	6.37	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	35000	130	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-003 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0007

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	2.1	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	8.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	69	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.6	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	15	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	30	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	11	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	2.5	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	11	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<10	10	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	31	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	250	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.091	0.021	mg/Kg	8/13/2009	jhess
9045C	pH	6.26	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	38000	150	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

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Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-004 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0008

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	93	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.1	2.1	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	6.4	0.85	mg/Kg	8/15/2009	rferrer
6010B	Barium	31	11	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.43	0.43	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	1.6	0.43	mg/Kg	8/13/2009	rferrer
6010B	Chromium	6.8	1.1	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	1.3	1.1	mg/Kg	8/13/2009	rferrer
6010B	Copper	13	2.1	mg/Kg	8/13/2009	rferrer
6010B	Lead	3.7	1.1	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Nickel	4.8	2.1	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<11	11	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	14	1.1	mg/Kg	8/13/2009	rferrer
6010B	Zinc	210	2.1	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.12	0.020	mg/Kg	8/13/2009	jhess
9045C	pH	5.86	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	36000	150	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-BG-001 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0009

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	99	N/A	%	8/12/2009	cohehir
6010B	Antimony	2.0	1.9	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.8	0.76	mg/Kg	8/15/2009	rferrer
6010B	Barium	67	9.5	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.38	0.38	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.98	0.38	mg/Kg	8/13/2009	rferrer

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Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-BG-001 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0009

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Chromium	14	0.95	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.5	0.95	mg/Kg	8/13/2009	rferrer
6010B	Copper	30	1.9	mg/Kg	8/13/2009	rferrer
6010B	Lead	4.6	0.95	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.5	0.95	mg/Kg	8/13/2009	rferrer
6010B	Nickel	10	1.9	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<9.5	9.5	mg/Kg	8/14/2009	rferrer
6010B	Silver	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	24	0.95	mg/Kg	8/13/2009	rferrer
6010B	Zinc	100	1.9	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.022	0.019	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	74	34	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
9045C	pH	7.24	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	1100	140	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-BG-002 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0010

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	99	N/A	%	8/12/2009	cohehir
6010B	Antimony	<1.9	1.9	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.5	0.76	mg/Kg	8/15/2009	rferrer
6010B	Barium	58	9.5	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.38	0.38	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.58	0.38	mg/Kg	8/13/2009	rferrer
6010B	Chromium	9.4	0.95	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.0	0.95	mg/Kg	8/13/2009	rferrer
6010B	Copper	9.4	1.9	mg/Kg	8/13/2009	rferrer
6010B	Lead	6.1	0.95	mg/Kg	8/13/2009	rferrer

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Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-BG-002 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0010

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Molybdenum	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Nickel	8.7	1.9	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<9.5	9.5	mg/Kg	8/14/2009	rferrer
6010B	Silver	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	19	0.95	mg/Kg	8/13/2009	rferrer
6010B	Zinc	92	1.9	mg/Kg	8/13/2009	rferrer
7471A	Mercury	<0.019	0.019	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	<34	34	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
9045C	pH	7.78	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	97	30	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	830	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	16	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	18	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	8.4	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	8.2	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	720	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	7.1	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	11	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3		U
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3		U
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	1500	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	19	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	28	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	6.0	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	7.8	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	940	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	15	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	18	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	12	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	8.3	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	5.1		U
75-00-3	Chloroethane	1.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	4.0		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	1.0		U
75-35-4	1,1-Dichloroethene	1.0		U
67-64-1	Acetone	10	36	
75-15-0	Carbon disulfide	1.0		U
75-09-2	Methylene chloride	5.1		U
75-65-0	tert-Butyl Alcohol	10		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
1634-04-4	Methyl-tert butyl ether	2.0		U
107-13-1	Acrylonitrile	2.0		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	2.0		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	0.51		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	2.0		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	1.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
108-38-3	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	1.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	1.0		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
79-20-9	Methyl Acetate	2.0		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	5.1		U
75-00-3	Chloroethane	1.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	4.0		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	1.0		U
75-35-4	1,1-Dichloroethene	1.0		U
67-64-1	Acetone	10	40	
75-15-0	Carbon disulfide	1.0		U
75-09-2	Methylene chloride	5.1	5.2	
75-65-0	tert-Butyl Alcohol	10		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
1634-04-4	Methyl-tert butyl ether	2.0		U
107-13-1	Acrylonitrile	2.0		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	2.0		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	0.51		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	2.0		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	1.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
108-38-3	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	1.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	1.0		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
79-20-9	Methyl Acetate	2.0		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900
FAX 714/538-1209

LAB REQUEST 239499

REPORTED 08/26/2009
RECEIVED 08/18/2009

CLIENT EMSL Analytical, Inc. (13096)
ATTN: Debbie Kreider
3 Cooper St.
Westmont, NJ 08108

SUBMITTER Client

COMMENTS LC50 > 500 mg/L = Non Hazardous
LC50 < 500 mg/L = Hazardous

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
1016035	010904102-1
1016036	010904102-2
1016037	010904102-3
1016038	010904102-4
1016039	010904102-5
1016040	010904102-6
1016041	010904102-7
1016042	010904102-8
1016043	010904102-9
1016044	010904102-10

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

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Page 1 of 1

Chain of Custody

010904102

Facility	HECA
City, State (Facility)	Buttonwillow, CA
Project Manager (Consultant)	Galen Coester
Project No.	12903-001
Laboratory Name	EMSL
Engineer	
Telephone No.	
Telephone No. (Consultant)	(562) 420-2933
Fax No. (Consultant)	(562) 420-2915
Consultant Company	AECOM Environment
Consultant Address	3995 Via Oro Avenue, Long Beach, CA 90810
Method of Shipment	Fed-Ex
Special Detection Limit/Reporting:	
Turn Around Time (Business Days)	HOLD (see remarks)

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Matrix: Water	Matrix: Air	Matrix: Other	Prsv.: Yes	Prsv.: No	Sampling Date	Sampling Time	CAM-17 Metals	1150 / 9040B (PH)	8015M-FFP (TPH)	624+ VOC	8260	624+ AMMONIA	Bioassay Fish Toxicity	Remarks:
HECA-IN-001		1	X					X	8/11/2009	13:45	X	X	X	X			X	2
HECA-IN-002		1	X					X	8/11/2009	13:45	X	X	X	X			X	2
HECA-IN-003		1	X					X	8/11/2009	13:45	X	X	X	X			X	2
HECA-IN-004		1	X					X	8/11/2009	13:45	X	X	X	X			X	2
HECA-OUT-001		1	X					X	8/11/2009	13:50	X	X			X	X	X	2
HECA-OUT-002		1	X					X	8/11/2009	13:50	X	X			X	X	X	2
HECA-OUT-003		1	X					X	8/11/2009	13:50	X	X			X	X	X	2
HECA-OUT-004		1	X					X	8/11/2009	13:50	X	X			X	X	X	2
HECA-BG-001		1	X					X	8/11/2009	13:55	X	X	X	X	X	X	X	2
HECA-BG-002		1	X					X	8/11/2009	13:55	X	X	X	X	X	X	X	2

Containers:

Sample Received Intact: Yes No

Temperature received: Ice No Ice

Relinq. by sampler (Sign & Print Name)	Date	Time	Received by (Sign & Print Name)	Date	Time
[illegible], Galen Coester	8/11/09	16:30	[illegible]	8/12/09	9:15
Relinquished by	Date	Time	Received by	Date	Time
			Galen Coester ice		
Relinquished by	Date	Time	Received by laboratory	Date	Time

Lab Work No.

Rev. 02/03/05

RECEIVED EMSL WESTMONT N.J. 2009 AUG 12 AM 10:53

* Fin Remedy Sub Toxicity Fish to Sub Acute Bioassay - 8/14 DK
Blood to Sub amending 8/17 due to [illegible] 8/14

Order #: 1016035 **Client Sample ID:** 010904102-1
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016036 **Client Sample ID:** 010904102-2
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016037 **Client Sample ID:** 010904102-3
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016038 **Client Sample ID:** 010904102-4
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Order #: 1016039 **Client Sample ID:** 010904102-5
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016040 **Client Sample ID:** 010904102-6
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016041 **Client Sample ID:** 010904102-7
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016042 **Client Sample ID:** 010904102-8
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Order #: 1016043 **Client Sample ID:** 010904102-9
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016044 **Client Sample ID:** 010904102-10
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

EMSL Analytical, Inc.
Environmental Chemistry Lab Service
3 Cooper St., Westmont, NJ 08108
TEL: (856) 858-4800 FAX: (856) 858-4571

Chain of Custody / Analysis Request Form
Print ALL Information. Incomplete chain of custody could result in the delay of analysis.

EMSL Project # _____
Account Rep:
Indicate State where samples were collected:

LAC # 239499

REPORT RESULTS TO:
Name: Debbie Kreider PO#:
Company
EMSL Analytical, Inc.
Address: 3 Cooper St.
City: Westmont
State: NJ Zip: 08108
Tel: 856-858-4800 ext. 1225 Fax: 856-854-2362
Email: dkreider@emsl.com

SEND INVOICE TO:
Name: PO#:
Company
EMSL Analytical, Inc.
Address: 107 Haddon Ave
City: Westmont
State: NJ Zip: 08108
Tel: 856-858-4800 Fax: 856-854-2362

Turnaround Time - 5 Business Days
Associated Laboratories
806 N. Batavia St.
Orange, CA 92868
714-771-6900

PROJECT NAME:

Date of Sample Shipment:

# of Samples in Shipment: 10

Sampled by: (Signature)

Lab Sample Number	Client Sample ID	Comp	Grab	WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO3	H2SO4	OTHER	DATE	TIME	Bioassay Fish Toxicity
1. 010904102-1			X										8/11/09		X
2. 010904102-2			X										8/11/09		X
3. 010904102-3			X										8/11/09		X
4. 010904102-4			X										8/11/09		X
5. 010904102-5			X										8/11/09		X
6. 010904102-6			X										8/11/09		X
7. 010904102-7			X										8/11/09		X
8. 010904102-8			X										8/11/09		X
9. 010904102-9			X										8/11/09		X
10. -010904102-10													8/11/09		X

Sampling — List Method and Test Needed

Released By Signature	Date & Time Released	Delivery Method	Received By Signature	Agency	Date & Time Received	Condition Noted
		8/17/09		ASL	8-18-09 1005	

Please indicate reporting requirements: ☐1. Results Only ☐2. Results and QC ☐3. Reduced Deliverables ☐4. Disk Deliverable ☐5. Other _____

Comments:

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
Client: EMSL Ana.
Date Received: 8-18-09
Sample(s) received in cooler: Yes
Shipping Information:
Project:
Sampler's Name: Yes No
No (Skip Section 2)

Section 2
Was the cooler packed with: X Ice ___ Ice Packs X Bubble Wrap ___ Styrofoam ___ Paper ___ None ___ Other
Cooler or box temperature: 5
(Acceptance range is 2 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	X		
Is it properly completed? (IDs, sampling date and time, signature, test)	X		
Were custody seals present?			X
If Yes – were they intact?			X
Were all samples sealed in plastic bags?	X		
Did all samples arrive intact? If no, indicate below.	X		
Did all bottle labels agree with COC? (ID, dates and times)	X		
Were correct containers used for the tests required?	X		
Was a sufficient amount of sample sent for tests indicated?	X		
Was there headspace in VOA vials?			X
Were the containers labeled with correct preservatives?			X
Was total residual chlorine measured (Fish Bioassay samples only)? *			X

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
Explanations/Comments

Section 5
Was Project Manager notified of discrepancies: Y / N N/A

Completed By: M. Eckert Date: 8-18-09

Lab. No. 239499-1

Date Received: 08/18/09
Date Reported: 08/24/09

Bioassay Type
Static ✓ Continuous ___
Screening ✓ Definitive ___

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016035

Sample Description Soil - 0109041 02 - 1 Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Test Organism: Pimephales Promelas No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 310 µmhos/cm
Aquaria Volume: 10 liters Aquaria Depth: 5 inches Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.54 gm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Alkalinity – Initial: 35 mg/l Final: 46 mg/l
Dilution water - Source: Soft Water Hardness – Initial: 45 mg/l Final: 70 mg/l Control Alkalinity Initial: 30 mg/l Final: 38 mg/l Control Conductivity 220 µmhos/cm
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control No.	Control %	750 No.	750 %	500 No.	500 %	250 No.	250 %	Dilution Dup 750 No.	Dup 750 %	Dup 500 No.	Dup 500 %	Dup 250 No.	Dup 250 %
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	2	20	10	100	0	0	1	10	10	100
	08/21	10	100	✓	✓	0	0	9	90	✓	✓	0	0	10	100
	08/22	10	100			✓	✓	8	80			✓	✓	9	90
	08/23	10	100					8	80					9	90
Dissolved Oxygen mg/l	09:40	6.9		6.5		6.5		6.5		6.5		6.5		6.5	
	10:10	7.7		7.0		7.0		7.3		6.8		7.0		7.3	
	13:30	7.2		6.8		6.7		7.4		✓		6.7		7.4	
	09:00	7.5		✓		✓		7.0				✓		7.0	
	11:20	7.0						6.9						6.9	
pH	Start	7.1	20.0 °C	6.8	20.0 °C	6.9	20.0 °C	7.0	20.0 °C	6.8	20.0 °C	6.9	20.0 °C	7.0	20.0 °C
	24 Hr	7.3	19.8 °C	6.6	19.8 °C	6.7	19.8 °C	6.9	19.8 °C	6.6	19.8 °C	6.7	19.8 °C	6.9	19.8 °C
	48 Hr	7.5	20.0 °C	✓	20.0 °C	6.6	20.0 °C	6.8	20.0 °C	✓	20.0 °C	6.6	20.0 °C	6.8	20.0 °C
Temp	72 Hr	7.3	19.8 °C		°C	✓	°C	6.7	19.8 °C		°C	✓	°C	6.7	19.8 °C
	96 Hr	7.4	20.4 °C		°C		°C	6.7	20.4 °C		°C		°C	6.7	20.4 °C

Results - LC_{50} = <500 mg/l
<500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits
LC_{50} Method

✓ Laboratory Supervisor

Lab. No. 239499-2

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical
(147) 1016036

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 2
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 325 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 72 mg/l Alkaline – Initial: 35 mg/l Final: 48 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	1	10	10	100	0	0	2	20	9	90
	08/21	10	100	✓	✓	0	0	9	90	✓	✓	0	0	9	90
	08/22	10	100			✓	✓	9	90			✓	✓	8	80
	08/23	10	100					9	90					8	80
Dissolved Oxygen mg/l	09:50	6.9		6.4		6.4		6.4		6.4		6.4		6.4	
	10:20	7.7		7.1		6.7		7.2		7.1		6.7		7.2	
	13:40	7.2		✓		7.0		6.8		✓		7.0		6.8	
	09:10	7.5				✓		7.0				✓		7.0	
	11:30	7.0						7.1						7.1	
pH / Temp	Start	7.1	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C
	24 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.1	19.8°C	6.8	19.8°C	6.9	19.8°C	7.1	19.8°C
	48 Hr	7.5	20.0°C	✓	20.0°C	6.8	20.0°C	7.0	20.0°C	✓	20.0°C	6.8	20.0°C	7.0	20.0°C
	72 Hr	7.3	19.8°C		°C	✓	°C	6.9	19.8°C		°C	✓	°C	6.9	19.8°C
	96 Hr	7.4	20.4°C		°C		°C	6.9	20.4°C		°C		°C	6.9	20.4°C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits
LC_{50} Method

✓
Laboratory Supervisor

Lab. No. 239499-3

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical
(147) 1016037

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 3
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 340 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 75 mg/l Alkaline – Initial: 35 mg/l Final: 50 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	2	20	10	100	0	0	1	10	10	100
	08/21	10	100	✓	✓	0	0	9	90	✓	✓	0	0	10	100
	08/22	10	100			✓	✓	9	90			✓	✓	9	90
	08/23	10	100					8	80					9	90
Dissolved Oxygen mg/l	10:00	6.9		6.3		6.3		6.3		6.3		6.3		6.3	
	10:30	7.7		7.0		6.8		7.1		7.0		6.8		7.1	
	13:50	7.2		✓		7.1		7.3		✓		7.1		7.3	
	09:20	7.5				✓		6.8				✓		6.8	
	11:40	7.0						6.7						6.7	
pH / Temp	Start	7.1	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	24 Hr	7.3	19.8°C	6.9	19.8°C	7.0	19.8°C	7.2	19.8°C	6.9	19.8°C	7.0	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	✓	20.0°C	6.9	20.0°C	7.1	20.0°C	✓	20.0°C	6.9	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C		°C	✓	°C	7.0	19.8°C		°C	✓	°C	7.0	19.8°C
	96 Hr	7.4	20.4°C		°C		°C	7.0	20.4°C		°C		°C	7.0	20.4°C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits
LC_{50} Method

✓
Laboratory Supervisor

Lab. No. 239499-4

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Report To: EMSL Analytical
(147) 1016038

Sample Description Soil - 010904102 - 4

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 345 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.54 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 78 mg/l Alkaline – Initial: 35 mg/l Final: 50 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	2	20	7	70	10	100	1	10	6	60	10	100
	08/21	10	100	0	0	3	30	10	100	0	0	4	40	10	100
	08/22	10	100	✓	✓	2	20	9	90	✓	✓	3	30	10	100
	08/23	10	100			2	20	9	90			3	30	10	100
Dissolved Oxygen mg/l	10:10	6.9		6.6		6.6		6.6		6.6		6.6		6.6	
	10:40	7.7		6.9		7.1		7.2		6.9		7.1		7.2	
	14:00	7.2		6.7		7.0		7.1		6.7		7.0		7.1	
	09:30	7.5		✓		6.7		7.3		✓		6.7		7.3	
	11:50	7.0				6.8		6.9				6.8		6.9	
pH / Temp	Start	7.1	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C
	24 Hr	7.3	19.8°C	6.8	19.8°C	7.0	19.8°C	7.1	19.8°C	6.8	19.8°C	7.0	19.8°C	7.1	19.8°C
	48 Hr	7.5	20.0°C	6.7	20.0°C	6.9	20.0°C	7.0	20.0°C	6.7	20.0°C	6.9	20.0°C	7.0	20.0°C
	72 Hr	7.3	19.8°C	✓	°C	6.8	19.8°C	6.9	19.8°C	✓	°C	6.8	19.8°C	6.9	19.8°C
	96 Hr	7.4	20.4°C		°C	6.8	20.4°C	6.9	20.4°C		°C	6.8	20.4°C	6.9	20.4°C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits
LC_{50} Method

Laboratory Supervisor

Lab. No. 239499-5

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Report To: EMSL Analytical
(147) 1016039

Sample Description Soil - 010904102 - 5

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 645 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.56 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 80 mg/l Alkaline – Initial: 35 mg/l Final: 58 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	9	90	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	8	80	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	8	80	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:20	6.9		6.8		6.8		6.8		6.8		6.8		6.8	
	10:50	7.7		7.0		7.3		7.1		7.0		7.3		7.1	
	14:10	7.2		7.4		6.9		7.0		7.4		6.9		7.0	
	09:40	7.5		6.8		7.0		7.3		6.8		7.0		7.3	
	12:00	7.0		7.3		7.1		7.2		7.3		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits
LC_{50} Method

Laboratory Supervisor

Lab. No. 239499-6

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical
(147) 1016040

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 6
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 535 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 75 mg/l Alkaline – Initial: 35 mg/l Final: 55 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:30	6.9		6.7		6.7		6.7		6.7		6.7		6.7	
	11:00	7.7		7.1		6.8		7.0		7.1		6.8		7.0	
	14:20	7.2		7.4		7.0		7.3		7.4		7.0		7.3	
	09:50	7.5		7.0		7.2		7.1		7.0		7.2		7.1	
	12:10	7.0		7.2		7.1		6.9		7.2		7.1		6.9	
pH / Temp	Start	7.1	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = >750 mg/l
>750 mg/l
% Survival N/A
Toxic Units T.U. ____ (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-7

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical
(147) 1016041

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 7
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 650 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.56 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 85 mg/l Alkaline – Initial: 35 mg/l Final: 65 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/22	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	10	100	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:40	6.9		6.5		6.5		6.5		6.5		6.5		6.5	
	11:10	7.7		7.3		7.0		7.2		7.3		7.0		7.2	
	14:30	7.2		7.1		7.3		7.0		7.1		7.3		7.0	
	10:00	7.5		6.8		7.2		7.3		6.8		7.2		7.3	
	12:20	7.0		7.4		6.7		7.1		7.4		6.7		7.1	
pH / Temp	Start	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.1	19.8°C	7.2	19.8°C	7.3	19.8°C	7.1	19.8°C	7.2	19.8°C	7.3	19.8°C
	48 Hr	7.5	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	72 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	96 Hr	7.4	20.4°C	7.0	20.4°C	7.1	20.4°C	7.2	20.4°C	7.0	20.4°C	7.1	20.4°C	7.2	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-8

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Report To: EMSL Analytical
(147) 1016042

Sample Description Soil - 010904102 - 8

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 640 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 80 mg/l Alkaline – Initial: 35 mg/l Final: 60 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	8	80	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	8	80	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:50	6.9		6.6		6.6		6.6		6.6		6.6		6.6	
	11:20	7.7		6.8		7.3		7.1		6.8		7.3		7.1	
	14:40	7.2		7.4		7.0		7.3		7.4		7.0		7.3	
	10:10	7.5		7.1		7.2		7.0		7.1		7.2		7.0	
	12:30	7.0		7.3		7.1		7.2		7.3		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l

% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-9

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Report To: EMSL Analytical
(147) 1016043

Sample Description Soil - 010904102 - 9

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 330 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 72 mg/l Alkaline – Initial: 35 mg/l Final: 46 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	10	100	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	11:00	6.9		6.7		6.7		6.7		6.7		6.7		6.7	
	11:30	7.7		7.1		6.8		7.0		7.1		6.8		7.0	
	14:50	7.2		7.3		7.0		7.1		7.3		7.0		7.1	
	10:20	7.5		6.7		7.2		7.3		6.7		7.2		7.3	
	12:40	7.0		7.4		7.1		7.2		7.4		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.6	20.0°C	7.5	20.0°C	7.4	20.0°C	7.6	20.0°C	7.5	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.4	19.8°C	7.3	19.8°C	7.2	19.8°C	7.4	19.8°C	7.3	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	7.3	20.0°C	7.2	20.0°C	7.1	20.0°C	7.3	20.0°C	7.2	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C	7.0	19.8°C	7.2	19.8°C	7.1	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	7.2	20.4°C	7.1	20.4°C	7.0	20.4°C	7.2	20.4°C	7.1	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l

% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-10

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Report To: EMSL Analytical
(147) 1016044

Sample Description Soil - 010904102 - 10
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 280 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.54 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 65 mg/l Alkaline – Initial: 35 mg/l Final: 40 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	11:10	6.9		6.4		6.4		6.4	~~6~~ (9P)	6.4		6.4		6.4	
	11:40	7.7		7.3		7.0		7.2		7.3		7.0		7.2	
	15:00	7.2		7.0		7.3		7.1		7.0		7.3		7.1	
	10:30	7.5		7.1		7.4		7.0		7.1		7.4		7.0	
	12:50	7.0		7.2		6.8		7.3		7.2		6.8		7.3	
pH / Temp	Start	7.1	20.0°C	7.7	20.0°C	7.6	20.0°C	7.5	20.0°C	7.7	20.0°C	7.6	20.0°C	7.5	20.0°C
	24 Hr	7.3	19.8°C	7.5	19.8°C	7.4	19.8°C	7.3	19.8°C	7.5	19.8°C	7.4	19.8°C	7.3	19.8°C
	48 Hr	7.5	20.0°C	7.4	20.0°C	7.3	20.0°C	7.2	20.0°C	7.4	20.0°C	7.3	20.0°C	7.2	20.0°C
	72 Hr	7.3	19.8°C	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C
	96 Hr	7.4	20.4°C	7.3	20.4°C	7.2	20.4°C	7.1	20.4°C	7.3	20.4°C	7.2	20.4°C	7.1	20.4°C

Results - LC_{50} = >750 mg/l
>750 mg/l
% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

✓
Laboratory Supervisor

Results from Kern County Environmental Health Services Department

BC Laboratories, Inc.

Chain of Custody Form

Report To:
Client: The report will be sent to this address under this person's attention.
Attn:
Street Address:
City, State, Zip:
Phone: Fax:
Email Address:
Submittal #:

Project #: Enter project information.
Project Name:
Project Code:
Sampler(s):

Analysis Requested

Sample # | Description | Date Sampled | Time Sampled

Enter sample descriptions. Please verify that sample descriptions and dates/times match the labels on respective sample containers.

Enter sample date and times.

Please complete to assure proper invoicing.

If submitting drinking water, please check the appropriate boxes.

Sample Matrix: Soil, Sludge, Drinking Water, Ground Water, Waste Water, Other

Use the legend below to reference analytical methods.

Check the appropriate sample.

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

Turnaround # of work days*

Notes

Check for standard turnaround.

Use this field to convey any special information such as sample hazards, similar samples and/or turnarounds.

Check the appropriate box to indicate special reporting.

Comments:

Please complete this field to assure proper invoicing.

Page ____ of ____

PLEASE COMPLETE: BCL QUOTE ID:

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

Report Drinking Waters on State Form? ☐ Yes ☐ No

Send Copy to State of CA? ☐ Yes ☐ No

Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive: Months

1. Relinquished By / Date / Time
2. Relinquished By / Date / Time
3. Relinquished By / Date / Time

1. Received By / Date / Time
2. Received By / Date / Time
3. Received By / Date / Time

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Analysis Legend

Method	Constituent(s)
8020A/8021	BTEX/MTBE by GC
8015M-D	Diesel Range Extractable Organics
8015M-G	Gasoline Range Purgeable Organics
8015M-FFP	TPH-Fuels
8015M-CC	Carbon Chain Breakdown Extractable Fuels
8080A-Pest	Organo-Chlorine Pesticides
8081-Pest	Organo-Chlorine Pesticides
8082-PCBs	Poly-Chlorinated Biphenyls
8140/8141	Organo-Phosphorus Pesticides
615	Chlorinated Herbicides
8150B	Chlorinated Herbicides
8151A	Chlorinated Herbicides
624	Volatile Halogenated & Aromatics Components
601	Volatile Halogenated & Aromatics Components
8240B	Volatile Halogenated & Aromatics Components
8260B	Volatile Halogenated & Aromatics Components
625	Base Neutral/Acid Extractables
8270C	Base Neutral/Acid Extractables
610/8310	Polynuclear Aromatic Hydrocarbons
632	Carbamates (dithiem)
504.1	EDB/DBCP/1,2,3-TCP
508	Organo-Chlorinated Compounds
524.2	Volatile organic Chemicals
525.2	Synthetic Organic Chemicals by GC/MS
413.1	Oil and Grease (Gravimetric)
413.2	Oil and Grease (Infrared)
418.1	Total Recoverable Petroleum Hydrocarbons
1664	Extractable Material HEM/SGT-HEM
Title 22 CCR 66261	Organic Lead
CAM 17 Metals	Total Metals (STLC as needed)
STLC Metals	48 hr CAM Extractable Metals
TCLP Metals	18 hr RCRA Extractable Metals
Dissolved Metals	Filtered and acidified metals
200.7	ICP Metals
200.8	ICP/MS Metals
206.9	GF/AA Metals
6010	ICP Metals
7470A/7471A	Hg Metals

Method	Constituent(s)
9040A	pH
310.1/2320B	Alkalinity
300.0	Bromide, Nitrate, Sulfate, Chloride
415.1	Total Organic Carbon
330.5, 330.4	Residual Chlorine
7196A	Hexavalent Chromium
110.2	Color
120.1	Electrical Conductivity
335.3	Cyanide Amenable to Chlorination
335.2/9012	Total Cyanide
335.4	Total Cyanide
1010	Flashpoint (PMCC)
340.2	Fluoride by ion selective electrode
425.1	MBAS (foaming agents)
350.1	Ammonia as N or NH3
353.2	Nitrate as NO3 or Nitrite phis Nitrate as Nitrogen
351.2	Total Kjeldhl Nitrogen and/or Organic Nitrogen
140.1	Odor
5210B	Biochemical Oxygen Demand (BOD)
410.2	Chemical Oxygen Demand (COD)
410.4	Chemical Oxygen Demand (COD)
360.1	Dissolved Oxygen
150.1/9040B	pH
420.2	Phenols
365.1	Ortho-Phosphate as P or PO4
365.4	Total Phosphorus
160.1	Total Dissolved Solids
160.2	Total Suspended Solids
160.3	Total Solids
160.4	Volatile Solids
160.5	Settleable Solids
376.1	Total or Dissolved Sulfide
376.2	Total or Dissolved Sulfide
180.1	Turbidity
SM 9223B	Coliform Total plus E.coli (Colilert)
Total SM 9221B	Total Coliform (MTF)
Fecal SM 9221E	Fecal Coliform (MTF)
CSS 6918B	Hetero-plate Plate Count

BC Laboratories, Inc.

Chain of Custody Form

46743

Report To:
Client: BC Laboratories
Attn: Shelly Taylor
Street Address: 4100 Atlas Ct.
City, State, Zip: Bakersf. Ca 93308
Phone: 852-4201 Fax:
Email Address:
Submittal #:

Project #:
Project Name:
Project Code:
Sampler(s):

Analysis Requested: BLO ASSAY-Fish Tox

Comments: Sub to: AQuatic

Page ____ of ____

PLEASE COMPLETE: BCL QUOTE ID:

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
05-3842-1		4/18/05	09:56	X							8oz jar
-2			0945	X							
-3			1012	X							
-4			1026	X							

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

Report Drinking Waters on State Form? ☐ Yes ☐ No

Send Copy to State of CA? ☐ Yes ☐ No

Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive: Months

Relinquished By	Date	Time	Received By	Date	Time
1. Deborah Renaud	4/20/05	7:55	1. [illegible] ATL	4-21-05	15:5
2.			2.		
3.			3.		

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

BC LABORATORIES INC. — SAMPLE RECEIPT FORM — Rev 10 01/21/04 — Page ___ Of ___

Submission #: 05-3842 — Project Code: — TB Batch #

SHIPPING INFORMATION: Federal Express ☐ UPS ☐ Hand Delivery ☒ BC Lab Field Service ☐ Other ☐ (Specify)

SHIPPING CONTAINER: Ice Chest ☐ Box ☐ None ☒ Other ☐ (Specify)

Refrigerant: Ice ☐ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ — Containers ☐ Intact? Yes ☐ No ☐ — None ☒ Comments:

All samples received? Yes ☒ No ☐ — All samples containers intact? Yes ☒ No ☐ — Description(s) match COC? Yes ☒ No ☐

COC Received: ☒ YES ☐ NO — Ice Chest ID: — Temperature: 15.4 °C — Thermometer ID: TH80 — Emissivity: 0.85 — Container: Clear Glass Jar — Date/Time: 4/19/05 08:05 — Analyst Init: FD

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT DE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2ozs. NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	1	1	1	1	1	1	1	1	1	1
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT OA/QC										
QT AMBER										
8 OZ. JAR	A	A	A	A						
32 OZ. JAR	A	A	A	A						
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments: — Sample Numbering Completed By: AH — Date/Time: 4/19/05 [illegible]

BC Laboratories, Inc.

Chain of Custody Form

PLEASE COMPLETE: BCL QUOTE ID:

46753

Page 1 of 1

Report To:
Client: Port Organic Products
Attn: Jim Zaben
Street Address: PO Box 5203
City, State, Zip: Bakersfield, 93388
Phone: 764-9670 Fax: 764-6719
Email Address: JZaben@Rok.RR.com
Submittal #: 05-3842

Project #:
Project Name: Waste fish
Project Code:
Sampler(s): Jim Zaben

Analysis Requested: CAM 17 METALS; ISO.1/SOIL PH; BIOASSAY - Fish Toxicity

Comments:

Sample #	Description	Date Sampled	Time Sampled	CAM 17 METALS	ISO.1/SOIL PH	BIOASSAY - Fish Toxicity	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	Soil - S	4/18/05	0956 hrs	X	X	X	X							
-2	Soil - N	4/18/05	0945 hrs	X	X	X	X							
-3	Soil - E	4/18/05	1012 hrs	X	X	X	X							
-4	Soil - West	4/18/05	1026 hrs	X	X	X	X							

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

CHK BY: HBC — DISTRIBUTION: MATRIX — SUB-OUT ☒

Billing ☒ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

Report Drinking Waters on State Form? ☐ Yes ☒ No

Send Copy to State of CA? ☐ Yes ☒ No

Sample Disposal: ☐ Return to Client ☒ Disposal by lab ☐ Archive: Months

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

Relinquished By	Date	Time	Received By	Date	Time
1. [illegible]	4/19/05	0800 hrs	1. Paige Taylor	4/19/05	08:
2.			2.		
3.			3.		

BC Laboratories, Inc

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-01 | **Client Sample Name: SOIL-S, 4/18/05 9:56:00AM, Jim Zaben**

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
pH	6.69	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0503842-01	COC Number: ---		Receive Date: 04/19/05 08:05		Waste Type: Type i: Millable solid - No Free Liquid
	Project Number: ---		Sampling Date: 04/18/05 09:56		
	Sampling Location: ---		Sample Depth: ---		
	Sampling Point:	SOIL-S	Sample Matrix: Solids		
	Sampled By:	Jim Zaben			
0503842-02	COC Number: ---		Receive Date: 04/19/05 08:05		Waste Type: Type i: Millable solid - No Free Liquid
	Project Number: ---		Sampling Date: 04/18/05 09:45		
	Sampling Location: ---		Sample Depth: ---		
	Sampling Point:	SOIL-N	Sample Matrix: Solids		
	Sampled By:	Jim Zaben			
0503842-03	COC Number: ---		Receive Date: 04/19/05 08:05		Waste Type: Type i: Millable solid - No Free Liquid
	Project Number: ---		Sampling Date: 04/18/05 10:12		
	Sampling Location: ---		Sample Depth: ---		
	Sampling Point:	SOIL-E	Sample Matrix: Solids		
	Sampled By:	Jim Zaben			
0503842-04	COC Number: ---		Receive Date: 04/19/05 08:05		Waste Type: Type i: Millable solid - No Free Liquid
	Project Number: ---		Sampling Date: 04/18/05 10:26		
	Sampling Location: ---		Sample Depth: ---		
	Sampling Point:	SOIL-WEST	Sample Matrix: Solids		
	Sampled By:	Jim Zaben			

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BC Laboratories, Inc

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-02 | **Client Sample Name:** SOIL-N, 4/18/05 9:45:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
pH	6.74	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-01 | **Client Sample Name:** SOIL-S, 4/18/05 9:56:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Antimony	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:49	JCC	TJA61E	0.97	BOD1505	0.32	A02
Arsenic	2.2	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Barium	53	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.015	
Beryllium	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.019	
Cadmium	1.3	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Chromium	16	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Cobalt	2.9	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Copper	24	mg/kg	2.0		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.42	
Lead	5.7	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.053	
Mercury	ND	mg/kg	0.14		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.89	BOD1498	0.0055	
Molybdenum	ND	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Nickel	9.9	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Selenium	0.65	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.068	
Silver	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Thallium	ND	mg/kg	5.0		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.44	
Vanadium	32	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Zinc	170	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.13	

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BC Laboratories, Inc

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-03 | Client Sample Name: SOIL-E, 4/18/05 10:12:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
	6.78	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-02 | Client Sample Name: SOIL-N, 4/18/05 9:45:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
.timony	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.63	A01, Q01
Arsenic	1.1	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Barium	14	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.029	A01
Beryllium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.039	A01
Cadmium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Chromium	10	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Cobalt	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Copper	32	mg/kg	4.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.84	A01
Lead	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.11	A01
Mercury	ND	mg/kg	0.16		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.92	BOD1498	0.0057	
Molybdenum	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Nickel	3.8	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Selenium	1.7	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.14	A01
Silver	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
,hallium	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.88	A01
Vanadium	14	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Zinc	96	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.26	A01

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BC Laboratories, Inc

Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-04 | Client Sample Name: SOIL-WEST, 4/18/05 10:26:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
pH	4.96	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-03 | Client Sample Name: SOIL-E, 4/18/05 10:12:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
timony	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:02	JCC	TJA61E	0.96	BOD1505	0.31	A02
Arsenic	2.7	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Barium	51	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.014	
Beryllium	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.019	
Cadmium	2.7	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Chromium	20	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Cobalt	3.0	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Copper	30	mg/kg	2.0		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.42	
Lead	7.9	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.053	
Mercury	ND	mg/kg	0.14		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.89	BOD1498	0.0055	
Molybdenum	ND	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Nickel	11	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Selenium	0.53	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.067	
Silver	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
hallium	ND	mg/kg	5.0		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.44	
Vanadium	38	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Zinc	160	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.13	

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Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
pH	BOD1194	BOD1194-DUP1	Duplicate	7.4430	7.4680		pH Units	0.335		200		

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Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-04 | **Client Sample Name:** SOIL-WEST, 4/18/05 10:26:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Antimony	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.64	A01, A02
Arsenic	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Barium	29	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.030	A01
Beryllium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.040	A01
Cadmium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Chromium	6.0	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Cobalt	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Copper	18	mg/kg	4.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.86	A01
Lead	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.11	A01
Mercury	ND	mg/kg	0.13		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.82	BOD1498	0.0051	
Molybdenum	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Nickel	3.7	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Selenium	2.1	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.14	A01
Silver	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Thallium	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.90	A01
Vanadium	4.6	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Zinc	120	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.27	A01

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

nstituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Qual:
Molybdenum	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	87.353	98.039	mg/kg		89.1		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	87.157	98.039	mg/kg	0.225	88.9	20	75 - 125	
Nickel	BOD1505	BOD1505-DUP1	Duplicate	2.4951	2.9020		mg/kg	15.1		20		
		BOD1505-MS1	Matrix Spike	2.4951	97.157	98.039	mg/kg		96.6		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	2.4951	97.647	98.039	mg/kg	0.516	97.1	20	75 - 125	
Selenium	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	3.7451	4.9020	mg/kg		76.4		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	4.4167	4.9020	mg/kg	16.5	90.1	20	75 - 125	
Silver	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	9.0049	9.8039	mg/kg		91.9		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	9.0441	9.8039	mg/kg	0.434	92.3	20	75 - 125	
Thallium	BOD1505	BOD1505-DUP1	Duplicate	0.50980	0.61765		mg/kg	19.1		20		
		BOD1505-MS1	Matrix Spike	0.50980	95.343	98.039	mg/kg		96.7		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	0.50980	93.971	98.039	mg/kg	1.46	95.3	20	75 - 125	
'anadium	BOD1505	BOD1505-DUP1	Duplicate	8.8137	9.5294		mg/kg	7.80		20		
		BOD1505-MS1	Matrix Spike	8.8137	103.87	98.039	mg/kg		97.0		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	8.8137	102.65	98.039	mg/kg	1.35	95.7	20	75 - 125	
Zinc	BOD1505	BOD1505-DUP1	Duplicate	26.137	26.564		mg/kg	1.62		20		
		BOD1505-MS1	Matrix Spike	26.137	134.31	98.039	mg/kg		110		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	26.137	121.18	98.039	mg/kg	12.7	96.9	20	75 - 125	

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

nstituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Qual:
Mercury	BOD1498	BOD1498-DUP1	Duplicate	0.068647	0.068647		mg/kg	0.00		20		
		BOD1498-MS1	Matrix Spike	0.068647	0.71775	0.71429	mg/kg		90.9		85 - 115	
		BOD1498-MSD1	Matrix Spike Duplicate	0.068647	0.71775	0.71429	mg/kg	0.00	90.9	20	85 - 115	
Antimony	BOD1505	BOD1505-DUP2	Duplicate	0.51961	0.34314		mg/kg	40.9		20		A02
		BOD1505-MS2	Matrix Spike	0.51961	37.686	98.039	mg/kg		37.9		16 - 119	A02
		BOD1505-MSD2	Matrix Spike Duplicate	0.51961	36.505	98.039	mg/kg	3.22	36.7	20	16 - 119	A02
Arsenic	BOD1505	BOD1505-DUP1	Duplicate	2.8627	2.7059		mg/kg	5.63		20		
		BOD1505-MS1	Matrix Spike	2.8627	7.0490	4.9020	mg/kg		85.4		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	2.8627	7.2892	4.9020	mg/kg	5.58	90.3	20	75 - 125	
Barium	BOD1505	BOD1505-DUP1	Duplicate	61.863	64.069		mg/kg	3.50		20		
		BOD1505-MS1	Matrix Spike	61.863	161.18	98.039	mg/kg		101		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	61.863	157.06	98.039	mg/kg	3.94	97.1	20	75 - 125	
Beryllium	BOD1505	BOD1505-DUP1	Duplicate	0.38725	0.39706		mg/kg	2.50		20		
		BOD1505-MS1	Matrix Spike	0.38725	10.142	9.8039	mg/kg		99.5		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	0.38725	10.054	9.8039	mg/kg	0.909	98.6	20	75 - 125	
Cadmium	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	9.3039	9.8039	mg/kg		94.9		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	9.3873	9.8039	mg/kg	0.944	95.8	20	75 - 125	
Chromium	BOD1505	BOD1505-DUP1	Duplicate	5.3578	6.0147		mg/kg	11.6		20		
		BOD1505-MS1	Matrix Spike	5.3578	101.47	98.039	mg/kg		98.0		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	5.3578	99.951	98.039	mg/kg	1.54	96.5	20	75 - 125	
Cobalt	BOD1505	BOD1505-DUP1	Duplicate	1.7059	1.8775		mg/kg	9.58		20		
		BOD1505-MS1	Matrix Spike	1.7059	96.324	98.039	mg/kg		96.5		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	1.7059	96.275	98.039	mg/kg	0.00	96.5	20	75 - 125	
Copper	BOD1505	BOD1505-DUP1	Duplicate	17.775	15.260		mg/kg	15.2		20		
		BOD1505-MS1	Matrix Spike	17.775	136.03	98.039	mg/kg		121		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	17.775	117.84	98.039	mg/kg	17.0	102	20	75 - 125	
Lead	BOD1505	BOD1505-DUP1	Duplicate	4.4412	4.2157		mg/kg	5.21		20		
		BOD1505-MS1	Matrix Spike	4.4412	96.422	98.039	mg/kg		93.8		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	4.4412	95.000	98.039	mg/kg	1.50	92.4	20	75 - 125	

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Instituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Mercury	BOD1498	BOD1498-BS1	LCS	1.3037	1.5700	0.14	mg/kg	83.0		75 - 125		
Antimony	BOD1505	BOD1505-BS2	LCS	0.032200	0.033330	0.10	mg/kg	96.6		75 - 125		
Arsenic	BOD1505	BOD1505-BS1	LCS	0.19240	0.20900	0.010	mg/kg	92.1		75 - 125		
Barium	BOD1505	BOD1505-BS1	LCS	1.8650	1.8810	0.010	mg/kg	99.1		75 - 125		
Beryllium	BOD1505	BOD1505-BS1	LCS	0.11070	0.12100	0.010	mg/kg	91.5		75 - 125		
Cadmium	BOD1505	BOD1505-BS1	LCS	0.10960	0.11110	0.010	mg/kg	98.6		75 - 125		
Chromium	BOD1505	BOD1505-BS1	LCS	0.26820	0.27720	0.010	mg/kg	96.8		75 - 125		
Cobalt	BOD1505	BOD1505-BS1	LCS	0.18930	0.17930	0.050	mg/kg	106		75 - 125		
Copper	BOD1505	BOD1505-BS1	LCS	0.26640	0.28490	0.040	mg/kg	93.5		75 - 125		
Lead	BOD1505	BOD1505-BS1	LCS	0.21220	0.19470	0.050	mg/kg	109		75 - 125		
Molybdenum	BOD1505	BOD1505-BS1	LCS	0.11500	0.12100	0.050	mg/kg	95.0		75 - 125		
Nickel	BOD1505	BOD1505-BS1	LCS	0.22620	0.23210	0.010	mg/kg	97.5		75 - 125		
Selenium	BOD1505	BOD1505-BS1	LCS	0.099800	0.097020	0.010	mg/kg	103		75 - 125		
Silver	BOD1505	BOD1505-BS1	LCS	0.10340	0.10637	0.010	mg/kg	97.2		75 - 125		
allium	BOD1505	BOD1505-BS1	LCS	0.11940	0.10329	0.10	mg/kg	116		75 - 125		
Vanadium	BOD1505	BOD1505-BS1	LCS	0.59530	0.58630	0.010	mg/kg	102		75 - 125		
Zinc	BOD1505	BOD1505-BS1	LCS	0.74510	0.71170	0.050	mg/kg	105		75 - 125		

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Instituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
pH	BOD1194	BOD1194-BS1	LCS	6.9760	7.0000	0.05	pH Units	99.7		0 - 200		

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Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Notes and Definitions

Q01	Sample precision is not within the control limits.
pH1:1	pH result reported on a 1:1 dilution of sample
	Estimated value
A02	The difference between duplicate readings is less than the PQL.
A01	PQL's and MDL's are raised due to sample dilution.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Port Organic Prop P.O. Box 5203 Bakersfield CA, 93358	Project: Soil samples Project Number: Waste fish Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
rcury	BOD1498	BOD1498-BLK1	ND	mg/kg	0.010	0.0016	
Antimony	BOD1505	BOD1505-BLK2	0.0065000	mg/kg	0.10	0.0056	
Arsenic	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0042	
Barium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0010	
Beryllium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.00044	
Cadmium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0024	
Chromium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0013	
Cobalt	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.0012	
Copper	BOD1505	BOD1505-BLK1	ND	mg/kg	0.040	0.0098	
Lead	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.0015	
Molybdenum	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.022	
Nickel	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
Selenium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0064	
Silver	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
allium	BOD1505	BOD1505-BLK1	0.0091000	mg/kg	0.10	0.0074	
Vanadium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
Zinc	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.024	

BC Laboratories, Inc

Port Organic Prop
P.O Box 5203
Bakersfield, CA 93358
Attn: Jim Zaben

BC Lab #	Client ID	Date Sampled	Time Sampled
05-03842-01	Soil S	04-18-05	09:56
05-03842-02	Soil N	04-18-05	09:45
05-03842-03	Soil E	04-18-05	10:12
05-03842-04	Soil W	04-18-05	10:26

Attached are the results analyzed by Aquatic Testing Laboratories.

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LABORATORY REPORT

Aquatic Testing Laboratories
"dedicated to providing quality aquatic toxicity testing"
4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650- 0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: April 26, 2005

Client: BC Laboratories, Inc.
4100 Atlas Court
Bakersfield, CA 93308
Attn: Shelley Taylor

Laboratory No.: A-05042108-001/004
Sample ID.: 0503842-01/04

Sample Control: The samples were received by ATL in a chilled state, with the chain of custody record attached.

Date Sampled: 04/18/05
Date Received: 04/21/05
Date Tested: 04/21/05 to 04/26/05

Sample Analysis: The following analyses were performed on your sample:

CCR Title 22 - Fathead Minnow Hazardous Waste Screen Bioassay (Polisini and Miller 1988).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Results
0503842-01	PASSED (LC50 > 750 mg/l)
0503842-02	PASSED (LC50 > 750 mg/l)
0503842-03	PASSED (LC50 > 750 mg/l)
0503842-04	PASSED (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-001

Client/ID: BC 3842-1

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	LM			LM				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.6	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.5	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.4	7.9	7.4	0	20.6	8.2	7.4	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.6	7.3	20.5	6.1	7.0	0	20.4	6.5	7.0	0	20.4	7.2	7.2	0	20.6	7.8	7.1	0
400 mg/l B	20.4	8.5	7.3	20.4	6.3	7.0	0	20.4	6.6	7.0	0	20.4	7.0	7.2	0	20.5	7.3	7.1	0
750 mg/l A	20.4	8.3	7.2	20.4	7.1	7.1	0	20.4	7.0	7.1	0	20.3	7.2	7.1	0	20.5	8.0	7.2	0
750 mg/l B	20.3	8.5	7.2	20.3	7.2	7.1	0	20.3	7.2	7.1	0	20.4	7.1	7.2	0	20.4	7.5	7.1	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	26 mg/l $CaCO_3$	46 mg/l $CaCO_3$	30 mg/l $CaCO_3$	70 mg/l $CaCO_3$
Final	27 mg/l $CaCO_3$	46 mg/l $CaCO_3$	37 mg/l $CaCO_3$	83 mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-002

Client/ID: BC 3842-2

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	[illegible]			LM				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.6	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.8	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.4	7.9	7.4	0	20.4	8.2	7.4	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.6	7.3	20.5	7.3	7.0	0	20.4	6.2	7.1	0	20.5	6.4	7.2	0	20.6	8.1	7.3	0
400 mg/l B	20.4	8.5	7.3	20.4	5.2	6.9	0	20.4	6.2	7.1	0	20.5	6.4	7.1	0	20.5	7.0	7.2	0
750 mg/l A	20.4	8.6	7.2	20.4	5.6	7.0	0	20.4	6.6	7.0	0	20.4	6.8	7.2	0	20.5	7.9	7.3	0
750 mg/l B	20.3	8.6	7.2	20.3	6.8	7.1	0	20.3	7.1	7.1	0	20.4	7.0	7.1	0	20.4	7.6	7.3	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	26 mg/l $CaCO_3$	46 mg/l $CaCO_3$	31 mg/l $CaCO_3$	86 mg/l $CaCO_3$
Final	27 mg/l $CaCO_3$	46 mg/l $CaCO_3$	54 mg/l $CaCO_3$	101 mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-003
Client/ID: BC 3842-3

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	LM			LM				JM				JM				LM			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.4	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.4	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.5	7.9	7.4	0	20.6	8.2	7.5	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.7	7.3	20.5	7.6	7.2	0	20.4	7.0	7.1	0	20.5	7.2	7.1	0	20.6	7.8	7.1	0
400 mg/l B	20.4	8.6	7.3	20.4	7.7	7.2	0	20.5	7.4	7.1	0	20.5	7.4	7.1	0	20.6	7.9	7.1	0
750 mg/l A	20.3	8.5	7.2	20.4	8.0	7.3	0	20.4	7.7	7.2	0	20.4	7.4	7.0	0	20.5	8.5	7.2	0
750 mg/l B	20.3	8.5	7.2	20.3	6.9	7.2	0	20.4	6.9	7.2	0	20.4	7.4	7.0	0	20.4	8.2	7.2	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	26 mg/l $CaCO_3$	46 mg/l $CaCO_3$	31 mg/l $CaCO_3$	71 mg/l $CaCO_3$
Final	27 mg/l $CaCO_3$	46 mg/l $CaCO_3$	38 mg/l $CaCO_3$	43 mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-004
Client/ID: BC 3842-4

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	LM			LM				JM				JM				LM			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.4	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.4	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.6	7.9	7.4	0	20.6	8.2	7.5	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.6	7.1	20.5	7.3	6.9	0	20.5	7.6	7.1	0	20.5	7.4	7.1	0	20.7	7.7	7.1	0
400 mg/l B	20.4	8.5	7.1	20.4	5.4	6.8	0	20.4	7.1	7.0	0	20.6	7.5	7.2	1	20.6	8.3	7.2	0
750 mg/l A	20.3	8.5	7.1	20.3	4.8	6.7	0	20.4	7.0	7.0	0	20.5	7.1	7.1	0	20.5	7.2	7.2	0
750 mg/l B	20.3	8.7	7.1	20.3	6.9	6.7	0	20.3	7.1	7.0	0	20.5	7.2	7.2	0	20.5	7.3	7.2	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL		HIGH CONCENTRATION	
	Alkalinity	Hardness	Alkalinity	Hardness
Initial	26 mg/l $CaCO_3$	46 mg/l $CaCO_3$	29 mg/l $CaCO_3$	70 mg/l $CaCO_3$
Final	27 mg/l $CaCO_3$	46 mg/l $CaCO_3$	45 mg/l $CaCO_3$	77 mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	1 /20
750 mg/l	0 /20

✓ (one)	Result	Description
X	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

AECOM Environment

Prepared for:
Hydrogen Energy California LLC
Long Beach, California

Prepared by:
AECOM
Camarillo, California
60163371
December 2010

Phase II Environmental Site Assessment Report

Proposed Hydrogen Energy California Project Site, Adohr and Dairy Roads, Kern County, California

Privileged & Confidential – Attorney Work Product/Attorney-Client Communication

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This report was prepared consistent with currently and generally accepted environmental consulting principles and practices. The material and data in this report were prepared under the supervision and direction of the undersigned.

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List of Abbreviations

°C	degrees Celsius
AOC	Area of Concern
bgs	below ground surface
BLI	BC Laboratories, Inc.
CHHSL	California Human Health Screening Level
CO_2	carbon dioxide
COC	chain-of-custody
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
GPS	Global Positioning System
HASP	Health and Safety Plan
HECA	Hydrogen Energy California LLC
JSA	Job Safety Analyses
mg/kg	milligrams per kilogram
MW	megawatt
OCP	organo-chlorine pesticide
OPP	organophosphorus pesticides
petcoke	petroleum coke
PID	photoionization detector
ppm	parts per million
RCRA	Resource Conservation & Recovery Act
REC	recognized environmental condition
RPD	relative percent difference
RSL	Regional Screening Level
TPH	total petroleum hydrocarbons
USA	Underground Service Alert
UST	underground storage tank
VOC	volatile organic compound

1.0 Introduction

This report documents the results of a Phase II Environmental Site Assessment (ESA) that was recently conducted by AECOM, on behalf of Hydrogen Energy California LLC (HECA), at the proposed project site located southwest of Buttonwillow, Kern County, California. The proposed project will gasify petroleum coke (petcoke) (or blends of petcoke and coal, as needed) to produce hydrogen to fuel a combustion turbine operating in combined cycle mode. The Gasification Block feeds a 390-gross-megawatt (MW) combined cycle plant. The net electrical generation output from the Project will provide California with approximately 250 MW of low carbon baseload power to the grid. The Gasification Block will also capture approximately 90 percent of the carbon from the raw syngas at steady-state operation, which will be transported to the Elk Hills Field for carbon dioxide (CO_2) Enhanced Oil Recovery, resulting in sequestration of the injected CO_2. In addition, approximately 100 MW of natural gas generated peaking power will be available from the proposed project.

This Phase II ESA was conducted to evaluate recognized environmental conditions (RECs) that were identified in April 2009 and August 2010 by URS during their Phase I ESAs of the proposed project site. RECs that were identified by URS included potential former underground storage tanks (USTs), unknown concrete structures, a farm equipment wash pad, a former fertilizing manufacturing facility (Port Organics Products Ltd.), outdoor and indoor tailings piles of raw materials used by Port Organics in the fertilizer manufacturing process, and a number of locations with stained surface soil.

The following sections summarize the site background, pre-field activities, field assessment methodology, laboratory analytical program, results of the assessment, conclusions, and recommendations of this Phase II ESA.

2.0 Site Background

2.1 Site Description

The proposed project site consists of approximately 1,100 acres of agricultural land that is generally located west of Tupman Road and Station Road, southwest of the intersection of Adohr and Tupman Roads, Kern County, California. Tule Elk State Park is located approximately ¼ mile east of the proposed project site and Interstate 5 is located approximately 2.5 miles east of the proposed project site. The approximate location of the proposed project site is illustrated on Figure 1.

The proposed project site currently consists of a residence, an active farming operations area (equipment storage and maintenance), a former fertilizer manufacturing plant, a crop duster airstrip, agricultural fields, and other nominal site features. The residence, farming operations area, and former fertilizer manufacturing plant occupy approximate 45 acres that are located in the northwest corner of the proposed project site. The remaining portions of the proposed project site are occupied by alfalfa and/or cotton fields, access roads, and irrigation ditches/canals. The general locations of the main site features are illustrated on Figure 2.

2.2 Site History

Historical research conducted by URS indicates that the proposed project site was developed for residential and agricultural uses in the 1940s. Farming operations appear to have been concentrated around the northern portion of the proposed project site which was developed with several equipment storage and maintenance buildings. In the 1950s a crop duster landing strip was constructed to the east of the farming operations area. By the early 1970s the proposed project site was developed into its current configuration.

Occupants of the proposed project site have included a residence located at 7345 Adohr Road, Palm Farms, Inc. (also identified as Palm Ranch) and Port Organic located at 7361 Adohr Road. From at least the late 1980s, Palm Farms manufactured fertilizer on site. Sometime in the 2000s Port Organics took over operation of the fertilizer manufacturing operations. According to URS, hazardous materials utilized by Port Organics included acids, bases, heavy metals, petroleum hydrocarbons, and organic fertilizer product including “Agrolizer” and “Fishilizer.” The materials were stored at various locations throughout the farming operations area, including in a former tank farm and associated concrete sumps that were located to the east of the Port Organics storage building.

2.3 Previous Environmental Site Assessments

In April 2009 and August 2010 URS conducted Phase I ESAs of the proposed project site. The Phase I ESAs identified six RECs. Several of these RECs consist of multiple environmental concerns that are located in different locations of the proposed project site. For purposes of clarity, AECOM has subdivided three of these RECs into their own individual RECs. A summary of the revised RECs as identified by URS is provided on the following page.

1. A review of a site-specific environmental database report indicates that five USTs were formerly located at the proposed project site. These USTs include two diesel fuel tanks, an unleaded gasoline tank, a regular gasoline tank, and a premium gasoline tank. At least three of these USTs were removed in 1984. The Phase I ESAs indicated that it is uncertain whether the other two USTs were actually located on the site and whether they may or may not have been removed.

2. A pipe that may be a UST fill or vent pipe was observed south of the large grain bins.

3. Two unknown large concrete covers were observed to the west of the south storage building. The site contact was aware of these structures, but does not know their nature or details on their former use.

4. Port Organics, a former fertilizer manufacturing plant, is located in the northwest portion of the farm operations area (see Figure 2). Manufacturing at this site included the use of hazardous materials and operation of a tank farm and associated concrete sumps. Unknown liquids are currently stored outdoors in drums and containers, and soil staining is present in the former Port Organics manufacturing area.

5. According to URS (as documented in the Phase I ESA) the east sump of the Port Organics facility previously discharged approximately 500 to 750 gallons per day of liquids to the drainage ditch located east of the Port Organics facility through an underground 2-inch flex line in 2009.

6. A farm equipment wash pad abuts the southeast side of the former horse stables building. The concrete, soil, and sediment in the adjacent irrigation ditch were observed to be visually stained.

7. One outdoor uncontained tailings pile, consisting of remnants of fishmeal and bird guano (raw materials used in the fertilizer manufacturing process), was found to the east of the former Port Organics aboveground tank farm. This pile was sampled in 2009 and was characterized as non-Resource Conservation & Recovery Act (RCRA) hazardous waste.

8. One indoor tailings pile, consisting of remnants of fishmeal and bird guano was observed inside the former Port Organics storage building. Like the outdoor tailings pile, this pile was also sampled in 2009 and was characterized as non-RCRA hazardous waste.

9. Stained soils were observed during the site visit in the farming operations area and agricultural production areas. The extent of any subsurface impacts from the staining was unknown.

In addition to addressing the RECs identified by URS, this Phase II ESA evaluated the following additional potential environmental concerns based on AECOM's conversation with Mr. Paul Ackerman on September 22, 2010, and AECOM's experience evaluating similar agricultural sites:

- According to Mr. Ackerman, a Chevron (former Unocal) pipeline runs along the north side of Adohr Road directly across the street from the proposed project site. Mr. Ackerman reported that in the past (exact date unknown) a section of pipeline near the intersection of Adohr and Dairy Roads ruptured, releasing crude oil onto Adohr Road and the immediate surrounding property including the northern edge of the proposed project site. Mr. Ackerman stated that

Unocal quickly repaired the pipeline and removed the impacted soil. This potential environmental concern is referred herein within this report as Area of Concern (AOC)-1.

- According to Mr. Ackerman, a UST was located adjacent to the former airplane hangar that abuts the crop duster air strip. Mr. Ackerman was not aware if the UST was still present on site. This potential environmental concern is referred herein within this report as AOC-2.
- According to Mr. Ackerman, a UST may have been located at the northeast end of the on-site crop duster airstrip, near the former chemical storage pad. Mr. Ackerman was not aware if the UST was still present on site. This potential environmental concern is referred herein within this report as AOC-3.
- It is has been AECOM's experience that residual concentrations of organo-chlorine pesticides (OCPs) are commonly present in the shallow soil of commercial agricultural sites throughout California. This potential environmental concern is referred herein within this report as AOC-4.

3.0 Pre-Field Activities

3.1 Health and Safety Plan

AECOM prepared a site-specific Health and Safety Plan (HASP) prior to the onset of field activities to address potential physical and chemical hazards associated with the work at the proposed project site and evaluate other health and safety considerations. Additionally, Job Safety Analyses (JSAs) were prepared to mitigate specifically identified hazards encountered within the scope of work. The HASP and JSAs were reviewed and approved by AECOM Health and Safety Management prior to commencement of field activities, and on a daily basis. Site assessment activities conducted by AECOM and subcontractors were performed in accordance and in compliance with the HASP and JSAs.

3.2 Permits

According to Kern County Environmental Health Department guidance, permits are not required for installation of soil borings.

3.3 Utility Clearance

On September 16, 2010, AECOM contacted Underground Service Alert (USA) of Northern California to notify them of the planned subsurface assessment as required by State law. USA issued ticket numbers 0279029, 0279041, and 0279044 for the planned Phase II ESA of the proposed project site.

3.4 Geophysical Survey

On September 23, 2010, AECOM oversaw a geophysical and utility clearance survey conducted by Subsurface Surveys of Carlsbad, California. Subsurface Surveys used ground-penetrating radar and a roller-mounted magnetometer to minimize the likelihood that utilities or other subsurface obstructions were present in the vicinity of the proposed boring locations. In addition, Subsurface Surveys evaluated the five suspect UST areas as well as the two unknown concrete structures.

No subsurface utilities or other subsurface obstructions were identified in the vicinity of the proposed borings. No USTs or other underground anomaly were identified in the vicinity of the presumed UST locations. In addition, no underground structures or potential anomalies were identified in the vicinity of the two unknown concrete structures. The approximate locations of the areas surveyed for suspect USTs and the two unknown concrete structures are illustrated on Figure 3. A copy of the geophysical survey report is included as Appendix A.

4.0 Field Assessment Methodology

The field assessment consisted of collection of 70 soil samples from 21 borings, 4 sediment samples, 3 surface soil sample, and 9 soil composite samples for laboratory analyses. The following sections describe the methods that were used to collect the samples.

4.1 Soil Borings

From September 21 through 23, 2010, AECOM advanced 21 soil borings (GP-1 through GP-21) at the proposed project site using a truck-mounted, hydraulically operated Geoprobe® sampling system operated by BC2 of Orange, California. The AOC that each boring was designed to evaluate, the targeted sampling depth of each boring, and analytical methodology used to analyze the soil samples is summarized in Table 1. The approximate locations of the borings are illustrated on Figure 4 and Figure 5.

Borings GP-1 through GP-21 were advanced to depths ranging between 4 and 25 feet below ground surface (bgs) depending on the area of concern being evaluated. The soil samples that were planned for volatile organic compound (VOC) analysis were preserved in the field in accordance with U.S. Environmental Protection Agency (EPA) Method 5035. This sample preservation method involves placing approximately 5 grams of soil in laboratory-supplied VOA vials containing sodium bi-sulfate or methanol as preservatives. In addition, soil samples were also placed in unpreserved laboratory-supplied jars for additional laboratory analysis.

The collected soil samples were then sealed, labeled, recorded on a chain-of-custody (COC) form, and placed in an ice chest chilled to approximately 4 degrees Celsius (ºC) pending delivery to BC Laboratories, Inc. (BLI) in Bakersfield, California. BLI is a certified hazardous waste testing laboratory under California certification number 1186.

Additional soil from each sample was collected and subsequently screened with a photoionization detector (PID) and observed for visual and olfactory evidence of contamination.

4.2 Surface Samples

AECOM used a manually operated hand auger to collect surface samples SS-1, SS-6, and SS-7 from areas of visually stained surface soil located within the former Port Organics tank farm. Each surface soil sample was collected using a stainless steel trowel. The collected surface samples were preserved in accordance with EPA Method 5035 (as described in Section 4.1), placed in laboratory-supplied VOAs and glass jars, sealed, labeled, recorded on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI. The approximate locations of the surface samples are illustrated on Figure 4.

4.3 Sediment Sampling

AECOM utilized a pole-mounted sampling device to collect sediment samples SS-2 through SS-5 from several irrigation ditches that are located throughout the proposed project site. The collected surface samples were placed in laboratory supplied VOAs and glass jars, sealed, labeled, recorded

on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI. The approximate locations of the sediment samples are illustrated on Figures 4 and 5.

4.4 Composite Soil Sampling

AECOM utilized a stainless steel hand trowel to collect 45 soil samples from nine representative areas (SC-1 through SC-9) located throughout the agricultural fields that comprise the proposed project site. Each square-shaped area measured approximately one acre. Five soil samples (A through E) were collected from each square-shaped area (four samples were collected near the corners and one sample from the middle) and placed in laboratory-supplied glass jars. The collected soil samples were then sealed, labeled, recorded on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI for preparing the area composite samples and subsequent analysis. The approximate locations of the composite samples are illustrated on Figure 4.

4.5 Groundwater Sampling

AECOM planned to advance borings GP-1, GP-3, and GP-7 to a depth of 40 feet bgs in an attempt to collect groundwater hydropunch samples. However, drilling refusal was encountered in borings GP-1 and GP-3 at a depth of approximately 25 feet bgs. The success of advancing boring GP-7 to 40 feet bgs was considered low. Therefore, an attempt to advance boring GP-7 to a depth of 40 feet bgs was not made.

4.6 Sample Location Survey

With the exception of the soil samples collected from boring GP-14 which was advanced inside a building, each soil sample location was recorded using a Trimble GeoXT sub meter-level Global Positioning System (GPS) unit. Field GPS data was post processed in the office to differentially correct for common satellite and atmospheric errors. The predicted horizontal precision of the post-processed data ranged between 0.4 and 0.7 meters (between 1.3 and 2.3 feet). The sample locations are plotted in Figures 4 and 5.

4.7 Equipment Decontamination

Equipment that came into contact with, or that was used to collect the soil samples, was cleaned with distilled water and Alconox™ detergent, followed by two rinses of tap and distilled water to prevent cross contamination.

4.8 Boring Abandonment

Following the completion of the soil sampling activities, the soil borings were backfilled with hydrated bentonite chips and capped with native soil or concrete to match the surrounding surface.

4.9 Laboratory Analyses

A total of 70 soil samples including 3 surface, 9 composite, and 4 sediment samples were selected for laboratory analysis. Depending on the environmental concern being evaluated the samples were analyzed for one or more of the following parameters:

- VOCs by EPA Method 8260;
- Organophosphorus pesticides (OPPs) by EPA Method 8141;
- OCPs by EPA Method 8081;

- The full carbon range of total petroleum hydrocarbons (TPH) by EPA Method 8015 modified;
- One or more of the Title 22 metals by EPA Method 6010/7000 series;
- pH;
- Phosphorus by EPA Method 365.4;
- Sulfate and Nitrogen by EPA Method 300; and
- Potassium by EPA Method 200.7.

The samples were analyzed on an expedited 48-hour laboratory turnaround-time basis.

5.0 Results of Assessment

5.1 Site Geology

In general, soils encountered from depths of between 0 and 5 feet bgs during the subsurface assessment consisted primarily of fine-grained material (i.e. clay, silt, sandy silt, and occasional silty sand). Soils encountered from 5 feet bgs to a total depth explored of 25 feet bgs consisted primarily of light gray to reddish brown, fine to medium-grained sand with occasional silt and silt/clay mixtures. Soil from ground surface to 25 feet bgs was primarily dry with the exception of soil borings GP-8 and GP-9 advanced in the former Port Organics concrete-lined sumps, which were moist to wet at a depth of approximately 4 feet bgs. Logs of borings GP-1 through GP-21 are included as Appendix B.

5.2 Groundwater

AECOM attempted to advance to borings (GP-1 and GP-3) to a depth of 40 feet bgs to collect a hydropunch groundwater sample. As described in Section 4.5, drilling refusal was encountered at a depth of 25 feet bgs in both borings. In January 2009 URS conducted a geotechnical field exploration of the proposed project site. This drilling program involved the advancement of 13 borings throughout the proposed project site at depths ranging from between 60 and 101.5 feet bgs. Groundwater was not encountered in the 13 borings advanced by URS in January 2009.

5.3 Field Observations

An ammonia-like odor was observed in the soil samples collected from the outdoor tailings pile and the concrete-lined sumps located within the former aboveground tank farm. A petroleum hydrocarbon odor and dark stained soil were observed in the soil samples collected from beneath the equipment washing area. With the exception of the soil sample collected from boring GP-8 at a depth of 4 feet bgs (138 parts per million (ppm) by volume), no significant PID readings were measured (above 50 pm) during this assessment.

5.4 Geophysical Survey

No subsurface utilities or other subsurface obstructions were identified in the vicinity of the proposed borings. No USTs or other underground anomalies were identified in the vicinity of the presumed UST locations. In addition, no underground structures or anomalies were identified in the vicinity of the two unknown concrete structures.

5.5 Analytical Results

The analytical result of the soil and sediment samples collected during the Phase II ESA are summarized in Tables 2 through 5. Table 2 summarizes the analytical results that exceed one or more of the following regulatory guidance values:

- California Human Health Screening Levels (CHHSLs) for industrial properties dated January 2005;
- EPA Region 9 Regional Screening Levels (RSLs) for industrial soil dated May 2010; and

- San Francisco Regional Water Quality Control Board Environmental Screening Levels (ESLs) for commercial/industrial property dated May 2008.

Table 3, 4, and 5 also compares the analytical results against regulatory guidance values, but provides a more comprehensive summary of the results that exceeded a laboratory detection limit. Table 3 provides a summary of the VOC and TPH analytical results; Table 4 provides a summary of the pH, potassium, anion, OPP, and OCP analytical results; and Table 5 presents a summary of metal analytical results. The following sections provide a discussion of the analytical results by the area of concern being evaluated. Copies of the certified laboratory analytical reports and COC documentation are included in Appendix C.

5.5.1 REC 1 – Five Former USTs

Borings GP-1 through GP-4 were advanced to evaluate the presumed locations of the three former USTs that were removed and the two USTs that may or may not have been removed. VOCs or TPH were not detected above the laboratory detection limit in the 12 soil samples collected from these two areas. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from borings GP-3 and GP-4. With the exception of total arsenic, none of the metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.2 REC 2 – Vent Pipe/Suspect UST

Boring GP-6 was advanced adjacent to the suspect vent pipe located to the south of the former grain storage silo. No VOCs, TPH, OCPs, or OPPs were detected in the three soil samples collected from boring GP-6. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-6. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.3 REC 3 – Two Large Concrete Covers

Boring GP-5 was advanced adjacent to the two large concrete covers that were observed to the west of the south farm storage building. No VOCs, TPH, OCPs, or OPPS were detected in the three soil samples collected from boring GP-5. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-5. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.4 REC 4 – Port Organics

Soil samples from borings GP-8, GP-9, GP-10, and GP-19 and surface samples SS-1, SS-5, and SS-6 were collected in the former Port Organics tank farm to evaluate the historical tank farm operations. No OPPs were detected in the 11 soil samples collected from the former tank farm. Low concentrations of VOCs, OCPs, and TPH were detected in one or more of the soil samples collected from the former tank farm. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the soil samples collected from the former tank farm. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from the former tank farm. pH in the soil samples collected ranged from 3.85 (GP-10-5) to 7.87 to (GP-8-4). With the exception of total

arsenic and the OCP endosulfane (detected in the duplicate soil samples), none of the compounds detected in the historical tank farm area exceeded the CHHSLs, RSLs, or ESLs.

5.5.5 REC 5 – Port Organics East Sump

Sediment sample SS-3 was collected adjacent to an underground 2-inch flex line that was observed to be protruding from a drainage ditch located to the east of the Port Organics tank farm. TPH, OCPs, and OPPs were not detected in the sediment sample SS-3. Low to moderate concentrations of VOCs, potassium, nitrate, sulfate, and phosphate were detected in the sediment sample SS-3. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, vanadium, and zinc were detected sediment sample SS-3. With the exception of total arsenic, none of the compounds detected in the former tank farm exceeded the CHHSLs, RSLs, or ESLs.

5.5.6 REC 6 – Farm Equipment Wash Pad

Borings GP-18 and GP-20 and sediment sample SS-2 were collected adjacent to the farm equipment wash pad. Low concentrations of VOCs and low to elevated concentrations of TPH in the mineral oil range were detected in the six soil samples collected from borings GP-18 and GP-20 as well as sediment sample SS-2. In addition, low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, vanadium, and zinc were detected in sediment sample SS-2. However, no OCPs or OPPs were detected in the six soil samples collected from borings GP-18 and GP-20 as well as sediment sample SS-2. With the exception of TPH in the mineral range and total arsenic, none of the compounds detected in the soil and sediment samples collected near the farm equipment wash pad exceeded the CHHSLs, RSLs, or ESLs.

5.5.7 REC 7 – Outdoor Tailings Pile

Borings GP-11, GP-12, and GP-13 were advanced adjacent to the outdoor tailings pile to evaluate the lateral extent of the pile. Low concentrations of VOCs were detected in the seven soil samples collected from borings GP-11, GP-12, and GP-13. No TPH, OCPs, or OPPS were detected in the soil samples collected from borings GP-11, GP-12, and GP-13. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from borings GP-11, GP-12, and GP-13. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.8 REC 8 – Indoor Tailings Pile

Boring GP-14 was advanced inside the former Port Organics storage building to evaluate if the tailings pile has impacted the underlying subsurface. Low concentrations of VOCs were detected in the two soil samples collected from boring GP-14. No TPH, OCPs, or OPPs were detected in the soil samples collected from boring GP-14. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-14. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.9 REC 9 – Stained Surface Soils

Borings GP-15 and GP-16 and sediment sample SS-7 were collected to evaluate visually stained soil that was observed in several areas of the proposed project site. Boring GP-15 was advanced near the northwest end of the crop duster airstrip to evaluate visually stained soil that was observed in this location as well as to evaluate potential pesticides/herbicides releases associated with the crop dusters. Boring GP-16 and sediment sample SS-7 were advanced in the southeast corner of the proposed project site to evaluate an area of stained yellowish soil and to assess if the stained soil had impacted the adjacent irrigation canal.

No VOCs or TPH were detected in the two soil samples collected from boring GP-15. Low concentrations of several OCPs and total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-15. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

No VOCs were detected in the soil samples collected from boring GP-16 and sediment sample SS-7 TPH was not detected in the two soil samples collected from boring GP-16; however low concentrations of TPH in the mineral oil range were detected in sediment sample SS-7. Several OCPs were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the sediment sample SS-7. With the exception of total arsenic, none of the compounds detected in boring GP-16 and sediment sample SS-7 exceeded the CHHSLs, RSLs, or ESLs.

5.5.10 AOC 1 – Historical Pipeline Release

Boring GP-21 was advanced on the south side of Adohr Road to evaluate a historical petroleum pipeline release as reported by Mr. Ackerman. No VOCs or TPH were detected in the two soil samples collected from boring GP-21. A low concentration of the OCP Dichlorodiphenyltrichloroethane was detected in one of the soil samples collected from boring GP-21. This concentration was well below the CHHSLs, RSLs, and ESLs.

5.5.11 AOC 2 – Airport Hangar Soil Staining

Boring GP-17 was advanced adjacent to the former airplane hangar that abuts the crop duster air strip to evaluate stained soil that was present in this location. Low concentrations of VOCs and elevated concentrations of TPH in the mineral oil range were detected in the two soil samples collected from boring GP-17. The OPP tokuthion and the OCPs endrin, Dichlorodiphenyldichloroethane, Dichlorodiphenyldichloroethylene, and Dichlorodiphenyltrichloroethane were detected in one or more of the soil samples collected from boring GP-17. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-17. With the exception of total arsenic, the OCP endrin, and TPH in the mineral oil range, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.12 AOC 3 – Suspect UST, Chemical Storage Pad, and Surface Staining

Boring GP-10 and sediment sample SS-4 were collected at the south end the crop duster airstrip adjacent to the former chemical storage pad. This boring and sediment sample location was selected to evaluate stained soil and the potential presence of a suspect UST as reported by Mr. Ackerman. No VOCs were detected in the three soil samples collected from boring GP-10. However, the VOC benzene was detected in sediment sample SS-4 at a concentration of 0.0021 milligrams per kilogram (mg/kg). TPH and OPPs were not detected in the soil samples collected from boring GP-10 and sediment sample SS-4. Low concentrations of several OCPs were detected in sediment sample SS-4, but no OCPs were detected in the soil samples collected from boring GP-10. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the soil samples collected from boring GP-10 and sediment sample SS-4. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-10 and sediment sample SS-4. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, and ESLs.

5.5.13 AOC 4 – Historical Pesticide and Herbicide Use

OPPs were not detected in the composite samples SC-1 through SC-9. However, low concentrations of OCPs were detected in the composite samples SC-1 through SC-9. Of the compounds detected, the concentration of dieldrin in SC-1, SC-5, and SC-9 and the concentrations of endrin in SC-2, SC-5, SC-7, and SC-9 exceeded the ESLs, but not the RSL or CHHSLs. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. With the exception of total arsenic, none of the metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.6 Quality Assurance/Quality Control

To demonstrate that quality data has been collected during the field program, field and laboratory quality control samples were analyzed and their data used in support of the primary data. Field quality control samples that were collected for this project consisted of the following:

1. Six field duplicate samples were used to determine relative percent difference (RPD) between duplicates,

2. Sample equipment was decontaminated and equipment blanks were collected to demonstrate its effectiveness, and

3. Trip blank controls were sent with each shipment to evaluate potential cross contamination of VOCs.

Laboratory quality controls included:

1. Method blank samples,

2. Lab control spikes and duplicates, and

3. Matrix spikes and duplicates.

Data for all quality control samples was included with laboratory data packages. Field duplicate RPDs were within criteria for 80 out of 104 analytes for which a valid comparison (measured value in both samples that is greater than 2 times the practical quantitation limit) could be determined. The 24 samples which exceeded criteria are attributed to detections that are close to practical quantitation limits and the variability of the soil at this location. No analytes were detected in trip blank samples. Chloroform was detected in an equipment blank sample, but was not detected in any primary sample. All laboratory quality controls were within laboratory and method-specified criteria.

Overall, based on the analysis of quality control samples collected at the proposed project site, the data are of sufficient quality to be used in the due diligence evaluation of this site.

6.0 Conclusions

Based on the results of this Phase II ESA, AECOM provides the following conclusions:

- REC-1 – The geophysical survey did not reveal the presence of USTs in the areas where they had presumably been located based on anecdotal information. This indicates that the USTs have either been removed or were located elsewhere. The analytical results of the soil samples collected from borings GP-1 and GP-2 appear to indicate that the three former USTs have not impacted the proposed project site. In addition, the analytical results of the soil samples collected from borings GP-3 and GP-4 appear to indicate the UST suspected to be present to the west of the horse stable has not impacted the proposed project site.
- REC 2 – A reconnaissance by AECOM of the area around the suspect vent pipe appears to indicate that this suspect vent pipe is more likely a water-related pipe rather than a fuel-related vent pipe. Equipment in the immediate vicinity of the water pipe is labeled as a "vaporizer" and appears to be related to a former propane above ground storage tank that appears to have been located in this area. Based on this information, AECOM concludes that this suspect vent pipe is not related to a potential UST or other environmental concern. However, to be conservative and rule out this potential environmental concern, AECOM advanced boring GP-6 and collected three soil samples from this location for laboratory analysis. The analytical results from these soil samples further demonstrate that REC-2 no longer presents a significant environmental concern to the proposed project site.
- REC 3 –The analytical results of the soil samples collected from borings GP-5 indicate that the soil in the vicinity of the two unknown large concrete covers is not impacted. This information combined with the geophysical survey which did not identify a subsurface anomaly, allow AECOM to conclude that REC-3 no longer presents a significant environmental concern to the proposed project site.
- REC 4 – The analytical results of soil samples collected from the former Port Organics tank farm appears to indicate that soil in this area has not been significantly impacted by the historical fertilizer plant operations. Based on this information, AECOM concludes that REC-4 no longer presents a significant environmental concern to the proposed project site.
- REC 5 – The analytical results of sediment sample SS-4 indicate that the former discharge to the 2-inch flex line that is protruding from a drainage ditch located to the east of the Port Organics tank farm has not significantly impacted the sediment in this location. Based on this information, AECOM concludes that REC-5 no longer presents a significant environmental concern to the proposed project site.
- REC 6 – The analytical results from the soil samples collected from borings GP-18 and GP-20 and sediment sample SS-2 indicate current and historical washing of farm equipment in this location has impacted the shallow soil and sediment with petroleum hydrocarbons at concentrations that exceed the ESLs. The vertical extent of this impact appears to be limited to the upper 5 feet; however the lateral extent of this contamination has not been defined. Based on this information, AECOM concludes that the former farm equipment wash pad continues to present a potentially significant environmental concern to the proposed project site.

- REC 7 – The analytical results from the soil samples collected from borings GP-11 through GP-13 appear to indicate that the potential contaminants associated with the outdoor tailing pile are confined to the immediate area of the pile. No additional lateral characterization of the soil beneath the tailing pile appears to be required.
- REC 8 – The analytical results from the soil samples collected from boring GP-14 appear to indicate that the potential contaminants associated with the indoor tailing pile are largely confined to the immediate area of the pile and have not impacted the shallow soil beneath the concrete floor. No additional characterization of the soil beneath the tailing pile appears to be required.
- REC 9 – The analytical results from the soil samples collected from boring GP-15 and GP-16 and sediment sample SS-7 appear to indicate that the stained soil that is present near the northwest end of the crop duster runway, the potential historical pesticides/herbicides releases (if any) that may have occurred at the end of the airstrip, and the yellow stained soil that is present in the southeast corner of the site do not present a significant environmental concern to the proposed project site.
- AOC 1 – The analytical results from the soil samples collected from boring GP-21 appear to indicate that the historic petroleum pipeline rupture was successfully remediated and has not significantly impacted the proposed project site. Based on this information, AECOM concludes that AOC-1 no longer presents a significant environmental concern to the proposed project site.
- AOC 2 – A UST was not identified during the geophysical survey of the area surrounding the former airplane hangar. However, elevated concentrations of endrin and TPH in the mineral oil range were detected in the 0.5 foot soil samples collected from boring GP-17 at concentrations that exceed regulatory guidance values. The soil in this area was visually stained. Additional lateral and vertical subsurface soil sampling will likely be required to characterize the TPH and endrin impacts in this area.
- AOC 3 – The results of the geophysical survey and analytical results of the soil samples collected from boring GP-10 indicate that the soil in this area has not been significantly impacted by a suspect UST (if any) or former chemical storage. In addition, the analytical results of sediment sample SS-4 collected from the adjacent irrigation cannel indicate that the surface staining that is visible in this area has not significantly impacted the nearby sediment. Based on these results, the surface staining in this location appears to be localized and does not appear to present a significant environmental concern to the proposed project site.
- AOC-4 – The OCPs endrin, endosulfan, and dieldrin are present in composite samples SC-1, SC-4, and SC-8 at concentrations that exceed the ESLs, but did not exceed the CHHSL or RSL. These results are consistent with the historical use of the proposed project site as an active agricultural operation. No consistent spatial pattern of OCPs above ESLs was observed and therefore no areas of the proposed project site are anticipated to have any greater risk associated with exposure to these constituents. The low frequency (less than 10 percent) and relatively low concentrations at which these three OCPs were detected in site soils indicate that they do not represent a significant environmental risk and a more rigorous risk analysis is not warranted.

- Total arsenic was detected throughout the proposed project site at concentrations ranging from 1.6 to 35 mg/kg. These concentrations exceed the CHHSLs for arsenic of 0.24 mg/kg, and exceed and/or equal the RSLs of 1.6 mg/kg. However, a mean concentration and variability (9.2 ± 6.9 mg/kg) was observed throughout the proposed project site which are consistent with regional background arsenic levels (Bradford et al. 1996), rather than the result of historical on-site agricultural operations. It is therefore AECOM's opinion that the concentrations of arsenic detected at the proposed project site are representative of regional background concentrations, and therefore do not present a significant environmental concern to the proposed project site.
- Data collected during this assessment indicate that pesticides in surface soil and sediment are at sufficiently low concentrations that they are unlikely to pose a risk to aquatic biota from surface runoff.
- Groundwater was not encountered during this assessment. In addition, groundwater was not encountered at depths of up to 101 feet bgs by URS in January 2009. The analytical results of soil samples collected in the vicinity of the RECs and AOCs indicate that soil impacts are generally confined to the upper 5 feet. Based on this information, AECOM's concludes that groundwater beneath the proposed project site is unlikely to have been impacted by historical agricultural operations.

7.0 Recommendations

Based on the results of this Phase II ESA, AECOM provides the following conclusions:

- No additional assessment is recommended to address RECs 1, 2, 3, 4, 5, 7, 8, and 9 as well as AOCs 1, 3, and 4.
- The lateral and vertical extent of the TPH-impacted soil and sediment associated with REC-6 (farm equipment wash pad) should be defined.
- The lateral and vertical extent of the TPH-impacted soil associated with AOC-2 (airplane hangar) should be defined.
- The indoor and outdoor tailing piles (RECs 7 and 8) should be removed and transported to a permitted disposal facility prior to site redevelopment.
- The stained surface soil that is present in the vicinity of RECs 9 (two areas), REC-10, AOC-2, and AOC-3 should be removed and transported to a permitted facility for disposal prior to site redevelopment.
- The tailing pile removal and impacted soil removal should be conducted under environmental oversight to ensure that these activities are properly documented.

8.0 Limitations

This Phase II ESA report has been prepared for the proposed HECA project site located near the intersection of Dairy and Adohr Roads, Kern County, California. In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the standard of practice measured on the date the work was performed in the locale of the project site for similar type studies. AECOM makes no warranty, express or implied. AECOM is not responsible for potential inaccuracies in data reported by others.

The analyses and interpretations in this report have been developed solely based on the field observations and the results from laboratory analyses in the soil and material samples collected at the proposed project site. It should be recognized that on any limited subsurface or material assessment, site conditions can vary laterally and with depth below a given site and that potential contaminant sources can go undetected.

9.0 References

The following references were consulted in the preparation of this report:

Ackerman, Paul. Personal communication between Paul Ackerman, property owner, and Jim Fickerson, AECOM, on September 22, 2010.

Background Concentrations of Trace and Major Elements in California Soils, Kearney Foundation of Soil Sciences, Division of Agriculture and Natural Resources University of California, Bradford, March 1996.

California Human Health Screening Levels for industrial properties dated January 2005.

EPA Region 9 Regional Screening Levels for industrial soil dated May 2010/; and

Phase I Environmental Site Assessment, HECA Project Site, Kern County, California, April 6, 2009.

Phase I Environmental Site Assessment, HECA Project Site, Kern County, California, August 24, 2010.

Report Preliminary Geotechnical Investigation Proposed Hydrogen Energy California Project Kern County, California, prepared by URS, dated April 14, 2009.

San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels for commercial/industrial property dated May 2008.

Figures

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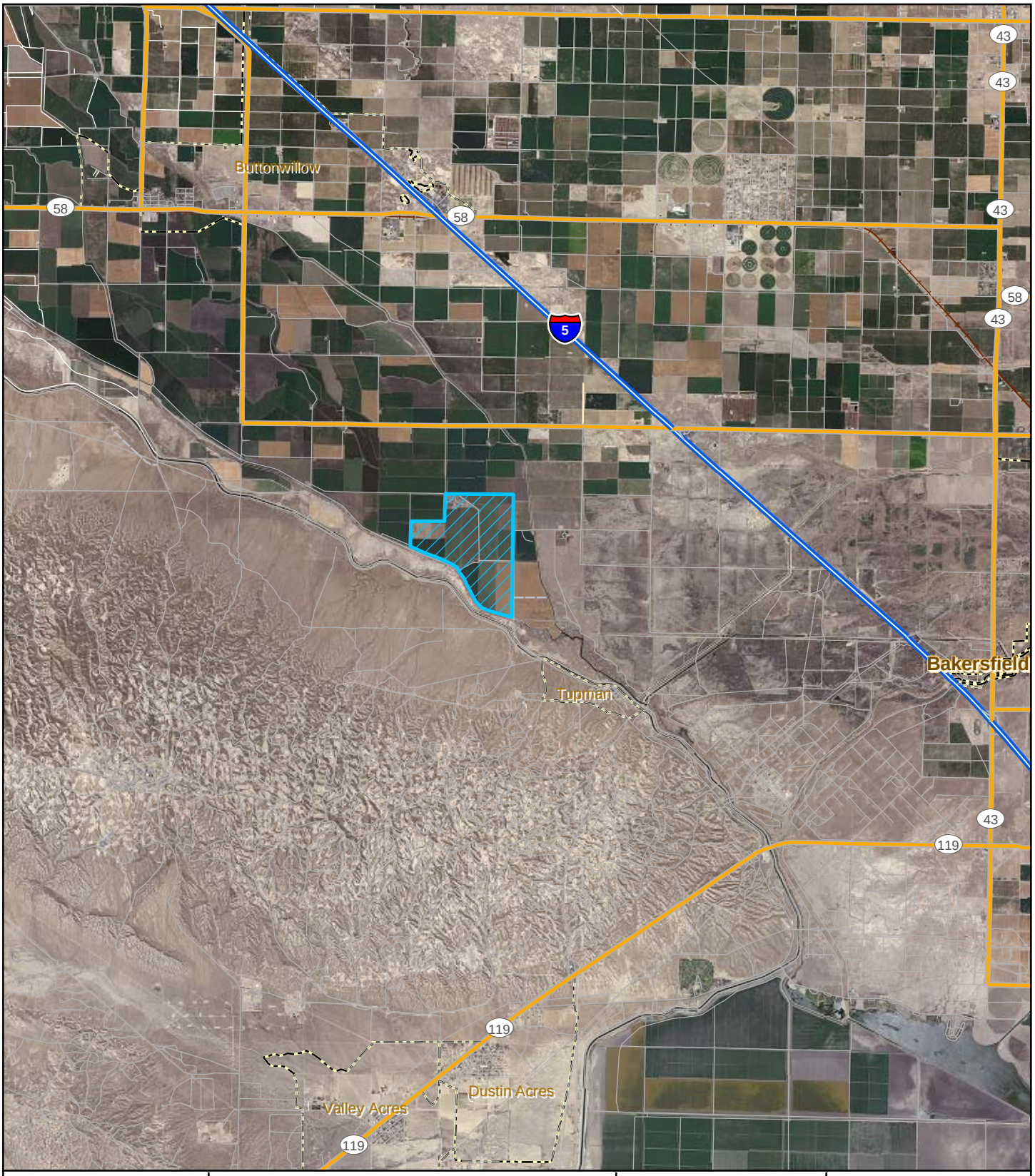

Map Location

Legend

Proposed HECA Project Site

1 in = 2 miles

0 2 4 Miles

N W E S

Hydrogen Energy California

Figure 1
Site Location Map

AECOM

Project: 60163371
Date: October 2010

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FIGURE NUMBER: 2

SHEET NUMBER: X

SITE PLAN

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

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S. Bilodeau	NO:	DESCRIPTION:	DATE:	BY:
DRAWN BY:				
M. Scop				
CHECKED BY:				
J. Fickerson				
APPROVED BY:				
H. Vandenberg				

REVISIONS:			
NO:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	S. Bilodeau
DRAWN BY:	M. Scop
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GEOPHYSICAL SURVEY MAP

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

3

SHEET NUMBER:

X

REVISIONS:			
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SAMPLING MAP A

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

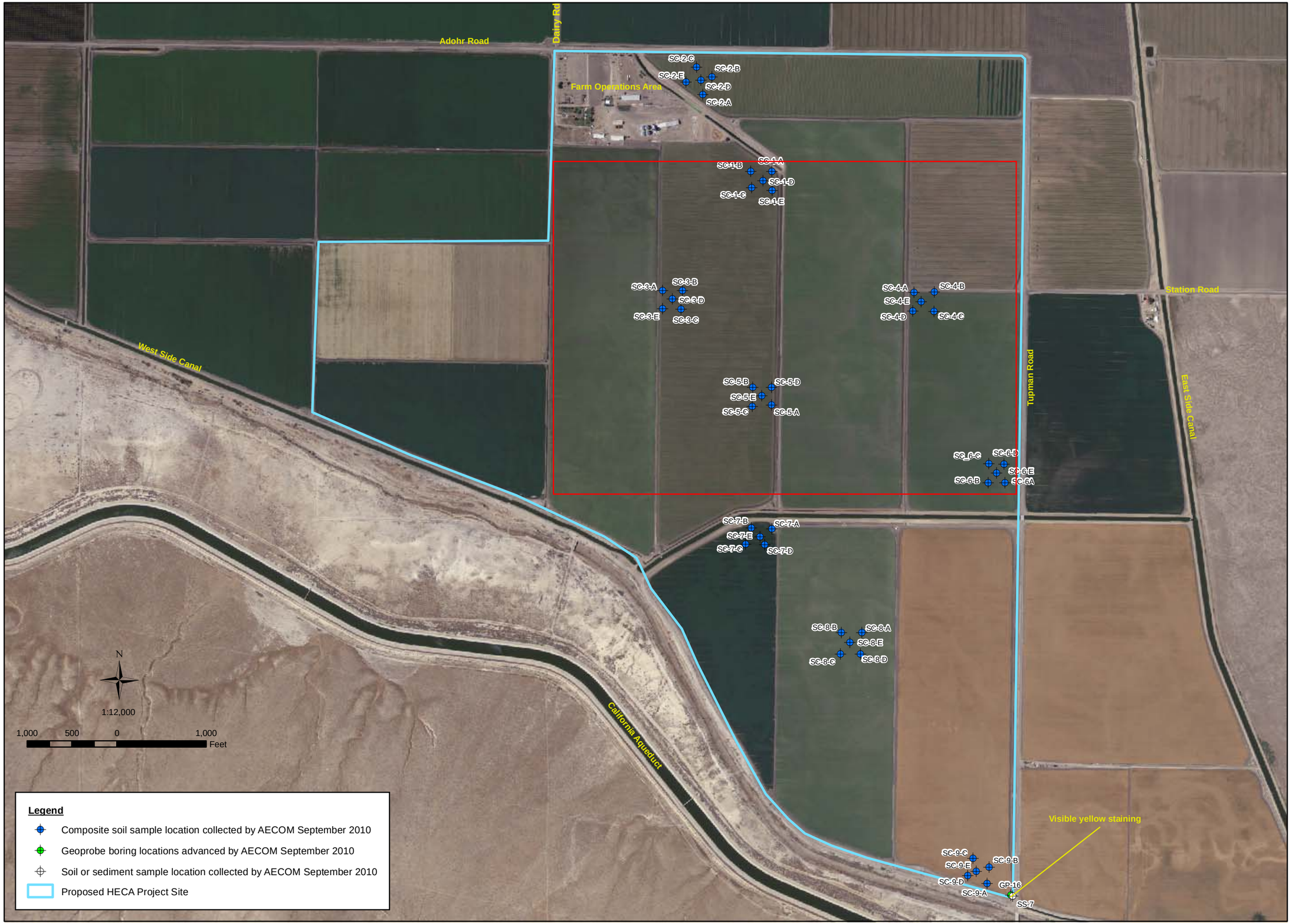
SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

4

SHEET NUMBER:

X



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SAMPLING MAP B

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

5

SHEET NUMBER:

X

Tables

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Table 1
Sampling Plan
Proposed Hydrogen Energy California Site
Kern County, California

REC	Area of Focus	Sample Location	Boring Number	Media	Sample Number	Sample Depth (feet bgs)	Analytical Methodology									
							VOC (8260B)	OPPs 8141	OCPs 8081	TPH-FF (8015M)	Lead (6010)	Title 22 Metals (6010)	pH	Phosphorous (365.4)	Sulfate and Nitrogen (300)	Potassium (200.7)
1	Three former USTs	West of the North Farm Storage Building	GP-1	Soil	GP-1-5	5	NA	Analyze	Analyze	NA	NA	NA	NA	NA	NA	NA
					GP-1-10	10	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
					GP-1-15	15	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
1	Three former USTs	West of the North Farm Storage Building	GP-2	Soil	GP-2-5	5	NA	Analyze	Analyze	NA	NA	NA	NA	NA	NA	NA
					GP-2-10	10	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
					GP-2-15	15	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
1	Suspect UST	West of the Horse Stable	GP-3	Soil	GP-3-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-3-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-3-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
1	Suspect UST	West of the Horse Stable	GP-4	Soil	GP-4-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-4-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-4-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
3	Suspect underground structure with concrete cover	West of Farm Storage Building	GP-5	Soil	GP-5-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-5-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-5-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
2	Fill Pipe by Grain Bin Suspect UST	South of Grain Storage Bins	GP-6	Soil	GP-6-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-6-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-6-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Port Organics	Tank Farm	GP-7	Soil	GP-7-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-1	5	Analyze	Analyze	Analyze	Analyze		Analyze	NA	NA	NA	NA
					GP-7-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-7-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Port Organics	Tank Farm	GP-8	Soil	GP-8-4	4	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
4	Port Organics	Tank Farm	GP-9	Soil	GP-9-4	4	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
4	Port Organics stained soil	Tank Farm	Surface	Soil	SS-1	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
				Soil	Dup-2	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
3	Farm Equipment Wash Pad	Drainage ditch that abuts the southern portion of the wash pad	Sediment	Sediment	SS-2	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
5	Port Organics Tank Farm	Irrigation Ditch located to the Northeast of the Tank Farm	Sediment	Sediment	SS-3	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
8	Chemical Storage Area, Suspect UST, and stained surface soil	Southeast end of Airstrip	GP-10	Soil	GP-10-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
					GP-10-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
					GP-10-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
8	Stained surface soil near irrigation ditch	Southeast end of Airstrip	NA	Sediment	SS-4	NA	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
7	Outdoor Tailing Pile	East of Tank Farm	GP-11	Soil	GP-11-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-3	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-11-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
7	Outdoor Tailing Pile	East of Tank Farm	GP-12	Soil	GP-12-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-12-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
7	Outdoor Tailing Pile	East of Tank Farm	GP-13	Soil	GP-13-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-13-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
8	Indoor Tailing Pile	Inside Port Organics Storage Building	GP-14	Soil	GP-14-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-14-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
5	Tank Farm	Tank Farm	Surface	Soil	SS-5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
5	Tank Farm	Tank Farm	Surface	Soil	SS-6	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Stained Surface Soil - Suspect Pesticide Release Area	North end of Airstrip	GP-15	Soil	GP-15-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-15-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Stained Surface Soil	Southeast corner of the proposed project site	GP-16	Soil	GP-16-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-16-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Former Airplane Hanger Stained Surface Soil - Suspect UST	South side of former airplane hanger	GP-17	Soil	GP-17-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-17-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA

Table 1
Sampling Plan
Proposed Hydrogen Energy California Site
Kern County, California

REC	Area of Focus	Sample Location	Boring Number	Media	Sample Number	Sample Depth (feet bgs)	Analytical Methodology									
							VOC (8260B)	OPPs 8141	OCPs 8081	TPH-FF (8015M)	Lead (6010)	Title 22 Metals (6010)	pH	Phosphorous (365.4)	Sulfate and Nitrogen (300)	Potassium (200.7)
6	Farm Equipment Wash Area	Southeast Horse Stables	GP-18	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-18-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-4	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Former Tank Farm	Tank Farm	GP-19	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-5		Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
6	Farm Equipment Wash Area	Southeast of Horse Stables	GP-20	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-18-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
AOC-1	Historic Pipeline Release	~ 200 feet E of intersection of Adohr and Dairy Rds	GP-21	Soil	GP-21-0.5	0.5	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
					GP-21-2	2	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
					GP-21-5	5	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
9	Stained surface soil	SE corner of the proposed project site.	Sediment	Sediment	SS-7	NA	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-1A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-2A	0.5	NA		Composite B-E & Analyze	NA	NA	Analyze A & Composite for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	Dup-6	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-3A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-4A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-5A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-6A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-7A	0.5	NA		Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-8A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-9A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA

Notes:

REC: Recognized environmental condition.

AOC - Area of concern.

NA - Not applicable/not analyzed.

bgs - Below ground surface.

VOCs - Volatile organic compounds.

OPPs - Organophosphorus pesticides

OCPs - Organo-chlorine pesticides.

TPH-FF: The full carbon range of total petroleum hydrocarbons.

Table 2
Summary of Analytical Results - Exceedences Only
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	TPH 8015 FF			Organochlorine Pesticides 8081			Metals 6010
				TPH-Diesel	TPH-Motor Oil	TPH-Mineral Oil	Dieldrin	Endo-sulfan II	Endrin	As
GP-3	GP-3-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**5.1**
	GP-3-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**4**
	GP-3-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**2.9**
GP-4	GP-4-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**12**
	GP-4-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**2.3**
	GP-4-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**5.1**
GP-5	GP-5-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	**29**
	GP-5-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	**7**
	GP-5-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	**1.6**
GP-6	GP-6-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**3**
	GP-6-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**9.6**
	GP-6-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**4.4**
GP-7	GP-7-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**8.6**
	Dup-1	5	9/22/2010	ND	ND	ND	ND	ND	ND	**22**
	GP-7-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**13**
	GP-7-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**25**
GP-8	GP-8-4	4	9/22/2010	ND	ND	**22**	ND	ND	ND	**6.5**
GP-9	GP-9-4	4	9/22/2010	ND	ND	**68**	ND	ND	ND	**4.9**
GP-10	GP-10-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**4.3**
	GP-10-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**15**
	GP-10-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**8.2**
GP-11	GP-11-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**16**
	Dup-3	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**8**
	GP-11-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**19**
GP-12	GP-12-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**6.7**
	GP-12-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**6.4**
GP-13	GP-13-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**11**
	GP-13-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**6.30**
GP-14	GP-14-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**7.3**
	GP-14-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**5.4**
GP-15	GP-15-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**35**
	GP-15-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**21**
GP-16	GP-16-0.5	0.5	9/23/2010	ND	ND	ND	**0.0014**	ND	**0.00031**	**7.7**
	GP-16-2	2	9/23/2010	ND	ND	ND	**0.00034**	ND	ND	**7.9**
GP-17	GP-17-0.5	0.5	9/22/2010	ND	ND	**4300**	ND	ND	**0.014**	**27**
	GP-17-2	2	9/22/2010	ND	ND	**320**	ND	ND	**0.0070**	**8.2**
	GP-17-5	5	9/22/2010	**23**	ND	ND	NA	NA	NA	NA
GP-18	GP-18-0.5	0.5	9/23/2010	ND	ND	**25000**	ND	ND	ND	**7.5**
	GP-18-2	2	9/23/2010	ND	ND	**2000**	ND	ND	ND	**5.5**

Table 2
Summary of Analytical Results - Exceedences Only
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	TPH 8015 FF			Organochlorine Pesticides 8081			Metals 6010
				TPH-Diesel	TPH-Motor Oil	TPH-Mineral Oil	Dieldrin	Endo-sulfan II	Endrin	As
	Dup-4	2	9/23/2010	ND	ND	**2700**	ND	ND	ND	**4.9**
	GP-18-5	5	9/23/2010	ND	ND	**290**	ND	ND	ND	**4.5**
GP-19	GP-19-0.5	0.5	9/21/2010	ND	ND	**45**	**0.0028**	ND	**0.0019**	**4.8**
	Dup-5		9/21/2010	ND	ND	**120**	ND	**0.0048**	**0.0032**	**4.8**
	GP-19-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**7.2**
GP-20	GP-20-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**16**
	GP-20-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**6.7**
GP-21	GP-21-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**21**
	GP-21-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**19**
NA	SS-1	0.5	9/23/2010	ND	ND	**140**	ND	ND	ND	**6.1**
NA	Dup-2	0.5	9/23/2010	ND	**20000**	ND	ND	ND	ND	**5.1**
NA	SS-2	0.5	9/23/2010	ND	ND	**93000**	ND	ND	ND	**5.5**
NA	SS-3	0.5	9/22/2010	ND	ND	ND	ND	ND	ND	**5**
NA	SS-4	0.5	9/22/2010	ND	ND	ND	**0.00071**	ND	ND	**5.9**
NA	SS-5	0.5	9/23/2010	ND	ND	**1200**	ND	ND	ND	**5.4**
NA	SS-6	0.5	9/23/2010	ND	ND	**26**	ND	ND	ND	**3.3**
NA	SS-7	0.5	9/23/2010	ND	ND	**49**	ND	ND	ND	**5.5**
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.0033**	ND	ND	**7.9**
NA	SC-2A	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	**5.4**
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	NA	NA	ND	ND	**0.00051**	**5.6**
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.00065**	ND	**0.0015**	**4.9**
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.00085**	ND	ND	**8.2**
NA	SC-4A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**8.3**
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.0027**	ND	**0.0014**	**7.7**
NA	SC-6A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**6.5**
NA	SC-7A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**14**
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	**0.0013**	ND	**0.0027**	NA
NA	SC-8A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**6.4**
NA	SC-9A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**7.8**
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	**0.0036**	ND	**0.0022**	NA
Regulatory/Guidance Values										
California Human Heath Screening Levels				NS	NS	NS	0.13	NS	230	0.24
US EPA Region 9 Regional Screening Levels				NS	NS	310,000	0.11	26,000	180	1.6
SFBRWQCB ESLs				83	1,000	1,000	0.0023	0.0046	0.00065	5.5

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed/not applicable.
NS = No standard established.
Highlight = Analyte detected in exceedence of screening level

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

				VOCs 8260													TPH FF 8015		
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Benzene	sec-Butyl-benzene	Ethyl-benzene	p-Isopropyl-toluene	Methyl t-butyl ether	n-Propyl-benzene	Toluene	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Total Xylenes	p- & m-Xylenes	o-Xylene	Diesel	TPH-Motor Oil	TPH-Mineral Oil
GP-1	GP-1-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-1-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-2	GP-2-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**95**
	GP-2-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	GP-3-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	GP-4-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	GP-5-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	GP-6-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	GP-7-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-1	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	GP-8-4	4	9/22/2010	**0.0019**	ND	**0.0035**	ND	ND	ND	**0.01**	ND	ND	ND	ND	ND	ND	**51**	ND	**22**
GP-9	GP-9-4	4	9/22/2010	**0.0026**	ND	ND	ND	ND	ND	**0.0025**	ND	ND	ND	ND	ND	ND	**50**	ND	**68**
GP-10	GP-10-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	GP-11-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-3	0.5	9/21/2010	**0.0013**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-11-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	GP-12-0.5	0.5	9/21/2010	**0.0012**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-12-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-13	GP-13-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-13-2	2	9/21/2010	**0.0015**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-14	GP-14-0.5	0.5	9/23/2010	**0.0048**	ND	ND	ND	ND	ND	**0.0027**	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

				VOCs 8260													TPH FF 8015		
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Benzene	sec-Butyl-benzene	Ethyl-benzene	p-Isopropyl-toluene	Methyl t-butyl ether	n-Propyl-benzene	Toluene	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Total Xylenes	p- & m-Xylenes	o-Xylene	Diesel	TPH-Motor Oil	TPH-Mineral Oil
	GP-14-2	2	9/23/2010	**0.003**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-15	GP-15-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-15-2	2	9/23/2010	**0.0027**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	GP-16-0.5	0.5	9/23/2010	**0.0028**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-16-2	2	9/23/2010	**0.0038**	ND	ND	ND	ND	ND	**0.0018**	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-17	GP-17-0.5	0.5	9/22/2010	**0.0031**	ND	ND	ND	ND	ND	**0.0012**	ND	ND	ND	ND	ND	ND	ND	ND	**4300**
	GP-17-2	2	9/22/2010	**0.0019**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**320**
GP-18	GP-18-0.5	0.5	9/23/2010	ND	**0.086**	**0.054**	**0.13**	ND	**0.1**	**0.25**	ND	**1.2**	**0.46**	**0.55**	**0.3**	**0.25**	ND	ND	**25000**
	GP-18-2	2	9/23/2010	ND	**0.033**	**0.039**	**0.058**	ND	**0.043**	**0.058**	ND	**0.36**	**0.15**	**0.18**	**0.083**	**0.093**	ND	ND	**2000**
	Dup-4	2	9/23/2010	ND	**0.056**	**0.04**	**0.092**	ND	**0.069**	**0.066**	ND	**0.72**	**0.25**	**0.24**	**0.12**	**0.13**	ND	ND	**2700**
	GP-18-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**290**
GP-19	GP-19-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**45**
	Dup-5	2	9/21/2010	**0.0031**	ND	ND	ND	ND	ND	**0.0011**	ND	ND	ND	ND	ND	ND	ND	ND	**120**
	GP-19-2	2	9/21/2010	**0.0034**	ND	ND	ND	ND	ND	**0.0014**	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-20	GP-20-0.5	0.5	9/23/2010	**0.0019**	ND	ND	ND	**0.00053**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-20-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-21	GP-21-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-21-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-1	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**140**
NA	Dup-2	0.5	9/23/2010	**0.0014**	ND	**0.0018**	**0.017**	ND	ND	**0.046**	ND	**0.013**	**0.0054**	**0.0088**	**0.0057**	**0.0031**	ND	**20000**	ND
NA	SS-2	0.5	9/23/2010	**0.0018**	ND	**0.0018**	**0.025**	ND	ND	**0.048**	**0.0019**	**0.021**	**0.0077**	**0.015**	**0.01**	**0.0047**	ND	ND	**93000**
NA	SS-3	0.5	9/22/2010	ND	ND	**0.0020**	**0.0060**	ND	ND	**0.0061**	ND	**0.0014**	ND	ND	ND	**0.0014**	ND	ND	ND
NA	SS-4	0.5	9/22/2010	**0.0021**	ND	ND	ND	ND	ND	**0.0027**	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-5	0.5	9/23/2010	**0.0017**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1200**
NA	SS-6	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**26**
NA	SS-7	0.5	9/23/2010	**0.0021**	ND	ND	ND	ND	ND	**0.0013**	ND	ND	ND	ND	ND	ND	ND	ND	**49**
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2A	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

				VOCs 8260													TPH FF 8015		
Boring Number	**Sample Number**	**Sample Depth (feet bgs)**	**Sample Date**	**Benzene**	**sec-Butyl-benzene**	**Ethyl-benzene**	**p-Isopropyl-toluene**	**Methyl t-butyl ether**	**n-Propyl-benzene**	**Toluene**	**Trichloro-ethene**	**1,2,4-Trimethyl-benzene**	**1,3,5-Trimethyl-benzene**	**Total Xylenes**	**p- & m-Xylenes**	**o-Xylene**	**Diesel**	**TPH-Motor Oil**	**TPH-Mineral Oil**
NA	SC-6-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory/Guidance Values																			
California Human Heath Screening Levels				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
US EPA Region 9 Regional Screening Levels				5.4	NS	27	NS	220	21,000	4,500	14	260	10,000	2,700	17,000	17,000	NS	NS	310,000
SFBRWQCB ESLs				0.044	NS	3.3	NS	0.023	NS	2.9	0.46	NS	NS	2.3	NS	NS	100	1,000	1,000

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of screening level.

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	pH	Potassium	Nitrate	Sulfate	Phosphate	Tokuthion	Chlorpyrifos	Beta BHC	Delta BHC	Gamma BHC (Lindane)	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Meth-oxychlor	Hepta-chlor
GP-1	GP-1-5	5	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-1-10	10	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-15	15	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	GP-2-5	5	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.00035**	ND	ND	ND	ND	**0.00055**	**0.001**	**0.0039**	**0.005**	ND	ND
	GP-2-10	10	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-15	15	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	GP-3-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0039**	ND	ND
	GP-3-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	GP-4-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	GP-5-5	5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-10	10	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-15	15	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	GP-6-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	GP-7-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-1	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	GP-8-4	4	9/22/2010	**7.87**	**6600**	**210**	**9100**	**7000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	GP-9-4	4	9/22/2010	**6.33**	**6300**	**4**	**32000**	**6800**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.037**	ND	ND	ND
GP-10	GP-10-5	5	9/22/2010	**3.85**	**2300**	**99**	**210**	**290**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-10	10	9/22/2010	**6.34**	**1600**	**2**	**71**	**200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-15	15	9/22/2010	**6.83**	**630**	**0.59**	**37**	**150**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	GP-11-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0029**	ND	ND
	Dup-3	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	**0.00034**	ND	**0.0005**	ND	ND	ND	ND	ND	ND	ND
	GP-11-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.00055**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	GP-12-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.014**	ND	ND	ND	ND	ND	ND	**0.14**	**0.023**	ND	ND
	GP-12-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.068**	ND	ND	ND	ND	ND	**0.016**	ND	ND	ND	ND
GP-13	GP-13-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-13-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.00062**	ND	ND	ND	ND	ND	**0.00062**	**0.0016**	**0.00049**	ND	ND
GP-14	GP-14-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-14-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	pH	Potassium	Nitrate	Sulfate	Phosphate	Tokuthion	Chlorpyrifos	Beta BHC	Delta BHC	Gamma BHC (Lindane)	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Meth-oxychlor	Hepta-chlor
GP-15	GP-15-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	0.00033	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-15-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	GP-16-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.00069	ND	0.0014	ND	ND	0.00031	0.001	0.016	0.00096	ND	ND
	GP-16-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	0.00034	ND	ND	ND	ND	0.0044	ND	ND	ND
GP-17	GP-17-0.5	0.5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.014	0.014	0.046	0.038	ND	ND
	GP-17-2	2	9/22/2010	NM	NA	NA	NA	NA	0.064	ND	ND	ND	ND	ND	ND	ND	0.0070	0.0092	0.0270	0.0360	ND	ND
GP-18	GP-18-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND
	GP-18-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-4	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-18-5	5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.00022	ND	ND	ND	ND	ND	ND	0.00065	ND	ND	ND
GP-19	GP-19-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	0.00091	0.0093	0.00099	0.0028	ND	ND	0.0019	0.0057	0.07	0.0081	ND	0.0003
	Dup-5		9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.016	ND	ND	ND	0.0048	0.0032	0.0093	0.16	0.013	ND	ND
	GP-19-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-20	GP-20-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-20-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-21	GP-21-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND
	GP-21-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-1	0.5	9/23/2010	NM	8500	3600	26000	9200	ND	ND	ND	0.0078	ND	ND	ND	ND	ND	0.0062	0.02	0.0011	ND	ND
NA	Dup-2	0.5	9/23/2010	NM	3400	0.41	96	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-2	0.5	9/23/2010	NM	3500	0.44	140	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-3	0.5	9/22/2010	NM	1600	0.4	390	2200	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019	0.0030	ND	ND	ND
NA	SS-4	0.5	9/22/2010	NM	2200	0.38	200	800	ND	ND	ND	ND	ND	0.00071	ND	ND	ND	0.0071	0.0077	0.0027	ND	ND
NA	SS-5	0.5	9/23/2010	NM	3200	4500	6200	4600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0083	ND	ND
NA	SS-6	0.5	9/23/2010	NM	3000	5400	9700	2300	ND	ND	ND	0.002	ND	ND	ND	ND	ND	0.00082	ND	ND	ND	ND
NA	SS-7	0.5	9/23/2010	NM	3000	0.79	210	510	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0039	ND	0.0033	ND	ND	ND	0.0026	0.039	0.011	ND	ND
NA	SC-2A	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0054	ND	ND	ND	ND	0.00051	0.00083	0.022	0.0046	ND	ND
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	0.0037	ND	0.0056	ND	0.00065	ND	ND	0.0015	0.0015	0.028	0.0061	ND	ND
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0026	ND	0.00085	ND	ND	ND	ND	0.0086	0.00098	ND	ND
NA	SC-4A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0045	ND	ND	ND	ND	0.00055	ND	0.017	0.0025	ND	ND
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.004	ND	0.0027	ND	ND	0.0014	0.0017	0.024	0.0078	ND	ND
NA	SC-6A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0029	ND	ND	ND	ND	ND	ND	0.0088	0.0016	ND	ND
NA	SC-7A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0048	ND	0.0013	ND	ND	0.0027	0.002	0.05	0.012	ND	ND

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	**Sample Number**	**Sample Depth (feet bgs)**	**Sample Date**	**pH**	**Potassium**	**Nitrate**	**Sulfate**	**Phosphate**	**Tokuthion**	**Chlorpyrifos**	**Beta BHC**	**Delta BHC**	**Gamma BHC (Lindane)**	**Dieldrin**	**Endo-sulfan I**	**Endo-sulfan II**	**Endrin**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Meth-oxychlor**	**Hepta-chlor**
NA	SC-8A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.0037**	ND	ND	ND	ND	ND	ND	**0.01**	**0.0014**	ND	ND
NA	SC-9A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.0049**	ND	**0.0036**	ND	ND	**0.0022**	**0.001**	**0.044**	**0.0071**	ND	ND
Regulatory/Guidance Values																						
California Human Heath Screening Levels				NS	NS	NS	NS	NS	NS	NS	NS	NS	2	0.13	NS	NS	230	9	6.3	6.3	3800	0.52
US EPA Region 9 Regional Screening Levels				NS	NS	1,600,000	NS	NS	NS	1,800	NS	NS	NS	0.11	26000	26000	180	7.2	5.1	7	3100	0.38
SFBRWQCB ESLs				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0023	0.0046	0.0046	0.00065	9	4	4	19	0.014

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of sceening level.

Table 5
Summary of Detected Analytes
Metals in Soil
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Metals 6010																
				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
GP-1	GP-1-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	0.88	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	0.69	NA	NA	NA	NA	NA	NA	NA	NA
GP-2	GP-2-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	GP-3-5	5	9/22/2010	ND	5.1	170	0.56	0.097	12	6.7	16	15	ND	1.2	10	ND	0.13	ND	42	45
	GP-3-10	10	9/22/2010	ND	4	79	0.57	0.094	12	6.1	12	3.8	ND	2.2	7.1	ND	ND	ND	49	46
	GP-3-15	15	9/22/2010	ND	2.9	33	0.3	ND	4.3	2.3	2.9	0.77	ND	1	1.8	ND	ND	ND	45	23
GP-4	GP-4-5	5	9/22/2010	ND	12	120	0.64	0.098	35	7.8	21	32	0.014	5.2	16	0.85	ND	ND	49	51
	GP-4-10	10	9/22/2010	ND	2.3	48	0.22	ND	5.4	3.4	5.3	1.8	ND	1.1	3	ND	ND	ND	26	35
	GP-4-15	15	9/22/2010	ND	5.1	28	0.29	ND	4.8	1.9	2.8	1.1	ND	1.7	1.5	ND	ND	ND	35	21
GP-5	GP-5-5	5	9/23/2010	ND	29	140	0.58	ND	11	6.6	10	3.1	0.021	3	7.7	ND	ND	ND	45	41
	GP-5-10	10	9/23/2010	ND	7	140	0.55	0.077	13	5.8	13	4.2	0.013	0.87	9.3	0.55	ND	ND	40	43
	GP-5-15	15	9/23/2010	ND	1.6	21	0.19	ND	4.5	2	2.8	1.3	ND	0.32	1.6	ND	ND	ND	22	17
GP-6	GP-6-5	5	9/22/2010	ND	3	89	0.74	0.13	19	6.6	15	5.3	ND	3.5	12	ND	ND	ND	40	62
	GP-6-10	10	9/22/2010	ND	9.6	270	0.38	0.05	8.3	5.1	8.7	2.5	0.012	3.1	4.7	0.71	ND	ND	30	35
	GP-6-15	15	9/22/2010	0.85	4.4	57	0.15	0.051	4.8	2.7	3.4	1	ND	1.2	2.6	0.71	ND	ND	15	24
GP-7	GP-7-5	5	9/22/2010	ND	8.6	150	1	0.47	23	7.6	25	7.4	0.02	1.4	18	ND	0.1	ND	76	67
	Dup-1	5	9/22/2010	ND	22	100	0.52	0.31	10	5.3	12	3.2	ND	1.6	7.2	ND	0.16	ND	50	49
	GP-7-10	10	9/22/2010	ND	13	120	0.67	0.11	15	7.2	16	4	ND	0.86	9.5	ND	ND	ND	47	59
	GP-7-15	15	9/22/2010	ND	25	230	0.64	0.14	16	7.8	15	5	0.012	2.9	9.1	0.55	ND	ND	40	51
GP-8	GP-8-4	4	9/22/2010	ND	6.5	100	0.55	2.6	24	4.8	27	7.9	0.013	2.5	15	ND	ND	ND	50	250
GP-9	GP-9-4	4	9/22/2010	ND	4.9	58	0.38	3	49	2.9	22	5.3	0.032	3.6	21	0.58	0.17	ND	45	150
GP-10	GP-10-5	5	9/22/2010	ND	4.3	110	0.44	0.16	12	5.5	11	3.1	ND	4.1	7.8	0.57	ND	ND	33	44
	GP-10-10	10	9/22/2010	ND	15	53	0.19	0.092	7.1	3.1	5.5	1.4	0.016	16	4.6	ND	ND	ND	18	28
	GP-10-15	15	9/22/2010	ND	8.2	25	0.06	ND	2.4	0.84	2.1	0.75	ND	4.6	1.3	ND	ND	ND	7.7	9.1
GP-11	GP-11-0.5	0.5	9/21/2010	ND	16	130	0.75	0.69	19	6	26	14	0.064	13	14	1.1	ND	ND	54	97
	Dup-3	0.5	9/21/2010	ND	8	140	0.66	1.1	18	5.9	32	26	0.058	2.5	13	0.65	ND	ND	44	330
	GP-11-2	2	9/21/2010	ND	19	140	0.83	0.38	18	6	22	6.5	0.094	31	16	ND	ND	ND	65	59
GP-12	GP-12-0.5	0.5	9/21/2010	ND	6.7	140	0.64	1.5	18	5.6	39	23	0.056	2.5	14	0.53	ND	ND	45	480
	GP-12-2	2	9/21/2010	ND	6.4	130	0.62	0.25	15	5.2	13	4.8	0.037	2.5	10	0.72	ND	ND	38	65
GP-13	GP-13-0.5	0.5	9/21/2010	0.82	11	150	0.77	0.57	18	6.4	20	7.6	0.031	11	17	0.79	ND	ND	49	61
	GP-13-2	2	9/21/2010	ND	6.30	150	0.77	0.42	18	6.8	19	6.60	0.02	6.10	16	1.30	ND	ND	42	62
GP-14	GP-14-0.5	0.5	9/23/2010	ND	7.3	170	0.92	0.33	19	7.5	20	8.1	0.03	4.4	14	ND	ND	ND	47	67
	GP-14-2	2	9/23/2010	ND	5.4	210	0.99	0.39	23	8.7	25	8.7	0.028	2	18	0.69	ND	0.73	60	73
GP-15	GP-15-0.5	0.5	9/23/2010	ND	35	190	0.92	0.25	22	8	26	11	0.28	9.8	13	ND	ND	ND	71	78
	GP-15-2	2	9/23/2010	ND	21	69	0.45	0.19	14	3.9	14	3.6	0.028	18	8	ND	ND	ND	44	46
GP-16	GP-16-0.5	0.5	9/23/2010	ND	7.7	150	0.77	0.55	21	7.2	19	9.1	0.032	1.5	18	ND	ND	ND	45	76
	GP-16-2	2	9/23/2010	ND	7.9	140	0.88	0.55	25	7.9	22	10	0.037	1.6	21	0.86	ND	ND	50	71
GP-17	GP-17-0.5	0.5	9/22/2010	ND	27	140	0.72	1.10	18	6.3	26	27	0.038	3.7	14.0	0.7	ND	ND	50	160
	GP-17-2	2	9/22/2010	ND	8.2	140	0.74	0.29	16	6.5	20	7.1	ND	2.7	14	0.64	ND	ND	51	67
GP-18	GP-18-0.5	0.5	9/23/2010	1.30	7.5	120	0.4	1.3	18	5.3	63	17	0.028	12	15	ND	0.079	ND	36	290
	GP-18-2	2	9/23/2010	ND	5.5	110	0.51	0.63	21	5.3	27	12	0.018	1.7	12	ND	ND	ND	34	110
	Dup-4	2	9/23/2010	ND	4.9	150	0.53	0.64	14	5.1	20	13	0.021	1.3	9.9	ND	ND	ND	35	110
	GP-18-5	5	9/23/2010	ND	4.5	150	0.62	0.14	14	6.5	16	4.5	0.022	0.91	12	ND	0.073	ND	42	50
GP-19	GP-19-0.5	0.5	9/21/2010	ND	4.8	95	0.52	1.7	19	4.5	33	8.9	0.039	2.1	13	0.6	ND	ND	41	180
	Dup-5		9/21/2010	ND	4.8	120	0.58	0.58	17	5.5	26	12	0.048	2.2	14	ND	ND	ND	39	140
	GP-19-2	2	9/21/2010	ND	7.2	160	0.91	0.39	19	7.5	24	7.9	0.031	1.5	15	ND	ND	ND	60	77
GP-20	GP-20-0.5	0.5	9/23/2010	ND	16	190	1.1	0.28	23	8.3	25	10	0.022	1.7	18	1	ND	ND	66	70
	GP-20-2	2	9/23/2010	ND	6.7	150	0.94	0.18	22	8	16	6.9	0.023	1.4	15	ND	ND	ND	49	56
GP-21	GP-21-0.5	0.5	9/23/2010	ND	21	160	0.82	0.4	20	7.1	20	9.6	0.056	5.7	15	ND	ND	ND	58	78

Table 5
Summary of Detected Analytes
Metals in Soil
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Metals 6010																
				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
	GP-21-2	2	9/23/2010	ND	**19**	**140**	**0.71**	**0.42**	**20**	**6.2**	**20**	**15**	**0.059**	**11**	**14**	ND	ND	ND	**60**	**66**
NA	SS-1	0.5	9/23/2010	ND	**6.1**	**63**	**0.55**	**7.4**	**31**	**3.2**	**46**	**9**	**0.027**	**2.7**	**19**	ND	ND	ND	**56**	**230**
NA	Dup-2	0.5	9/23/2010	1.90	**5.1**	**150**	**0.45**	**1.6**	**17**	**4.6**	**51**	**17**	**0.049**	**14**	**13**	ND	ND	ND	**33**	**290**
NA	SS-2	0.5	9/23/2010	1.60	**5.5**	**140**	**0.45**	**1.7**	**17**	**4.9**	**63**	**22**	**0.053**	**12**	**14**	ND	ND	ND	**33**	**290**
NA	SS-3	0.5	9/22/2010	ND	**5**	**120**	**0.54**	**9.3**	**39**	**3.7**	**76**	**5.8**	**0.018**	**4.2**	**21**	ND	ND	ND	**60**	**310**
NA	SS-4	0.5	9/22/2010	ND	**5.9**	**87**	**0.5**	**4.5**	**22**	**3.4**	**37**	**4.7**	**0.024**	**3.2**	**8.5**	ND	ND	ND	**43**	**200**
NA	SS-5	0.5	9/23/2010	ND	**5.4**	**76**	**0.41**	**1.1**	**19**	**3.8**	**17**	**5.5**	**0.024**	**1.9**	**13**	ND	ND	ND	**34**	**83**
NA	SS-6	0.5	9/23/2010	ND	**3.3**	**44**	**0.27**	**0.96**	**11**	**2.5**	**8.6**	**3.6**	**0.012**	**1.1**	**11**	ND	ND	ND	**22**	**84**
NA	SS-7	0.5	9/23/2010	ND	**5.5**	**86**	**0.5**	**0.35**	**15**	**4.9**	**14**	**5.1**	**0.019**	**0.88**	**13**	ND	0.05	ND	**30**	**62**
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	**7.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2A	0.5	9/21/2010	NA	**5.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	**5.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	**4.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	**8.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4A	0.5	9/22/2010	NA	**8.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	**7.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6A	0.5	9/22/2010	NA	**6.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7A	0.5	9/22/2010	NA	**14**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8A	0.5	9/22/2010	NA	**6.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9A	0.5	9/22/2010	NA	**7.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory/Guidance Values																				
California Human Heath Screening Levels				380	0.24	63,000	1,700	7.5	100,000	3,200	38,000	3,500	180	4,800	16,000	4,800	4,800	63	6,700	10,000
US EPA Region 9 Regional Screening Levels				410	1.6	190,000	2,000	800	1,500,000	300	41,000	800	34	5,100	20,000	390	5,100	NS	5,200	310,000
SFBRWQCB ESLs				40	1.6	1,500	8	7.4	58	10	230	750	10	40	150	10	40	16	200	600

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of screen level.

Appendix A
Geophysical Survey Report

CONFIDENTIAL

SubSurface Surveys
& Associates, Inc.
An Applied Geophysical Company

2075 Corte Del Nogal, Suite W
Carlsbad, California 92011

Office: (760) 476-0492
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September 29, 2010

Project/Invoice No. 10-435

AECOM
1220 Avenida Acaso
Camarillo, California 93012

Attn: Jim Fickerson

Re: Geophysical Investigation Report, HECA Site, Buttonwillow, California.

This report is to present the results of our geophysical survey carried out over areas within and adjacent to the future Hydrogen Energy California (HECA) site southeast of the intersection of Dairy Road and Adohr Road near Buttonwillow, California (Figure 1). The survey was performed on September 21, 2010, and its purpose was to detect and delineate, insofar as possible, all pipes, conduits, utilities, and other underground obstructions within the immediate vicinity of sixteen (16) proposed boreholes. A secondary objective of the survey was to detect and delineate, insofar as possible, any existing underground storage tanks (UST) or backfilled excavations resulting from former USTs having been removed. This was performed over five (5) areas.

A combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR) were applied to the search. A utility locator with line tracing capabilities was also brought to the field and used where risers exist onto which a signal could be impressed and traced.

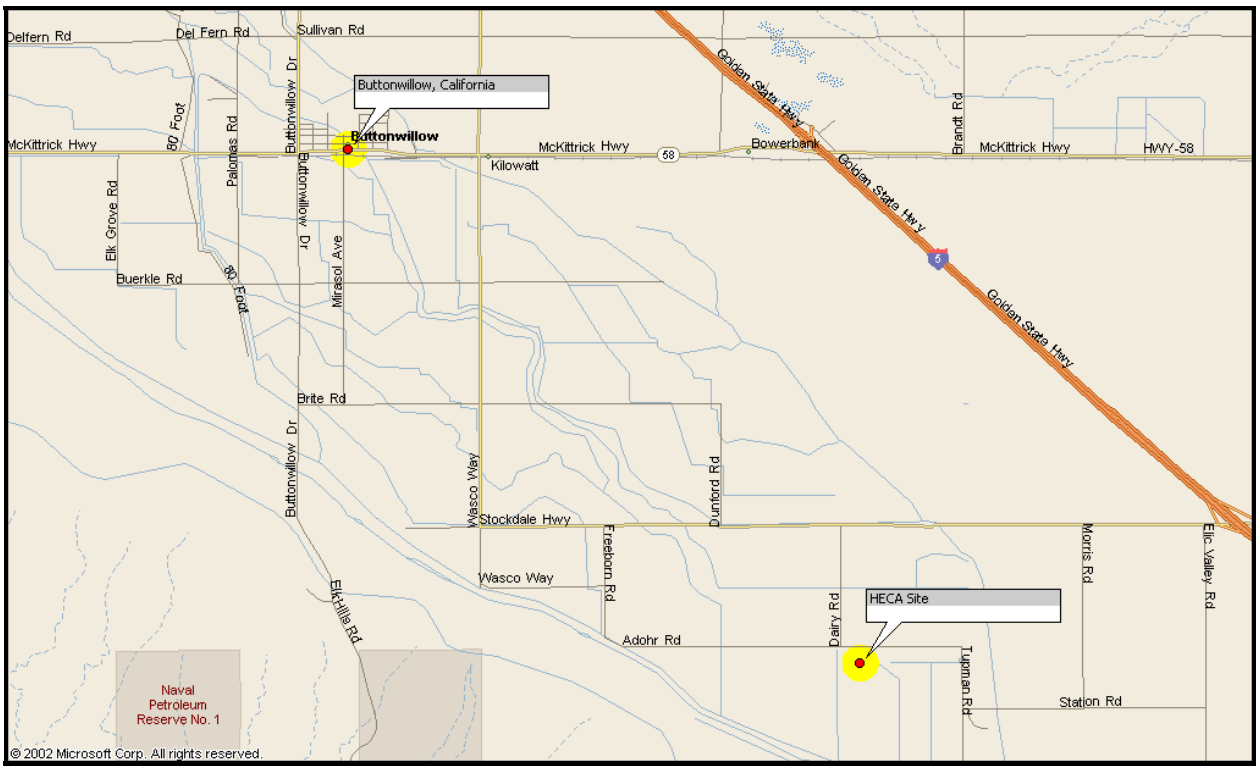


FIGURE 1. Site location map.

Survey Design – For both the borehole clearances and the UST/backfilled excavation detection the survey design was the same. In site situations and survey objectives such as this, the best use of time is achieved by systematically free-traversing with the instruments while monitoring them continuously to determine which responses are significant and due to true subsurface targets, and which are due to other non-target or above-ground features and must be ignored (an example being nearby chain-link fencing and uneven ground surfaces in some areas). Where applicable, the GPR, multiple EM devices, and magnetic gradiometer was traversed systematically over the various survey areas along many closely-spaced profiles and in multiple, organized directions. Other traverses were taken for detailing and confirmation where anomalous conditions were found.

In addition, the line tracers were used to impress signals onto pipes, generally through accessible risers and tracer wires when present, to delineate the lines' locations and orientations. The instruments were also used in passive mode, configured to detect 60 Hz electrical signals and other common radio-frequency signals found in active electrical and communication lines.

Hard copy of the EM data was not acquired, that is, discrete readings on the nodes of a grid were not recorded that could be put into a contoured map format. Rather, the instruments' meters were read continuously, and in real-time, during each traverse. This free-traversing method allowed for immediate detection of anomalous objects and facilitated the opportunity to investigate them further, without the need to first download and process data in the office. The lack of hard copy for EM data sets does not degrade the quality of the survey in any way. Hard copy merely provides a basis for report documentation of these geophysical fields, if such documentation is needed.

A Geonic's model EM61, and a Fischer M-Scope, was used for the EM sampling. A Sensors & Software Noggin Ground Penetrating Radar unit with a 500 MHz antenna produced the radar images. The magnetic gradiometer was a Schonstedt GA-52, and a Metrotech 9890 and RIGID SR-60 SeekTech utility locator rounded out the tools applied.

Brief Description of the Geophysical Methods Applied – The EM61 instrument is a high resolution, time-domain device for detecting buried conductive objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field when its coils are energized, which induces eddy currents in nearby conductive objects. The decay of the eddy currents, following the input pulse, is measured by the coils, which in turn serve as receiver coils. The decay rate is measured for two coils, mounted concentrically, one above the other. By making the measurements at a relatively long time interval (measured in milliseconds) after termination of the primary pulse, the response is nearly independent of the electrical conductivity of the ground. Thus, the instrument is a super-sensitive metal detector. Due to its unique coil arrangement, the response curve is a single well-defined positive peak directly over a buried conductive object. This facilitates quick and accurate location of targets.

The M-Scope device energizes the ground by producing an alternating primary magnetic field with AC current in a transmitting coil. If conducting materials are within the area of influence of the primary field, AC eddy currents are induced to flow in the conductors. A receiving coil senses the secondary magnetic field produced by these eddy currents, and outputs the response as anomalous conditions. The strength of the secondary field is a function of the conductivity of the object, say a pipe, tank or cluster of drums, its size, and its depth and position relative to the instrument's two coils. Conductive objects, to a depth of approximately 7 feet below ground surface (bgs) for the M-Scope are sensed. The device is also somewhat focused; that is, it is more sensitive to conductors below the instrument than they are to

conductors off to the side.

The magnetic gradiometer has two flux gate magnetic fixed sensors that are passed closely to and over the ground. When not in close proximity to a magnetic object, that is, only in the earth's field, the instrument emits a sound signal at a low frequency. When the instrument passes over a buried iron or steel object, so that locally there is a high magnetic gradient, the frequency of the emitted sound increases. The frequency is a function of the gradient between the two sensors.

The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground electrical conductivity and dielectric constant.

Interpretation and Conclusions - The interpretation took place in real time as the survey progressed, and accordingly, the results of our investigation were marked out on the site's ground cover with spray chalk, reported to the client, and further documented with a proposed borehole location map (Figure 2) and site photographs showing both the boreholes (Figures 3-16) and the significant UST/backfilled excavation findings (Figures 17-18). Note that the borehole location map also shows the areas where UST/backfilled excavation surveys were conducted along with abbreviated conclusions regarding those areas. Lastly, the numbers adjacent to map symbols correspond to the figure number of the photograph depicting that area.

Items detected on site were not marked out in the typical industry standard colors, but rather florescent pink and orange in order to increase visibility on the dirt and gravel ground cover throughout most of the area.

All proposed boreholes were either clear as where original positioned by the client, or were moved slightly, if necessary, in order to provide adequate clearance from detected obstructions. In their final locations, they were marked with the client's original wooden stake and a green pin flag labeled "SSS" to indicate that each had been checked by company personnel. No proposed borehole required a relocation of more that 3 feet.

Two vertically-oriented cylindrical-shaped concrete structures were visible at the surface in the location shown in Figure 17. The covers were not removable thus the purpose of the structures could not be positively confirmed, however they somewhat resembled water cisterns or septic tanks. The structures do not appear to get wider below ground and the only other anomalous object in the area was a pipe-like

anomaly whose location and orientation is shown in Figure 17. This possible pipe, however, appears broken in places and possibly corroded to the point of being barely detectable.

A very subtle but distinct backfilled excavation was detected in the area shown in Figure 18. The size, depth, and nature of this anomaly is suggestive of this being the location of a large buried object that has since been removed. No other foreign object was detected within the backfilled excavation or in the vicinity.

No other USTs or backfilled excavations were detected in any other area surveyed for such. Please note that the near-surface geologic environment of the site is not conducive for GPR penetration and it is believed that our ability to positively detect backfilled excavations was somewhat degraded. In this case, our claim that a backfilled excavation was not detected in certain areas DOES NOT mean that a backfilled excavation does not exist there. This does not pertain to USTs as they still would have been easily detected by instruments that are not affected by the local soil conditions.

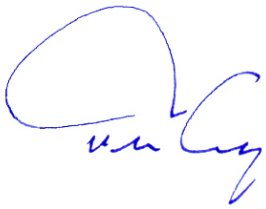
Limitations and Further Recommendations - It should be understood that limitations inherent in geophysical instruments and/or surveying techniques exist at all sites, and nearly all sites exhibit conditions under which such might not perform optimally. Consequently, the detection of buried objects in all circumstances **cannot be guaranteed**. Such limitations are numerous and include, but are not limited to, rebar-reinforced ground cover, abrupt changes in ground cover type, above-ground obstacles preventing full traverses or traverses in one direction only, above-ground conductive objects interfering with instrument signal, nearby powerlines or EM transmitters, highly conductive background soil conditions, limited GPR penetration, non-metallic targets, shallower or larger objects shielding deeper or smaller targets, tracing signal jumping from one line to another, and inaccessible risers, cleanouts, valve boxes, and manholes. If one or more geophysical instrument is rendered ineffective and cannot be utilized, the quality of the survey can be somewhat degraded.

For the above reasons, and in the interest of maximum safety, we encourage our clients to take advantage of Underground Service Alert (USA), Dig Alert, or other similar services, when possible. Furthermore, we recommend hand-auguring and the use of a drilling method known as air knifing or vacuum extraction, when feasible or if applicable to this project. These methods may significantly limit damage to underground pipes, conduits, and utilities that might not have been detectable during the course of this survey. Please bear in mind, that geophysical surveying is only one of several levels of protection that is available to our clients.

SubSurface Surveys may include maps in some reports. While they are an accurate general representation of the site and our findings, they are not of engineering quality (i.e., measured and mapped by a licensed land surveyor).

SubSurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy of the findings and interpretations present. And, in no event will SubSurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations and opinions presented herewith.

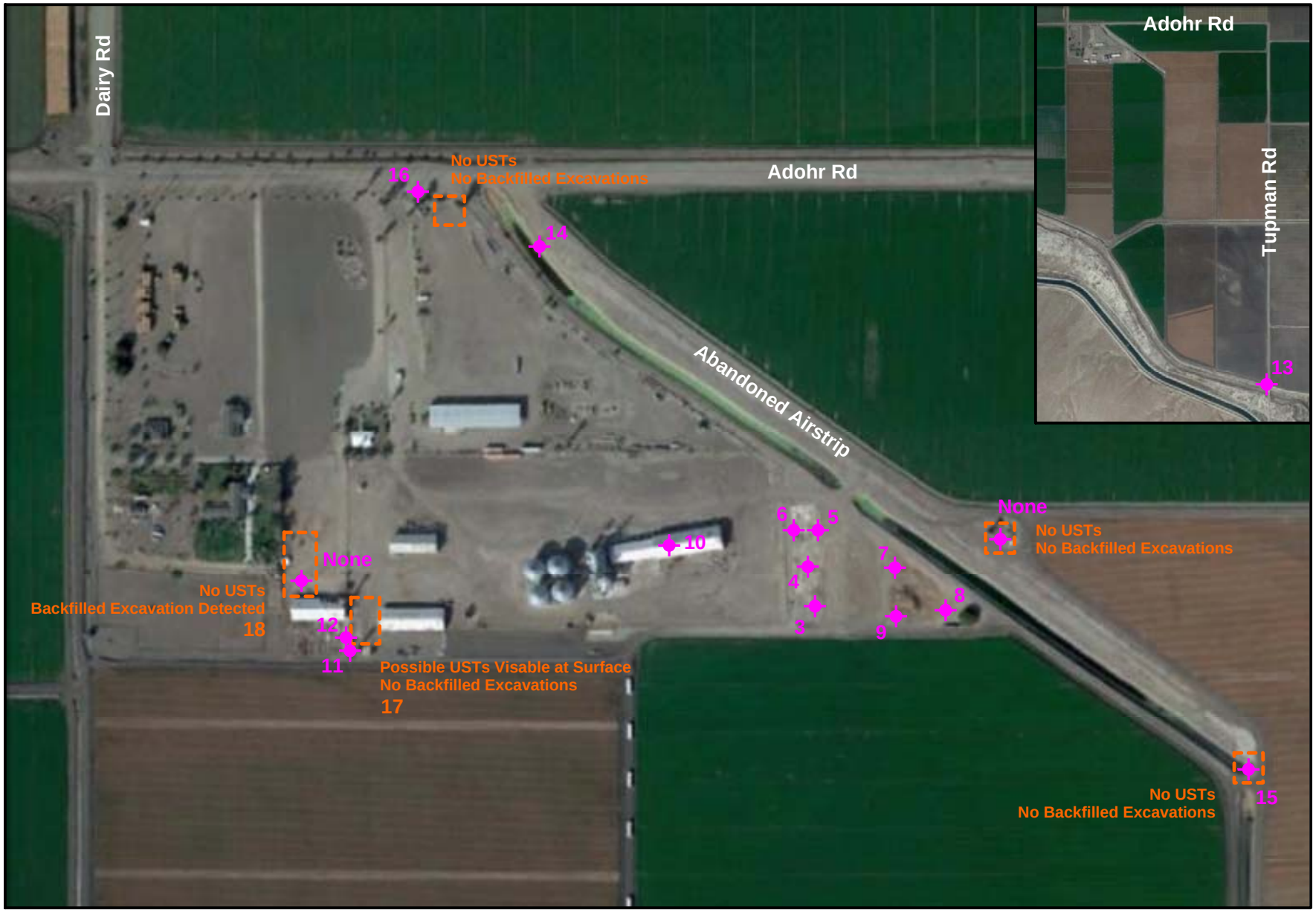
All data generated on this project are in confidential file in this office, and are available for review by authorized persons at any time. The opportunity to participate in this investigation is very much appreciated. Please call, if there are questions.



Travis Crosby
California State Geophysics Registration GP1044
Senior Geophysicist, SubSurface Surveys

BOREHOLE LOCATION MAP

Hydrogen Energy California (HECA) Site
Buttonwillow, California



SCALE
0 316ft

Proposed borehole (number corresponds to photo figure number)

Survey area for USTs and backfilled excavations (number corresponds to photo figure number)

FIGURE 2

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California

FIGURE 3

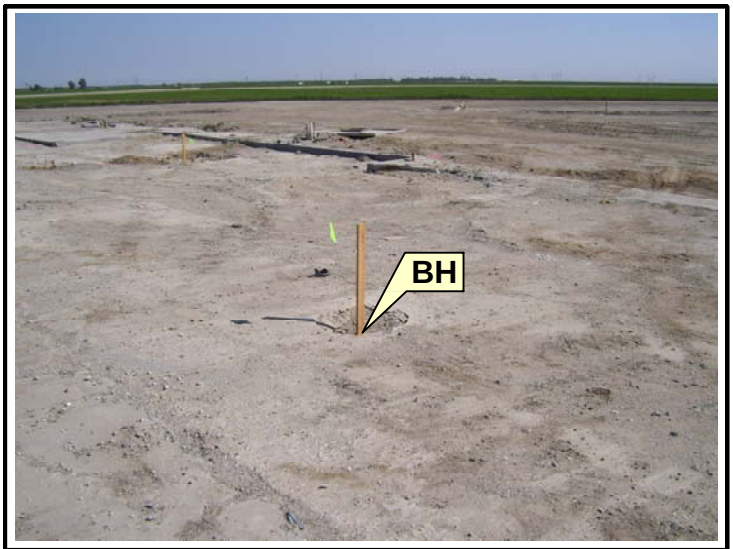


FIGURE 4

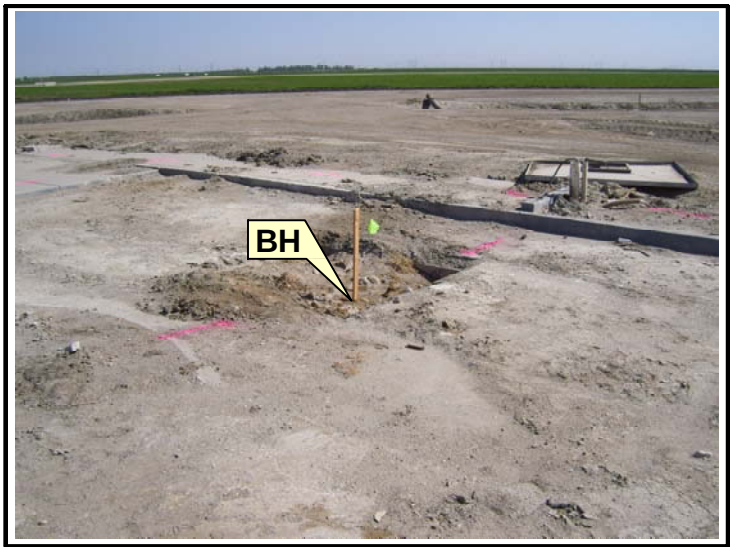


FIGURE 5

FIGURE 6

FIGURE 7

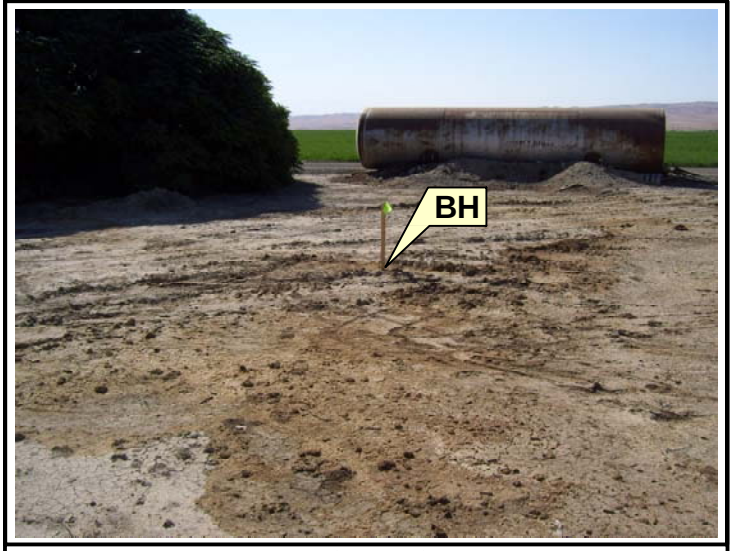


FIGURE 8

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California

FIGURE 9

FIGURE 10

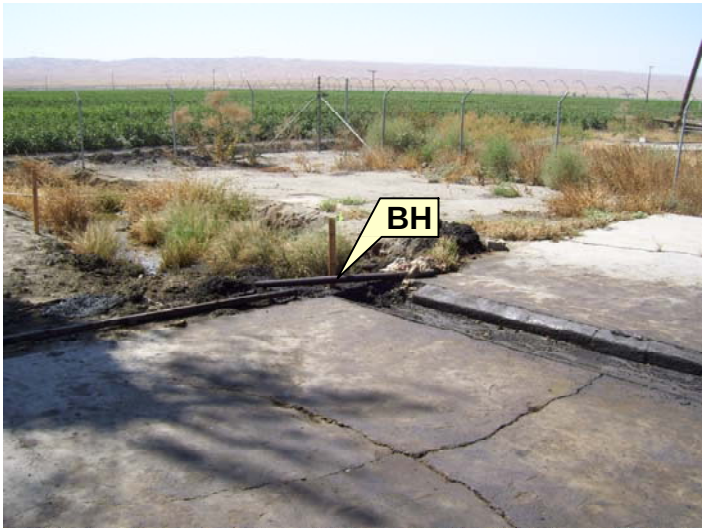


FIGURE 11

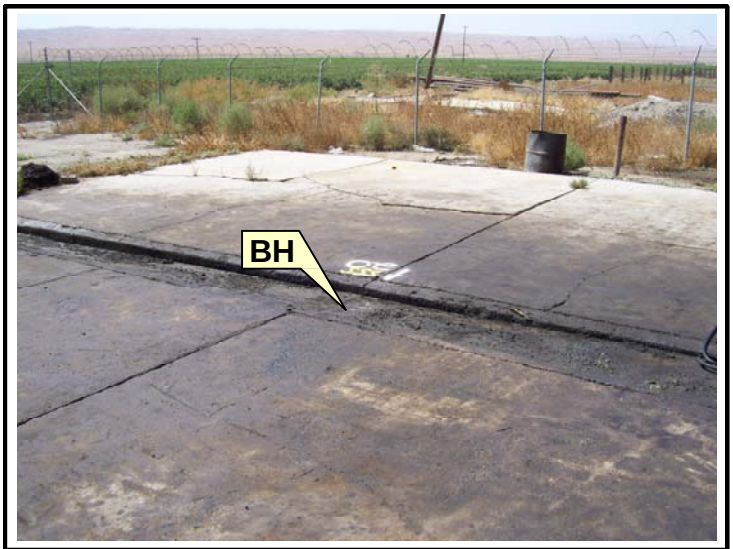


FIGURE 12

FIGURE 13

FIGURE 14

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California

FIGURE 15

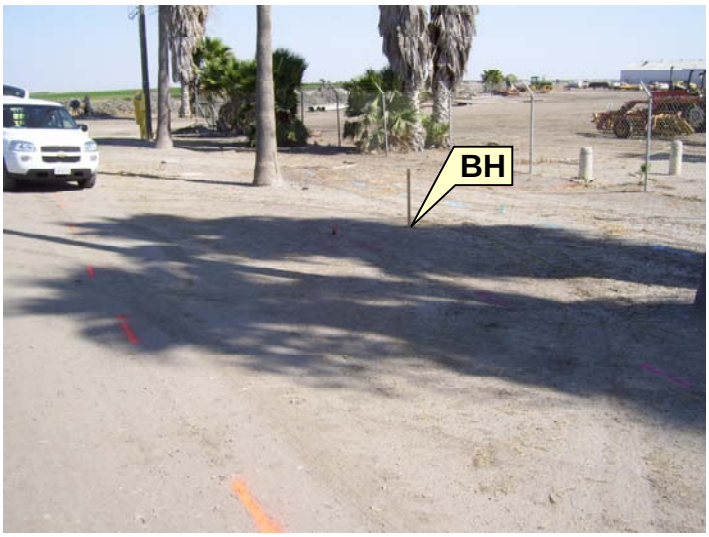


FIGURE 16

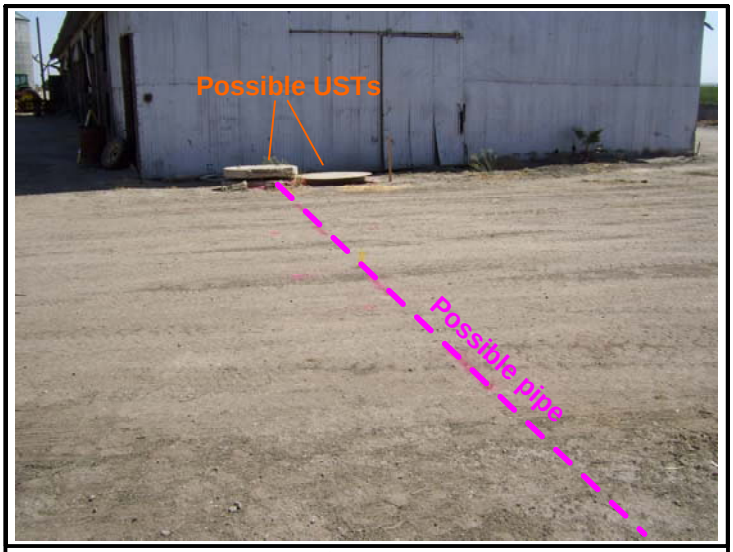


FIGURE 17

FIGURE 18

Appendix B
Borings Logs GP-1 through GP-21

CONFIDENTIAL

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-1**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312229.9 N 6146338 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook	*Date/Time Started:* 09-23-10 / 10:55	*Depth of Boring:* 25 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-23-10 / 11:45	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
						SM		SILTY SAND, light brown, 60% very fine grained sand, 40% non-plastic fines, dense, dry, no odor or staining
5	GP-1-5	X		1.5	0.0			
						SP		SAND, reddish brown, 100% fine grained sand, loose, dry, red stain, no odor
10	GP-1-10	X		1.5	0.0			
15	GP-1-15	X		1.5	0.0			
20								
25	GP-1-25	X		1.5	0.0			-light gray, no odor or staining at 25'

Total Depth = 25 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312231.8 N 6146360.8 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-2** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 10:05	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 10:30	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-2-5	X		1.5	0.0	ML		SANDY SILT, light brown, 25% very fine grained sand, 75% non-plastic fines, dense, dry, no odor or staining
10	GP-2-10	X		1.5	0.0	SP		SAND, light reddish brown, 100% very fine to fine grained sand, loose, dry, no odor, light red staining
15	GP-2-15	X		1.5	0.0			-reddish brown, red stain at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-3**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312107.7 N 6146200.4 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 15:07	*Depth of Boring:* 24 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 15:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-3-5	X		1.5	0.0	SM		SILTY SAND, light gray, 60% very fine to fine grained sand, 40% non-plastic fines, medium dense, dry, no odor or staining
10	GP-3-10	X		1.5	0.1	ML		SILT TO SANDY SILT, light brown, 15% very fine sand, 85% non-plastic fines, dense, dry, no odor or staining
15	GP-3-15	X		1.5	0.0	SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
20								

Refusal at 24 feet.
Boring Terminated

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-4**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312116.1 N 6146200 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 16:05	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 16:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
						ML		SILT TO SANDY SILT, light brown, 10% very fine sand, 90% non-plastic fines, dense, dry, no odor or staining
5	GP-4-5	X		1.5	0.0			
						SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
10	GP-4-10	X		1.5	0.0			
15	GP-4-15	X		1.5	0.0			-light brown at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312069.8 N 6146394.3 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-5** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 08:40	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 08:58	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-5-5	X		1.5	0.0	SM		SILTY SAND, light brown, 65% very fine to fine grained sand, 35% non-plastic fines, loose, dry, no odor, slight red stain
10	GP-5-10	X		1.5	0.0	SP		SAND, reddish brown, 100% fine grained sand, loose, dry, no odor, red stain
15	GP-5-15	X		1.5	0.0			-light brown, no odor or staining at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312047.2 N 6146926.2 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-6** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 17:11	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10 / 17:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-6-5	X		1.5	0.1	CL		, dark brown, 100% low to medium plastic fines, stiff, dry, no odor or staining
10	GP-6-10	X		1.5	0.0	SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
15	GP-6-15	X		1.5	0.0	SC-CL		CLAYEY SAND TO SANDY CLAY, dark brown, 50% fined grained sand, 50% medium plastic fines, dense, dry, no odor or staining

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312207.7 N 6147357.7 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-7** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 08:45	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10 / 09:00	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-7-5	X		1.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, slight odor, no staining
10	GP-7-10	X		1.5	0.1			
15	GP-7-15	X		1.5	0.1	SP-SM		SAND TO SILTY SAND, reddish brown, 90% very fine to fine grained sand, 10% non-plastic fines, dense, dry, no odor or staining

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312250 N 6147373.5 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-8** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS

Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 09:40	*Depth of Boring:* 4 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-8-4	X		1.5	15.3	SP		GRAVELLY SAND, black, 30% gravel, 70% fine to medium grained sand, subrounded, medium dense, moist to wet, black staining, strong rotten egg odor
								Refusal at 4 feet. Boring Terminated

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-9**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312253.3 N 6147330 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 10:17	*Depth of Boring:* 4 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-9-4	X		1.5	138	SP		GRAVELLY SAND, black, 25% gravel, 75% fine to medium grained sand, subrounded, dense, moist to wet, strong ammonia odor, black staining
								Refusal at 4 feet. Boring Terminated

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-10**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2311710.2 N 6148342.3 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 11:51	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 12:34	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-10-5			1.5	0.0	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
10	GP-10-10			1.5	0.0	SP		SAND, light gray, 100% very fine to fine grained sand, dense, dry, no odor or staining
15	GP-10-15			1.5	0.1			-fine to medium grained sand at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002	**Boring No. GP-11**
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2312061.7 N 6147540.6 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	*Drilling Equipment/Method/*Hand Auger *Weather:*	*Monitoring Well Installed:*No
	Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*D. Files *Date/Time Started:* 09-21-10 / 13:07	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-21-10 / 13:28	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-11-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-11-2			0.5	0.1	SP		SAND, light gray, 100% very fine to fine grained sand, loose, dry, no odor or staining
5	GP-11-5			0.5	0.1			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002	**Boring No. GP-12**
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2312069.6 N 6147674.5 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	*Drilling Equipment/Method/*Hand Auger *Weather:*	*Monitoring Well Installed:*No
	Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*D. Files *Date/Time Started:* 09-21-10 / 13:49	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-21-10 / 14:11	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-12-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-12-2			0.5	0.1	SP		SAND, light gray, 100% very fine to fine grained sand, subrounded, loose, dry, no odor or staining
5	GP-12-5			0.5	0.2			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312164.1 N 6147578.9 E *Elevation:* *Datum:* *Drilling Equipment/Method/*Hand Auger *Weather:* *Sample Type(s):* 5035/Jars *Boring Diameter:* 2 IN.	**Boring No. GP-13** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:*No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*D. Files *Date/Time Started:* 09-21-10 / 12:23	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-21-10 / 12:52	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-13-0.5			1	0.1	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-13-2			1	0.2			
						SP		SAND, light gray, 100% very fine to fine grained sand, loose, dry, no odor or staining
5	GP-13-5			1	0.2			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002	**Boring No. GP-14**
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: Not Surveyed *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	*Drilling Equipment/Method/*Hand Auger *Weather:*	*Monitoring Well Installed:*No
	Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*T. Shook *Date/Time Started:* 09-23-10 / 15:55	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-23-10 / 16:10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-14-0.5			0.5		CL		, very dark brown, 100% low to medium plastic fines, stiff, moist, no odor or staining
	GP-14-2			0.5				
5	GP-14-5			0.5				

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312885.7 N 6146772.2 E *Elevation:* *Datum:* *Drilling Equipment/Method/*Hand Auger *Weather:* *Sample Type(s):* 5035/Jars *Boring Diameter:* 2 IN.	**Boring No. GP-15** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:*No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*T. Shook *Date/Time Started:* 09-23-10 / 13:05	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-23-10 / 13:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-15-0.5			0.5	0.0	CL		, dark brown, 100% low to medium plastic fines, stiff, moist, no odor or staining
	GP-15-2			0.5	0.0			
5	GP-15-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002	**Boring No. GP-16**
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2303583.5 N 6150873 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	*Drilling Equipment/Method/*Hand Auger *Weather:*	*Monitoring Well Installed:*No
	Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*T. Shook *Date/Time Started:* 09-23-10 / 14:20	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-23-10 / 14:40	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-16-0.5			0.5	0.0	CL		CLAY, dark brown, 5% very fine grained sand, 95% medium plastic fines, stiff, dry, no odor or staining
	GP-16-2			0.5	0.0	CL		CLAY, dark brown, 100% medium plastic fines, stiff, dry, no odor or staining
5	GP-16-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312228.8 N 6147772.1 E *Elevation:* *Datum:* *Drilling Equipment/Method:* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-17** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS

Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 13:50	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 13:57	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-17-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-17-2			0.5	0.0			
5	GP-17-5			0.5	0.3			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312016.6 N 6146341.4 E *Elevation:* *Datum:* *Drilling Equipment/Method/*Hand Auger *Weather:* *Sample Type(s):* 5035/Jars *Boring Diameter:* 2 IN.	**Boring No. GP-18** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:*No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*T. Shook *Date/Time Started:* 09-23-10 / 09:13	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-23-10 / 09:40	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-18-0.5			0.5	10.8	CL		CLAY, black, 100% medium plastic fines, stiff, wet, oil odor
	GP-18-2			0.5	7.4			
5	GP-18-5			0.5	3.2			-gray at 5'

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312105.4 N 6147368.5 E *Elevation:* *Datum:* *Drilling Equipment/Method* Geoprobe/Direct Push *Weather:* *Sample Type(s):* 5035/Sleeve *Boring Diameter:* 2 IN.	**Boring No. GP-19** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:* No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-21-10 / 14:59	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-21-10 / 15:06	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-19-0.5			0.5	0.2	CL		SANDY CLAY, dark brown, 30% fine grained sand, 70% medium plastic fines, firm, dry, no odor or staining
	GP-19-2			0.5	0.2	CL		CLAY, dark brown, 100% medium plastic fines, soft, dry, no odor or staining
5	GP-19-5			0.5	0.3			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002 *Site Description/Location:* Dairy Road & Adohr Road, Kern County, California *Coordinates:* 2312037.3 N 6146337.1 E *Elevation:* *Datum:* *Drilling Equipment/Method/*Hand Auger *Weather:* *Sample Type(s):* 5035/Jars *Boring Diameter:* 2 IN.	**Boring No. GP-20** *Ambient PID Reading:* NM *Sheet:* 1 *of* 1 *Monitoring Well Installed:*No *Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:*T. Shook *Date/Time Started:* 09-23-10 / 15:10	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:*09-23-10 / 15:20	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-20-0.5			0.5	1.3	CL		CLAY, very dark brown, 5% sand, 95% medium plastic fines, soft, wet, oil odor
	GP-20-2			0.5	0.5			-moist, no odor or staining at 2'
						SC		CLAYEY SAND, greenish gray, 60% very fine to fine grained sand, 40% medium plastic fines, loose, moist, no odor or staining
5	GP-20-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California *Project Number:* 60163371-0002	**Boring No. GP-21**
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2312999.5 N 6146469.8 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	*Drilling Equipment/Method/*Hand Auger *Weather:*	*Monitoring Well Installed:*No
	Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS

Approved By: D. Files	*Logged By:*T. Shook	*Date/Time Started:* 09-23-10 / 12:30	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:*09-23-10 / 12:55	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-21-0.5			0.5	0.0	CL		SANDY CLAY, brown, 10% fine-grained sand, 90% medium plastic fines, stiff, dry, no odor or staining
	GP-21-2			0.5	0.0	SP		SAND, light brown, 100% fine grained sand, loose, dry, no odor or staining
5	GP-21-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

Appendix C
Certified Laboratory Reports & Chain-of-Custody Documentation

CONFIDENTIAL

Date of Report: 09/24/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013212
Invoice ID: B087421

Enclosed are the results of analyses for samples received by the laboratory on 9/21/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Pg. 1 of 2

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour Rush | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests: Include QC Data Package: ☐ Yes ☐ No; FAX Results: ☐ Yes ☐ No; Email Results: ☒ Yes ☐ No; State EDT: ☐ Yes ☐ No (Include Source Number in Notes)

Sampler Information: Name: Dana Files; Employer: AECOM; Signature:

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

CHK BY DISTRIBUTION SAF QUALITY PLP SUB-OUT ☐

Sample ID		Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-13-0.5	-1	9-21-10	1223	X				X					X	X	5	X	X	X	X	X					S	
GP-13-2	-2	9-21-10	1228	X				X					X	X	5	X	X	X	X	X					S	
GP-13-5	-3	9-21-10	1252	X				X					X	X	5	X									~~HOLD~~ S	HOLD
GP-11-0.5	-4	9-21-10	1307	X				X					X	X	5	X	X	X	X	X					S	
GP-11-2	-5	9-21-10	1323	X				X					X	X	5	X	X	X	X	X					S	
GP-11-5	-6	9-21-10	1328	X				X					X	X	5	X									S	HOLD
GP-12-0.5	-7	9-21-10	1349	X				X					X	X	5	X	X	X	X	X					S	
GP-12-2	-8	9-21-10	1406	X				X					X	X	5	X	X	X	X	X					S	
GP-12-5	-9	9-21-10	1411	X				X					X	X	5										S	HOLD
Dup-3	-10	9-21-10	—	X				X					X	X	5	X	X	X	X	X					S	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Dana Files / AECOM	9-21-10 / 1551	Dana / [signature]	BCLABS 9-21-10 1715
~~[signature]~~	~~Tom Shots AECOM~~	~~9-21-10 1717~~		

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No | Temperature °C

Custody Seal(s) Intact? Yes No N/A

Sample(s) Intact? Yes No | ☐ Cooler Blank

Lab Notes

Lab No. 10-13212

Page 1 of 2

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Pg. 2 of 2

Client: AECOM
Contact: Chad Roper
Phone No. 805 388 3775 xt. 219
FAX No. 805 388 3577
Email: chad.roper@aecom.com
Project Name: Hydrogen Energy California
Project Location: 189 E. Front Street, Buttonwillow
Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush
*Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ☒ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Dana Files
Employer: AECOM
Signature: [signature]

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

Sample ID		Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-19-0.5	11	9-21-10	1459	X				X					X	X	5	X	X	X	X	X					S	
GP-19-2	12	9-21-10	1503	X				X					X	X	5	X	X	X	X	X					S	
GP-19-5	13	9-21-10	1506	X				X					X	X	5										S	HOLD
Dup-5	14	9-21-10	—	X				X					X	X	5	X	X	X	X	X					S	
QCTB-1	15	9-21-10	1200			X									1	X									W	
QCTB-2	16	9-21-10	1200			X									1	X									W	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature] Dana	AECOM	9-21-10/1551	Dana Jones	BClabs 9-21-10 1715

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature
Custody Seal(s) Intact?	Yes	No	N/A	°C
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 10-13212

Page 2 of 2

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Chain of Custody and Cooler Receipt Form for 1013212 Page 3 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 1 of 3

Submission #: 10-13212

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: 1183
Temperature: A 3.5 °C / C 3.5 °C

Date/Time 9-21-10 1720
Analyst Init JCW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AH	AH	AH	AH	AH				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B	B	B	B	B	B				
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

JCW 9/21/10

Comments:
Sample Numbering Completed By: JCW Date/Time: 9/21/10 1755
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SANREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013212 Page 4 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 3

Submission #: 10-13212

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 1103
Temperature: A 116.1 °C / C 116.1 °C

Date/Time 9-21-10 1720
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AM	AM	AM	AM			AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/21/10 1755
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013212 Page 5 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 Of 3

Submission #: 1013212

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: soil sleeve Thermometer ID: IR3
Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-21-10 1720
Analyst Init JRW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK					A1	A1				
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR							B	B	B	B
SOIL SLEEVE	B	B	B	B						
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JRW Date/Time: 9/21/10 1755
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-01	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:23
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-02	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:28
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-03	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:52
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-04	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:07
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-0.5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-05	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:23
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-06	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:28
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-07	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:49
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-08	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-09	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:11
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-10	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-3	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-11	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:59
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-12	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:03
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-13	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-14	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-15	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-1	**Sample Matrix:**	Water
	Sampled By:	---		
1013212-16	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-2	**Sample Matrix:**	Water
	Sampled By:	---		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	25.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	37.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 11:47	VH1	GC-1	0.997	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 06:24	cc1	GC-7	0.997	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 00:19	ADC	MS-V2	0.910	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	65.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 13:20	MWB	GC-2	0.990	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**0.82**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**11**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.031**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**17**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.79**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**61**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 15:56	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:13	MEV	CETAC1	0.977	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00062**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.00062**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0016**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.00049**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**J**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	26.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 16:13	VH1	GC-1	0.987	BTI1413

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	56.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 06:46	cc1	GC-7	0.997	BTI1411

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0015**	**mg/kg**	**0.0045**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0045	0.00083	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0045	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0045	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0045	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0045	0.00089	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0045	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0045	0.00090	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0045	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0045	0.00073	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0045	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0045	0.00073	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0045	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0090	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0045	0.00045	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0045	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0045	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0045	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0090	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0045	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 00:45	ADC	MS-V2	0.900	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	72.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 13:43	MWB	GC-2	0.990	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**19**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.017**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**6.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.3**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:06	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:24	MEV	CETAC1	1.008	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-03 | **Client Sample Name:** HECA, GP-13-5, 9/21/2010 12:52:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00089**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	41.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	58.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 12:24	VH1	GC-1	0.997	BTI1413

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	**0.0029**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 12:42	VH1	GC-1	0.987	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	50.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 07:32	cc1	GC-7	0.984	BTI1411

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 01:37	ADC	MS-V2	0.890	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**190**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**Z1**	1
Tetracosane (Surrogate)	104	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 18:40	MWB	GC-2	0.997	BTI1417

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**16**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**130**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.75**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.69**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**14**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.064**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**13**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.1**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**54**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**97**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:15	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:26	MEV	CETAC1	0.992	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00055**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00062**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	31.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.2	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 13:00	VH1	GC-1	0.990	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 07:54	cc1	GC-7	0.990	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.4	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 02:02	ADC	MS-V2	0.890	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	69.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 14:29	MWB	GC-2	0.997	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**19**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.83**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.094**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**31**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**65**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**59**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:44	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:28	MEV	CETAC1	1.008	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.14**	**mg/kg**	**0.050**	**0.0076**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.14**	**mg/kg**	**0.050**	**0.0045**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.023**	**mg/kg**	**0.0050**	**0.00031**	**EPA-8081**	**ND**	**A01**	3
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	**0.12**	**mg/kg**	**0.050**	**0.013**	**EPA-8081**	**ND**	**A01**	2
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	120	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	45.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	67.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	118	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	0	%	26 - 151 (LCL - UCL)		EPA-8081		A01,A17	2
Dibutyl chlorendate (Surrogate)	116	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 14:13	VH1	GC-1	1	BTI1413
2	EPA-8081	09/21/10	09/23/10 16:31	VH1	GC-1	100	BTI1413
3	EPA-8081	09/21/10	09/24/10 13:24	VH1	GC-1	10	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	37.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 09:47	cc1	GC-7	0.984	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0012**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0048	0.00088	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0048	0.00081	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0048	0.00061	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0048	0.00095	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0048	0.00096	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0048	0.00082	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0096	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0048	0.00048	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0048	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0048	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0048	0.00074	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0096	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0048	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	90.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	88.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.017**	**mg/kg**			**EPA-8260**			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Heptane, 2,4-dimethyl-	**0.0070**	**mg/kg**			**EPA-8260**			1
TIC: Hexane	**0.0082**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 09:47	ADC	MS-V2	0.961	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	1000	460	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	1000	140	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	1000	120	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	2000	280	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	2000	650	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**8500**	**mg/kg**	**5000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 19:26	MWB	GC-2	98.361	BTI1417

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.5**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**39**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**23**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.056**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.53**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**480**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:18	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:34	MEV	CETAC1	0.962	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0014**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	29.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 14:31	VH1	GC-1	0.997	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	68.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 10:10	cc1	GC-7	0.997	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00078	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00092	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0093	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0093	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 10:12	ADC	MS-V2	0.934	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	74.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 14:51	MWB	GC-2	0.997	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**130**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.62**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.25**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**13**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.037**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**10**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.72**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**65**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:19	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:37	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.011**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	**0.00034**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**	**J**	1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.016**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.068**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	**0.00050**	**mg/kg**	**0.00050**	**0.000086**	**EPA-8081**	**ND**		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	38.0	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	44.5	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	71.1	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	52.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	0	%	26 - 151 (LCL - UCL)		EPA-8081		A01,A17	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:07	VH1	GC-1	0.993	BTI1413
2	EPA-8081	09/21/10	09/23/10 16:49	VH1	GC-1	4.967	BTI1413
3	EPA-8081	09/21/10	09/23/10 17:07	VH1	GC-1	49.669	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 10:56	cc1	GC-7	0.993	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0013**	**mg/kg**	**0.0043**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 04:12	ADC	MS-V2	0.860	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**36**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	73.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 18:17	MWB	GC-2	0.990	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**8.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.66**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**32**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**26**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.058**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.65**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**330**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:21	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:39	MEV	CETAC1	0.962	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	**0.00091**	**mg/kg**	**0.00050**	**0.00038**	**EPA-8081**	**ND**		1
delta-BHC	**0.0093**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	**0.00099**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0057**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.070**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	**0.0081**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	2
Dieldrin	**0.0028**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0019**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**	**V11**	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	**0.00030**	**mg/kg**	**0.00050**	**0.00026**	**EPA-8081**	**ND**	**J**	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	41.8	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	58.2	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	79.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	54.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	54.8	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:26	VH1	GC-1	0.990	BTI1413
2	EPA-8081	09/21/10	09/23/10 17:25	VH1	GC-1	4.950	BTI1413
3	EPA-8081	09/21/10	09/23/10 17:44	VH1	GC-1	49.505	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	61.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 11:19	cc1	GC-7	0.990	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00091	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00083	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00098	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0099	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0099	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 11:29	ADC	MS-V2	0.994	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**45**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	73.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 17:55	MWB	GC-2	0.984	BTI1417

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**95**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.52**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**33**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.039**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.60**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**41**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**180**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:46	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:41	MEV	CETAC1	0.992	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	24.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	44.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:44	VH1	GC-1	0.984	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	53.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 11:41	cc1	GC-7	0.993	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0034**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00093	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00079	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0093	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	**0.0014**	**mg/kg**	**0.0046**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0093	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 07:38	ADC	MS-V2	0.930	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	73.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 16:01	MWB	GC-2	0.997	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.91**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**24**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.031**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**77**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:47	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:43	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.016**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0093**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.16**	**mg/kg**	**0.050**	**0.0045**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	**0.013**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	2
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	**0.0048**	**mg/kg**	**0.00050**	**0.000066**	**EPA-8081**	**ND**		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0032**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**	**V11**	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	40.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	55.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	87.1	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	57.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	58.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 16:20	VH1	GC-1	0.987	BTI1413
2	EPA-8081	09/21/10	09/23/10 18:02	VH1	GC-1	4.934	BTI1413
3	EPA-8081	09/21/10	09/23/10 18:20	VH1	GC-1	98.684	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	47.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 12:26	cc1	GC-7	0.984	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0031**	**mg/kg**	**0.0047**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00087	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00060	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00095	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00077	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00077	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0095	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	**0.0011**	**mg/kg**	**0.0047**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00073	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0095	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 11:04	ADC	MS-V2	0.946	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**120**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	76.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 19:03	MWB	GC-2	0.984	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.048**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**140**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:26	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:45	MEV	CETAC1	0.919	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 15:18	MGC	MS-V5	1	BTI1371

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.5	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 15:47	MGC	MS-V5	1	BTI1371

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1413						
Aldrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1413-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1413-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1413-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1413-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1413-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1413-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1413-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1413-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1413-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1413-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1413-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1413-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1413-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1413-BLK1	67.6	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1413-BLK1	108	%	26 - 151 (LCL - UCL)		

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1413										
Aldrin	BTI1413-BS1	LCS	0.0049718	0.0049834	mg/kg	99.8		60 - 124		
gamma-BHC (Lindane)	BTI1413-BS1	LCS	0.0049150	0.0049834	mg/kg	98.6		46 - 107		
4,4'-DDT	BTI1413-BS1	LCS	0.0052070	0.0049834	mg/kg	104		40 - 148		
Dieldrin	BTI1413-BS1	LCS	0.0051877	0.0049834	mg/kg	104		56 - 130		
Endrin	BTI1413-BS1	LCS	0.0055179	0.0049834	mg/kg	111		61 - 131		
Heptachlor	BTI1413-BS1	LCS	0.0048615	0.0049834	mg/kg	97.6		58 - 130		
TCMX (Surrogate)	BTI1413-BS1	LCS	0.0066312	0.0099668	mg/kg	66.5		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1413-BS1	LCS	0.024854	0.024917	mg/kg	99.7		26 - 151		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1413	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
Aldrin	MS	1013212-03	ND	0.0038330	0.0050000	mg/kg		76.7		63 - 119	
	MSD	1013212-03	ND	0.0038449	0.0049505	mg/kg	1.3	77.7	20	63 - 119	
gamma-BHC (Lindane)	MS	1013212-03	ND	0.0043233	0.0050000	mg/kg		86.5		47 - 102	
	MSD	1013212-03	ND	0.0043927	0.0049505	mg/kg	2.6	88.7	30	47 - 102	
4,4'-DDT	MS	1013212-03	ND	0.0036707	0.0050000	mg/kg		73.4		32 - 158	
	MSD	1013212-03	ND	0.0038347	0.0049505	mg/kg	5.4	77.5	30	32 - 158	
Dieldrin	MS	1013212-03	ND	0.0042330	0.0050000	mg/kg		84.7		57 - 125	
	MSD	1013212-03	ND	0.0043142	0.0049505	mg/kg	2.9	87.1	20	57 - 125	
Endrin	MS	1013212-03	ND	0.0041837	0.0050000	mg/kg		83.7		61 - 130	
	MSD	1013212-03	ND	0.0047059	0.0049505	mg/kg	12.7	95.1	27	61 - 130	
Heptachlor	MS	1013212-03	ND	0.0038280	0.0050000	mg/kg		76.6		52 - 139	
	MSD	1013212-03	ND	0.0039142	0.0049505	mg/kg	3.2	79.1	30	52 - 139	
TCMX (Surrogate)	MS	1013212-03	ND	0.0056543	0.010000	mg/kg		56.5		12 - 168	
	MSD	1013212-03	ND	0.0055782	0.0099010	mg/kg		56.3		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013212-03	ND	0.020107	0.025000	mg/kg		80.4		26 - 151	
	MSD	1013212-03	ND	0.019425	0.024752	mg/kg		78.5		26 - 151	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1411						
Azinphos methyl	BTI1411-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1411-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1411-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1411-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1411-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1411-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1411-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1411-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1411-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1411-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1411-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1411-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1411-BLK1	104	%	9 - 105 (LCL - UCL)		

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1411										
Bolstar	BTI1411-BS1	LCS	0.032616	0.026490	mg/kg	123		9 - 146		
Chlorpyrifos	BTI1411-BS1	LCS	0.023344	0.026490	mg/kg	88.1		68 - 151		
Diazinon	BTI1411-BS1	LCS	0.022020	0.026490	mg/kg	83.1		38 - 105		
Methyl parathion	BTI1411-BS1	LCS	0.024834	0.026490	mg/kg	93.7		70 - 130		
Mevinphos	BTI1411-BS1	LCS	0.017550	0.026490	mg/kg	66.2		48 - 135		
Ronnel (Fenchlorphos)	BTI1411-BS1	LCS	0.022848	0.026490	mg/kg	86.2		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1411-BS1	LCS	0.021026	0.026490	mg/kg	79.4		66 - 164		
Triphenylphosphate (Surrogate)	BTI1411-BS1	LCS	0.084934	0.082781	mg/kg	103		9 - 105		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1411	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
Bolstar	MS	1013212-03	ND	0.028239	0.026578	mg/kg		106		1 - 167	
	MSD	1013212-03	ND	0.026656	0.026490	mg/kg	5.4	101	30	1 - 167	
Chlorpyrifos	MS	1013212-03	ND	0.019767	0.026578	mg/kg		74.4		41 - 167	
	MSD	1013212-03	ND	0.018212	0.026490	mg/kg	7.9	68.7	20	41 - 167	
Diazinon	MS	1013212-03	ND	0.021429	0.026578	mg/kg		80.6		31 - 97	
	MSD	1013212-03	ND	0.019702	0.026490	mg/kg	8.1	74.4	30	31 - 97	
Methyl parathion	MS	1013212-03	ND	0.020598	0.026578	mg/kg		77.5		41 - 159	
	MSD	1013212-03	ND	0.021026	0.026490	mg/kg	2.4	79.4	20	41 - 159	
Mevinphos	MS	1013212-03	ND	0.020930	0.026578	mg/kg		78.7		35 - 136	
	MSD	1013212-03	ND	0.020530	0.026490	mg/kg	1.6	77.5	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013212-03	ND	0.018605	0.026578	mg/kg		70.0		34 - 143	
	MSD	1013212-03	ND	0.018543	0.026490	mg/kg	0.0	70.0	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013212-03	ND	0.021096	0.026578	mg/kg		79.4		7 - 209	
	MSD	1013212-03	ND	0.020861	0.026490	mg/kg	0.8	78.8	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013212-03	ND	0.077741	0.083056	mg/kg		93.6		9 - 105	
	MSD	1013212-03	ND	0.080132	0.082781	mg/kg		96.8		9 - 105	

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1371						
Benzene	BTI1371-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1371-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1371-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1371-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1371-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1371-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1371-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1371-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1371-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.14	

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1371						
trans-1,3-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1371-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1371-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1371-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1371-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1371-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1371-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1371-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1371-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1371-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1371-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1371-BLK1	107	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1371-BLK1	100	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1371-BLK1	96.0	%	86 - 115 (LCL - UCL)		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1371										
Benzene	BTI1371-BS1	LCS	23.990	25.000	ug/L	96.0		70 - 130		
Bromodichloromethane	BTI1371-BS1	LCS	26.600	25.000	ug/L	106		70 - 130		
Chlorobenzene	BTI1371-BS1	LCS	24.920	25.000	ug/L	99.7		70 - 130		
Chloroethane	BTI1371-BS1	LCS	25.270	25.000	ug/L	101		70 - 130		
1,4-Dichlorobenzene	BTI1371-BS1	LCS	26.870	25.000	ug/L	107		70 - 130		
1,1-Dichloroethane	BTI1371-BS1	LCS	24.990	25.000	ug/L	100		70 - 130		
1,1-Dichloroethene	BTI1371-BS1	LCS	25.550	25.000	ug/L	102		70 - 130		
Toluene	BTI1371-BS1	LCS	25.310	25.000	ug/L	101		70 - 130		
Trichloroethene	BTI1371-BS1	LCS	27.410	25.000	ug/L	110		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1371-BS1	LCS	9.8700	10.000	ug/L	98.7		76 - 114		
Toluene-d8 (Surrogate)	BTI1371-BS1	LCS	9.7900	10.000	ug/L	97.9		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1371-BS1	LCS	9.5200	10.000	ug/L	95.2		86 - 115		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1371	Used client sample: N										
Benzene	MS	1013101-01	ND	23.750	25.000	ug/L		95.0		70 - 130	
	MSD	1013101-01	ND	24.190	25.000	ug/L	1.8	96.8	20	70 - 130	
Bromodichloromethane	MS	1013101-01	ND	27.400	25.000	ug/L		110		70 - 130	
	MSD	1013101-01	ND	27.650	25.000	ug/L	0.9	111	20	70 - 130	
Chlorobenzene	MS	1013101-01	ND	27.540	25.000	ug/L		110		70 - 130	
	MSD	1013101-01	ND	26.490	25.000	ug/L	3.9	106	20	70 - 130	
Chloroethane	MS	1013101-01	ND	24.120	25.000	ug/L		96.5		70 - 130	
	MSD	1013101-01	ND	24.970	25.000	ug/L	3.5	99.9	20	70 - 130	
1,4-Dichlorobenzene	MS	1013101-01	ND	29.810	25.000	ug/L		119		70 - 130	
	MSD	1013101-01	ND	28.570	25.000	ug/L	4.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1013101-01	ND	24.810	25.000	ug/L		99.2		70 - 130	
	MSD	1013101-01	ND	25.260	25.000	ug/L	1.8	101	20	70 - 130	
1,1-Dichloroethene	MS	1013101-01	ND	25.110	25.000	ug/L		100		70 - 130	
	MSD	1013101-01	ND	25.470	25.000	ug/L	1.4	102	20	70 - 130	
Toluene	MS	1013101-01	ND	25.820	25.000	ug/L		103		70 - 130	
	MSD	1013101-01	ND	25.490	25.000	ug/L	1.3	102	20	70 - 130	
Trichloroethene	MS	1013101-01	ND	26.440	25.000	ug/L		106		70 - 130	
	MSD	1013101-01	ND	26.330	25.000	ug/L	0.4	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013101-01	ND	10.020	10.000	ug/L		100		76 - 114	
	MSD	1013101-01	ND	10.070	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	MS	1013101-01	ND	9.8300	10.000	ug/L		98.3		88 - 110	
	MSD	1013101-01	ND	9.8900	10.000	ug/L		98.9		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013101-01	ND	10.480	10.000	ug/L		105		86 - 115	
	MSD	1013101-01	ND	10.070	10.000	ug/L		101		86 - 115	

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
Benzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1169-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
trans-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1169-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1169-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1169-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1169-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1169-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1169-BLK1	93.9	%	74 - 121 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1169										
Benzene	BTI1169-BS1	LCS	0.14203	0.12500	mg/kg	114		70 - 130		
Bromodichloromethane	BTI1169-BS1	LCS	0.13725	0.12500	mg/kg	110		70 - 130		
Chlorobenzene	BTI1169-BS1	LCS	0.14710	0.12500	mg/kg	118		70 - 130		
Chloroethane	BTI1169-BS1	LCS	0.13854	0.12500	mg/kg	111		70 - 130		
1,4-Dichlorobenzene	BTI1169-BS1	LCS	0.15338	0.12500	mg/kg	123		70 - 130		
1,1-Dichloroethane	BTI1169-BS1	LCS	0.13780	0.12500	mg/kg	110		70 - 130		
1,1-Dichloroethene	BTI1169-BS1	LCS	0.13756	0.12500	mg/kg	110		70 - 130		
Toluene	BTI1169-BS1	LCS	0.14072	0.12500	mg/kg	113		70 - 130		
Trichloroethene	BTI1169-BS1	LCS	0.14587	0.12500	mg/kg	117		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BS1	LCS	0.048797	0.050000	mg/kg	97.6		70 - 121		
Toluene-d8 (Surrogate)	BTI1169-BS1	LCS	0.049922	0.050000	mg/kg	99.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1169-BS1	LCS	0.050451	0.050000	mg/kg	101		74 - 121		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1169	Used client sample: N										
Benzene	MS	1011454-82	ND	0.14460	0.12500	mg/kg		116		70 - 130	
	MSD	1011454-82	ND	0.13682	0.12500	mg/kg	5.5	109	20	70 - 130	
Bromodichloromethane	MS	1011454-82	ND	0.13951	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13585	0.12500	mg/kg	2.7	109	20	70 - 130	
Chlorobenzene	MS	1011454-82	ND	0.14044	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.14015	0.12500	mg/kg	0.2	112	20	70 - 130	
Chloroethane	MS	1011454-82	ND	0.14011	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13496	0.12500	mg/kg	3.7	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-82	ND	0.14943	0.12500	mg/kg		120		70 - 130	
	MSD	1011454-82	ND	0.14604	0.12500	mg/kg	2.3	117	20	70 - 130	
1,1-Dichloroethane	MS	1011454-82	ND	0.14196	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13656	0.12500	mg/kg	3.9	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-82	ND	0.14217	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13518	0.12500	mg/kg	5.0	108	20	70 - 130	
Toluene	MS	1011454-82	ND	0.14173	0.12500	mg/kg		113		70 - 130	
	MSD	1011454-82	ND	0.14008	0.12500	mg/kg	1.2	112	20	70 - 130	
Trichloroethene	MS	1011454-82	ND	0.14875	0.12500	mg/kg		119		70 - 130	
	MSD	1011454-82	ND	0.14228	0.12500	mg/kg	4.4	114	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-82	ND	0.051334	0.050000	mg/kg		103		70 - 121	
	MSD	1011454-82	ND	0.050523	0.050000	mg/kg		101		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-82	ND	0.050309	0.050000	mg/kg		101		81 - 117	
	MSD	1011454-82	ND	0.049980	0.050000	mg/kg		100		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-82	ND	0.051623	0.050000	mg/kg		103		74 - 121	
	MSD	1011454-82	ND	0.049722	0.050000	mg/kg		99.4		74 - 121	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1417						
TPH - Light Naptha	BTI1417-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1417-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1417-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1417-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1417-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1417-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1417-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1417-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1417-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1417-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1417-BLK1	72.8	%	20 - 145 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1417										
TPH - Diesel (FFP)	BTI1417-BS1	LCS	78.660	82.508	mg/kg	95.3		64 - 124		
Tetracosane (Surrogate)	BTI1417-BS1	LCS	2.6483	3.3003	mg/kg	80.2		20 - 145		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1417	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
TPH - Diesel (FFP)	MS	1013212-03	ND	74.681	82.237	mg/kg		90.8		52 - 131	
	MSD	1013212-03	ND	73.166	82.237	mg/kg	2.0	89.0	30	52 - 131	
Tetracosane (Surrogate)	MS	1013212-03	ND	2.5079	3.2895	mg/kg		76.2		20 - 145	
	MSD	1013212-03	ND	2.3423	3.2895	mg/kg		71.2		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1379						
Mercury	BTI1379-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1412						
Antimony	BTI1412-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1412-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1412-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1412-BLK1	0.079046	mg/kg	0.50	0.050	J
Chromium	BTI1412-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1412-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1412-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1412-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1412-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1412-BLK1	0.95934	mg/kg	2.5	0.25	J

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1379										
Mercury	BTI1379-BS1	LCS	1.3420	1.5000	mg/kg	89.5		75 - 125		
QC Batch ID: BTI1412										
Antimony	BTI1412-BS1	LCS	94.237	100.00	mg/kg	94.2		75 - 125		
Arsenic	BTI1412-BS1	LCS	9.5229	10.000	mg/kg	95.2		75 - 125		
Barium	BTI1412-BS1	LCS	98.941	100.00	mg/kg	98.9		75 - 125		
Beryllium	BTI1412-BS1	LCS	10.378	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1412-BS1	LCS	9.7953	10.000	mg/kg	98.0		75 - 125		
Chromium	BTI1412-BS1	LCS	99.075	100.00	mg/kg	99.1		75 - 125		
Cobalt	BTI1412-BS1	LCS	99.548	100.00	mg/kg	99.5		75 - 125		
Copper	BTI1412-BS1	LCS	101.34	100.00	mg/kg	101		75 - 125		
Lead	BTI1412-BS1	LCS	102.21	100.00	mg/kg	102		75 - 125		
Molybdenum	BTI1412-BS1	LCS	98.538	100.00	mg/kg	98.5		75 - 125		
Nickel	BTI1412-BS1	LCS	99.866	100.00	mg/kg	99.9		75 - 125		
Selenium	BTI1412-BS1	LCS	9.4134	10.000	mg/kg	94.1		75 - 125		
Silver	BTI1412-BS1	LCS	9.2611	10.000	mg/kg	92.6		75 - 125		
Thallium	BTI1412-BS1	LCS	104.12	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1412-BS1	LCS	105.07	100.00	mg/kg	105		75 - 125		
Zinc	BTI1412-BS1	LCS	99.186	100.00	mg/kg	99.2		75 - 125		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1379	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Mercury	DUP	1013212-01	0.031094	0.031250		mg/kg	0.5		20		J
	MS	1013212-01	0.031094	0.72703	0.78125	mg/kg		89.1		85 - 115	
	MSD	1013212-01	0.031094	0.72125	0.78125	mg/kg	0.8	88.3	20	85 - 115	
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Antimony	DUP	1013212-01	0.81676	ND		mg/kg			20		
	MS	1013212-01	0.81676	29.001	100.00	mg/kg		28.2		16 - 119	
	MSD	1013212-01	0.81676	28.957	100.00	mg/kg	0.2	28.1	20	16 - 119	
Arsenic	DUP	1013212-01	11.200	11.134		mg/kg	0.6		20		
	MS	1013212-01	11.200	19.657	10.000	mg/kg		84.6		75 - 125	
	MSD	1013212-01	11.200	20.323	10.000	mg/kg	7.6	91.2	20	75 - 125	
Barium	DUP	1013212-01	146.87	147.61		mg/kg	0.5		20		
	MS	1013212-01	146.87	239.21	100.00	mg/kg		92.3		75 - 125	
	MSD	1013212-01	146.87	244.88	100.00	mg/kg	6.0	98.0	20	75 - 125	
Beryllium	DUP	1013212-01	0.77486	0.79216		mg/kg	2.2		20		
	MS	1013212-01	0.77486	10.078	10.000	mg/kg		93.0		75 - 125	
	MSD	1013212-01	0.77486	10.290	10.000	mg/kg	2.3	95.2	20	75 - 125	
Cadmium	DUP	1013212-01	0.56673	0.54612		mg/kg	3.7		20		
	MS	1013212-01	0.56673	9.4837	10.000	mg/kg		89.2		75 - 125	
	MSD	1013212-01	0.56673	9.6619	10.000	mg/kg	2.0	91.0	20	75 - 125	
Chromium	DUP	1013212-01	17.680	17.233		mg/kg	2.6		20		
	MS	1013212-01	17.680	106.51	100.00	mg/kg		88.8		75 - 125	
	MSD	1013212-01	17.680	109.10	100.00	mg/kg	2.9	91.4	20	75 - 125	
Cobalt	DUP	1013212-01	6.4146	6.3434		mg/kg	1.1		20		
	MS	1013212-01	6.4146	93.334	100.00	mg/kg		86.9		75 - 125	
	MSD	1013212-01	6.4146	95.258	100.00	mg/kg	2.2	88.8	20	75 - 125	
Copper	DUP	1013212-01	20.070	20.145		mg/kg	0.4		20		
	MS	1013212-01	20.070	110.52	100.00	mg/kg		90.5		75 - 125	
	MSD	1013212-01	20.070	113.37	100.00	mg/kg	3.1	93.3	20	75 - 125	
Lead	DUP	1013212-01	7.6494	7.7199		mg/kg	0.9		20		
	MS	1013212-01	7.6494	94.476	100.00	mg/kg		86.8		75 - 125	
	MSD	1013212-01	7.6494	96.831	100.00	mg/kg	2.7	89.2	20	75 - 125	
Molybdenum	DUP	1013212-01	10.637	10.275		mg/kg	3.5		20		
	MS	1013212-01	10.637	89.423	100.00	mg/kg		78.8		75 - 125	
	MSD	1013212-01	10.637	91.182	100.00	mg/kg	2.2	80.5	20	75 - 125	
Nickel	DUP	1013212-01	16.698	16.297		mg/kg	2.4		20		
	MS	1013212-01	16.698	103.79	100.00	mg/kg		87.1		75 - 125	
	MSD	1013212-01	16.698	105.71	100.00	mg/kg	2.2	89.0	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Selenium	DUP	1013212-01	0.79020	0.76520		mg/kg	3.2		20		J
	MS	1013212-01	0.79020	8.7312	10.000	mg/kg		79.4		75 - 125	
	MSD	1013212-01	0.79020	9.8354	10.000	mg/kg	13.0	90.5	20	75 - 125	
Silver	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	8.3152	10.000	mg/kg		83.2		75 - 125	
	MSD	1013212-01	ND	8.5502	10.000	mg/kg	2.8	85.5	20	75 - 125	
Thallium	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	87.016	100.00	mg/kg		87.0		75 - 125	
	MSD	1013212-01	ND	89.474	100.00	mg/kg	2.8	89.5	20	75 - 125	
Vanadium	DUP	1013212-01	49.149	49.770		mg/kg	1.3		20		
	MS	1013212-01	49.149	145.36	100.00	mg/kg		96.2		75 - 125	
	MSD	1013212-01	49.149	148.62	100.00	mg/kg	3.3	99.5	20	75 - 125	
Zinc	DUP	1013212-01	61.480	62.481		mg/kg	1.6		20		
	MS	1013212-01	61.480	149.56	100.00	mg/kg		88.1		75 - 125	
	MSD	1013212-01	61.480	151.92	100.00	mg/kg	2.6	90.4	20	75 - 125	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 09/24/2010 15:45 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A17	Surrogate not reportable due to sample dilution.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Chromatogram not typical of mineral oil.

Date of Report: 11/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013213
Invoice ID: B087410

Enclosed are the results of analyses for samples received by the laboratory on 9/21/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Green

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Client: AECOM **Contact:** Chad Roper **Phone No.** 805 388 3775 xt. 219

FAX No. 805 388 3577 **Email:** chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine *3-5 Day Rush (*48 Hour) *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests (Include Source Number in Notes)
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No

Sampler Information
Name: Tom Shook
Employer: AECOM
Signature: Tom Shook

CHK BY DISTRIBUTION
SUB-OUT ☐

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SC-1-A	9-21-10	12:20	1											1		X	X		X					S	Composite Sample
SC-1-B	9-21-10	12:22	1											1		X	X		X					S	SC-1 A to E
SC-1-C	9-21-10	12:26	1											1		X	X		X					S	prior to analy
SC-1-D	9-21-10	12:28	1											1		X	X		X					S	
SC-1-E	9-21-10	12:30	1											1		X	X		X					S	
SC-5-A	9-21-10	12:58	1											1		X	X		X					S	Composite Sample
SC-5-B	9-21-10	13:00	1											1		X	X		X					S	SC-5 A to E
SC-5-C	9-21-10	13:02	1											1		X	X		X					S	prior to analy
SC-5-D	9-21-10	13:04	1											1		X	X		X					S	
SC-5-E	9-21-10	13:06	1											1		X	X		X					S	

Matrix: DW = Drinking Water, WW = Wastewater, GW = Groundwater, S = Soil, SG = Sludge, L = Liquid, M = Miscellaneous

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Tom Shook	Tom Shook / AECOM	9-21-10 17:15	Dia Green	BC Labs 9-21-10 1715

(For Lab Use Only) Sample Integrity Upon Receipt				Lab Notes
Sample(s) Submitted on Ice?	Yes	No	Temperature °C	
Custody Seal(s) Intact?	Yes	No	N/A	
Sample(s) Intact?	Yes	No	☐ Cooler Blank	

Lab No. 10-13213

Page 1 of 3

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Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour Rush | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests: Include QC Data Package: Yes No; FAX Results: Yes No; Email Results: Yes No; State EDT: Yes No (Include Source Number in Notes)

Sampler Information
Name: Tom Shook
Employer: AECOM
Signature: Tom Shook

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SC-2-A -3	9-21-10	14:36	1											1		X	X		X					S	Composite Sample
SC-2-B	9-21-10	14:38	1											1		X	X		X					S	SC-2 A to E
SC-2-C	9-21-10	14:40	1											1		X	X		X					S	prior to analy.
SC-2-D -4	9-21-10	14:42	1											1		X	X		X					S	
SC-2-E	9-21-10	14:44	1											1		X	X		X					S	
DUPE-6-A	9-21-10		1											1		X	X		X					S	
Dupe-6-B	9-21-10		1											1		X	X		X					S	
Dupe-6-C -5	9-21-10		1											1		X	X		X					S	
Dupe-6-D	9-21-10		1											1		X	X		X					S	
Dupe-6-E	9-21-10		1											1		X	X		X					S	

SC-2-A - do not composite analyze for Arsenic only

composite SC-2-B through 2E

See Tina for Questions

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	
Tom Shook	Tom Shook/AECOM	9-21-10 / 17:15	Dina Dacca	BC Lab

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No
Custody Seal(s) Intact? Yes No N/A
Sample(s) Intact? Yes No

Temperature °C
☐ Cooler Blank

Lab Notes

Lab No. 10-13213

Page 2 of 3

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Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM
Contact: Chad Roper
Phone No. 805 388 3775 xt. 219
FAX No. 805 388 3577
Email: chad.roper@aecom.com
Project Name: Hydrogen Energy California
Project Location: 189 E. Front Street, Buttonwillow
Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush
*Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Tom Shook
Employer: AECOM
Signature: Tom Shook

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SC-3-A	9-21-10	15:00	1											1		X	X		X					S	SC-3 Composite
SC-3-B	9-21-10	15:02	1											1		X	X		X					S	Sample A to E
SC-3-C	9-21-10	15:04	1											1		X	X		X					S	prior to analy-
SC-3-D	9-21-10	15:06	1											1		X	X		X					S	Composite Sample
SC-3-E	9-21-10	15:08	1											1		X	X		X					S	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Tom Shook	Tom Shook / AECOM	9-21-10 17:15	Dina Dyer	BC Labs 9-21-10 1715

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature °C
Custody Seal(s) Intact?	Yes	No	N/A	
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 10-13213

Page 3 of 3

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Chain of Custody and Cooler Receipt Form for 1013213 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 1

Submission #: 10-13213

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____
JLW 9-21-10

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Styrofoam Thermometer ID: 1183
Temperature: A 25.3 °C / C 25.3 °C

Date/Time 9-21-10 1726
Analyst Init JLW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT [illegible]ICAL OXYGEN DEMAND										
[illegible] PHENOLICS										
[illegible] ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR			A	ABCD	ABCDE	ABCDE				
~~32 OZ.~~ JAR 402	ABCDE	ABCDE								
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JLW Date/Time: 9-21-10 1802
A = Actual / C = Corrected

[H:\DOCS\WP60\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013213-01	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:30
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-1-A ,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-02	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-5-A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-03	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:36
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-2-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-04	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:44
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-2-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-05	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of DupE-6 A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-06	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:08
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-3-A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-01 | **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0039**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0026**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.039**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.011**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	3
Dieldrin	**0.0033**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	32.8	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	23.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	62.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	39.0	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	41.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 19:32	VH1	GC-1	0.993	BTI1414
2	EPA-8081	09/21/10	09/23/10 20:09	VH1	GC-1	49.669	BTI1414
3	EPA-8081	09/21/10	09/23/10 19:51	VH1	GC-1	4.967	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-01 | **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	74.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 01:26	cc1	GC-7	0.993	BTI1410

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-01 **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.94**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.13**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.74**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**85**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:49	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:47	MEV	CETAC1	0.977	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0040**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0017**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.024**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0078**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A01**	2
Dieldrin	**0.0027**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0014**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	33.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	37.5	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	94.9	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	64.2	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 20:27	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 20:45	VH1	GC-1	19.934	BTI1414

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 01:48	cc1	GC-7	0.997	BTI1410

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**180**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.99**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.36**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.041**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.81**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**59**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**86**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 17:03	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:49	MEV	CETAC1	1.008	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-03 | **Client Sample Name:** HECA, SC-2-A, 9/21/2010 2:36:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:52	JRG	PE-OP2	1	BTI1412

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0054**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.00083**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.022**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0046**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00051**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	45.6	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	66.8	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	51.5	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 21:03	VH1	GC-1	0.993	BTI1414
2	EPA-8081	09/21/10	09/23/10 21:21	VH1	GC-1	9.934	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**37**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**160**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 16:33	LD1	IC2	1	BTK0311

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**200**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**120**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:19	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0447

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**5.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:46	JRG	PE-OP2	1	BTI1468

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0056**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0015**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.028**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0061**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A01**	2
Dieldrin	**0.00065**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0015**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	39.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	49.1	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	88.6	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	60.6	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 21:40	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 21:58	VH1	GC-1	19.934	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	**0.0037**	**mg/kg**	**0.010**	**0.00080**	**EPA-8141**	**ND**	**J**	1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 02:57	cc1	GC-7	0.997	BTI1410

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.84**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.32**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.026**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**53**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**85**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:54	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 12:00	MEV	CETAC1	1.008	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0026**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.0086**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.00098**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	**0.00085**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	19.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	22.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	51.9	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 22:16	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 22:34	VH1	GC-1	4.983	BTI1414

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	64.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 03:19	cc1	GC-7	0.997	BTI1410

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**1.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.036**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**61**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**81**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:55	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 12:02	MEV	CETAC1	1.008	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1414						
Aldrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1414-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1414-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1414-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1414-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1414-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1414-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1414-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1414-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1414-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1414-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1414-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1414-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1414-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1414-BLK1	71.4	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1414-BLK1	99.0	%	26 - 151 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1414										
Aldrin	BTI1414-BS1	LCS	0.0054706	0.0049505	mg/kg	111		60 - 124		
gamma-BHC (Lindane)	BTI1414-BS1	LCS	0.0057323	0.0049505	mg/kg	116		46 - 107		L01
4,4'-DDT	BTI1414-BS1	LCS	0.0033779	0.0049505	mg/kg	68.2		40 - 148		
Dieldrin	BTI1414-BS1	LCS	0.0053673	0.0049505	mg/kg	108		56 - 130		
Endrin	BTI1414-BS1	LCS	0.0057673	0.0049505	mg/kg	116		61 - 131		
Heptachlor	BTI1414-BS1	LCS	0.0051304	0.0049505	mg/kg	104		58 - 130		
TCMX (Surrogate)	BTI1414-BS1	LCS	0.0073234	0.0099010	mg/kg	74.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1414-BS1	LCS	0.025835	0.024752	mg/kg	104		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1414	Used client sample: N										
Aldrin	MS	1011454-51	ND	0.0052155	0.0049342	mg/kg		106		63 - 119	
	MSD	1011454-51	ND	0.0055103	0.0050000	mg/kg	4.2	110	20	63 - 119	
gamma-BHC (Lindane)	MS	1011454-51	ND	0.0053914	0.0049342	mg/kg		109		47 - 102	Q03
	MSD	1011454-51	ND	0.0056427	0.0050000	mg/kg	3.2	113	30	47 - 102	Q03
4,4'-DDT	MS	1011454-51	ND	0.0033612	0.0049342	mg/kg		68.1		32 - 158	
	MSD	1011454-51	ND	0.0035337	0.0050000	mg/kg	3.7	70.7	30	32 - 158	
Dieldrin	MS	1011454-51	ND	0.0052395	0.0049342	mg/kg		106		57 - 125	
	MSD	1011454-51	ND	0.0055557	0.0050000	mg/kg	4.5	111	20	57 - 125	
Endrin	MS	1011454-51	ND	0.0055990	0.0049342	mg/kg		113		61 - 130	
	MSD	1011454-51	ND	0.0058713	0.0050000	mg/kg	3.4	117	27	61 - 130	
Heptachlor	MS	1011454-51	ND	0.0048786	0.0049342	mg/kg		98.9		52 - 139	
	MSD	1011454-51	ND	0.0051327	0.0050000	mg/kg	3.8	103	30	52 - 139	
TCMX (Surrogate)	MS	1011454-51	ND	0.0067602	0.0098684	mg/kg		68.5		12 - 168	
	MSD	1011454-51	ND	0.0068883	0.010000	mg/kg		68.9		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1011454-51	ND	0.025283	0.024671	mg/kg		102		26 - 151	
	MSD	1011454-51	ND	0.026951	0.025000	mg/kg		108		26 - 151	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1410						
Azinphos methyl	BTI1410-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1410-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1410-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1410-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1410-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1410-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1410-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1410-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1410-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1410-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1410-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1410-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1410-BLK1	97.0	%	9 - 105 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1410										
Bolstar	BTI1410-BS1	LCS	0.021452	0.026403	mg/kg	81.3		9 - 146		
Chlorpyrifos	BTI1410-BS1	LCS	0.023927	0.026403	mg/kg	90.6		68 - 151		
Diazinon	BTI1410-BS1	LCS	0.019307	0.026403	mg/kg	73.1		38 - 105		
Methyl parathion	BTI1410-BS1	LCS	0.023597	0.026403	mg/kg	89.4		70 - 130		
Mevinphos	BTI1410-BS1	LCS	0.016337	0.026403	mg/kg	61.9		48 - 135		
Ronnel (Fenchlorphos)	BTI1410-BS1	LCS	0.022937	0.026403	mg/kg	86.9		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1410-BS1	LCS	0.020957	0.026403	mg/kg	79.4		66 - 164		
Triphenylphosphate (Surrogate)	BTI1410-BS1	LCS	0.082178	0.082508	mg/kg	99.6		9 - 105		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1410	Used client sample: N										
Bolstar	MS	1011454-50	ND	0.019435	0.026578	mg/kg		73.1		1 - 167	
	MSD	1011454-50	ND	0.026230	0.026230	mg/kg	31.0	100	30	1 - 167	Q02
Chlorpyrifos	MS	1011454-50	ND	0.020266	0.026578	mg/kg		76.2		41 - 167	
	MSD	1011454-50	ND	0.026885	0.026230	mg/kg	29.4	102	20	41 - 167	Q02
Diazinon	MS	1011454-50	ND	0.014120	0.026578	mg/kg		53.1		31 - 97	
	MSD	1011454-50	ND	0.022951	0.026230	mg/kg	48.9	87.5	30	31 - 97	Q02
Methyl parathion	MS	1011454-50	ND	0.020930	0.026578	mg/kg		78.7		41 - 159	
	MSD	1011454-50	ND	0.025902	0.026230	mg/kg	22.5	98.8	20	41 - 159	Q02
Mevinphos	MS	1011454-50	ND	0.014452	0.026578	mg/kg		54.4		35 - 136	
	MSD	1011454-50	ND	0.015738	0.026230	mg/kg	9.8	60.0	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1011454-50	ND	0.019767	0.026578	mg/kg		74.4		34 - 143	
	MSD	1011454-50	ND	0.025082	0.026230	mg/kg	25.0	95.6	20	34 - 143	Q02
Stirophos (Tetrachlorvinphos)	MS	1011454-50	ND	0.018106	0.026578	mg/kg		68.1		7 - 209	
	MSD	1011454-50	ND	0.023279	0.026230	mg/kg	26.3	88.8	26	7 - 209	Q02
Triphenylphosphate (Surrogate)	MS	1011454-50	ND	0.071595	0.083056	mg/kg		86.2		9 - 105	
	MSD	1011454-50	ND	0.091803	0.081967	mg/kg		112		9 - 105	Q03

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Reported: 11/08/2010 12:23
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Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0311						
Chloride	BTK0311-BLK1	ND	mg/kg	5.0	0.59	
Sulfate	BTK0311-BLK1	ND	mg/kg	10	2.1	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0311										
Chloride	BTK0311-BS1	LCS	103.80	100.00	mg/kg	104		90 - 110		
Sulfate	BTK0311-BS1	LCS	99.097	100.00	mg/kg	99.1		90 - 110		

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Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0311	Used client sample: Y - Description: Composite of SC-8-B,C,D,E, 09/22/2010 10:16										
Chloride	DUP	1013288-08	22.370	22.860		mg/kg	2.2		20		
	MS	1013288-08	22.370	1083.1	1010.1	mg/kg		105		80 - 120	
	MSD	1013288-08	22.370	1080.2	1010.1	mg/kg	0.3	105	20	80 - 120	
Sulfate	DUP	1013288-08	92.940	92.130		mg/kg	0.9		20		
	MS	1013288-08	92.940	1121.4	1010.1	mg/kg		102		80 - 120	
	MSD	1013288-08	92.940	1117.5	1010.1	mg/kg	0.4	101	20	80 - 120	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 11/08/2010 12:23 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0447						
EC as NaCl (Salinity)	BTK0447-BLK1	ND	mg/L	1.0	1.0	

AECOM
1220 Avenida Acaso
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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0111										
Electrical Conductivity @ 25 C	BTK0111-BS1	LCS	307.40	303.00	umhos/cm	101		90 - 110		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0111	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Electrical Conductivity @ 25 C	DUP	1013213-04	198.00	202.80		umhos/cm	2.4		20		

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1379						
Mercury	BTI1379-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1412						
Antimony	BTI1412-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1412-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1412-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1412-BLK1	0.079046	mg/kg	0.50	0.050	J
Chromium	BTI1412-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1412-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1412-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1412-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1412-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1412-BLK1	0.95934	mg/kg	2.5	0.25	J
QC Batch ID: BTI1468						
Arsenic	BTI1468-BLK1	ND	mg/kg	1.0	0.38	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1379										
Mercury	BTI1379-BS1	LCS	1.3420	1.5000	mg/kg	89.5		75 - 125		
QC Batch ID: BTI1412										
Antimony	BTI1412-BS1	LCS	94.237	100.00	mg/kg	94.2		75 - 125		
Arsenic	BTI1412-BS1	LCS	9.5229	10.000	mg/kg	95.2		75 - 125		
Barium	BTI1412-BS1	LCS	98.941	100.00	mg/kg	98.9		75 - 125		
Beryllium	BTI1412-BS1	LCS	10.378	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1412-BS1	LCS	9.7953	10.000	mg/kg	98.0		75 - 125		
Chromium	BTI1412-BS1	LCS	99.075	100.00	mg/kg	99.1		75 - 125		
Cobalt	BTI1412-BS1	LCS	99.548	100.00	mg/kg	99.5		75 - 125		
Copper	BTI1412-BS1	LCS	101.34	100.00	mg/kg	101		75 - 125		
Lead	BTI1412-BS1	LCS	102.21	100.00	mg/kg	102		75 - 125		
Molybdenum	BTI1412-BS1	LCS	98.538	100.00	mg/kg	98.5		75 - 125		
Nickel	BTI1412-BS1	LCS	99.866	100.00	mg/kg	99.9		75 - 125		
Selenium	BTI1412-BS1	LCS	9.4134	10.000	mg/kg	94.1		75 - 125		
Silver	BTI1412-BS1	LCS	9.2611	10.000	mg/kg	92.6		75 - 125		
Thallium	BTI1412-BS1	LCS	104.12	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1412-BS1	LCS	105.07	100.00	mg/kg	105		75 - 125		
Zinc	BTI1412-BS1	LCS	99.186	100.00	mg/kg	99.2		75 - 125		
QC Batch ID: BTI1468										
Arsenic	BTI1468-BS1	LCS	10.415	10.000	mg/kg	104		75 - 125		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1379	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Mercury	DUP	1013212-01	0.031094	0.031250		mg/kg	0.5		20		J
	MS	1013212-01	0.031094	0.72703	0.78125	mg/kg		89.1		85 - 115	
	MSD	1013212-01	0.031094	0.72125	0.78125	mg/kg	0.8	88.3	20	85 - 115	
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Antimony	DUP	1013212-01	0.81676	ND		mg/kg			20		
	MS	1013212-01	0.81676	29.001	100.00	mg/kg		28.2		16 - 119	
	MSD	1013212-01	0.81676	28.957	100.00	mg/kg	0.2	28.1	20	16 - 119	
Arsenic	DUP	1013212-01	11.200	11.134		mg/kg	0.6		20		
	MS	1013212-01	11.200	19.657	10.000	mg/kg		84.6		75 - 125	
	MSD	1013212-01	11.200	20.323	10.000	mg/kg	7.6	91.2	20	75 - 125	
Barium	DUP	1013212-01	146.87	147.61		mg/kg	0.5		20		
	MS	1013212-01	146.87	239.21	100.00	mg/kg		92.3		75 - 125	
	MSD	1013212-01	146.87	244.88	100.00	mg/kg	6.0	98.0	20	75 - 125	
Beryllium	DUP	1013212-01	0.77486	0.79216		mg/kg	2.2		20		
	MS	1013212-01	0.77486	10.078	10.000	mg/kg		93.0		75 - 125	
	MSD	1013212-01	0.77486	10.290	10.000	mg/kg	2.3	95.2	20	75 - 125	
Cadmium	DUP	1013212-01	0.56673	0.54612		mg/kg	3.7		20		
	MS	1013212-01	0.56673	9.4837	10.000	mg/kg		89.2		75 - 125	
	MSD	1013212-01	0.56673	9.6619	10.000	mg/kg	2.0	91.0	20	75 - 125	
Chromium	DUP	1013212-01	17.680	17.233		mg/kg	2.6		20		
	MS	1013212-01	17.680	106.51	100.00	mg/kg		88.8		75 - 125	
	MSD	1013212-01	17.680	109.10	100.00	mg/kg	2.9	91.4	20	75 - 125	
Cobalt	DUP	1013212-01	6.4146	6.3434		mg/kg	1.1		20		
	MS	1013212-01	6.4146	93.334	100.00	mg/kg		86.9		75 - 125	
	MSD	1013212-01	6.4146	95.258	100.00	mg/kg	2.2	88.8	20	75 - 125	
Copper	DUP	1013212-01	20.070	20.145		mg/kg	0.4		20		
	MS	1013212-01	20.070	110.52	100.00	mg/kg		90.5		75 - 125	
	MSD	1013212-01	20.070	113.37	100.00	mg/kg	3.1	93.3	20	75 - 125	
Lead	DUP	1013212-01	7.6494	7.7199		mg/kg	0.9		20		
	MS	1013212-01	7.6494	94.476	100.00	mg/kg		86.8		75 - 125	
	MSD	1013212-01	7.6494	96.831	100.00	mg/kg	2.7	89.2	20	75 - 125	
Molybdenum	DUP	1013212-01	10.637	10.275		mg/kg	3.5		20		
	MS	1013212-01	10.637	89.423	100.00	mg/kg		78.8		75 - 125	
	MSD	1013212-01	10.637	91.182	100.00	mg/kg	2.2	80.5	20	75 - 125	
Nickel	DUP	1013212-01	16.698	16.297		mg/kg	2.4		20		
	MS	1013212-01	16.698	103.79	100.00	mg/kg		87.1		75 - 125	
	MSD	1013212-01	16.698	105.71	100.00	mg/kg	2.2	89.0	20	75 - 125	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Selenium	DUP	1013212-01	0.79020	0.76520		mg/kg	3.2		20		J
	MS	1013212-01	0.79020	8.7312	10.000	mg/kg		79.4		75 - 125	
	MSD	1013212-01	0.79020	9.8354	10.000	mg/kg	13.0	90.5	20	75 - 125	
Silver	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	8.3152	10.000	mg/kg		83.2		75 - 125	
	MSD	1013212-01	ND	8.5502	10.000	mg/kg	2.8	85.5	20	75 - 125	
Thallium	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	87.016	100.00	mg/kg		87.0		75 - 125	
	MSD	1013212-01	ND	89.474	100.00	mg/kg	2.8	89.5	20	75 - 125	
Vanadium	DUP	1013212-01	49.149	49.770		mg/kg	1.3		20		
	MS	1013212-01	49.149	145.36	100.00	mg/kg		96.2		75 - 125	
	MSD	1013212-01	49.149	148.62	100.00	mg/kg	3.3	99.5	20	75 - 125	
Zinc	DUP	1013212-01	61.480	62.481		mg/kg	1.6		20		
	MS	1013212-01	61.480	149.56	100.00	mg/kg		88.1		75 - 125	
	MSD	1013212-01	61.480	151.92	100.00	mg/kg	2.6	90.4	20	75 - 125	
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Arsenic	DUP	1013213-04	5.5520	5.6268		mg/kg	1.3		20		
	MS	1013213-04	5.5520	15.586	10.000	mg/kg		100		75 - 125	
	MSD	1013213-04	5.5520	14.892	10.000	mg/kg	7.2	93.4	20	75 - 125	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 11/08/2010 12:23 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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Date of Report: 10/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013287
Invoice ID: B087506

Enclosed are the results of analyses for samples received by the laboratory on 9/22/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests (Include Source Number in Notes): Include QC Data Package: Yes No; FAX Results: Yes No; Email Results: Yes No; State EDT: Yes No

Sampler Information: Name: ; Employer: AECOM ; Signature:

Samples

Sample ID		Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-7-5	-1	9-22-10	0845	X				X					X	X	5	X	X	X	X	X					S	
GP-7-10	-2		0852	X				X					X	X	5	X	X	X	X	X					S	
GP-7-15	-3		0900	X				X					X	X	5	X	X	X	X	X					S	
DUP-1	-4		—	X				X					X	X	5	X	X	X	X	X					S	
QCTB-1	-5		0730			X									1	X									W	
GP-8-4	-6		0940	X				X					X	X	5	X	X	X	X	X		X	X	X	S	Also analyze for pH
GP-9-4	-7		1017	X				X					X	X	5	X	X	X	X	X		X	X	X	S	Also analyze for pH
GP-10-5	-8		1151	X				X					X	X	5	X	X	X	X	X		X	X	X	S	" " pH
GP-10-10	-9		1204	X				X					X	X	5	X	X	X	X	X		X	X	X	S	" " pH
GP-10-15	-10	↓	1234	X				X					X	X	5	X	X	X	X	X		X	X	X	S	" " pH

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

CHK BY: DISTRIBUTION: SUB-OUT

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Dawn Fiks / AECOM	9-22-10 / 1727	[signature]	BC LABS 9-22-10 1830

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature
Custody Seal(s) Intact?	Yes	No	N/A	2.9 °C
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 1013287

Page 1 of 4

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BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests (Include Source Number in Notes): Include QC Data Package: Yes No; FAX Results: Yes No; Email Results: Yes No; State EDT: Yes No

Sampler Information: Name: Dana Files; Employer: AECOM; Signature: [signature]

Sleeve

Sample ID		Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-17-0.5	-11	9-22-10	1350	X				X					X	X	5	X	X	X	X	X					S	
GP-17-2	-12		1354	X				X					X	X	5	X	X	X	X	X					S	
GP-17-5	-13		1357	X				X					X	X	5										S	HOLD
GP-3-5	-14		1507	X				X					X	X	5	X	X	X	X	X					S	
GP-3-10	-15		1515	X				X					X	X	5	X	X	X	X	X					S	
GP-3-15	-16		1525	X				X					X	X	5	X	X	X	X	X					S	
GP-4-5	-17		1605	X				X					X	X	5	X	X	X	X	X					S	
GP-4-10	-18		1615	X				X					X	X	5	X	X	X	X	X					S	
GP-4-15	-19		1625	X				X					X	X	5	X	X	X	X	X					S	
EQB	-20		1657											X	3	X									DW	

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Dana Files / AECOM	9-22-10 / 1727	Dana Dean	BC Lab 9-22-10 1830

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature
Custody Seal(s) Intact?	Yes	No	N/A	2.9 °C
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 10-13287

Page 2 of 4

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Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ☒ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Dana Files
Employer: AECOM
Signature: [signature]

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-6-5 -21	9-22-10	1711	X				X					X	X	5	X	X	X	X	X					S	
GP-6-10 -22	↓	1715	X				X					X	X	5	X	X	X	X	X					S	
GP-6-15 -23	↓	1725	X				X					X	X	5	X	X	X	X	X					S	

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Dana Files/AECOM	9-22-10/1727	[signature]	BC labs 9-22-10 1830

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature
Custody Seal(s) Intact?	Yes	No	N/A	°C
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 10-13287

Page 3 of 4

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BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Chain of Custody & Sample Information Record

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California

Project Location: 189 E. Front Street, Buttonwillow

Turn Around Time: Routine | *3-5 Day Rush | *48 Hour | *24 Hour Rush

*Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: GALEN COOTER
Employer: AECOM
Signature:

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SS-4 -24	9/22/10	1400	1				2				1		1	5	X	X	X	X	X		X	X	X	SG	
SS-3 -25	9/22/10	1441	1				2				1		1	5	X	X	X	X	X		X	X	X	SG	

Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	GALEN COOTER/AECOM	9/22/10 1445	MG / DMC	BC LABS 9-22-10 1830

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice?	Yes	No		Temperature
Custody Seal(s) Intact?	Yes	No	N/A	°C
Sample(s) Intact?	Yes	No		☐ Cooler Blank

Lab Notes

Lab No. 10-13287

Page 4 of 4

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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Chain of Custody and Cooler Receipt Form for 1013287 Page 5 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 5

Submission #: 1013287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments: JNW 9-22-10

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 1103
Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-22-10 1835
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK					A1					
40ml VOA VIAL	AH	AH	AH	AH		AH	AH	AH	AH	AH
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910
A = Actual / C = Corrected

[N:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013287 Page 6 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 5

Submission #: 10-13287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments: JNW 9/22/10

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: soil sleeve Thermometer ID: 1103
Temperature: A 2.3 °C / C 2.3 °C

Date/Time 9-22-10 1835
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	B	B	B	B		B	B	B	B	B
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013287 Page 7 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 of 5

Submission #: 1013287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments: JNW 9/22/10

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 103 Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-22-10 1835 Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 11	12	13	14	15	16	17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AH	AH	AH	AH	AH				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910
A = Actual / C = Corrected

[H:\DOCS\WP8\LAB_DOCS\FORMS\SAMREC2.WP0]

Chain of Custody and Cooler Receipt Form for 1013287 Page 8 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/09 Page 4 Of 5

Submission #: 10-13287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JNW 9/22/10

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: soil sleeve Thermometer ID: 103
Temperature: A 2.3 °C / C 2.3 °C

Date/Time 9-22-10 1835
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 11	12	13	14	15	16	17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 515										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE R	B	B	B	B	B	B	B	B	B	
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910
A = Actual / C = Corrected

[R:\DOCS\WFDR\LAB_DOCS\FORMS\SAMPREC1.WPD]

Chain of Custody and Cooler Receipt Form for 1013287 Page 9 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 5 of 5

Submission #: 1013287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JNW 9/22/10

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: 103
Temperature: A 5.7 °C / C 5.7 °C
Date/Time: 9-22-10 1835
Analyst Init: JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 21	22	23	24	25		17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
16oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AH	AH	AH	AH		AH	AH	AH	AH
QT EPA 413.1, 413.2, 418.1										*
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER			JNW 9/22/10							
8 OZ. JAR										
32 OZ. JAR			B *	B	B					*
SOIL SLEEVE PC	B	B	B							B
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9/22/10 1110
A = Actual / C = Corrected

[N:\DOCS\WP10\LAB_DOCS\FORMS\SAMPRECT.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-01	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:45
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-02	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:52
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-03	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-04	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-1	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-05	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-1	**Sample Matrix:**	Water
	Sampled By:	---		
1013287-06	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:40
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-8-4	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-07	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:17
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-9-4	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-08	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 11:51
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-09	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 12:04
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-10	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 12:34
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-11	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:50
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-12	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:54
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-13	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:57
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013287-14	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:07
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-15	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-16	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-17	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:05
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-18	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-19	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-20	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	EQB	**Sample Matrix:**	Water
	Sampled By:	---		
1013287-21	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:11
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-22	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-23	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-24	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 14:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-4	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013287-25	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:44
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-3	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10,V11	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	49.6	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	65.3	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:04	VH1	GC-1	1.987	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:05	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0056	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0056	0.00095	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0056	0.00071	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0056	0.00096	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0027	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0056	0.00056	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0056	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0056	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0056	0.00087	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0038	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0056	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 23:25	ADC	MS-V2	1.130	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	83.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 21:20	MWB	GC-2	0.987	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-01 **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**1.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.020**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.10**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**76**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:55	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:23	MEV	CETAC1	0.977	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	32.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	51.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:22	VH1	GC-1	0.990	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	51.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:28	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0040	0.00073	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0040	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0040	0.00050	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0040	0.00078	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0040	0.00079	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0040	0.00067	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0079	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0040	0.00040	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0040	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0040	0.00061	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0079	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 23:51	ADC	MS-V2	0.790	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	73.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 22:50	MWB	GC-2	1	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**13**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.67**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.11**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**0.86**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**59**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:01	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:25	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	81.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:40	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	75.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:50	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00078	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00085	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00072	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0085	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0085	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 00:17	ADC	MS-V2	0.850	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	72.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:13	MWB	GC-2	0.990	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**25**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**230**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**16**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**15**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**9.1**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.55**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**51**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:24	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:27	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	84.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:58	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:13	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00081	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00071	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00071	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0088	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00068	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0088	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 00:43	ADC	MS-V2	0.880	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:36	MWB	GC-2	0.984	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**22**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**100**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.52**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.31**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**10**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**12**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**7.2**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.16**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**49**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:04	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:12	MEV	CETAC1	0.962	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.6	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.1	%	86 - 115 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:44	MGC	MS-V5	1	BTI1372

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0028**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	23.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	34.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 17:16	VH1	GC-1	0.997	BTI1454

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	57.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:36	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	**0.0035**	**mg/kg**	**0.0053**	**0.0016**	**EPA-8260**	**ND**	**J**	1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	**0.010**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	90.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.58**	**mg/kg**	**0.021**	**0.013**	**EPA-8260**			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Butanal	**0.040**	**mg/kg**			**EPA-8260**			1
TIC: Methanethiol	**0.74**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 12:20	ADC	MS-V2	1.060	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**51**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**22**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J,Z1**	1
Tetracosane (Surrogate)	47.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:48	MWB	GC-2	0.993	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**7.87**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.9**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**9100**	**mg/kg**	**50**	**10**	**EPA-300.0**	**ND**	**A01**	2
Nitrate as N	**210**	**mg/kg**	**2.0**	**0.52**	**EPA-300.0**	**ND**	**A01**	3
Total Phosphorus	**7000**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 17:48	LD1	IC5	5	BTI1491
3	EPA-300.0	09/23/10	09/24/10 14:26	LD1	IC5	2	BTI1491
4	EPA-365.4	09/23/10	09/24/10 11:44	CDR	SC-1	20	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**6.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**100**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**2.6**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**24**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**27**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.013**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**250**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**6600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:06	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:34	MEV	CETAC1	1.008	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081	ND	A10,V11	1
4,4'-DDE	**0.037**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081	ND	A10	1
TCMX (Surrogate)	48.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	38.6	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:08	VH1	GC-1	10	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	40.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:59	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0026**	**mg/kg**	**0.0047**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	**0.0025**	**mg/kg**	**0.0047**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	135	%	70 - 121 (LCL - UCL)		EPA-8260		A19,S09	1
Toluene-d8 (Surrogate)	89.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	82.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 11:54	ADC	MS-V2	0.940	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**50**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**68**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	38.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 07:11	MWB	GC-2	0.990	BTI1480

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.33**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**23.3**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**32000**	**mg/kg**	**100**	**21**	**EPA-300.0**	**ND**	**A01**	2
Nitrate as N	**4.0**	**mg/kg**	**10**	**2.6**	**EPA-300.0**	**ND**	**J,A01**	2
Total Phosphorus	**6800**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 14:41	LD1	IC5	10	BTI1491
3	EPA-365.4	09/23/10	09/24/10 11:44	CDR	SC-1	20	BTI1464

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**58**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**3.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**49**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.032**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.58**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	**0.17**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**150**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**6300**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:26	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:36	MEV	CETAC1	0.933	BTI1493

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	14.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	41.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 18:47	VH1	GC-1	1	BTI1454

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 10:21	cc1	GC-7	1	BTI1484

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	89.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 04:36	ADC	MS-V2	0.860	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	66.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:44	MWB	GC-2	1	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**3.85**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**22.0**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**210**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**99**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**		2
Total Phosphorus	**290**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 14:55	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 11:41	CDR	SC-1	5	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**110**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.16**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**11**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**4.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**7.8**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.57**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**44**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**2300**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:09	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:38	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	77.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 19:05	VH1	GC-1	0.987	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	90.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 10:44	cc1	GC-7	0.997	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0058	0.0011	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0058	0.00097	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0058	0.00072	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0058	0.0021	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0058	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0058	0.0020	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0058	0.0012	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0058	0.0021	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0058	0.00093	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0058	0.00098	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0058	0.00093	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0058	0.0020	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.012	0.0028	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0058	0.00058	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0058	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0058	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0058	0.00089	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.012	0.0039	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0058	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:01	ADC	MS-V2	1.150	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	81.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 01:07	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.34**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.5**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**71**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**2.0**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**		2
Total Phosphorus	**200**	**mg/kg**	**10**	**6.2**	**EPA-365.4**	**ND**		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 15:38	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 10:52	CDR	SC-1	1	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**15**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**53**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.092**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**7.1**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**5.5**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	**0.016**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**16**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**4.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**18**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**28**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**1600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:11	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:40	MEV	CETAC1	0.962	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	38.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	71.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 19:24	VH1	GC-1	0.984	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 11:06	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00080	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00073	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00086	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0087	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00067	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0087	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:27	ADC	MS-V2	0.870	BTI1169

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	82.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 01:29	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.83**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.5**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**37**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**0.59**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	2
Total Phosphorus	**150**	**mg/kg**	**10**	**6.2**	**EPA-365.4**	**ND**		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 13:29	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 10:53	CDR	SC-1	1	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**25**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.060**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**2.4**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**0.84**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.1**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**0.75**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**4.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**1.3**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**7.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**9.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**630**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:13	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:42	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.014**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.046**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**		2
4,4'-DDT	**0.038**	**mg/kg**	**0.0050**	**0.00031**	**EPA-8081**	**ND**		2
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	**0.014**	**mg/kg**	**0.0025**	**0.00018**	**EPA-8081**	**ND**	**A10**	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	53.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
TCMX (Surrogate)	0	%	12 - 168 (LCL - UCL)		EPA-8081		A17	2
Dibutyl chlorendate (Surrogate)	64.7	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	51.3	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:26	VH1	GC-1	5	BTI1454
2	EPA-8081	09/22/10	09/27/10 08:43	VH1	GC-1	10	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	33.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 11:30	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0031**	**mg/kg**	**0.0044**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00080	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00073	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00086	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0087	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	**0.0012**	**mg/kg**	**0.0044**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00067	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0087	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:53	ADC	MS-V2	0.870	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	1200	500	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	1200	500	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	500	120	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	500	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	250	35	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	250	30	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	500	70	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	500	160	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**4300**	**mg/kg**	**1200**	**500**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 07:08	MWB	GC-13	25	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**27**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.72**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**27**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.038**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.67**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**160**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:15	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:44	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.0092**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.027**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.035**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	**0.0070**	**mg/kg**	**0.0025**	**0.00018**	**EPA-8081**	**ND**	**A10**	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	39.7	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	46.0	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:44	VH1	GC-1	5	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	**0.054**	**mg/kg**	**0.010**	**0.0010**	**EPA-8141**	**ND**		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	38.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 13:00	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	91.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 06:19	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**320**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	87.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 02:15	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.74**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.29**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**16**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.64**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**51**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:16	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:46	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0023**	**mg/kg**	**0.0040**	**0.0010**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0040	0.00073	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0040	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0040	0.00050	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0040	0.00078	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0040	0.00079	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0040	0.00067	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0079	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0040	0.00040	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0040	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0040	0.00061	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0079	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 06:45	ADC	MS-V2	0.790	BTI1565

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**23**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	96.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	10/08/10 01:00	MWB	GC-2	1.010	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	48.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 20:36	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	80.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 13:45	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 07:10	ADC	MS-V2	0.890	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 03:45	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.56**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.097**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**15**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**10**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.13**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**45**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:05	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:49	MEV	CETAC1	0.919	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	**0.0039**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	36.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	75.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 20:55	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	77.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:09	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0041	0.00075	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0041	0.00069	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0041	0.00052	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0041	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0041	0.00081	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0041	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0041	0.00082	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0041	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0041	0.00066	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0041	0.00070	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0041	0.00066	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0041	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0082	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0041	0.00041	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0041	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0041	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0041	0.00063	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0082	0.0028	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0041	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 07:36	ADC	MS-V2	0.820	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	76.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:08	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**79**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.094**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**12**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**2.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**7.1**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**46**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:07	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:51	MEV	CETAC1	1.008	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	41.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 21:13	VH1	GC-1	0.987	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:31	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0049	0.00090	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0049	0.00082	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0049	0.00062	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0049	0.00097	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0049	0.00098	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0049	0.00083	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0098	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0049	0.00049	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0049	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0049	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0049	0.00075	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0098	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0049	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:02	ADC	MS-V2	0.980	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:31	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**2.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**33**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.3**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.9**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**0.77**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.8**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**23**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:09	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:53	MEV	CETAC1	1.008	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	18.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	29.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 21:31	VH1	GC-1	0.997	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	82.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:54	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:28	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	74.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:54	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**12**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.098**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**35**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**32**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.014**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**5.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.85**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**51**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:11	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:59	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	57.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	99.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 13:44	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	114	%	9 - 105 (LCL - UCL)		EPA-8141		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 15:17	cc1	GC-7	0.997	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0052	0.00096	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0052	0.00087	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0052	0.00066	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0052	0.00088	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0052	0.00052	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0052	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0052	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0052	0.00080	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0035	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0052	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	91.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:54	ADC	MS-V2	1.040	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	40.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 05:17	MWB	GC-2	0.990	BTI1480

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**2.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**48**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**5.4**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**5.3**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**3.0**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**26**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**35**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:12	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:02	MEV	CETAC1	0.919	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	43.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	64.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:02	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	113	%	9 - 105 (LCL - UCL)		EPA-8141		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 15:39	cc1	GC-7	0.990	BTI1484

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0052	0.00096	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0052	0.00087	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0052	0.00066	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0052	0.00088	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0052	0.00052	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0052	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0052	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0052	0.00080	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0035	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0052	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:20	ADC	MS-V2	1.040	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 05:40	MWB	GC-2	1	BTI1480

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**28**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.29**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.8**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.8**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**21**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:14	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:04	MEV	CETAC1	0.962	BTI1493

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	**0.80**	**ug/L**	**0.50**	**0.12**	**EPA-8260**	**ND**		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.4	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:13	MGC	MS-V5	1	BTI1372

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	22.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	38.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:21	VH1	GC-1	0.984	BTI1454

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	76.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 16:02	cc1	GC-7	0.984	BTI1484

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0039	0.00072	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0039	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0039	0.00049	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0039	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0039	0.00077	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0039	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0039	0.00078	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0039	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0039	0.00063	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0039	0.00066	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0039	0.00063	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0039	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0078	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0039	0.00039	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0039	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0039	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0039	0.00060	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0078	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0039	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:46	ADC	MS-V2	0.780	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	80.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:02	MWB	GC-2	1	BTI1480

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**3.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**89**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.74**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.13**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**15**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**3.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:16	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:06	MEV	CETAC1	0.947	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	32.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	47.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:39	VH1	GC-1	0.984	BTI1454

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 16:24	cc1	GC-7	0.987	BTI1484

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:11	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	69.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:25	MWB	GC-2	0.987	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**9.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**270**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.050**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**8.3**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**8.7**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**4.7**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.71**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**35**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:18	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:08	MEV	CETAC1	0.977	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	53.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 16:10	VH1	GC-1	0.984	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	90.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:10	cc1	GC-7	1	BTI1482

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0036	0.00066	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0036	0.00060	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0036	0.00045	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0036	0.0013	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0036	0.00071	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0036	0.00072	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0036	0.0013	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0036	0.00058	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0036	0.00061	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0036	0.00058	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0072	0.0017	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0036	0.00036	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0036	0.0015	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0036	0.0014	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0036	0.00055	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0072	0.0024	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0036	0.0016	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:38	ADC	MS-V2	0.720	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	109	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:55	MWB	GC-13	0.984	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**0.85**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**4.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**57**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.051**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**4.8**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**3.4**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**2.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.71**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**24**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:13	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:22	MEV	CETAC1	0.962	BTI1547

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0071**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0077**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.0027**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	**0.00071**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	16.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	31.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 16:28	VH1	GC-1	0.997	BTI1470

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	47.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:33	cc1	GC-7	0.984	BTI1482

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0021**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0048	0.00088	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0048	0.00081	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0048	0.00060	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0048	0.00095	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0048	0.00096	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0048	0.00082	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0096	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0048	0.00048	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Toluene	**0.0027**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0048	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0048	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0048	0.00074	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0096	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0048	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	93.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	78.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 12:46	ADC	MS-V2	0.960	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	75.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:20	MWB	GC-13	0.987	BTI1479

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**200**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.38**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**600**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/23/10	09/24/10 15:53	LD1	IC5	1	BTI1491
2	EPA-365.4	09/23/10	09/24/10 11:08	CDR	SC-1	5	BTI1464

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**87**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**4.5**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**37**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.024**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**8.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**43**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**200**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**2200**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:23	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:33	MEV	CETAC1	0.933	BTI1547

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0019**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0030**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	68.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	82.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 17:41	VH1	GC-1	0.993	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	59.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:55	cc1	GC-7	0.997	BTI1482

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	**0.0020**	**mg/kg**	**0.0053**	**0.0016**	**EPA-8260**	**ND**	**J**	1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	**0.0060**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	**0.0061**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	**0.0014**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**	**J**	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	**0.0014**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**	**J**	1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	89.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	88.6	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.025**	**mg/kg**	**0.021**	**0.013**	**EPA-8260**			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Methanethiol	**0.14**	**mg/kg**			**EPA-8260**			1
TIC: Pentane	**0.021**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 11:29	ADC	MS-V2	1.060	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	84.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:45	MWB	GC-13	0.993	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**390**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.40**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**2200**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/23/10	09/24/10 16:07	LD1	IC5	1	BTI1491
2	EPA-365.4	09/23/10	09/24/10 11:20	CDR	SC-1	20	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.54**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**9.3**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**39**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**76**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.018**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**4.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**310**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**1600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:25	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:35	MEV	CETAC1	0.933	BTI1547

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1454						
Aldrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1454-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1454-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1454-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1454-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1454-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1454-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1454-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1454-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1454-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1454-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1454-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1454-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1454-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1454-BLK1	48.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1454-BLK1	225	%	26 - 151 (LCL - UCL)		S09
QC Batch ID: BTI1470						
Aldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1470-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1470-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1470-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1470-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1470-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1470-BLK1	ND	mg/kg	0.00050	0.000086	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1470						
Endosulfan II	BTI1470-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1470-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1470-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1470-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1470-BLK1	70.9	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1470-BLK1	114	%	26 - 151 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1454										
Aldrin	BTI1454-BS1	LCS	0.0033803	0.0050000	mg/kg	67.6		60 - 124		
gamma-BHC (Lindane)	BTI1454-BS1	LCS	0.0032603	0.0050000	mg/kg	65.2		46 - 107		
4,4'-DDT	BTI1454-BS1	LCS	0.0033763	0.0050000	mg/kg	67.5		40 - 148		
Dieldrin	BTI1454-BS1	LCS	0.0034147	0.0050000	mg/kg	68.3		56 - 130		
Endrin	BTI1454-BS1	LCS	0.0038617	0.0050000	mg/kg	77.2		61 - 131		
Heptachlor	BTI1454-BS1	LCS	0.0032133	0.0050000	mg/kg	64.3		58 - 130		
TCMX (Surrogate)	BTI1454-BS1	LCS	0.0041493	0.010000	mg/kg	41.5		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1454-BS1	LCS	0.016850	0.025000	mg/kg	67.4		26 - 151		
QC Batch ID: BTI1470										
Aldrin	BTI1470-BS1	LCS	0.0036086	0.0049834	mg/kg	72.4		60 - 124		
gamma-BHC (Lindane)	BTI1470-BS1	LCS	0.0036864	0.0049834	mg/kg	74.0		46 - 107		
4,4'-DDT	BTI1470-BS1	LCS	0.0041555	0.0049834	mg/kg	83.4		40 - 148		
Dieldrin	BTI1470-BS1	LCS	0.0036841	0.0049834	mg/kg	73.9		56 - 130		
Endrin	BTI1470-BS1	LCS	0.0040801	0.0049834	mg/kg	81.9		61 - 131		
Heptachlor	BTI1470-BS1	LCS	0.0036817	0.0049834	mg/kg	73.9		58 - 130		
TCMX (Surrogate)	BTI1470-BS1	LCS	0.0055917	0.0099668	mg/kg	56.1		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1470-BS1	LCS	0.019115	0.024917	mg/kg	76.7		26 - 151		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1454	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
Aldrin	MS	1013287-02	ND	0.0021553	0.0049342	mg/kg		43.7		63 - 119	Q03
	MSD	1013287-02	ND	0.0032135	0.0049342	mg/kg	39.4	65.1	20	63 - 119	Q02
gamma-BHC (Lindane)	MS	1013287-02	ND	0.0024069	0.0049342	mg/kg		48.8		47 - 102	
	MSD	1013287-02	ND	0.0034543	0.0049342	mg/kg	35.7	70.0	30	47 - 102	Q02
4,4'-DDT	MS	1013287-02	ND	0.0020618	0.0049342	mg/kg		41.8		32 - 158	
	MSD	1013287-02	ND	0.0032589	0.0049342	mg/kg	45.0	66.0	30	32 - 158	Q02
Dieldrin	MS	1013287-02	ND	0.0022671	0.0049342	mg/kg		45.9		57 - 125	Q03
	MSD	1013287-02	ND	0.0034704	0.0049342	mg/kg	41.9	70.3	20	57 - 125	Q02
Endrin	MS	1013287-02	ND	0.0025763	0.0049342	mg/kg		52.2		61 - 130	Q03
	MSD	1013287-02	ND	0.0039342	0.0049342	mg/kg	41.7	79.7	27	61 - 130	Q02
Heptachlor	MS	1013287-02	ND	0.0021385	0.0049342	mg/kg		43.3		52 - 139	Q03
	MSD	1013287-02	ND	0.0031023	0.0049342	mg/kg	36.8	62.9	30	52 - 139	Q02
TCMX (Surrogate)	MS	1013287-02	ND	0.0033385	0.0098684	mg/kg		33.8		12 - 168	
	MSD	1013287-02	ND	0.0043072	0.0098684	mg/kg		43.6		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-02	ND	0.011318	0.024671	mg/kg		45.9		26 - 151	
	MSD	1013287-02	ND	0.018050	0.024671	mg/kg		73.2		26 - 151	
QC Batch ID: BTI1470	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Aldrin	MS	1013287-23	ND	0.0047930	0.0049834	mg/kg		96.2		63 - 119	
	MSD	1013287-23	ND	0.0045907	0.0049669	mg/kg	4.0	92.4	20	63 - 119	
gamma-BHC (Lindane)	MS	1013287-23	ND	0.0047880	0.0049834	mg/kg		96.1		47 - 102	
	MSD	1013287-23	ND	0.0046844	0.0049669	mg/kg	1.9	94.3	30	47 - 102	
4,4'-DDT	MS	1013287-23	ND	0.0054259	0.0049834	mg/kg		109		32 - 158	
	MSD	1013287-23	ND	0.0050033	0.0049669	mg/kg	7.8	101	30	32 - 158	
Dieldrin	MS	1013287-23	ND	0.0049920	0.0049834	mg/kg		100		57 - 125	
	MSD	1013287-23	ND	0.0047103	0.0049669	mg/kg	5.5	94.8	20	57 - 125	
Endrin	MS	1013287-23	ND	0.0055645	0.0049834	mg/kg		112		61 - 130	
	MSD	1013287-23	ND	0.0052825	0.0049669	mg/kg	4.9	106	27	61 - 130	
Heptachlor	MS	1013287-23	ND	0.0048987	0.0049834	mg/kg		98.3		52 - 139	
	MSD	1013287-23	ND	0.0046745	0.0049669	mg/kg	4.4	94.1	30	52 - 139	
TCMX (Surrogate)	MS	1013287-23	ND	0.0072960	0.0099668	mg/kg		73.2		12 - 168	
	MSD	1013287-23	ND	0.0073911	0.0099338	mg/kg		74.4		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-23	ND	0.025976	0.024917	mg/kg		104		26 - 151	
	MSD	1013287-23	ND	0.026903	0.024834	mg/kg		108		26 - 151	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1482						
Azinphos methyl	BTI1482-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1482-BLK1	ND	mg/kg	0.010	0.0014	V11
Chlorpyrifos	BTI1482-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0022	V11
Demeton O/S	BTI1482-BLK1	ND	mg/kg	0.010	0.0015	V11
Diazinon	BTI1482-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1482-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	V11
Ethoprop	BTI1482-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1482-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1482-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1482-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1482-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1482-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1482-BLK1	112	%	9 - 105 (LCL - UCL)		S09
QC Batch ID: BTI1484						
Azinphos methyl	BTI1484-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1484-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1484-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1484-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1484-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1484-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1484-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1484-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1484-BLK1	ND	mg/kg	0.010	0.0010	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1484						
Merphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1484-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1484-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1484-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1484-BLK1	123	%	9 - 105 (LCL - UCL)		S09

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1482										
Bolstar	BTI1482-BS1	LCS	0.027409	0.026578	mg/kg	103		9 - 146		
Chlorpyrifos	BTI1482-BS1	LCS	0.023256	0.026578	mg/kg	87.5		68 - 151		
Diazinon	BTI1482-BS1	LCS	0.014452	0.026578	mg/kg	54.4		38 - 105		
Methyl parathion	BTI1482-BS1	LCS	0.022757	0.026578	mg/kg	85.6		70 - 130		
Mevinphos	BTI1482-BS1	LCS	0.016445	0.026578	mg/kg	61.9		48 - 135		
Ronnel (Fenchlorphos)	BTI1482-BS1	LCS	0.022093	0.026578	mg/kg	83.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1482-BS1	LCS	0.021595	0.026578	mg/kg	81.3		66 - 164		
Triphenylphosphate (Surrogate)	BTI1482-BS1	LCS	0.088040	0.083056	mg/kg	106		9 - 105		S09
QC Batch ID: BTI1484										
Bolstar	BTI1484-BS1	LCS	0.031023	0.026403	mg/kg	118		9 - 146		
Chlorpyrifos	BTI1484-BS1	LCS	0.024587	0.026403	mg/kg	93.1		68 - 151		
Diazinon	BTI1484-BS1	LCS	0.015842	0.026403	mg/kg	60.0		38 - 105		
Methyl parathion	BTI1484-BS1	LCS	0.024092	0.026403	mg/kg	91.2		70 - 130		
Mevinphos	BTI1484-BS1	LCS	0.016172	0.026403	mg/kg	61.3		48 - 135		
Ronnel (Fenchlorphos)	BTI1484-BS1	LCS	0.023597	0.026403	mg/kg	89.4		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1484-BS1	LCS	0.022937	0.026403	mg/kg	86.9		66 - 164		
Triphenylphosphate (Surrogate)	BTI1484-BS1	LCS	0.090429	0.082508	mg/kg	110		9 - 105		S09

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1482	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Bolstar	MS	1013287-23	ND	0.024754	0.026230	mg/kg		94.4		1 - 167	
	MSD	1013287-23	ND	0.024507	0.026316	mg/kg	1.3	93.1	30	1 - 167	
Chlorpyrifos	MS	1013287-23	ND	0.018033	0.026230	mg/kg		68.8		41 - 167	
	MSD	1013287-23	ND	0.017599	0.026316	mg/kg	2.8	66.9	20	41 - 167	
Diazinon	MS	1013287-23	ND	0.019180	0.026230	mg/kg		73.1		31 - 97	
	MSD	1013287-23	ND	0.019408	0.026316	mg/kg	0.9	73.8	30	31 - 97	
Methyl parathion	MS	1013287-23	ND	0.018525	0.026230	mg/kg		70.6		41 - 159	
	MSD	1013287-23	ND	0.019408	0.026316	mg/kg	4.3	73.8	20	41 - 159	
Mevinphos	MS	1013287-23	ND	0.015246	0.026230	mg/kg		58.1		35 - 136	
	MSD	1013287-23	ND	0.017270	0.026316	mg/kg	12.1	65.6	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013287-23	ND	0.017869	0.026230	mg/kg		68.1		34 - 143	
	MSD	1013287-23	ND	0.017434	0.026316	mg/kg	2.8	66.3	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013287-23	ND	0.018197	0.026230	mg/kg		69.4		7 - 209	
	MSD	1013287-23	ND	0.018586	0.026316	mg/kg	1.8	70.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013287-23	ND	0.069016	0.081967	mg/kg		84.2		9 - 105	
	MSD	1013287-23	ND	0.072533	0.082237	mg/kg		88.2		9 - 105	
QC Batch ID: BTI1484	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
Bolstar	MS	1013287-02	ND	0.026000	0.026667	mg/kg		97.5		1 - 167	
	MSD	1013287-02	ND	0.025667	0.026667	mg/kg	1.3	96.2	30	1 - 167	
Chlorpyrifos	MS	1013287-02	ND	0.018500	0.026667	mg/kg		69.4		41 - 167	
	MSD	1013287-02	ND	0.017500	0.026667	mg/kg	5.6	65.6	20	41 - 167	
Diazinon	MS	1013287-02	ND	0.020500	0.026667	mg/kg		76.9		31 - 97	
	MSD	1013287-02	ND	0.020333	0.026667	mg/kg	0.8	76.2	30	31 - 97	
Methyl parathion	MS	1013287-02	ND	0.020333	0.026667	mg/kg		76.2		41 - 159	
	MSD	1013287-02	ND	0.020333	0.026667	mg/kg	0	76.2	20	41 - 159	
Mevinphos	MS	1013287-02	ND	0.021500	0.026667	mg/kg		80.6		35 - 136	
	MSD	1013287-02	ND	0.021167	0.026667	mg/kg	1.6	79.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013287-02	ND	0.017833	0.026667	mg/kg		66.9		34 - 143	
	MSD	1013287-02	ND	0.017000	0.026667	mg/kg	4.8	63.7	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013287-02	ND	0.022333	0.026667	mg/kg		83.7		7 - 209	
	MSD	1013287-02	ND	0.020000	0.026667	mg/kg	11.0	75.0	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013287-02	ND	0.063833	0.083333	mg/kg		76.6		9 - 105	
	MSD	1013287-02	ND	0.059667	0.083333	mg/kg		71.6		9 - 105	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1372						
Benzene	BTI1372-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1372-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1372-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1372-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1372-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1372-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1372-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1372-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1372-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.14	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1372						
trans-1,3-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1372-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1372-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1372-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1372-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1372-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1372-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1372-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1372-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1372-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1372-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1372-BLK1	102	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1372-BLK1	98.5	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1372-BLK1	92.5	%	86 - 115 (LCL - UCL)		

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1372										
Benzene	BTI1372-BS1	LCS	24.190	25.000	ug/L	96.8		70 - 130		
Bromodichloromethane	BTI1372-BS1	LCS	26.810	25.000	ug/L	107		70 - 130		
Chlorobenzene	BTI1372-BS1	LCS	25.400	25.000	ug/L	102		70 - 130		
Chloroethane	BTI1372-BS1	LCS	25.110	25.000	ug/L	100		70 - 130		
1,4-Dichlorobenzene	BTI1372-BS1	LCS	26.330	25.000	ug/L	105		70 - 130		
1,1-Dichloroethane	BTI1372-BS1	LCS	24.960	25.000	ug/L	99.8		70 - 130		
1,1-Dichloroethene	BTI1372-BS1	LCS	26.160	25.000	ug/L	105		70 - 130		
Toluene	BTI1372-BS1	LCS	25.510	25.000	ug/L	102		70 - 130		
Trichloroethene	BTI1372-BS1	LCS	30.080	25.000	ug/L	120		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1372-BS1	LCS	10.210	10.000	ug/L	102		76 - 114		
Toluene-d8 (Surrogate)	BTI1372-BS1	LCS	9.9100	10.000	ug/L	99.1		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1372-BS1	LCS	9.8900	10.000	ug/L	98.9		86 - 115		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1372	Used client sample: N										
Benzene	MS	1013172-05	0.23000	24.560	25.000	ug/L		97.3		70 - 130	
	MSD	1013172-05	0.23000	23.950	25.000	ug/L	2.5	94.9	20	70 - 130	
Bromodichloromethane	MS	1013172-05	ND	28.230	25.000	ug/L		113		70 - 130	
	MSD	1013172-05	ND	27.790	25.000	ug/L	1.6	111	20	70 - 130	
Chlorobenzene	MS	1013172-05	ND	25.060	25.000	ug/L		100		70 - 130	
	MSD	1013172-05	ND	25.170	25.000	ug/L	0.4	101	20	70 - 130	
Chloroethane	MS	1013172-05	ND	25.620	25.000	ug/L		102		70 - 130	
	MSD	1013172-05	ND	25.300	25.000	ug/L	1.3	101	20	70 - 130	
1,4-Dichlorobenzene	MS	1013172-05	ND	26.100	25.000	ug/L		104		70 - 130	
	MSD	1013172-05	ND	26.180	25.000	ug/L	0.3	105	20	70 - 130	
1,1-Dichloroethane	MS	1013172-05	0.91000	26.180	25.000	ug/L		101		70 - 130	
	MSD	1013172-05	0.91000	26.070	25.000	ug/L	0.4	101	20	70 - 130	
1,1-Dichloroethene	MS	1013172-05	ND	26.750	25.000	ug/L		107		70 - 130	
	MSD	1013172-05	ND	26.290	25.000	ug/L	1.7	105	20	70 - 130	
Toluene	MS	1013172-05	ND	25.850	25.000	ug/L		103		70 - 130	
	MSD	1013172-05	ND	26.010	25.000	ug/L	0.6	104	20	70 - 130	
Trichloroethene	MS	1013172-05	ND	26.680	25.000	ug/L		107		70 - 130	
	MSD	1013172-05	ND	26.600	25.000	ug/L	0.3	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013172-05	ND	10.450	10.000	ug/L		104		76 - 114	
	MSD	1013172-05	ND	10.140	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	MS	1013172-05	ND	9.6200	10.000	ug/L		96.2		88 - 110	
	MSD	1013172-05	ND	9.8400	10.000	ug/L		98.4		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013172-05	ND	9.5600	10.000	ug/L		95.6		86 - 115	
	MSD	1013172-05	ND	9.7800	10.000	ug/L		97.8		86 - 115	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
Benzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1169-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
trans-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1169-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1169-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1169-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1169-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1169-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1169-BLK1	93.9	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1347						
Benzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Bromobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1347-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Ethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1347-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1347-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1347-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1347-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BLK1	98.1	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1347-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1347-BLK1	98.2	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1565						
Benzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Bromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1565-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Hexachlorobutadiene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1565-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1565-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1565-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1565-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1565-BLK1	98.7	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1565-BLK1	101	%	74 - 121 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1169										
Benzene	BTI1169-BS1	LCS	0.14203	0.12500	mg/kg	114		70 - 130		
Bromodichloromethane	BTI1169-BS1	LCS	0.13725	0.12500	mg/kg	110		70 - 130		
Chlorobenzene	BTI1169-BS1	LCS	0.14710	0.12500	mg/kg	118		70 - 130		
Chloroethane	BTI1169-BS1	LCS	0.13854	0.12500	mg/kg	111		70 - 130		
1,4-Dichlorobenzene	BTI1169-BS1	LCS	0.15338	0.12500	mg/kg	123		70 - 130		
1,1-Dichloroethane	BTI1169-BS1	LCS	0.13780	0.12500	mg/kg	110		70 - 130		
1,1-Dichloroethene	BTI1169-BS1	LCS	0.13756	0.12500	mg/kg	110		70 - 130		
Toluene	BTI1169-BS1	LCS	0.14072	0.12500	mg/kg	113		70 - 130		
Trichloroethene	BTI1169-BS1	LCS	0.14587	0.12500	mg/kg	117		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BS1	LCS	0.048797	0.050000	mg/kg	97.6		70 - 121		
Toluene-d8 (Surrogate)	BTI1169-BS1	LCS	0.049922	0.050000	mg/kg	99.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1169-BS1	LCS	0.050451	0.050000	mg/kg	101		74 - 121		
QC Batch ID: BTI1347										
Benzene	BTI1347-BS1	LCS	0.12403	0.12500	mg/kg	99.2		70 - 130		
Bromodichloromethane	BTI1347-BS1	LCS	0.12230	0.12500	mg/kg	97.8		70 - 130		
Chlorobenzene	BTI1347-BS1	LCS	0.13179	0.12500	mg/kg	105		70 - 130		
Chloroethane	BTI1347-BS1	LCS	0.12402	0.12500	mg/kg	99.2		70 - 130		
1,4-Dichlorobenzene	BTI1347-BS1	LCS	0.12969	0.12500	mg/kg	104		70 - 130		
1,1-Dichloroethane	BTI1347-BS1	LCS	0.12574	0.12500	mg/kg	101		70 - 130		
1,1-Dichloroethene	BTI1347-BS1	LCS	0.12240	0.12500	mg/kg	97.9		70 - 130		
Toluene	BTI1347-BS1	LCS	0.12592	0.12500	mg/kg	101		70 - 130		
Trichloroethene	BTI1347-BS1	LCS	0.12949	0.12500	mg/kg	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BS1	LCS	0.048673	0.050000	mg/kg	97.3		70 - 121		
Toluene-d8 (Surrogate)	BTI1347-BS1	LCS	0.049782	0.050000	mg/kg	99.6		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1347-BS1	LCS	0.050312	0.050000	mg/kg	101		74 - 121		
QC Batch ID: BTI1565										
Benzene	BTI1565-BS1	LCS	0.14513	0.12500	mg/kg	116		70 - 130		
Bromodichloromethane	BTI1565-BS1	LCS	0.13467	0.12500	mg/kg	108		70 - 130		
Chlorobenzene	BTI1565-BS1	LCS	0.14620	0.12500	mg/kg	117		70 - 130		
Chloroethane	BTI1565-BS1	LCS	0.14475	0.12500	mg/kg	116		70 - 130		
1,4-Dichlorobenzene	BTI1565-BS1	LCS	0.14608	0.12500	mg/kg	117		70 - 130		
1,1-Dichloroethane	BTI1565-BS1	LCS	0.14749	0.12500	mg/kg	118		70 - 130		
1,1-Dichloroethene	BTI1565-BS1	LCS	0.14779	0.12500	mg/kg	118		70 - 130		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1565										
Toluene	BTI1565-BS1	LCS	0.14061	0.12500	mg/kg	112		70 - 130		
Trichloroethene	BTI1565-BS1	LCS	0.14409	0.12500	mg/kg	115		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BS1	LCS	0.050604	0.050000	mg/kg	101		70 - 121		
Toluene-d8 (Surrogate)	BTI1565-BS1	LCS	0.048840	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1565-BS1	LCS	0.050624	0.050000	mg/kg	101		74 - 121		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1169	Used client sample: N										
Benzene	MS	1011454-82	ND	0.14460	0.12500	mg/kg		116		70 - 130	
	MSD	1011454-82	ND	0.13682	0.12500	mg/kg	5.5	109	20	70 - 130	
Bromodichloromethane	MS	1011454-82	ND	0.13951	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13585	0.12500	mg/kg	2.7	109	20	70 - 130	
Chlorobenzene	MS	1011454-82	ND	0.14044	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.14015	0.12500	mg/kg	0.2	112	20	70 - 130	
Chloroethane	MS	1011454-82	ND	0.14011	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13496	0.12500	mg/kg	3.7	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-82	ND	0.14943	0.12500	mg/kg		120		70 - 130	
	MSD	1011454-82	ND	0.14604	0.12500	mg/kg	2.3	117	20	70 - 130	
1,1-Dichloroethane	MS	1011454-82	ND	0.14196	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13656	0.12500	mg/kg	3.9	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-82	ND	0.14217	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13518	0.12500	mg/kg	5.0	108	20	70 - 130	
Toluene	MS	1011454-82	ND	0.14173	0.12500	mg/kg		113		70 - 130	
	MSD	1011454-82	ND	0.14008	0.12500	mg/kg	1.2	112	20	70 - 130	
Trichloroethene	MS	1011454-82	ND	0.14875	0.12500	mg/kg		119		70 - 130	
	MSD	1011454-82	ND	0.14228	0.12500	mg/kg	4.4	114	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-82	ND	0.051334	0.050000	mg/kg		103		70 - 121	
	MSD	1011454-82	ND	0.050523	0.050000	mg/kg		101		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-82	ND	0.050309	0.050000	mg/kg		101		81 - 117	
	MSD	1011454-82	ND	0.049980	0.050000	mg/kg		100		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-82	ND	0.051623	0.050000	mg/kg		103		74 - 121	
	MSD	1011454-82	ND	0.049722	0.050000	mg/kg		99.4		74 - 121	
QC Batch ID: BTI1347	Used client sample: N										
Benzene	MS	1011454-83	ND	0.12337	0.12500	mg/kg		98.7		70 - 130	
	MSD	1011454-83	ND	0.13141	0.12500	mg/kg	6.3	105	20	70 - 130	
Bromodichloromethane	MS	1011454-83	ND	0.12205	0.12500	mg/kg		97.6		70 - 130	
	MSD	1011454-83	ND	0.12854	0.12500	mg/kg	5.2	103	20	70 - 130	
Chlorobenzene	MS	1011454-83	ND	0.12847	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13403	0.12500	mg/kg	4.2	107	20	70 - 130	
Chloroethane	MS	1011454-83	ND	0.12387	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13379	0.12500	mg/kg	7.7	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-83	ND	0.12925	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13518	0.12500	mg/kg	4.5	108	20	70 - 130	
1,1-Dichloroethane	MS	1011454-83	ND	0.12382	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13500	0.12500	mg/kg	8.6	108	20	70 - 130	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1347	Used client sample: N										
1,1-Dichloroethene	MS	1011454-83	ND	0.12077	0.12500	mg/kg		96.6		70 - 130	
	MSD	1011454-83	ND	0.13396	0.12500	mg/kg	10.4	107	20	70 - 130	
Toluene	MS	1011454-83	ND	0.12390	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13119	0.12500	mg/kg	5.7	105	20	70 - 130	
Trichloroethene	MS	1011454-83	ND	0.12869	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13649	0.12500	mg/kg	5.9	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-83	ND	0.049376	0.050000	mg/kg		98.8		70 - 121	
	MSD	1011454-83	ND	0.050907	0.050000	mg/kg		102		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-83	ND	0.049513	0.050000	mg/kg		99.0		81 - 117	
	MSD	1011454-83	ND	0.049643	0.050000	mg/kg		99.3		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-83	ND	0.049088	0.050000	mg/kg		98.2		74 - 121	
	MSD	1011454-83	ND	0.050501	0.050000	mg/kg		101		74 - 121	
QC Batch ID: BTI1565	Used client sample: N										
Benzene	MS	1011454-85	ND	0.13260	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13418	0.12500	mg/kg	1.2	107	20	70 - 130	
Bromodichloromethane	MS	1011454-85	ND	0.12495	0.12500	mg/kg		100		70 - 130	
	MSD	1011454-85	ND	0.12959	0.12500	mg/kg	3.6	104	20	70 - 130	
Chlorobenzene	MS	1011454-85	ND	0.13786	0.12500	mg/kg		110		70 - 130	
	MSD	1011454-85	ND	0.14235	0.12500	mg/kg	3.2	114	20	70 - 130	
Chloroethane	MS	1011454-85	ND	0.13184	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13647	0.12500	mg/kg	3.4	109	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-85	ND	0.14577	0.12500	mg/kg		117		70 - 130	
	MSD	1011454-85	ND	0.14256	0.12500	mg/kg	2.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1011454-85	ND	0.13317	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-85	ND	0.13582	0.12500	mg/kg	2.0	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-85	ND	0.13304	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13641	0.12500	mg/kg	2.5	109	20	70 - 130	
Toluene	MS	1011454-85	ND	0.13065	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13658	0.12500	mg/kg	4.4	109	20	70 - 130	
Trichloroethene	MS	1011454-85	ND	0.13874	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-85	ND	0.13883	0.12500	mg/kg	0.1	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-85	ND	0.049343	0.050000	mg/kg		98.7		70 - 121	
	MSD	1011454-85	ND	0.048122	0.050000	mg/kg		96.2		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-85	ND	0.049731	0.050000	mg/kg		99.5		81 - 117	
	MSD	1011454-85	ND	0.049426	0.050000	mg/kg		98.9		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-85	ND	0.049331	0.050000	mg/kg		98.7		74 - 121	
	MSD	1011454-85	ND	0.049105	0.050000	mg/kg		98.2		74 - 121	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1479						
TPH - Light Naptha	BTI1479-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1479-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1479-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1479-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1479-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1479-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1479-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1479-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1479-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1479-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1479-BLK1	104	%	20 - 145 (LCL - UCL)		
QC Batch ID: BTI1480						
TPH - Light Naptha	BTI1480-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1480-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1480-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1480-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1480-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1480-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1480-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1480-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1480-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1480-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1480-BLK1	86.4	%	20 - 145 (LCL - UCL)		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1479										
TPH - Diesel (FFP)	BTI1479-BS1	LCS	53.559	82.508	mg/kg	64.9		64 - 124		
Tetracosane (Surrogate)	BTI1479-BS1	LCS	2.0673	3.3003	mg/kg	62.6		20 - 145		
QC Batch ID: BTI1480										
TPH - Diesel (FFP)	BTI1480-BS1	LCS	63.694	82.237	mg/kg	77.5		64 - 124		
Tetracosane (Surrogate)	BTI1480-BS1	LCS	1.6322	3.2895	mg/kg	49.6		20 - 145		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1479	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
TPH - Diesel (FFP)	MS	1013287-23	ND	86.870	81.967	mg/kg		106		52 - 131	
	MSD	1013287-23	ND	91.528	82.781	mg/kg	4.2	111	30	52 - 131	
Tetracosane (Surrogate)	MS	1013287-23	ND	3.4157	3.2787	mg/kg		104		20 - 145	
	MSD	1013287-23	ND	3.5339	3.3113	mg/kg		107		20 - 145	
QC Batch ID: BTI1480	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
TPH - Diesel (FFP)	MS	1013287-02	ND	68.055	82.508	mg/kg		82.5		52 - 131	
	MSD	1013287-02	ND	67.969	82.508	mg/kg	0.1	82.4	30	52 - 131	
Tetracosane (Surrogate)	MS	1013287-02	ND	2.6012	3.3003	mg/kg		78.8		20 - 145	
	MSD	1013287-02	ND	2.5988	3.3003	mg/kg		78.7		20 - 145	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1464						
Total Phosphorus	BTI1464-BLK1	ND	mg/kg	10	6.2	
QC Batch ID: BTI1491						
Sulfate	BTI1491-BLK1	ND	mg/kg	10	2.1	
Nitrate as N	BTI1491-BLK1	ND	mg/kg	1.0	0.26	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1464										
Total Phosphorus	BTI1464-BS1	LCS	205.52	200.00	mg/kg	103		85 - 115		
QC Batch ID: BTI1481										
pH	BTI1481-BS1	LCS	6.9690	7.0000	pH Units	99.6		95 - 105		
QC Batch ID: BTI1491										
Sulfate	BTI1491-BS1	LCS	99.769	100.00	mg/kg	99.8		90 - 110		
Nitrate as N	BTI1491-BS1	LCS	5.0780	5.0000	mg/kg	102		90 - 110		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1464	Used client sample: Y - Description: GP-10-5, 09/22/2010 11:51										
Total Phosphorus	DUP	1013287-08	288.10	239.90		mg/kg	18.3		20		
	MS	1013287-08	288.10	451.30	200.00	mg/kg		81.6		80 - 120	
	MSD	1013287-08	288.10	434.20	200.00	mg/kg	11.1	73.0	20	80 - 120	Q03
QC Batch ID: BTI1481	Used client sample: Y - Description: GP-8-4, 09/22/2010 09:40										
pH	DUP	1013287-06	7.8730	7.8790		pH Units	0.1		20		
QC Batch ID: BTI1491	Used client sample: Y - Description: GP-10-15, 09/22/2010 12:34										
Sulfate	DUP	1013287-10	36.860	37.370		mg/kg	1.4		20		
	MS	1013287-10	36.860	1048.2	1010.1	mg/kg		100		80 - 120	
	MSD	1013287-10	36.860	1048.1	1010.1	mg/kg	0.0	100	20	80 - 120	
Nitrate as N	DUP	1013287-10	0.59000	0.63000		mg/kg	6.6		20		J
	MS	1013287-10	0.59000	49.303	50.505	mg/kg		96.5		80 - 120	
	MSD	1013287-10	0.59000	49.384	50.505	mg/kg	0.2	96.6	20	80 - 120	

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1468						
Antimony	BTI1468-BLK1	1.2271	mg/kg	5.0	0.50	J
Arsenic	BTI1468-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1468-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1468-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1468-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1468-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1468-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1468-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1468-BLK1	1.6868	mg/kg	2.5	0.25	J
Potassium	BTI1468-BLK1	ND	mg/kg	50	5.0	
QC Batch ID: BTI1469						
Antimony	BTI1469-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1469-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1469-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1469-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1469-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1469-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1469-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1469-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1469						
Zinc	BTI1469-BLK1	1.7151	mg/kg	2.5	0.25	J
Potassium	BTI1469-BLK1	ND	mg/kg	50	5.0	
QC Batch ID: BTI1493						
Mercury	BTI1493-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1547						
Mercury	BTI1547-BLK1	ND	mg/kg	0.16	0.012	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1468										
Antimony	BTI1468-BS1	LCS	102.65	100.00	mg/kg	103		75 - 125		
Arsenic	BTI1468-BS1	LCS	10.415	10.000	mg/kg	104		75 - 125		
Barium	BTI1468-BS1	LCS	106.85	100.00	mg/kg	107		75 - 125		
Beryllium	BTI1468-BS1	LCS	10.896	10.000	mg/kg	109		75 - 125		
Cadmium	BTI1468-BS1	LCS	10.623	10.000	mg/kg	106		75 - 125		
Chromium	BTI1468-BS1	LCS	107.25	100.00	mg/kg	107		75 - 125		
Cobalt	BTI1468-BS1	LCS	108.11	100.00	mg/kg	108		75 - 125		
Copper	BTI1468-BS1	LCS	103.80	100.00	mg/kg	104		75 - 125		
Lead	BTI1468-BS1	LCS	110.78	100.00	mg/kg	111		75 - 125		
Molybdenum	BTI1468-BS1	LCS	105.59	100.00	mg/kg	106		75 - 125		
Nickel	BTI1468-BS1	LCS	108.55	100.00	mg/kg	109		75 - 125		
Selenium	BTI1468-BS1	LCS	10.345	10.000	mg/kg	103		75 - 125		
Silver	BTI1468-BS1	LCS	9.7404	10.000	mg/kg	97.4		75 - 125		
Thallium	BTI1468-BS1	LCS	108.30	100.00	mg/kg	108		75 - 125		
Vanadium	BTI1468-BS1	LCS	112.42	100.00	mg/kg	112		75 - 125		
Zinc	BTI1468-BS1	LCS	109.77	100.00	mg/kg	110		75 - 125		
Potassium	BTI1468-BS1	LCS	496.95	500.00	mg/kg	99.4		75 - 125		
QC Batch ID: BTI1469										
Antimony	BTI1469-BS1	LCS	91.031	100.00	mg/kg	91.0		75 - 125		
Arsenic	BTI1469-BS1	LCS	9.2873	10.000	mg/kg	92.9		75 - 125		
Barium	BTI1469-BS1	LCS	95.683	100.00	mg/kg	95.7		75 - 125		
Beryllium	BTI1469-BS1	LCS	9.8616	10.000	mg/kg	98.6		75 - 125		
Cadmium	BTI1469-BS1	LCS	9.6401	10.000	mg/kg	96.4		75 - 125		
Chromium	BTI1469-BS1	LCS	96.240	100.00	mg/kg	96.2		75 - 125		
Cobalt	BTI1469-BS1	LCS	98.140	100.00	mg/kg	98.1		75 - 125		
Copper	BTI1469-BS1	LCS	93.861	100.00	mg/kg	93.9		75 - 125		
Lead	BTI1469-BS1	LCS	99.381	100.00	mg/kg	99.4		75 - 125		
Molybdenum	BTI1469-BS1	LCS	95.466	100.00	mg/kg	95.5		75 - 125		
Nickel	BTI1469-BS1	LCS	97.527	100.00	mg/kg	97.5		75 - 125		
Selenium	BTI1469-BS1	LCS	9.1405	10.000	mg/kg	91.4		75 - 125		
Silver	BTI1469-BS1	LCS	8.8356	10.000	mg/kg	88.4		75 - 125		
Thallium	BTI1469-BS1	LCS	99.058	100.00	mg/kg	99.1		75 - 125		
Vanadium	BTI1469-BS1	LCS	102.28	100.00	mg/kg	102		75 - 125		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1469										
Zinc	BTI1469-BS1	LCS	100.07	100.00	mg/kg	100		75 - 125		
Potassium	BTI1469-BS1	LCS	446.21	500.00	mg/kg	89.2		75 - 125		
QC Batch ID: BTI1493										
Mercury	BTI1493-BS1	LCS	1.6287	1.5000	mg/kg	109		75 - 125		
QC Batch ID: BTI1547										
Mercury	BTI1547-BS1	LCS	1.6277	1.5000	mg/kg	109		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Antimony	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	30.006	100.00	mg/kg		30.0		16 - 119	
	MSD	1013213-04	ND	29.324	100.00	mg/kg	2.3	29.3	20	16 - 119	
Arsenic	DUP	1013213-04	5.5520	5.6268		mg/kg	1.3		20		
	MS	1013213-04	5.5520	15.586	10.000	mg/kg		100		75 - 125	
	MSD	1013213-04	5.5520	14.892	10.000	mg/kg	7.2	93.4	20	75 - 125	
Barium	DUP	1013213-04	138.68	139.51		mg/kg	0.6		20		
	MS	1013213-04	138.68	237.34	100.00	mg/kg		98.7		75 - 125	
	MSD	1013213-04	138.68	237.11	100.00	mg/kg	0.2	98.4	20	75 - 125	
Beryllium	DUP	1013213-04	0.84581	0.87001		mg/kg	2.8		20		
	MS	1013213-04	0.84581	10.956	10.000	mg/kg		101		75 - 125	
	MSD	1013213-04	0.84581	10.913	10.000	mg/kg	0.4	101	20	75 - 125	
Cadmium	DUP	1013213-04	0.31336	0.34072		mg/kg	8.4		20		J
	MS	1013213-04	0.31336	10.107	10.000	mg/kg		97.9		75 - 125	
	MSD	1013213-04	0.31336	10.121	10.000	mg/kg	0.1	98.1	20	75 - 125	
Chromium	DUP	1013213-04	20.264	20.827		mg/kg	2.7		20		
	MS	1013213-04	20.264	117.61	100.00	mg/kg		97.3		75 - 125	
	MSD	1013213-04	20.264	117.70	100.00	mg/kg	0.1	97.4	20	75 - 125	
Cobalt	DUP	1013213-04	7.6085	7.6282		mg/kg	0.3		20		
	MS	1013213-04	7.6085	102.61	100.00	mg/kg		95.0		75 - 125	
	MSD	1013213-04	7.6085	102.91	100.00	mg/kg	0.3	95.3	20	75 - 125	
Copper	DUP	1013213-04	20.385	20.852		mg/kg	2.3		20		
	MS	1013213-04	20.385	119.30	100.00	mg/kg		98.9		75 - 125	
	MSD	1013213-04	20.385	118.25	100.00	mg/kg	1.1	97.9	20	75 - 125	
Lead	DUP	1013213-04	7.5133	8.0370		mg/kg	6.7		20		
	MS	1013213-04	7.5133	102.64	100.00	mg/kg		95.1		75 - 125	
	MSD	1013213-04	7.5133	102.80	100.00	mg/kg	0.2	95.3	20	75 - 125	
Molybdenum	DUP	1013213-04	1.5497	1.4179		mg/kg	8.9		20		J
	MS	1013213-04	1.5497	87.530	100.00	mg/kg		86.0		75 - 125	
	MSD	1013213-04	1.5497	86.966	100.00	mg/kg	0.7	85.4	20	75 - 125	
Nickel	DUP	1013213-04	16.116	16.404		mg/kg	1.8		20		
	MS	1013213-04	16.116	111.81	100.00	mg/kg		95.7		75 - 125	
	MSD	1013213-04	16.116	111.72	100.00	mg/kg	0.1	95.6	20	75 - 125	
Selenium	DUP	1013213-04	ND	1.0020		mg/kg			20		
	MS	1013213-04	ND	10.470	10.000	mg/kg		105		75 - 125	
	MSD	1013213-04	ND	11.426	10.000	mg/kg	8.7	114	20	75 - 125	
Silver	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	8.8149	10.000	mg/kg		88.1		75 - 125	
	MSD	1013213-04	ND	8.8370	10.000	mg/kg	0.3	88.4	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Thallium	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	94.009	100.00	mg/kg		94.0		75 - 125	
	MSD	1013213-04	ND	92.842	100.00	mg/kg	1.2	92.8	20	75 - 125	
Vanadium	DUP	1013213-04	56.037	58.327		mg/kg	4.0		20		
	MS	1013213-04	56.037	162.21	100.00	mg/kg		106		75 - 125	
	MSD	1013213-04	56.037	161.74	100.00	mg/kg	0.4	106	20	75 - 125	
Zinc	DUP	1013213-04	94.419	94.287		mg/kg	0.1		20		
	MS	1013213-04	94.419	189.17	100.00	mg/kg		94.8		75 - 125	
	MSD	1013213-04	94.419	190.93	100.00	mg/kg	1.8	96.5	20	75 - 125	
Potassium	DUP	1013213-04	5060.3	5171.3		mg/kg	2.2		20		
	MS	1013213-04	5060.3	5863.5	500.00	mg/kg		161		75 - 125	A03
	MSD	1013213-04	5060.3	5854.4	500.00	mg/kg	1.1	159	20	75 - 125	A03
QC Batch ID: BTI1469	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Antimony	DUP	1013287-23	0.85421	ND		mg/kg			20		
	MS	1013287-23	0.85421	42.118	100.00	mg/kg		41.3		16 - 119	
	MSD	1013287-23	0.85421	46.176	100.00	mg/kg	9.4	45.3	20	16 - 119	
Arsenic	DUP	1013287-23	4.3686	4.6532		mg/kg	6.3		20		
	MS	1013287-23	4.3686	15.481	10.000	mg/kg		111		75 - 125	
	MSD	1013287-23	4.3686	14.896	10.000	mg/kg	5.4	105	20	75 - 125	
Barium	DUP	1013287-23	56.910	54.695		mg/kg	4.0		20		
	MS	1013287-23	56.910	163.83	100.00	mg/kg		107		75 - 125	
	MSD	1013287-23	56.910	163.58	100.00	mg/kg	0.2	107	20	75 - 125	
Beryllium	DUP	1013287-23	0.15328	0.14927		mg/kg	2.7		20		J
	MS	1013287-23	0.15328	10.929	10.000	mg/kg		108		75 - 125	
	MSD	1013287-23	0.15328	10.972	10.000	mg/kg	0.4	108	20	75 - 125	
Cadmium	DUP	1013287-23	0.051299	ND		mg/kg			20		
	MS	1013287-23	0.051299	10.609	10.000	mg/kg		106		75 - 125	
	MSD	1013287-23	0.051299	10.554	10.000	mg/kg	0.5	105	20	75 - 125	
Chromium	DUP	1013287-23	4.7607	4.5584		mg/kg	4.3		20		
	MS	1013287-23	4.7607	109.70	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	4.7607	109.98	100.00	mg/kg	0.3	105	20	75 - 125	
Cobalt	DUP	1013287-23	2.7302	2.6197		mg/kg	4.1		20		
	MS	1013287-23	2.7302	108.00	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	2.7302	108.23	100.00	mg/kg	0.2	106	20	75 - 125	
Copper	DUP	1013287-23	3.3730	3.3716		mg/kg	0.0		20		
	MS	1013287-23	3.3730	108.18	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	3.3730	108.88	100.00	mg/kg	0.7	106	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1469	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Lead	DUP	1013287-23	1.0075	1.1810		mg/kg	15.9		20		J
	MS	1013287-23	1.0075	106.85	100.00	mg/kg		106		75 - 125	
	MSD	1013287-23	1.0075	106.48	100.00	mg/kg	0.4	105	20	75 - 125	
Molybdenum	DUP	1013287-23	1.2233	1.1862		mg/kg	3.1		20		J
	MS	1013287-23	1.2233	103.96	100.00	mg/kg		103		75 - 125	
	MSD	1013287-23	1.2233	103.85	100.00	mg/kg	0.1	103	20	75 - 125	
Nickel	DUP	1013287-23	2.6269	2.5356		mg/kg	3.5		20		
	MS	1013287-23	2.6269	107.59	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	2.6269	107.94	100.00	mg/kg	0.3	105	20	75 - 125	
Selenium	DUP	1013287-23	0.70667	0.54661		mg/kg	25.5		20		J,A02
	MS	1013287-23	0.70667	10.416	10.000	mg/kg		97.1		75 - 125	
	MSD	1013287-23	0.70667	10.329	10.000	mg/kg	0.9	96.2	20	75 - 125	
Silver	DUP	1013287-23	ND	ND		mg/kg			20		
	MS	1013287-23	ND	9.6823	10.000	mg/kg		96.8		75 - 125	
	MSD	1013287-23	ND	9.7460	10.000	mg/kg	0.7	97.5	20	75 - 125	
Thallium	DUP	1013287-23	ND	ND		mg/kg			20		
	MS	1013287-23	ND	105.84	100.00	mg/kg		106		75 - 125	
	MSD	1013287-23	ND	105.19	100.00	mg/kg	0.6	105	20	75 - 125	
Vanadium	DUP	1013287-23	14.974	14.710		mg/kg	1.8		20		
	MS	1013287-23	14.974	128.09	100.00	mg/kg		113		75 - 125	
	MSD	1013287-23	14.974	128.03	100.00	mg/kg	0.1	113	20	75 - 125	
Zinc	DUP	1013287-23	24.310	24.595		mg/kg	1.2		20		
	MS	1013287-23	24.310	129.71	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	24.310	129.63	100.00	mg/kg	0.1	105	20	75 - 125	
Potassium	DUP	1013287-23	1544.4	1466.0		mg/kg	5.2		20		
	MS	1013287-23	1544.4	2138.3	500.00	mg/kg		119		75 - 125	
	MSD	1013287-23	1544.4	2055.2	500.00	mg/kg	15.0	102	20	75 - 125	
QC Batch ID: BTI1493	Used client sample: Y - Description: Dup-1, 09/22/2010 00:00										
Mercury	DUP	1013287-04	ND	ND		mg/kg			20		
	MS	1013287-04	ND	0.73523	0.76923	mg/kg		95.6		85 - 115	
	MSD	1013287-04	ND	0.72585	0.76923	mg/kg	1.3	94.4	20	85 - 115	
QC Batch ID: BTI1547	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Mercury	DUP	1013287-23	ND	0.014769		mg/kg			20		J
	MS	1013287-23	ND	0.76277	0.76923	mg/kg		99.2		85 - 115	
	MSD	1013287-23	ND	0.75708	0.76923	mg/kg	0.7	98.4	20	85 - 115	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 10/08/2010 14:28 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
A19	Surrogate is high due to matrix interference. Interferences verified through second extraction/analysis.
A52	Chromatogram not typical of diesel.
pH1:1	pH result reported on a 1:1 dilution of sample
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Chromatogram not typical of mineral oil.

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Date of Report: 11/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013288
Invoice ID: B087496

Enclosed are the results of analyses for samples received by the laboratory on 9/22/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 2

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA 93012
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@aecom.com
Work Order #: 10-13288

Project #:
Project Name: Hydrogen Energy CA
Global ID #:
Sampler(s): Tom Shook

Analysis Requested: 8081 OCPs; 6010 Arsenic; 6010 THC 22 Metals

Please refer to the back of this page for completion instructions and method legend.

Comments:

Sample #	Description	Date Sampled	Time Sampled	8081 OCPs	6010 Arsenic	6010 THC 22 Metals	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
	SC-6-A -1	9/22/10	8:46		X		X						2	
	SC-6-B	9/22/10	8:48	X			X						2	Composite B to E
	SC-6-C -2	9/22/10	8:50	X			X						2	prior to analy.
	SC-6-D	9/22/10	8:52	X			X						2	
	SC-6-E	9/22/10	8:54	X			X						2	
	SC-4-A -3	9/22/10	9:12		X		X						2	
	SC-4-B	9/22/10	9:14	X			X						2	Composite B to E
	SC-4-C	9/22/10	9:16	X			X						2	prior to analy
	SC-4-D -4	9/22/10	9:18	X			X						2	
	SC-4-E	9/22/10	9:20	X			X						2	
	SC-9-A -5	9/22/10	9:48		X		X						2	
	SC-9-B	9/22/10	9:50	X			X						2	
	SC-9-C -6	9/22/10	9:52	X			X						2	
	SC-9-D	9/22/10	9:54	X			X						2	

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

COK BY DISTRIP SAMPLER

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No

Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

System # (Needed for EDT)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Tom Shook	9-22-10	19:30	Dana Brown	9-22-10	1830
2.						
3.						

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 2

Report To
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA 93012
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@aecom.com
Work Order #: 10-13288

Project #:
Project Name: Hydrogen Energy CA
Global ID #:
Sampler(s): Tom Shook

Please refer to the back of this page for completion instructions and method legend.

Analysis Requested

Comments:

Sample #	Description	Date Sampled	Time Sampled	8081 OCP's	6010 Arsenic	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
	SC-9-E -6	9/22/10	9:56	X		X						2	
	SC-8-A -7	9/22/10	10:08		X	X						2	Composite B to E
	SC-8-B	9/22/10	10:10	X		X						2	prior to analy
	SC-8-C -8	9/22/10	10:12	X		X						2	
	SC-8-D	9/22/10	10:14	X		X						2	
	SC-8-E	9/22/10	10:16	X		X						2	Composite B to E
	SC-7-A -9	9/22/10	10:48		X	X						2	prior to analy
	SC-7-B	9/22/10	10:50	X		X						2	
	SC-7-C -10	9/22/10	10:52	X		X						2	
	SC-7-D	9/22/10	10:54	X		X						2	
	SC-7-E	9/22/10	10:56	X		X						2	

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: Tom Shook	9-22-10	18:30	1. Received By: [illegible]	9-22-10	1830
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013288 Page 3 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/09 Page 1 of 2

Submission #: 10-13288

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: 103
Temperature: A 5.7 °C / C 5.7 °C

Date/Time 4-22-10 1835
Analyst Init JCW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR	A	ABCD	A	ABCD	A	ABCD	A	ABCD	A	ABCD
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JCW Date/Time: 4/22/10 1110
A = Actual / C = Corrected

P:\DOCS\APPS\LAB_DOCS\FORMS\SAMREC1.VIP01

Chain of Custody and Cooler Receipt Form for 1013288 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 2

Submission #: 1013288

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: 1103
Temperature: A 5.7 °C / C 5.7 °C

Date/Time 9-22-10 1835
Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JDW Date/Time: 9/22/10 1910
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013288-01	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:46
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-6-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-02	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:54
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-6-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-03	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:12
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-4-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-04	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:20
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-4-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-05	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:48
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-9-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-06	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:56
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-9-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	---		
1013288-07	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:08
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-8-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013288-08	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:16
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-8-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-09	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:48
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-7-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-10	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:56
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Compoiste of SC-7-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-01 | **Client Sample Name:** HECA, SC-6-A, 9/22/2010 8:46:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**6.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:40	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0029**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.0088**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0016**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	47.1	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	82.4	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	73.1	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 17:59	VH1	GC-1	0.993	BTI1470
2	EPA-8081	09/22/10	09/26/10 22:02	VH1	GC-1	1.987	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**17**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**73**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 16:46	LD1	IC2	1	BTK0311

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**140**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**83**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:27	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0448

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-03 | **Client Sample Name:** HECA, SC-4-A, 9/22/2010 9:12:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**8.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:52	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-04 | **Client Sample Name:** HECA, Composite of SC-4-B,C,D,E, 9/22/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0045**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.017**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0025**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00055**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	51.7	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	74.3	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	59.1	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:17	VH1	GC-1	0.997	BTI1470
2	EPA-8081	09/22/10	09/26/10 22:20	VH1	GC-1	4.983	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-05 | **Client Sample Name:** HECA, SC-9-A, 9/22/2010 9:48:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**7.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:57	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-06 | **Client Sample Name:** HECA, Composite of SC-9-B,C,D,E, 9/22/2010 9:56:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0049**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0010**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.044**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0071**	**mg/kg**	**0.0010**	**0.000062**	**EPA-8081**	**ND**	**A01,V11**	3
Dieldrin	**0.0036**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0022**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	50.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	51.7	%	12 - 168 (LCL - UCL)		EPA-8081			3
Dibutyl chlorendate (Surrogate)	91.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.3	%	26 - 151 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	76.6	%	26 - 151 (LCL - UCL)		EPA-8081			3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:35	VH1	GC-1	0.990	BTI1470
2	EPA-8081	09/22/10	09/26/10 23:51	VH1	GC-1	19.802	BTI1470
3	EPA-8081	09/22/10	09/26/10 22:38	VH1	GC-1	1.980	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-07 | **Client Sample Name:** HECA, SC-8-A, 9/22/2010 10:08:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**6.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:58	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0037**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.010**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0014**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	46.9	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	68.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.4	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:54	VH1	GC-1	0.987	BTI1470
2	EPA-8081	09/22/10	09/27/10 00:09	VH1	GC-1	1.974	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**22**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**93**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 17:00	LD1	IC2	1	BTK0311

AECOM
1220 Avenida Acaso
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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**170**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**99**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:31	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0448

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-09 | **Client Sample Name:** HECA, SC-7-A, 9/22/2010 10:48:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**14**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:00	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-10 | **Client Sample Name:** HECA, Compoiste of SC-7-B,C,D,E, 9/22/2010 10:56:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0048**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0020**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.050**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.012**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01,V11**	3
Dieldrin	**0.0013**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0027**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	54.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	56.6	%	12 - 168 (LCL - UCL)		EPA-8081			3
Dibutyl chlorendate (Surrogate)	132	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	83.0	%	26 - 151 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	89.2	%	26 - 151 (LCL - UCL)		EPA-8081			3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 19:12	VH1	GC-1	0.997	BTI1470
2	EPA-8081	09/22/10	09/27/10 00:45	VH1	GC-1	19.934	BTI1470
3	EPA-8081	09/22/10	09/27/10 00:27	VH1	GC-1	4.983	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1470						
Aldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1470-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1470-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1470-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1470-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1470-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1470-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1470-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1470-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1470-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1470-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1470-BLK1	70.9	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1470-BLK1	114	%	26 - 151 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1470										
Aldrin	BTI1470-BS1	LCS	0.0036086	0.0049834	mg/kg	72.4		60 - 124		
gamma-BHC (Lindane)	BTI1470-BS1	LCS	0.0036864	0.0049834	mg/kg	74.0		46 - 107		
4,4'-DDT	BTI1470-BS1	LCS	0.0041555	0.0049834	mg/kg	83.4		40 - 148		
Dieldrin	BTI1470-BS1	LCS	0.0036841	0.0049834	mg/kg	73.9		56 - 130		
Endrin	BTI1470-BS1	LCS	0.0040801	0.0049834	mg/kg	81.9		61 - 131		
Heptachlor	BTI1470-BS1	LCS	0.0036817	0.0049834	mg/kg	73.9		58 - 130		
TCMX (Surrogate)	BTI1470-BS1	LCS	0.0055917	0.0099668	mg/kg	56.1		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1470-BS1	LCS	0.019115	0.024917	mg/kg	76.7		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1470	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Aldrin	MS	1013287-23	ND	0.0047930	0.0049834	mg/kg		96.2		63 - 119	
	MSD	1013287-23	ND	0.0045907	0.0049669	mg/kg	4.0	92.4	20	63 - 119	
gamma-BHC (Lindane)	MS	1013287-23	ND	0.0047880	0.0049834	mg/kg		96.1		47 - 102	
	MSD	1013287-23	ND	0.0046844	0.0049669	mg/kg	1.9	94.3	30	47 - 102	
4,4'-DDT	MS	1013287-23	ND	0.0054259	0.0049834	mg/kg		109		32 - 158	
	MSD	1013287-23	ND	0.0050033	0.0049669	mg/kg	7.8	101	30	32 - 158	
Dieldrin	MS	1013287-23	ND	0.0049920	0.0049834	mg/kg		100		57 - 125	
	MSD	1013287-23	ND	0.0047103	0.0049669	mg/kg	5.5	94.8	20	57 - 125	
Endrin	MS	1013287-23	ND	0.0055645	0.0049834	mg/kg		112		61 - 130	
	MSD	1013287-23	ND	0.0052825	0.0049669	mg/kg	4.9	106	27	61 - 130	
Heptachlor	MS	1013287-23	ND	0.0048987	0.0049834	mg/kg		98.3		52 - 139	
	MSD	1013287-23	ND	0.0046745	0.0049669	mg/kg	4.4	94.1	30	52 - 139	
TCMX (Surrogate)	MS	1013287-23	ND	0.0072960	0.0099668	mg/kg		73.2		12 - 168	
	MSD	1013287-23	ND	0.0073911	0.0099338	mg/kg		74.4		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-23	ND	0.025976	0.024917	mg/kg		104		26 - 151	
	MSD	1013287-23	ND	0.026903	0.024834	mg/kg		108		26 - 151	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0311						
Chloride	BTK0311-BLK1	ND	mg/kg	5.0	0.59	
Sulfate	BTK0311-BLK1	ND	mg/kg	10	2.1	

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0311										
Chloride	BTK0311-BS1	LCS	103.80	100.00	mg/kg	104		90 - 110		
Sulfate	BTK0311-BS1	LCS	99.097	100.00	mg/kg	99.1		90 - 110		

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1220 Avenida Acaso
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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0311	Used client sample: Y - Description: Composite of SC-8-B,C,D,E, 09/22/2010 10:16										
Chloride	DUP	1013288-08	22.370	22.860		mg/kg	2.2		20		
	MS	1013288-08	22.370	1083.1	1010.1	mg/kg		105		80 - 120	
	MSD	1013288-08	22.370	1080.2	1010.1	mg/kg	0.3	105	20	80 - 120	
Sulfate	DUP	1013288-08	92.940	92.130		mg/kg	0.9		20		
	MS	1013288-08	92.940	1121.4	1010.1	mg/kg		102		80 - 120	
	MSD	1013288-08	92.940	1117.5	1010.1	mg/kg	0.4	101	20	80 - 120	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 11/08/2010 12:26 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0448						
EC as NaCl (Salinity)	BTK0448-BLK1	ND	mg/L	1.0	1.0	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0111										
Electrical Conductivity @ 25 C	BTK0111-BS1	LCS	307.40	303.00	umhos/cm	101		90 - 110		

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0111	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Electrical Conductivity @ 25 C	DUP	1013213-04	198.00	202.80		umhos/cm	2.4		20		

AECOM
1220 Avenida Acaso
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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1566						
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	

AECOM
1220 Avenida Acaso
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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1566										
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 11/08/2010 12:26 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
S05	The sample holding time was exceeded.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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Date of Report: 09/28/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013352
Invoice ID: B087535

Enclosed are the results of analyses for samples received by the laboratory on 9/23/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 1

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA
Phone: 805 388 3775 Fax: 805 388-3577
Email Address: chad.roper@aecom.com
Work Order #: 10-13352

Project #:
Project Name: HECA
Global ID #:
Sampler(s): GALEN LOOTER

Analysis Requested

Please refer to the back of this page for complete instructions, method and [illegible]

Comments:

Sample #	Description	Date Sampled	Time Sampled	VOC	OPP	OCP	TPH-EF	METALS	PHOSPHORUS	SULFATE/NITROGEN	POTASSIUM	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
SS-7	SEDIMENT SAMPLE -1	9/23/10	1440	X	X	X	X	X	X	X	X		X					2	
SS-2	SEDIMENT SAMPLE -2	9/23/10	1545	X	X	X	X	X	X	X	X		X					2	
~~DUP-2~~	~~SE~~																		
DUP-2	SEDIMENT SAMPLE (DUPLICATE) -3	9/23/10	[redacted]	X	X	X	X	X	X	X	X		X					2	
SS-1	SOIL SAMPLE -4	9/23/10	1625	X	X	X	X	X	X	X	X	X						2	
SS-6	-5	9/23/10	17:00	X	X	X	X	X	X	X	X	X						2	
SS-5	-6	9/23/10	16:50	X	X	X	X	X	X	X	X	X						2	

Sample Matrix: Soil, Sludge, Drinking Water, Ground Water, Waste Water, Other

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

CHK BY: [illegible]
DISTRIBUTION: [illegible]
SUB-OUT ☐

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: GALEN LOOTER	9/23/10	1603	1. Received By: [illegible]	9/23/10	1510 ~~1603~~
2. Relinquished By: [illegible]	9-23-10	18:10	2. Received By:		
3. Relinquished By:			3. Received By:		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013352 Page 2 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 3

Submission #: 1013352

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: GMA Thermometer ID: 1123
Temperature: A 4.9 °C / C 4.9 °C

Date/Time 9-23-10 1820
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK							A1			
40ml VOA VIAL	A4	A4	A4	A4	A4	A4				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER					B	B				
8 OZ. JAR										
32 OZ. JAR		B	B		B	B	JNW 1123			
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9-23-10 1829
A = Actual / C = Corrected

(R:\DOCS\WF60\LAB_DOCS\FORMS\SAMREC2.VFD)

Chain of Custody and Cooler Receipt Form for 1013352 Page 3 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 Of 3

Submission #: 1013352

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging between samples & ice

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 32oz Thermometer ID: 113
Temperature: A 116.7 °C / C 116.7 °C

Date/Time 9-23-10 1820
Analyst Init NW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
500ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: NW Date/Time: 9-23-10 1829
A = Actual C = Corrected

(R:\DOCS\NP99\LAB_DOCS\FORMS\SAMREC2.INFD)

Chain of Custody and Cooler Receipt Form for 1013352 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 Of 3

Submission #:

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: 9/23

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 113
Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820
Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER				B						
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JKW Date/Time: 9-23-10 1927
A = Actual / C = Corrected

[H:\DOCS\WP8\LAB_DOCS\FORMS\SAMREC2.WP0]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013352-01	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:40
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-7 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-02	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:45
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-2 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-03	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-2 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-04	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-1 Soil Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-05	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 17:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-6	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-06	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:50
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-5	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-07	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	TB	**Sample Matrix:**	Water
	Sampled By:	---		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND	V11	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	62.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	109	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:40	VH1	GC-1	1.007	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 15:24	cc1	GC-7	1.017	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0021**	**mg/kg**	**0.0054**	**0.0014**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00092	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00069	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00093	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	**0.0013**	**mg/kg**	**0.0054**	**0.0013**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0023	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00084	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0037	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 22:37	ADC	MS-V2	1.090	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**49**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	40.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 00:17	MWB	GC-13	0.997	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**210**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.79**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**510**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:19	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 12:52	CDR	SC-1	5	BTI1539

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**86**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**14**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.019**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.88**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.050**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3000**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:01	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:03	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	53.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	93.5	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:58	VH1	GC-1	2.034	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.020	0.0038	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.020	0.0028	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.020	0.0016	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.020	0.0044	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.020	0.0030	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.020	0.0012	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.020	0.012	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.020	0.0022	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.020	0.0016	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.020	0.011	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.020	0.0020	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.020	0.0022	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.020	0.0042	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.020	0.0028	EPA-8141	ND		1
Naled	ND	mg/kg	0.020	0.0034	EPA-8141	ND		1
Phorate	ND	mg/kg	0.020	0.0012	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.020	0.0032	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.020	0.0050	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.020	0.0020	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.020	0.0022	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	74.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 15:47	cc1	GC-7	2.020	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0018**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Bromochloromethane	ND	mg/kg	0.0050	0.00093	EPA-8260	ND	S08,Z1	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND	S08,Z1	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Chloroform	ND	mg/kg	0.0050	0.00064	EPA-8260	ND	S08,Z1	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Dibromochloromethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00082	EPA-8260	ND	S08,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00086	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00082	EPA-8260	ND	S08,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Ethylbenzene	**0.0029**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
p-Isopropyltoluene	**0.025**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND	S08,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND	S08,Z1	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Toluene	**0.048**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**S08,Z1**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND	S08,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND	S08,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00078	EPA-8260	ND	S08,Z1	1
Trichloroethene	**0.0019**	**mg/kg**	**0.0050**	**0.0011**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,2,4-Trimethylbenzene	**0.021**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
1,3,5-Trimethylbenzene	**0.0077**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**S08,Z1**	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
Total Xylenes	**0.015**	**mg/kg**	**0.010**	**0.0034**	**EPA-8260**	**ND**	**S08,Z1**	1
p- & m-Xylenes	**0.010**	**mg/kg**	**0.0050**	**0.0022**	**EPA-8260**	**ND**	**S08,Z1**	1
o-Xylene	**0.0047**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**J,S08,Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	86.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	84.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1-Ethyl-1-methylcyclopropane	**0.11**	**mg/kg**			**EPA-8260**		**S08,Z1**	1

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 2-Butanone	0.050	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methyl-2-propanethiol	0.068	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methylbutane	0.025	mg/kg			EPA-8260		S08,Z1	1
TIC: 4-Methyldecane	0.19	mg/kg			EPA-8260		S08,Z1	1
TIC: Acetone	0.075	mg/kg	0.020	0.012	EPA-8260		S08,Z1	1
TIC: Carbon disulfide	0.038	mg/kg			EPA-8260		S08,Z1	1
TIC: Methyl isobutyl ketone	0.042	mg/kg			EPA-8260		S08,Z1	1
TIC: n-Heptane	0.046	mg/kg			EPA-8260		S08,Z1	1
TIC: Pentane	0.063	mg/kg			EPA-8260		S08,Z1	1
TIC: trans, cis-1,2,4-Trimethylcyclohexane	0.18	mg/kg			EPA-8260		S08,Z1	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 15:58	ADC	MS-V2	1.010	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	3000	1400	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	3000	420	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	3000	360	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	6000	840	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	6000	2000	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**93000**	**mg/kg**	**15000**	**6000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 02:45	MWB	GC-13	300	BTI1613

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1220 Avenida Acaso
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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**140**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.44**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**1600**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:34	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:55	CDR	SC-1	5	BTI1539

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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.6**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**63**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**22**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.053**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3500**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:03	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:05	MEV	CETAC1	0.977	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0050	0.00045	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081	ND	A10	1
TCMX (Surrogate)	54.4	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	106	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 02:16	VH1	GC-1	9.901	BTI1586

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	80.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:10	cc1	GC-7	1.010	BTI1599

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0014**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND	S08,Z1	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND	S08,Z1	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND	S08,Z1	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND	S08,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND	S08,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND	S08,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Ethylbenzene	**0.0018**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
p-Isopropyltoluene	**0.017**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND	S08,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND	S08,Z1	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Toluene	**0.046**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**S08,Z1**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND	S08,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND	S08,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND	S08,Z1	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,2,4-Trimethylbenzene	**0.013**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
1,3,5-Trimethylbenzene	**0.0054**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**S08,Z1**	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
Total Xylenes	**0.0088**	**mg/kg**	**0.010**	**0.0034**	**EPA-8260**	**ND**	**J,S08,Z1**	1
p- & m-Xylenes	**0.0057**	**mg/kg**	**0.0050**	**0.0022**	**EPA-8260**	**ND**	**S08,Z1**	1
o-Xylene	**0.0031**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**J,S08,Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	87.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	78.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,2-Trimethylcyclohexane	**0.092**	**mg/kg**			**EPA-8260**		**S08,Z1**	1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 2-Butyl-1,1,3-trimethylcyclohexane	0.13	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methyl-1-propene	0.23	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methyl-2-propanethiol	0.088	mg/kg			EPA-8260		S08,Z1	1
TIC: 4-Methyldecane	0.24	mg/kg			EPA-8260		S08,Z1	1
TIC: Methanethiol	0.090	mg/kg			EPA-8260		S08,Z1	1
TIC: Pentane	0.035	mg/kg			EPA-8260		S08,Z1	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 16:23	ADC	MS-V2	1	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	3000	1400	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	3000	420	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	3000	360	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	6000	840	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	**20000**	**mg/kg**	**6000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
TPH - WD-40	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 11:44	EJB	GC-13	300	BTI1613

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**96**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.41**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**1400**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:48	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:56	CDR	SC-1	5	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.9**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.6**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**51**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.049**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**14**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3400**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:05	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:07	MEV	CETAC1	0.962	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	**0.0078**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.0062**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.020**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.0011**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	65.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	55.8	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 02:34	VH1	GC-1	4.983	BTI1586

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	32.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:32	cc1	GC-7	1.017	BTI1599

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0066	0.0012	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0066	0.00083	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0066	0.0024	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0066	0.0013	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0066	0.0022	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0066	0.0013	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0066	0.0024	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0066	0.0022	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.013	0.0031	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0066	0.00066	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0066	0.0028	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0066	0.0026	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0066	0.0010	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.013	0.0045	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0066	0.0029	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	126	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	91.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	80.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 23:54	ADC	MS-V2	1.310	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	250	100	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	250	100	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	100	25	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	100	25	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	50	23	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	50	7.0	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	50	6.0	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	100	32	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**140**	**mg/kg**	**250**	**100**	**Luft/FFP**	**ND**	**J,A01**	1
Tetracosane (Surrogate)	65.3	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 12:08	EJB	GC-13	5	BTI1613

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**26000**	**mg/kg**	**100**	**21**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**3600**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	2
Total Phosphorus	**9200**	**mg/kg**	**400**	**250**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 12:02	LD1	IC5	10	BTI1519
2	EPA-300.0	09/24/10	09/24/10 17:19	LD1	IC5	50	BTI1519
3	EPA-365.4	09/24/10	09/24/10 13:21	CDR	SC-1	40	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**63**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**7.4**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**31**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**46**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.027**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**19**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**56**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**230**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**8500**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:07	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:14	MEV	CETAC1	0.962	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.0020**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	**0.00082**	**mg/kg**	**0.0010**	**0.00013**	**EPA-8081**	**ND**	**J,A10,V11**	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10,V11	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	48.2	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	79.5	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 03:47	VH1	GC-1	2.034	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:55	cc1	GC-7	1.017	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 00:19	ADC	MS-V2	1.060	BTI1347

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**26**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	68.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 11:19	EJB	GC-13	1	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**9700**	**mg/kg**	**500**	**100**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**5400**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	1
Total Phosphorus	**2300**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 16:22	LD1	IC5	50	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:52	CDR	SC-1	20	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**3.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**44**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.27**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.96**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**11**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**8.6**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**11**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**84**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3000**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:08	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 12:52	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.010	0.00052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.0028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.30	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.010	0.0013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.010	0.00090	EPA-8081	ND	A10	1
4,4'-DDT	**0.0083**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	ND	mg/kg	0.010	0.00064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.010	0.0017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00070	EPA-8081	ND	A09,A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.0012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.010	0.0052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	1.0	0.15	EPA-8081	ND	A10	1
TCMX (Surrogate)	46.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	81.8	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 04:05	VH1	GC-1	20	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	57.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 17:17	cc1	GC-7	4.983	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0017**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 00:45	ADC	MS-V2	0.840	BTI1347

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	300	120	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	300	120	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	120	30	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	120	30	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	60	28	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	60	8.4	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	60	7.2	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	120	17	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	120	39	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**1200**	**mg/kg**	**300**	**120**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 14:37	EJB	GC-13	6	BTI1613

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AECOM
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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**6200**	**mg/kg**	**50**	**10**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**4500**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	2
Total Phosphorus	**4600**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 12:46	LD1	IC5	5	BTI1519
2	EPA-300.0	09/24/10	09/24/10 17:34	LD1	IC5	50	BTI1519
3	EPA-365.4	09/24/10	09/24/10 13:13	CDR	SC-1	20	BTI1539

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**76**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.41**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**17**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.024**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**34**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**83**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3200**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:10	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:16	MEV	CETAC1	0.933	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013352-07 | **Client Sample Name:** HECA, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013352-07 | **Client Sample Name:** HECA, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.8	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013352-07 | **Client Sample Name:** HECA, TB, 9/23/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/24/10 13:22	MGC	MS-V5	1	BTI1540

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1586						
Aldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1586-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1586-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1586-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1586-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1586-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1586-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1586-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1586-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1586-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1586-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1586-BLK1	64.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1586-BLK1	113	%	26 - 151 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1586										
Aldrin	BTI1586-BS1	LCS	0.0051784	0.0049834	mg/kg	104		60 - 124		
gamma-BHC (Lindane)	BTI1586-BS1	LCS	0.0051621	0.0049834	mg/kg	104		46 - 107		
4,4'-DDT	BTI1586-BS1	LCS	0.0057216	0.0049834	mg/kg	115		40 - 148		
Dieldrin	BTI1586-BS1	LCS	0.0052930	0.0049834	mg/kg	106		56 - 130		
Endrin	BTI1586-BS1	LCS	0.0058944	0.0049834	mg/kg	118		61 - 131		
Heptachlor	BTI1586-BS1	LCS	0.0052877	0.0049834	mg/kg	106		58 - 130		
TCMX (Surrogate)	BTI1586-BS1	LCS	0.0072794	0.0099668	mg/kg	73.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1586-BS1	LCS	0.029195	0.024917	mg/kg	117		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1586	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Aldrin	MS	1013353-25	ND	0.0020775	0.0049669	mg/kg		41.8		63 - 119	Q03
	MSD	1013353-25	ND	0.0015380	0.0049180	mg/kg	28.9	31.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-25	ND	0.0028245	0.0049669	mg/kg		56.9		47 - 102	
	MSD	1013353-25	ND	0.0021197	0.0049180	mg/kg	27.5	43.1	30	47 - 102	Q03
4,4'-DDT	MS	1013353-25	ND	0.0023752	0.0049669	mg/kg		47.8		32 - 158	
	MSD	1013353-25	ND	0.0014216	0.0049180	mg/kg	49.3	28.9	30	32 - 158	Q03
Dieldrin	MS	1013353-25	ND	0.0023921	0.0049669	mg/kg		48.2		57 - 125	Q03
	MSD	1013353-25	ND	0.0019193	0.0049180	mg/kg	21.0	39.0	20	57 - 125	Q03
Endrin	MS	1013353-25	ND	0.0027523	0.0049669	mg/kg		55.4		61 - 130	Q03
	MSD	1013353-25	ND	0.0021859	0.0049180	mg/kg	22.0	44.4	27	61 - 130	Q03
Heptachlor	MS	1013353-25	ND	0.0023308	0.0049669	mg/kg		46.9		52 - 139	Q03
	MSD	1013353-25	ND	0.0016489	0.0049180	mg/kg	33.3	33.5	30	52 - 139	Q03
TCMX (Surrogate)	MS	1013353-25	ND	0.0033381	0.0099338	mg/kg		33.6		12 - 168	
	MSD	1013353-25	ND	0.0025393	0.0098361	mg/kg		25.8		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-25	ND	0.014076	0.024834	mg/kg		56.7		26 - 151	
	MSD	1013353-25	ND	0.0094797	0.024590	mg/kg		38.6		26 - 151	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1599						
Azinphos methyl	BTI1599-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1599-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1599-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1599-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1599-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1599-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1599-BLK1	100	%	9 - 105 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1599										
Bolstar	BTI1599-BS1	LCS	0.024917	0.026578	mg/kg	93.8		9 - 146		
Chlorpyrifos	BTI1599-BS1	LCS	0.022259	0.026578	mg/kg	83.8		68 - 151		
Diazinon	BTI1599-BS1	LCS	0.010797	0.026578	mg/kg	40.6		38 - 105		
Methyl parathion	BTI1599-BS1	LCS	0.021595	0.026578	mg/kg	81.3		70 - 130		
Mevinphos	BTI1599-BS1	LCS	0.015282	0.026578	mg/kg	57.5		48 - 135		
Ronnel (Fenchlorphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		66 - 164		
Triphenylphosphate (Surrogate)	BTI1599-BS1	LCS	0.080399	0.083056	mg/kg	96.8		9 - 105		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1599	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Bolstar	MS	1013353-25	ND	0.024257	0.026403	mg/kg		91.9		1 - 167	
	MSD	1013353-25	ND	0.019802	0.026403	mg/kg	20.2	75.0	30	1 - 167	
Chlorpyrifos	MS	1013353-25	ND	0.017987	0.026403	mg/kg		68.1		41 - 167	
	MSD	1013353-25	ND	0.016172	0.026403	mg/kg	10.6	61.3	20	41 - 167	
Diazinon	MS	1013353-25	ND	0.020132	0.026403	mg/kg		76.2		31 - 97	
	MSD	1013353-25	ND	0.016997	0.026403	mg/kg	16.9	64.4	30	31 - 97	
Methyl parathion	MS	1013353-25	ND	0.019472	0.026403	mg/kg		73.8		41 - 159	
	MSD	1013353-25	ND	0.016667	0.026403	mg/kg	15.5	63.1	20	41 - 159	
Mevinphos	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		35 - 136	
	MSD	1013353-25	ND	0.015677	0.026403	mg/kg	20.8	59.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-25	ND	0.017822	0.026403	mg/kg		67.5		34 - 143	
	MSD	1013353-25	ND	0.015512	0.026403	mg/kg	13.9	58.8	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		7 - 209	
	MSD	1013353-25	ND	0.016007	0.026403	mg/kg	18.7	60.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-25	ND	0.074752	0.082508	mg/kg		90.6		9 - 105	
	MSD	1013353-25	ND	0.065182	0.082508	mg/kg		79.0		9 - 105	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1540						
Benzene	BTI1540-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1540-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1540-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1540-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1540-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1540-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1540-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1540-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1540-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.14	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1540						
trans-1,3-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1540-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1540-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1540-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1540-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1540-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1540-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1540-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1540-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1540-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1540-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1540-BLK1	99.5	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1540-BLK1	98.7	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1540-BLK1	94.9	%	86 - 115 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1540										
Benzene	BTI1540-BS1	LCS	23.050	25.000	ug/L	92.2		70 - 130		
Bromodichloromethane	BTI1540-BS1	LCS	23.930	25.000	ug/L	95.7		70 - 130		
Chlorobenzene	BTI1540-BS1	LCS	24.110	25.000	ug/L	96.4		70 - 130		
Chloroethane	BTI1540-BS1	LCS	26.200	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	BTI1540-BS1	LCS	24.740	25.000	ug/L	99.0		70 - 130		
1,1-Dichloroethane	BTI1540-BS1	LCS	26.590	25.000	ug/L	106		70 - 130		
1,1-Dichloroethene	BTI1540-BS1	LCS	25.090	25.000	ug/L	100		70 - 130		
Toluene	BTI1540-BS1	LCS	23.770	25.000	ug/L	95.1		70 - 130		
Trichloroethene	BTI1540-BS1	LCS	25.260	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1540-BS1	LCS	9.8600	10.000	ug/L	98.6		76 - 114		
Toluene-d8 (Surrogate)	BTI1540-BS1	LCS	9.7300	10.000	ug/L	97.3		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1540-BS1	LCS	9.8400	10.000	ug/L	98.4		86 - 115		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1540	Used client sample: N										
Benzene	MS	1013347-02	ND	24.200	25.000	ug/L		96.8		70 - 130	
	MSD	1013347-02	ND	24.150	25.000	ug/L	0.2	96.6	20	70 - 130	
Bromodichloromethane	MS	1013347-02	ND	26.280	25.000	ug/L		105		70 - 130	
	MSD	1013347-02	ND	25.300	25.000	ug/L	3.8	101	20	70 - 130	
Chlorobenzene	MS	1013347-02	ND	25.740	25.000	ug/L		103		70 - 130	
	MSD	1013347-02	ND	25.330	25.000	ug/L	1.6	101	20	70 - 130	
Chloroethane	MS	1013347-02	ND	27.280	25.000	ug/L		109		70 - 130	
	MSD	1013347-02	ND	26.680	25.000	ug/L	2.2	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1013347-02	ND	26.620	25.000	ug/L		106		70 - 130	
	MSD	1013347-02	ND	25.820	25.000	ug/L	3.1	103	20	70 - 130	
1,1-Dichloroethane	MS	1013347-02	ND	28.020	25.000	ug/L		112		70 - 130	
	MSD	1013347-02	ND	27.790	25.000	ug/L	0.8	111	20	70 - 130	
1,1-Dichloroethene	MS	1013347-02	ND	26.360	25.000	ug/L		105		70 - 130	
	MSD	1013347-02	ND	26.030	25.000	ug/L	1.3	104	20	70 - 130	
Toluene	MS	1013347-02	ND	25.800	25.000	ug/L		103		70 - 130	
	MSD	1013347-02	ND	25.200	25.000	ug/L	2.4	101	20	70 - 130	
Trichloroethene	MS	1013347-02	ND	26.770	25.000	ug/L		107		70 - 130	
	MSD	1013347-02	ND	25.710	25.000	ug/L	4.0	103	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013347-02	ND	9.4900	10.000	ug/L		94.9		76 - 114	
	MSD	1013347-02	ND	9.6200	10.000	ug/L		96.2		76 - 114	
Toluene-d8 (Surrogate)	MS	1013347-02	ND	9.9100	10.000	ug/L		99.1		88 - 110	
	MSD	1013347-02	ND	9.7800	10.000	ug/L		97.8		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013347-02	ND	9.3600	10.000	ug/L		93.6		86 - 115	
	MSD	1013347-02	ND	9.8400	10.000	ug/L		98.4		86 - 115	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Benzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1347-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
trans-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1347-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1347-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1347-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1347-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BLK1	98.1	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1347-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1347-BLK1	98.2	%	74 - 121 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1347										
Benzene	BTI1347-BS1	LCS	0.12403	0.12500	mg/kg	99.2		70 - 130		
Bromodichloromethane	BTI1347-BS1	LCS	0.12230	0.12500	mg/kg	97.8		70 - 130		
Chlorobenzene	BTI1347-BS1	LCS	0.13179	0.12500	mg/kg	105		70 - 130		
Chloroethane	BTI1347-BS1	LCS	0.12402	0.12500	mg/kg	99.2		70 - 130		
1,4-Dichlorobenzene	BTI1347-BS1	LCS	0.12969	0.12500	mg/kg	104		70 - 130		
1,1-Dichloroethane	BTI1347-BS1	LCS	0.12574	0.12500	mg/kg	101		70 - 130		
1,1-Dichloroethene	BTI1347-BS1	LCS	0.12240	0.12500	mg/kg	97.9		70 - 130		
Toluene	BTI1347-BS1	LCS	0.12592	0.12500	mg/kg	101		70 - 130		
Trichloroethene	BTI1347-BS1	LCS	0.12949	0.12500	mg/kg	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BS1	LCS	0.048673	0.050000	mg/kg	97.3		70 - 121		
Toluene-d8 (Surrogate)	BTI1347-BS1	LCS	0.049782	0.050000	mg/kg	99.6		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1347-BS1	LCS	0.050312	0.050000	mg/kg	101		74 - 121		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1347	Used client sample: N										
Benzene	MS	1011454-83	ND	0.12337	0.12500	mg/kg		98.7		70 - 130	
	MSD	1011454-83	ND	0.13141	0.12500	mg/kg	6.3	105	20	70 - 130	
Bromodichloromethane	MS	1011454-83	ND	0.12205	0.12500	mg/kg		97.6		70 - 130	
	MSD	1011454-83	ND	0.12854	0.12500	mg/kg	5.2	103	20	70 - 130	
Chlorobenzene	MS	1011454-83	ND	0.12847	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13403	0.12500	mg/kg	4.2	107	20	70 - 130	
Chloroethane	MS	1011454-83	ND	0.12387	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13379	0.12500	mg/kg	7.7	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-83	ND	0.12925	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13518	0.12500	mg/kg	4.5	108	20	70 - 130	
1,1-Dichloroethane	MS	1011454-83	ND	0.12382	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13500	0.12500	mg/kg	8.6	108	20	70 - 130	
1,1-Dichloroethene	MS	1011454-83	ND	0.12077	0.12500	mg/kg		96.6		70 - 130	
	MSD	1011454-83	ND	0.13396	0.12500	mg/kg	10.4	107	20	70 - 130	
Toluene	MS	1011454-83	ND	0.12390	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13119	0.12500	mg/kg	5.7	105	20	70 - 130	
Trichloroethene	MS	1011454-83	ND	0.12869	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13649	0.12500	mg/kg	5.9	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-83	ND	0.049376	0.050000	mg/kg		98.8		70 - 121	
	MSD	1011454-83	ND	0.050907	0.050000	mg/kg		102		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-83	ND	0.049513	0.050000	mg/kg		99.0		81 - 117	
	MSD	1011454-83	ND	0.049643	0.050000	mg/kg		99.3		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-83	ND	0.049088	0.050000	mg/kg		98.2		74 - 121	
	MSD	1011454-83	ND	0.050501	0.050000	mg/kg		101		74 - 121	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1613						
TPH - Light Naptha	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1613-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1613-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1613-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1613-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1613-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1613-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1613-BLK1	98.9	%	20 - 145 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1613										
TPH - Diesel (FFP)	BTI1613-BS1	LCS	80.925	82.781	mg/kg	97.8		64 - 124		
Tetracosane (Surrogate)	BTI1613-BS1	LCS	3.5637	3.3113	mg/kg	108		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1613	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
TPH - Diesel (FFP)	MS	1013353-25	ND	65.153	83.056	mg/kg		78.4		52 - 131	
	MSD	1013353-25	ND	51.755	83.056	mg/kg	22.9	62.3	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-25	ND	3.3909	3.3223	mg/kg		102		20 - 145	
	MSD	1013353-25	ND	3.0128	3.3223	mg/kg		90.7		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1519						
Sulfate	BTI1519-BLK1	ND	mg/kg	10	2.1	
Nitrate as N	BTI1519-BLK1	ND	mg/kg	1.0	0.26	
QC Batch ID: BTI1539						
Total Phosphorus	BTI1539-BLK1	ND	mg/kg	10	6.2	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1519										
Sulfate	BTI1519-BS1	LCS	99.802	100.00	mg/kg	99.8		90 - 110		
Nitrate as N	BTI1519-BS1	LCS	4.9510	5.0000	mg/kg	99.0		90 - 110		
QC Batch ID: BTI1539										
Total Phosphorus	BTI1539-BS1	LCS	202.84	200.00	mg/kg	101		85 - 115		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1519	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Sulfate	DUP	013352-05RE´	9673.0	9761.5		mg/kg	0.9		20		
	MS	013352-05RE´	9673.0	61914	50505	mg/kg		103		80 - 120	
	MSD	013352-05RE´	9673.0	62177	50505	mg/kg	0.5	104	20	80 - 120	
Nitrate as N	DUP	013352-05RE´	5374.5	5482.0		mg/kg	2.0		20		
	MS	013352-05RE´	5374.5	7846.0	2525.3	mg/kg		97.9		80 - 120	
	MSD	013352-05RE´	5374.5	7859.1	2525.3	mg/kg	0.5	98.4	20	80 - 120	
QC Batch ID: BTI1539	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Total Phosphorus	DUP	1013352-05	2334.4	2988.0		mg/kg	24.6		20		Q01
	MS	1013352-05	2334.4	2315.6	200.00	mg/kg		-9.4		80 - 120	A03
	MSD	1013352-05	2334.4	2345.6	200.00	mg/kg	789	5.6	20	80 - 120	A03

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1555						
Mercury	BTI1555-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1566						
Antimony	BTI1566-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1566-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1566-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1566-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1566-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1566-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1566-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1566-BLK1	0.35796	mg/kg	2.5	0.25	J
Potassium	BTI1566-BLK1	ND	mg/kg	50	5.0	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1555										
Mercury	BTI1555-BS1	LCS	1.4542	1.5000	mg/kg	96.9		75 - 125		
QC Batch ID: BTI1566										
Antimony	BTI1566-BS1	LCS	100.65	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		
Barium	BTI1566-BS1	LCS	102.58	100.00	mg/kg	103		75 - 125		
Beryllium	BTI1566-BS1	LCS	10.399	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1566-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125		
Chromium	BTI1566-BS1	LCS	103.19	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1566-BS1	LCS	104.14	100.00	mg/kg	104		75 - 125		
Copper	BTI1566-BS1	LCS	100.44	100.00	mg/kg	100		75 - 125		
Lead	BTI1566-BS1	LCS	106.62	100.00	mg/kg	107		75 - 125		
Molybdenum	BTI1566-BS1	LCS	102.32	100.00	mg/kg	102		75 - 125		
Nickel	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Selenium	BTI1566-BS1	LCS	9.5899	10.000	mg/kg	95.9		75 - 125		
Silver	BTI1566-BS1	LCS	9.3760	10.000	mg/kg	93.8		75 - 125		
Thallium	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1566-BS1	LCS	108.14	100.00	mg/kg	108		75 - 125		
Zinc	BTI1566-BS1	LCS	103.41	100.00	mg/kg	103		75 - 125		
Potassium	BTI1566-BS1	LCS	480.56	500.00	mg/kg	96.1		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1555	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Mercury	DUP	1013352-05	0.012059	0.015000		mg/kg	21.7		20		J,A02
	MS	1013352-05	0.012059	0.73838	0.73529	mg/kg		98.8		85 - 115	
	MSD	1013352-05	0.012059	0.73985	0.73529	mg/kg	0.2	99.0	20	85 - 115	
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Antimony	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	29.026	100.00	mg/kg		29.0		16 - 119	
	MSD	1013288-01	ND	29.067	100.00	mg/kg	0.1	29.1	20	16 - 119	
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	
Barium	DUP	1013288-01	147.86	143.51		mg/kg	3.0		20		
	MS	1013288-01	147.86	240.61	100.00	mg/kg		92.8		75 - 125	
	MSD	1013288-01	147.86	241.18	100.00	mg/kg	0.6	93.3	20	75 - 125	
Beryllium	DUP	1013288-01	0.89421	0.88155		mg/kg	1.4		20		
	MS	1013288-01	0.89421	10.702	10.000	mg/kg		98.1		75 - 125	
	MSD	1013288-01	0.89421	10.457	10.000	mg/kg	2.5	95.6	20	75 - 125	
Cadmium	DUP	1013288-01	0.33235	0.29947		mg/kg	10.4		20		J
	MS	1013288-01	0.33235	9.8579	10.000	mg/kg		95.3		75 - 125	
	MSD	1013288-01	0.33235	9.6586	10.000	mg/kg	2.1	93.3	20	75 - 125	
Chromium	DUP	1013288-01	20.175	20.542		mg/kg	1.8		20		
	MS	1013288-01	20.175	115.10	100.00	mg/kg		94.9		75 - 125	
	MSD	1013288-01	20.175	112.86	100.00	mg/kg	2.4	92.7	20	75 - 125	
Cobalt	DUP	1013288-01	7.6614	7.5462		mg/kg	1.5		20		
	MS	1013288-01	7.6614	99.201	100.00	mg/kg		91.5		75 - 125	
	MSD	1013288-01	7.6614	97.365	100.00	mg/kg	2.0	89.7	20	75 - 125	
Copper	DUP	1013288-01	19.628	19.377		mg/kg	1.3		20		
	MS	1013288-01	19.628	115.66	100.00	mg/kg		96.0		75 - 125	
	MSD	1013288-01	19.628	113.30	100.00	mg/kg	2.5	93.7	20	75 - 125	
Lead	DUP	1013288-01	7.2603	7.1235		mg/kg	1.9		20		
	MS	1013288-01	7.2603	100.72	100.00	mg/kg		93.5		75 - 125	
	MSD	1013288-01	7.2603	99.382	100.00	mg/kg	1.4	92.1	20	75 - 125	
Molybdenum	DUP	1013288-01	1.1281	1.1938		mg/kg	5.7		20		J
	MS	1013288-01	1.1281	84.626	100.00	mg/kg		83.5		75 - 125	
	MSD	1013288-01	1.1281	82.470	100.00	mg/kg	2.6	81.3	20	75 - 125	
Nickel	DUP	1013288-01	14.944	14.876		mg/kg	0.5		20		
	MS	1013288-01	14.944	109.43	100.00	mg/kg		94.5		75 - 125	
	MSD	1013288-01	14.944	107.64	100.00	mg/kg	1.9	92.7	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Selenium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	7.6892	10.000	mg/kg		76.9		75 - 125	
	MSD	1013288-01	ND	8.7582	10.000	mg/kg	13.0	87.6	20	75 - 125	
Silver	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	8.5742	10.000	mg/kg		85.7		75 - 125	
	MSD	1013288-01	ND	8.3853	10.000	mg/kg	2.2	83.9	20	75 - 125	
Thallium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	91.857	100.00	mg/kg		91.9		75 - 125	
	MSD	1013288-01	ND	89.610	100.00	mg/kg	2.5	89.6	20	75 - 125	
Vanadium	DUP	1013288-01	51.833	51.455		mg/kg	0.7		20		
	MS	1013288-01	51.833	154.17	100.00	mg/kg		102		75 - 125	
	MSD	1013288-01	51.833	151.40	100.00	mg/kg	2.7	99.6	20	75 - 125	
Zinc	DUP	1013288-01	85.886	84.545		mg/kg	1.6		20		
	MS	1013288-01	85.886	177.25	100.00	mg/kg		91.4		75 - 125	
	MSD	1013288-01	85.886	174.57	100.00	mg/kg	3.0	88.7	20	75 - 125	
Potassium	DUP	1013288-01	5172.8	5146.4		mg/kg	0.5		20		
	MS	1013288-01	5172.8	6025.1	500.00	mg/kg		170		75 - 125	A03
	MSD	1013288-01	5172.8	5825.3	500.00	mg/kg	26.5	131	20	75 - 125	A03,Q02

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 09/28/2010 13:20 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A09	PQL's were raised due to high concentration of target analytes requiring sample dilution.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
Q01	Sample precision is not within the control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S08	The internal standard on the sample was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Sample was analysed twice and both times internal standards were low.

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Date of Report: 09/28/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013353
Invoice ID: B087570

Enclosed are the results of analyses for samples received by the laboratory on 9/23/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 3

Report To
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@AECOM.com
Work Order #: 10-13353

Project #:
Project Name: Hydrogen Energy
Global ID #:
Sampler(s): Tom Shoot

Analysis Requested

Please refer to the back of this page for completion instructions and method codes.

Comments:

Sample #	Description	Date Sampled	Time Sampled	8260B VOCs	8081 OPPs	8081 OCPs	8015M TPH TFE	6010 Lead	6010 Title 22 Metals	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
1	GP-5-5	9/23/10	8:40	X	X	X	X		X	X						2	
2	GP-5-10	9/23/10	8:52	X	X	X	X		X	X						2	
3	GP-5-15	9/23/10	8:58	X	X	X	X		X	X						2	
4	DUPE-4	9/23/10		X	X	X	X		X	X						2	
5	GP-18-0.5	9/23/10	9:13	X	X	X	X		X	X						2	
6	GP-18-2	9/23/10	9:20	X	X	X	X		X	X						2	
7	GP-18-5	9/23/10	9:40	X	X	X	X		X	X						2	
8	GP-2-5	9/23/10	10:05		X	X				X						2	
9	GP-2-10	9/23/10	10:15	X			X	X		X						2	
10	GP-2-15	9/23/10	10:30	X			X	X		X						2	
11	GP-1-5	9/23/10	10:55		X	X				X						2	
12	GP-1-10	9/23/10	11:05	X			X	X		X						2	
13	GP-1-15	9/23/10	11:20	X			X	X		X						2	
14	JNW 9-23-10									X						2	

Sample Matrix

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

CHAIN OF CUSTODY DISTRIBUTION
SUB-CU: ☐

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: Tom	9-23-10	1810	1. Received By	9-23-10	1810
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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Chain of Custody Form

Page 2 of 3

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA
Phone: Fax:
Email Address:
Work Order #: 10-13353

Project #:
Project Name: Hydrogen Energy CA
Global ID #:
Sampler(s): Tom Stroot

Please refer to the back of this page for completion legend.

Comments: See Notes for Hold

Analysis Requested

Sample #	Description	Date Sampled	Time Sampled	8260B VOC	8141 OPP's	8081 OCP's	8015M TPH RF	6010 Title 22 metals	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
14	GP-21-0.5	9/23/10	12:30	X	X	X	X	X	X						2	GP-15-5 Hold
15	GP-21-2	9/23/10	12:45	X	X	X	X	X	X						2	
16	GP-21-5	9/23/10	12:55	X	X	X	X	X	X						2	GP-16-5 Hold
17	GP-15-0.5	9/23/10	13:05	X	X	X	X	X	X						2	
18	GP-15-2	9/23/10	13:15	X	X	X	X	X	X						2	GP-20-5 Hold
19	GP-15-5	9/23/10	13:25	X	X	X	X	X	X						2	
20	GP-16-0.5	9/23/10	14:20	X	X	X	X	X	X						2	GP-21-5 Hold
21	GP-16-2	9/23/10	14:30	X	X	X	X	X	X						2	
22	GP-16-5	9/23/10	14:40	X	X	X	X	X	X						2	
23	GP-20-0.5	9/23/10	15:10	X	X	X	X	X	X						2	
24	GP-20-2	9/23/10	15:15	X	X	X	X	X	X						2	
25	GP-20-5	9/23/10	15:20	X	X	X	X	X	X						2	

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

	Date	Time		Date	Time
1. Relinquished By: Tom M	9-23-10	18:10	1. Received By:	9/23/10	1810
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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BC Laboratories, Inc.

Chain of Custody Form

Page 3 of 3

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@AECOM.com
Work Order #: 10-13353

Project #:
Project Name: Hydrogen Energy
Global ID #:
Sampler(s): Tom Shook

Analysis Requested

Please refer to the back of this page for completion of abbreviations and method legend.

Comments: See Notes for Hold

Sample #	Description	Date Sampled	Time Sampled	8260 VOC	8141 OPPs	8081 OCPs	8015M FE-TPH	6061 T.Hg 22 metals	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-26	GP-14-0.5	9/23/10	15:55	X	X	X	X	X	X						2	
-27	GP-14-2	9/23/10	16:00	X	X	X	X	X	X						2	
-28	GP-14-5	9/23/10	16:10	X	X	X	X	X	X						2	Hold on GP-14-5

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Billing ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)
System # (Needed for EDT)

Relinquished By	Date	Time	Received By	Date	Time
1. Tom	9-23-10	19:10	1.	9/23/10	1810
2.			2.		
3.			3.		

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

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BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 10

Submission #: 1013353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments: NWA123

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103
Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820
Analyst Init NW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AM	AM	AM	AM	AM	AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: NW Date/Time: 9-23-10 1929
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013353 Page 5 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals: Ice Chest ☒ Intact? Yes ☒ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: 1W 9/23

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 143
Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1820
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 415.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER				B	B	B	B			
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE PE	B	B	B					B	B	B
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9-23-10 1929
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 6 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 of 10

Submission #: 10-13353

SHIPPING INFORMATION

Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER

Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments: ice not touching samples

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 163
Temperature: A 13.4 °C / C 13.4 °C
Date/Time 9-23-10 1820
Analyst Init AM

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	14	15	16	17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL				AM	AM	AM	AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8250										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: [illegible] Date/Time: 9-23-10 1824
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 7 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 4 Of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: 1123

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 1123
Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820
Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A M	A M	A M							
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JKW Date/Time: 9-23-10 1925
A = Actual / C = Corrected
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Chain of Custody and Cooler Receipt Form for 1013353 Page 8 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 5 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments: 10W0123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103
Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1820
Analyst Init JWW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE pe	B	B	B							
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JWW Date/Time: 9-23-10 1929
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 9 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 6 Of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging between samples & ice

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 32oz jar Thermometer ID: 103
Temperature: A 16.7 °C / C 16.7 °C

Date/Time 9-23-10 1820
Analyst Init NW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 535 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER				B	B	B	B		B	
8 OZ. JAR								B		B
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: NW Date/Time: 9-23-10 1829
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 10 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 7 of 10

Submission #: 1013353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: ice not touching samples

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☐ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 103
Temperature: A 13.4 °C / C 13.4 °C
Date/Time 9-23-10 1820
Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 21	22	23	24	1-5	6	7	8	29	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
Tot. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL	AU	AU	AU	AU	AU					
QT EPA 413.1, 415.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 535.1										
QT EPA 548										
QT EPA 549										
QT EPA 631										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JDW Date/Time: 9-23-10 1824
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 11 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 8 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging between samples & ice

Custody Seals Ice Chest ☒ Intact? Yes ☒ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 32 oz jar Thermometer ID: 1123
Temperature: A 16.7 °C / C 16.7 °C

Date/Time 9-23-10 1820
Analyst Init

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B	B	B	B	B					
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: Date/Time: 9-23-10 1827
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 12 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 9 of 10

Submission #: 10-13353

SHIPPING INFORMATION

Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER

Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: WW123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 163
Temperature: A 0.9 °C / C 0.9 °C

Date/Time 9-23-10 1820
Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	26	27	28	29	30
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL						AM	AM	AM		
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: [illegible] Date/Time: 9-23-10 1924
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 13 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 10 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: 10W123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103
Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1520
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	26	27	28	29	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR						B	B	B		
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9-23-10 1529
A = Actual C = Corrected

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-01	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-02	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:52
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-03	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:58
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-04	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	DUPE-4	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-05	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:13
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-06	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-07	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-5	**Sample Matrix:**	Solids
	Sampled By:	---		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-08	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013353-09	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-10	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-11	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-12	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 11:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-13	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 11:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-14	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:30
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-15	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:45
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-16	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-17	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-18	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-19	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:25
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-20	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-21	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:30
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-22	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-23	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:10
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-24	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-25	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-26	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-27	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-28	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:10
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-5	**Sample Matrix:**	Solids
	Sampled By:	---		

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 09/28/2010 13:45 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-29	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	TB	**Sample Matrix:**	Water
	Sampled By:	---		

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	15.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 00:02	VH1	GC-1	0.990	BTI1587

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	64.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:04	cc1	GC-7	0.993	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 01:10	ADC	MS-V2	0.910	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	76.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 11:30	MWB	GC-13	0.997	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**29**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**11**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**10**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.021**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**7.7**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**41**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:18	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:18	MEV	CETAC1	1.008	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	67.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 00:21	VH1	GC-1	0.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	86.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:27	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00092	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00069	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00093	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0023	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00084	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0037	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 01:36	ADC	MS-V2	1.090	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	92.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 11:54	MWB	GC-13	0.993	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.077**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**13**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**13**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.013**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.87**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.3**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.55**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**43**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:20	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:20	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	54.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	86.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 15:57	VH1	GC-1	0.997	BTI1587

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:50	cc1	GC-7	0.997	BTI1624

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 02:01	ADC	MS-V2	1	BTI1451

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1220 Avenida Acaso
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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	99.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 12:19	MWB	GC-13	0.993	BTI1609

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1220 Avenida Acaso
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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**1.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**21**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.5**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.8**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**0.32**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:21	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:22	MEV	CETAC1	0.992	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	28.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	50.7	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 16:15	VH1	GC-1	1.993	BTI1587

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:13	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.11	0.021	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.056**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.11	0.014	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Ethylbenzene	**0.040**	**mg/kg**	**0.11**	**0.034**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.092**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Methylene chloride	ND	mg/kg	0.22	0.054	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.11	0.011	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
n-Propylbenzene	**0.069**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Toluene	**0.066**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.11	0.047	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.11	0.045	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.11	0.017	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**0.72**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.25**	**mg/kg**	**0.11**	**0.034**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
Total Xylenes	**0.24**	**mg/kg**	**0.22**	**0.076**	**EPA-8260**	**ND**	**A01**	1
p- & m-Xylenes	**0.12**	**mg/kg**	**0.11**	**0.049**	**EPA-8260**	**ND**	**A01**	1
o-Xylene	**0.13**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	109	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: (3-Methyl-2-butenyl)benzene	**0.37**	**mg/kg**			**EPA-8260**		**A01**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,1,2,3-Tetramethylcyclohexane	0.59	mg/kg			EPA-8260		A01	1
TIC: 1,3-Diethylbenzene	0.27	mg/kg			EPA-8260		A01	1
TIC: 1,4-Dimethylcyclohexane	0.36	mg/kg			EPA-8260		A01	1
TIC: Decahydro-2-methylnaphthalene	0.22	mg/kg			EPA-8260		A01	1
TIC: trans-1,2-Dimethylcyclohexane	0.40	mg/kg			EPA-8260		A01	1
TIC: trans-1,3,5-Trimethylcyclohexane	0.26	mg/kg			EPA-8260		A01	1
TIC: trans-Decahydronaphthalene	0.42	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 16:48	ADC	MS-V2	22.400	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	100	46	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	100	12	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	200	28	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	200	65	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**2700**	**mg/kg**	**500**	**200**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:06	MWB	GC-13	10	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.53**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**13**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.021**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.9**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**110**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:23	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:24	MEV	CETAC1	0.962	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0025	0.00022	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	75.9	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	120	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 04:23	VH1	GC-1	5	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:35	cc1	GC-7	4.967	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.12	0.022	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.12	0.020	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.086**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.12	0.015	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.12	0.043	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.12	0.024	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.12	0.040	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.12	0.024	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.12	0.043	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.12	0.019	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.12	0.020	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.12	0.019	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
Ethylbenzene	**0.054**	**mg/kg**	**0.12**	**0.036**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.12	0.040	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.13**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**A01**	1
Methylene chloride	ND	mg/kg	0.24	0.057	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.12	0.012	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
n-Propylbenzene	**0.10**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Toluene	**0.25**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.12	0.050	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.12	0.048	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.12	0.018	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**1.2**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.46**	**mg/kg**	**0.12**	**0.036**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
Total Xylenes	**0.55**	**mg/kg**	**0.24**	**0.081**	**EPA-8260**	**ND**	**A01**	1
p- & m-Xylenes	**0.30**	**mg/kg**	**0.12**	**0.052**	**EPA-8260**	**ND**	**A01**	1
o-Xylene	**0.25**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	93.5	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	109	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,3-Trimethylcyclohexane	**0.47**	**mg/kg**			**EPA-8260**		**A01**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,2,3,4-Tetrahydro-6-methylnaphthalene	1.1	mg/kg			EPA-8260		A01	1
TIC: 1,2,3-Trimethylcyclohexane	0.77	mg/kg			EPA-8260		A01	1
TIC: 1,2,4,5-Tetramethylbenzene	0.41	mg/kg			EPA-8260		A01	1
TIC: 1,4-Dimethylcyclohexane	0.42	mg/kg			EPA-8260		A01	1
TIC: 1-Methyl-3-(1-methylethyl)cyclopentane	1.5	mg/kg			EPA-8260		A01	1
TIC: Decahydro-2-methylnaphthalene	0.85	mg/kg			EPA-8260		A01	1
TIC: Ethylcyclohexane	0.21	mg/kg			EPA-8260		A01	1
TIC: trans, cis-1,2,4-Trimethylcyclohexane	0.64	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 17:14	ADC	MS-V2	23.800	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	990	460	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	990	140	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	990	120	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	2000	280	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	2000	640	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**25000**	**mg/kg**	**5000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:56	MWB	GC-13	99.010	BTI1609

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.3**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**7.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.3**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**63**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.079**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**36**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:25	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:27	MEV	CETAC1	0.977	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.0019**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A09,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	41.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	71.9	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 16:52	VH1	GC-1	1.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	68.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:57	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.11	0.021	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.033**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.11	0.014	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Ethylbenzene	**0.039**	**mg/kg**	**0.11**	**0.033**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.058**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Methylene chloride	ND	mg/kg	0.22	0.054	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.11	0.011	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
n-Propylbenzene	**0.043**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Toluene	**0.058**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.11	0.047	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.11	0.045	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.11	0.017	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**0.36**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.15**	**mg/kg**	**0.11**	**0.033**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
Total Xylenes	**0.18**	**mg/kg**	**0.22**	**0.076**	**EPA-8260**	**ND**	**J,A01**	1
p- & m-Xylenes	**0.083**	**mg/kg**	**0.11**	**0.049**	**EPA-8260**	**ND**	**J,A01**	1
o-Xylene	**0.093**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	106	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,2,3-Tetramethylcyclohexane	**0.49**	**mg/kg**			**EPA-8260**		**A01**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,1,3-Trimethylcyclohexane	0.19	mg/kg			EPA-8260		A01	1
TIC: 1,2,3,4-Tetrahydro-6-methylnaphthalene	0.30	mg/kg			EPA-8260		A01	1
TIC: 1,2,3-Trimethylcyclohexane	0.49	mg/kg			EPA-8260		A01	1
TIC: 1,2,4,5-Tetramethylbenzene	0.14	mg/kg			EPA-8260		A01	1
TIC: 1,2,4-Trimethylcyclohexane	0.19	mg/kg			EPA-8260		A01	1
TIC: 1-Ethyl-2-methylbenzene	0.31	mg/kg			EPA-8260		A01	1
TIC: 4-Ethyl-1,2-dimethylbenzene	0.24	mg/kg			EPA-8260		A01	1
TIC: Bicyclo[3.3.1]nonane	0.48	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 17:40	ADC	MS-V2	22.300	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	100	46	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	100	12	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	200	28	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	200	65	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**2000**	**mg/kg**	**500**	**200**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:31	MWB	GC-13	9.967	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**110**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.51**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.63**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**27**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.018**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**34**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**110**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:26	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:29	MEV	CETAC1	0.977	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00022**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**	**J**	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00065**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	47.0	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	85.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:10	VH1	GC-1	0.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	49.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 11:20	cc1	GC-7	0.993	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 18:06	ADC	MS-V2	0.940	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**290**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	88.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 05:14	MWB	GC-13	0.997	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.62**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.022**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.91**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.073**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**50**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:28	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:31	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-08 | **Client Sample Name:** Heca, GP-2-5, 9/23/2010 10:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00035**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**	**J**	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0010**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**	**V11**	1
4,4'-DDE	**0.0039**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.0050**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00055**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	44.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:28	VH1	GC-1	0.984	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-08 | **Client Sample Name:** Heca, GP-2-5, 9/23/2010 10:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	56.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 11:42	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.6	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 11:15	ADC	MS-V2	0.840	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**95**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	93.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 04:00	MWB	GC-13	1	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:29	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0056	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0056	0.00095	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0056	0.00071	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0056	0.00096	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0027	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0056	0.00056	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0056	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0056	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0056	0.00087	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0038	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0056	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	99.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 11:41	ADC	MS-V2	1.130	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	93.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 12:44	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:04	JRG	PE-OP2	1	BTI1567

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1220 Avenida Acaso
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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-11 | **Client Sample Name:** Heca, GP-1-5, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	38.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:46	VH1	GC-1	1	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-11 | **Client Sample Name:** Heca, GP-1-5, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	63.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 12:05	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 12:33	ADC	MS-V2	0.940	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	56.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 13:08	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**0.88**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:14	JRG	PE-OP2	1	BTI1567

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0049	0.00090	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0049	0.00082	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0049	0.00062	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0049	0.00097	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0049	0.00098	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0049	0.00083	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0098	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0049	0.00049	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0049	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0049	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0049	0.00075	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0098	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0049	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 12:58	ADC	MS-V2	0.980	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	92.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 13:33	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**0.69**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:16	JRG	PE-OP2	1	BTI1567

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AECOM
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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0025	0.00022	EPA-8081	ND	A10	1
4,4'-DDT	**0.010**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	60.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	105	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:04	VH1	GC-1	5	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND		1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	54.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 12:27	cc1	GC-7	5	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 13:24	ADC	MS-V2	1	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	39.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 14:12	EJB	GC-13	0.987	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**21**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.82**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**20**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.056**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**5.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**78**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:18	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:33	MEV	CETAC1	0.933	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	44.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	57.1	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 18:06	VH1	GC-1	2	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	65.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 14:20	cc1	GC-7	1	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00090	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00087	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00091	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00087	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 13:49	ADC	MS-V2	1.070	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 04:50	MWB	GC-13	0.997	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**19**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.71**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**20**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**15**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.059**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**66**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:26	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:39	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	**0.00033**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**	**J**	1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	10.2	%	12 - 168 (LCL - UCL)		EPA-8081		S09	1
Dibutyl chlorendate (Surrogate)	47.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 18:24	VH1	GC-1	0.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	40.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 15:05	cc1	GC-7	0.993	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 14:40	ADC	MS-V2	0.856	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 15:12	MWB	GC-13	0.997	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**35**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**190**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.92**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.25**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.28**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**		2
Molybdenum	**9.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**71**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**78**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:27	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:42	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND	V11	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	9.5	%	12 - 168 (LCL - UCL)		EPA-8081		S09	1
Dibutyl chlorendate (Surrogate)	47.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 10:20	VH1	GC-1	0.987	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	41.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 15:27	cc1	GC-7	1	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0027**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	89.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	75.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 18:31	ADC	MS-V2	0.912	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	67.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 13:23	EJB	GC-13	0.990	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**21**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**69**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**14**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**18**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**8.0**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**46**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:29	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:44	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.00069**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**J,A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	**0.0010**	**mg/kg**	**0.0010**	**0.00013**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.016**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.00096**	**mg/kg**	**0.0010**	**0.000062**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	**0.0014**	**mg/kg**	**0.0010**	**0.000064**	**EPA-8081**	**ND**	**A10**	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	**0.00031**	**mg/kg**	**0.0010**	**0.000070**	**EPA-8081**	**ND**	**J,A10**	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	25.7	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	64.4	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:22	VH1	GC-1	1.974	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	41.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 16:13	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0028**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 17:40	ADC	MS-V2	0.910	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	89.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 13:48	EJB	GC-13	0.993	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**19**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.032**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**76**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:30	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:46	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0044**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	**0.00034**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**	**J**	1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	20.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	54.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 19:55	VH1	GC-1	0.997	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	46.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 16:35	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0038**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	**0.0018**	**mg/kg**	**0.0042**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	90.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 18:06	ADC	MS-V2	0.840	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 16:02	MWB	GC-13	0.997	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.88**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**25**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**10**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.037**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.86**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**71**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:32	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:48	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	14.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	34.2	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 20:31	VH1	GC-1	0.997	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	34.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 17:20	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0037**	**0.00096**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0037	0.00068	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0037	0.00062	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0037	0.00047	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0037	0.00073	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0037	0.00074	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0037	0.00060	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0037	0.00063	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0037	0.00060	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0074	0.0018	EPA-8260	ND		1
Methyl t-butyl ether	**0.00053**	**mg/kg**	**0.0037**	**0.00037**	**EPA-8260**	**ND**	**J**	1
Naphthalene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0037	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0037	0.0015	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0037	0.00057	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0074	0.0025	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0037	0.0016	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.8	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 18:58	ADC	MS-V2	0.740	BTI1451

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	91.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 22:39	MWB	GC-13	0.997	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**16**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**190**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.28**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**10**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.022**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.0**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**66**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**70**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:33	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:50	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	17.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	45.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 20:49	VH1	GC-1	0.984	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	49.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 17:43	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0038	0.00071	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0038	0.00065	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0038	0.00049	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0038	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0038	0.00076	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0038	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0038	0.00077	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0038	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0038	0.00062	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0038	0.00065	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0038	0.00062	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0038	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0077	0.0018	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0038	0.00038	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0038	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0038	0.0015	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0038	0.00059	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0077	0.0026	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0038	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 19:23	ADC	MS-V2	0.770	BTI1451

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:03	MWB	GC-13	0.990	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.94**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.18**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.023**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**56**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:35	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:08	MEV	CETAC1	0.977	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	43.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/25/10 21:55	VH1	GC-1	0.997	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	71.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 04:09	cc1	GC-7	1	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0048**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00078	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00085	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00072	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0085	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	**0.0027**	**mg/kg**	**0.0042**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0085	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.8	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 20:14	ADC	MS-V2	0.850	BTI1565

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	81.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:28	MWB	GC-13	1	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.92**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.030**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**4.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:36	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:11	MEV	CETAC1	1.025	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/25/10 22:13	VH1	GC-1	0.997	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	44.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 04:32	cc1	GC-7	0.987	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0030**	**mg/kg**	**0.0043**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 20:40	ADC	MS-V2	0.860	BTI1565

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1220 Avenida Acaso
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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:52	MWB	GC-13	0.993	BTI1613

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**210**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.99**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.69**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	**0.73**	**mg/kg**	**5.0**	**0.73**	**EPA-6010B**	**ND**	**J**	1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**73**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:38	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:13	MEV	CETAC1	1.008	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	99.5	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 09:26	MGC	MS-V5	1	BTI1541

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1586						
Aldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1586-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1586-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1586-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1586-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1586-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1586-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1586-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1586-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1586-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1586-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1586-BLK1	64.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1586-BLK1	113	%	26 - 151 (LCL - UCL)		
QC Batch ID: BTI1587						
Aldrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1587-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1587-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1587-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1587-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1587-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1587-BLK1	ND	mg/kg	0.00050	0.000086	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1587						
Endosulfan II	BTI1587-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1587-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1587-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1587-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1587-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1587-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1587-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1587-BLK1	66.4	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1587-BLK1	117	%	26 - 151 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1586										
Aldrin	BTI1586-BS1	LCS	0.0051784	0.0049834	mg/kg	104		60 - 124		
gamma-BHC (Lindane)	BTI1586-BS1	LCS	0.0051621	0.0049834	mg/kg	104		46 - 107		
4,4'-DDT	BTI1586-BS1	LCS	0.0057216	0.0049834	mg/kg	115		40 - 148		
Dieldrin	BTI1586-BS1	LCS	0.0052930	0.0049834	mg/kg	106		56 - 130		
Endrin	BTI1586-BS1	LCS	0.0058944	0.0049834	mg/kg	118		61 - 131		
Heptachlor	BTI1586-BS1	LCS	0.0052877	0.0049834	mg/kg	106		58 - 130		
TCMX (Surrogate)	BTI1586-BS1	LCS	0.0072794	0.0099668	mg/kg	73.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1586-BS1	LCS	0.029195	0.024917	mg/kg	117		26 - 151		
QC Batch ID: BTI1587										
Aldrin	BTI1587-BS1	LCS	0.0049153	0.0049834	mg/kg	98.6		60 - 124		
gamma-BHC (Lindane)	BTI1587-BS1	LCS	0.0048429	0.0049834	mg/kg	97.2		46 - 107		
4,4'-DDT	BTI1587-BS1	LCS	0.0056116	0.0049834	mg/kg	113		40 - 148		
Dieldrin	BTI1587-BS1	LCS	0.0050850	0.0049834	mg/kg	102		56 - 130		
Endrin	BTI1587-BS1	LCS	0.0054814	0.0049834	mg/kg	110		61 - 131		
Heptachlor	BTI1587-BS1	LCS	0.0050449	0.0049834	mg/kg	101		58 - 130		
TCMX (Surrogate)	BTI1587-BS1	LCS	0.0070704	0.0099668	mg/kg	70.9		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1587-BS1	LCS	0.028168	0.024917	mg/kg	113		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1586	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Aldrin	MS	1013353-25	ND	0.0020775	0.0049669	mg/kg		41.8		63 - 119	Q03
	MSD	1013353-25	ND	0.0015380	0.0049180	mg/kg	28.9	31.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-25	ND	0.0028245	0.0049669	mg/kg		56.9		47 - 102	
	MSD	1013353-25	ND	0.0021197	0.0049180	mg/kg	27.5	43.1	30	47 - 102	Q03
4,4'-DDT	MS	1013353-25	ND	0.0023752	0.0049669	mg/kg		47.8		32 - 158	
	MSD	1013353-25	ND	0.0014216	0.0049180	mg/kg	49.3	28.9	30	32 - 158	Q03
Dieldrin	MS	1013353-25	ND	0.0023921	0.0049669	mg/kg		48.2		57 - 125	Q03
	MSD	1013353-25	ND	0.0019193	0.0049180	mg/kg	21.0	39.0	20	57 - 125	Q03
Endrin	MS	1013353-25	ND	0.0027523	0.0049669	mg/kg		55.4		61 - 130	Q03
	MSD	1013353-25	ND	0.0021859	0.0049180	mg/kg	22.0	44.4	27	61 - 130	Q03
Heptachlor	MS	1013353-25	ND	0.0023308	0.0049669	mg/kg		46.9		52 - 139	Q03
	MSD	1013353-25	ND	0.0016489	0.0049180	mg/kg	33.3	33.5	30	52 - 139	Q03
TCMX (Surrogate)	MS	1013353-25	ND	0.0033381	0.0099338	mg/kg		33.6		12 - 168	
	MSD	1013353-25	ND	0.0025393	0.0098361	mg/kg		25.8		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-25	ND	0.014076	0.024834	mg/kg		56.7		26 - 151	
	MSD	1013353-25	ND	0.0094797	0.024590	mg/kg		38.6		26 - 151	
QC Batch ID: BTI1587	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
Aldrin	MS	1013353-03	ND	0.0031689	0.0049180	mg/kg		64.4		63 - 119	
	MSD	1013353-03	ND	0.0029672	0.0049180	mg/kg	6.6	60.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-03	ND	0.0031433	0.0049180	mg/kg		63.9		47 - 102	
	MSD	1013353-03	ND	0.0029708	0.0049180	mg/kg	5.6	60.4	30	47 - 102	
4,4'-DDT	MS	1013353-03	ND	0.0035052	0.0049180	mg/kg		71.3		32 - 158	
	MSD	1013353-03	ND	0.0032528	0.0049180	mg/kg	7.5	66.1	30	32 - 158	
Dieldrin	MS	1013353-03	ND	0.0031767	0.0049180	mg/kg		64.6		57 - 125	
	MSD	1013353-03	ND	0.0030200	0.0049180	mg/kg	5.1	61.4	20	57 - 125	
Endrin	MS	1013353-03	ND	0.0035246	0.0049180	mg/kg		71.7		61 - 130	
	MSD	1013353-03	ND	0.0033525	0.0049180	mg/kg	5.0	68.2	27	61 - 130	
Heptachlor	MS	1013353-03	ND	0.0032443	0.0049180	mg/kg		66.0		52 - 139	
	MSD	1013353-03	ND	0.0030652	0.0049180	mg/kg	5.7	62.3	30	52 - 139	
TCMX (Surrogate)	MS	1013353-03	ND	0.0045328	0.0098361	mg/kg		46.1		12 - 168	
	MSD	1013353-03	ND	0.0043731	0.0098361	mg/kg		44.5		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-03	ND	0.015927	0.024590	mg/kg		64.8		26 - 151	
	MSD	1013353-03	ND	0.014356	0.024590	mg/kg		58.4		26 - 151	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1599						
Azinphos methyl	BTI1599-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1599-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1599-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1599-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1599-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1599-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1599-BLK1	100	%	9 - 105 (LCL - UCL)		
QC Batch ID: BTI1624						
Azinphos methyl	BTI1624-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1624-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1624-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1624-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1624-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1624-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1624-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1624-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1624-BLK1	ND	mg/kg	0.010	0.0010	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1624						
Merphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1624-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1624-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1624-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1624-BLK1	102	%	9 - 105 (LCL - UCL)		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1599										
Bolstar	BTI1599-BS1	LCS	0.024917	0.026578	mg/kg	93.8		9 - 146		
Chlorpyrifos	BTI1599-BS1	LCS	0.022259	0.026578	mg/kg	83.8		68 - 151		
Diazinon	BTI1599-BS1	LCS	0.010797	0.026578	mg/kg	40.6		38 - 105		
Methyl parathion	BTI1599-BS1	LCS	0.021595	0.026578	mg/kg	81.3		70 - 130		
Mevinphos	BTI1599-BS1	LCS	0.015282	0.026578	mg/kg	57.5		48 - 135		
Ronnel (Fenchlorphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		66 - 164		
Triphenylphosphate (Surrogate)	BTI1599-BS1	LCS	0.080399	0.083056	mg/kg	96.8		9 - 105		
QC Batch ID: BTI1624										
Bolstar	BTI1624-BS1	LCS	0.024751	0.026578	mg/kg	93.1		9 - 146		
Chlorpyrifos	BTI1624-BS1	LCS	0.021927	0.026578	mg/kg	82.5		68 - 151		
Diazinon	BTI1624-BS1	LCS	0.012292	0.026578	mg/kg	46.2		38 - 105		
Methyl parathion	BTI1624-BS1	LCS	0.021927	0.026578	mg/kg	82.5		70 - 130		
Mevinphos	BTI1624-BS1	LCS	0.014120	0.026578	mg/kg	53.1		48 - 135		
Ronnel (Fenchlorphos)	BTI1624-BS1	LCS	0.020930	0.026578	mg/kg	78.7		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1624-BS1	LCS	0.020930	0.026578	mg/kg	78.7		66 - 164		
Triphenylphosphate (Surrogate)	BTI1624-BS1	LCS	0.078571	0.083056	mg/kg	94.6		9 - 105		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1599	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Bolstar	MS	1013353-25	ND	0.024257	0.026403	mg/kg		91.9		1 - 167	
	MSD	1013353-25	ND	0.019802	0.026403	mg/kg	20.2	75.0	30	1 - 167	
Chlorpyrifos	MS	1013353-25	ND	0.017987	0.026403	mg/kg		68.1		41 - 167	
	MSD	1013353-25	ND	0.016172	0.026403	mg/kg	10.6	61.3	20	41 - 167	
Diazinon	MS	1013353-25	ND	0.020132	0.026403	mg/kg		76.2		31 - 97	
	MSD	1013353-25	ND	0.016997	0.026403	mg/kg	16.9	64.4	30	31 - 97	
Methyl parathion	MS	1013353-25	ND	0.019472	0.026403	mg/kg		73.8		41 - 159	
	MSD	1013353-25	ND	0.016667	0.026403	mg/kg	15.5	63.1	20	41 - 159	
Mevinphos	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		35 - 136	
	MSD	1013353-25	ND	0.015677	0.026403	mg/kg	20.8	59.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-25	ND	0.017822	0.026403	mg/kg		67.5		34 - 143	
	MSD	1013353-25	ND	0.015512	0.026403	mg/kg	13.9	58.8	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		7 - 209	
	MSD	1013353-25	ND	0.016007	0.026403	mg/kg	18.7	60.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-25	ND	0.074752	0.082508	mg/kg		90.6		9 - 105	
	MSD	1013353-25	ND	0.065182	0.082508	mg/kg		79.0		9 - 105	
QC Batch ID: BTI1624	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
Bolstar	MS	1013353-03	ND	0.029703	0.026403	mg/kg		112		1 - 167	
	MSD	1013353-03	ND	0.026080	0.026578	mg/kg	13.6	98.1	30	1 - 167	
Chlorpyrifos	MS	1013353-03	ND	0.021617	0.026403	mg/kg		81.9		41 - 167	
	MSD	1013353-03	ND	0.019601	0.026578	mg/kg	10.4	73.8	20	41 - 167	
Diazinon	MS	1013353-03	ND	0.022442	0.026403	mg/kg		85.0		31 - 97	
	MSD	1013353-03	ND	0.020598	0.026578	mg/kg	9.2	77.5	30	31 - 97	
Methyl parathion	MS	1013353-03	ND	0.023927	0.026403	mg/kg		90.6		41 - 159	
	MSD	1013353-03	ND	0.021096	0.026578	mg/kg	13.2	79.4	20	41 - 159	
Mevinphos	MS	1013353-03	ND	0.018812	0.026403	mg/kg		71.2		35 - 136	
	MSD	1013353-03	ND	0.018106	0.026578	mg/kg	4.5	68.1	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-03	ND	0.020627	0.026403	mg/kg		78.1		34 - 143	
	MSD	1013353-03	ND	0.018605	0.026578	mg/kg	11.0	70.0	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-03	ND	0.021122	0.026403	mg/kg		80.0		7 - 209	
	MSD	1013353-03	ND	0.019435	0.026578	mg/kg	9.0	73.1	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-03	ND	0.075413	0.082508	mg/kg		91.4		9 - 105	
	MSD	1013353-03	ND	0.071927	0.083056	mg/kg		86.6		9 - 105	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1541						
Benzene	BTI1541-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1541-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1541-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1541-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1541-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1541-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1541-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1541-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1541-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.14	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1541						
trans-1,3-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1541-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1541-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1541-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1541-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1541-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1541-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1541-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1541-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1541-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1541-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1541-BLK1	106	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1541-BLK1	97.3	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1541-BLK1	98.7	%	86 - 115 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1541										
Benzene	BTI1541-BS1	LCS	22.220	25.000	ug/L	88.9		70 - 130		
Bromodichloromethane	BTI1541-BS1	LCS	27.740	25.000	ug/L	111		70 - 130		
Chlorobenzene	BTI1541-BS1	LCS	24.820	25.000	ug/L	99.3		70 - 130		
Chloroethane	BTI1541-BS1	LCS	24.780	25.000	ug/L	99.1		70 - 130		
1,4-Dichlorobenzene	BTI1541-BS1	LCS	26.020	25.000	ug/L	104		70 - 130		
1,1-Dichloroethane	BTI1541-BS1	LCS	26.400	25.000	ug/L	106		70 - 130		
1,1-Dichloroethene	BTI1541-BS1	LCS	25.530	25.000	ug/L	102		70 - 130		
Toluene	BTI1541-BS1	LCS	25.260	25.000	ug/L	101		70 - 130		
Trichloroethene	BTI1541-BS1	LCS	30.630	25.000	ug/L	123		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1541-BS1	LCS	10.080	10.000	ug/L	101		76 - 114		
Toluene-d8 (Surrogate)	BTI1541-BS1	LCS	9.9000	10.000	ug/L	99.0		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1541-BS1	LCS	9.7200	10.000	ug/L	97.2		86 - 115		

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1541	Used client sample: N										
Benzene	MS	1013347-08	ND	22.460	25.000	ug/L		89.8		70 - 130	
	MSD	1013347-08	ND	22.810	25.000	ug/L	1.5	91.2	20	70 - 130	
Bromodichloromethane	MS	1013347-08	ND	28.330	25.000	ug/L		113		70 - 130	
	MSD	1013347-08	ND	28.740	25.000	ug/L	1.4	115	20	70 - 130	
Chlorobenzene	MS	1013347-08	ND	27.750	25.000	ug/L		111		70 - 130	
	MSD	1013347-08	ND	25.830	25.000	ug/L	7.2	103	20	70 - 130	
Chloroethane	MS	1013347-08	ND	24.650	25.000	ug/L		98.6		70 - 130	
	MSD	1013347-08	ND	25.390	25.000	ug/L	3.0	102	20	70 - 130	
1,4-Dichlorobenzene	MS	1013347-08	ND	28.490	25.000	ug/L		114		70 - 130	
	MSD	1013347-08	ND	26.940	25.000	ug/L	5.6	108	20	70 - 130	
1,1-Dichloroethane	MS	1013347-08	ND	26.850	25.000	ug/L		107		70 - 130	
	MSD	1013347-08	ND	27.300	25.000	ug/L	1.7	109	20	70 - 130	
1,1-Dichloroethene	MS	1013347-08	ND	26.060	25.000	ug/L		104		70 - 130	
	MSD	1013347-08	ND	26.230	25.000	ug/L	0.7	105	20	70 - 130	
Toluene	MS	1013347-08	ND	25.650	25.000	ug/L		103		70 - 130	
	MSD	1013347-08	ND	26.030	25.000	ug/L	1.5	104	20	70 - 130	
Trichloroethene	MS	1013347-08	ND	26.670	25.000	ug/L		107		70 - 130	
	MSD	1013347-08	ND	27.030	25.000	ug/L	1.3	108	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013347-08	ND	10.670	10.000	ug/L		107		76 - 114	
	MSD	1013347-08	ND	10.510	10.000	ug/L		105		76 - 114	
Toluene-d8 (Surrogate)	MS	1013347-08	ND	9.9600	10.000	ug/L		99.6		88 - 110	
	MSD	1013347-08	ND	9.8900	10.000	ug/L		98.9		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013347-08	ND	10.650	10.000	ug/L		106		86 - 115	
	MSD	1013347-08	ND	10.030	10.000	ug/L		100		86 - 115	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1451						
Benzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1451-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1451						
trans-1,3-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1451-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1451-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1451-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1451-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1451-BLK1	97.8	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1451-BLK1	100	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1451-BLK1	92.2	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1565						
Benzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Bromobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1565-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Ethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1565-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1565-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1565-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1565-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1565-BLK1	98.7	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1565-BLK1	101	%	74 - 121 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1451										
Benzene	BTI1451-BS1	LCS	0.13017	0.12500	mg/kg	104		70 - 130		
Bromodichloromethane	BTI1451-BS1	LCS	0.12816	0.12500	mg/kg	103		70 - 130		
Chlorobenzene	BTI1451-BS1	LCS	0.13253	0.12500	mg/kg	106		70 - 130		
Chloroethane	BTI1451-BS1	LCS	0.12878	0.12500	mg/kg	103		70 - 130		
1,4-Dichlorobenzene	BTI1451-BS1	LCS	0.13066	0.12500	mg/kg	105		70 - 130		
1,1-Dichloroethane	BTI1451-BS1	LCS	0.13420	0.12500	mg/kg	107		70 - 130		
1,1-Dichloroethene	BTI1451-BS1	LCS	0.12967	0.12500	mg/kg	104		70 - 130		
Toluene	BTI1451-BS1	LCS	0.13276	0.12500	mg/kg	106		70 - 130		
Trichloroethene	BTI1451-BS1	LCS	0.13307	0.12500	mg/kg	106		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1451-BS1	LCS	0.051475	0.050000	mg/kg	103		70 - 121		
Toluene-d8 (Surrogate)	BTI1451-BS1	LCS	0.049931	0.050000	mg/kg	99.9		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1451-BS1	LCS	0.048854	0.050000	mg/kg	97.7		74 - 121		
QC Batch ID: BTI1565										
Benzene	BTI1565-BS1	LCS	0.14513	0.12500	mg/kg	116		70 - 130		
Bromodichloromethane	BTI1565-BS1	LCS	0.13467	0.12500	mg/kg	108		70 - 130		
Chlorobenzene	BTI1565-BS1	LCS	0.14620	0.12500	mg/kg	117		70 - 130		
Chloroethane	BTI1565-BS1	LCS	0.14475	0.12500	mg/kg	116		70 - 130		
1,4-Dichlorobenzene	BTI1565-BS1	LCS	0.14608	0.12500	mg/kg	117		70 - 130		
1,1-Dichloroethane	BTI1565-BS1	LCS	0.14749	0.12500	mg/kg	118		70 - 130		
1,1-Dichloroethene	BTI1565-BS1	LCS	0.14779	0.12500	mg/kg	118		70 - 130		
Toluene	BTI1565-BS1	LCS	0.14061	0.12500	mg/kg	112		70 - 130		
Trichloroethene	BTI1565-BS1	LCS	0.14409	0.12500	mg/kg	115		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BS1	LCS	0.050604	0.050000	mg/kg	101		70 - 121		
Toluene-d8 (Surrogate)	BTI1565-BS1	LCS	0.048840	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1565-BS1	LCS	0.050624	0.050000	mg/kg	101		74 - 121		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1451	Used client sample: N										
Benzene	MS	1011454-84	ND	0.13215	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-84	ND	0.12647	0.12500	mg/kg	4.4	101	20	70 - 130	
Bromodichloromethane	MS	1011454-84	ND	0.12991	0.12500	mg/kg		104		70 - 130	
	MSD	1011454-84	ND	0.12193	0.12500	mg/kg	6.3	97.5	20	70 - 130	
Chlorobenzene	MS	1011454-84	ND	0.13829	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-84	ND	0.13170	0.12500	mg/kg	4.9	105	20	70 - 130	
Chloroethane	MS	1011454-84	ND	0.13126	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-84	ND	0.12805	0.12500	mg/kg	2.5	102	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-84	ND	0.13497	0.12500	mg/kg		108		70 - 130	
	MSD	1011454-84	ND	0.13018	0.12500	mg/kg	3.6	104	20	70 - 130	
1,1-Dichloroethane	MS	1011454-84	ND	0.13486	0.12500	mg/kg		108		70 - 130	
	MSD	1011454-84	ND	0.13065	0.12500	mg/kg	3.2	105	20	70 - 130	
1,1-Dichloroethene	MS	1011454-84	ND	0.13042	0.12500	mg/kg		104		70 - 130	
	MSD	1011454-84	ND	0.12748	0.12500	mg/kg	2.3	102	20	70 - 130	
Toluene	MS	1011454-84	ND	0.13297	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-84	ND	0.12648	0.12500	mg/kg	5.0	101	20	70 - 130	
Trichloroethene	MS	1011454-84	ND	0.13365	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-84	ND	0.13077	0.12500	mg/kg	2.2	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-84	ND	0.049706	0.050000	mg/kg		99.4		70 - 121	
	MSD	1011454-84	ND	0.048668	0.050000	mg/kg		97.3		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-84	ND	0.048435	0.050000	mg/kg		96.9		81 - 117	
	MSD	1011454-84	ND	0.049309	0.050000	mg/kg		98.6		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-84	ND	0.049984	0.050000	mg/kg		100		74 - 121	
	MSD	1011454-84	ND	0.049341	0.050000	mg/kg		98.7		74 - 121	
QC Batch ID: BTI1565	Used client sample: N										
Benzene	MS	1011454-85	ND	0.13260	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13418	0.12500	mg/kg	1.2	107	20	70 - 130	
Bromodichloromethane	MS	1011454-85	ND	0.12495	0.12500	mg/kg		100		70 - 130	
	MSD	1011454-85	ND	0.12959	0.12500	mg/kg	3.6	104	20	70 - 130	
Chlorobenzene	MS	1011454-85	ND	0.13786	0.12500	mg/kg		110		70 - 130	
	MSD	1011454-85	ND	0.14235	0.12500	mg/kg	3.2	114	20	70 - 130	
Chloroethane	MS	1011454-85	ND	0.13184	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13647	0.12500	mg/kg	3.4	109	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-85	ND	0.14577	0.12500	mg/kg		117		70 - 130	
	MSD	1011454-85	ND	0.14256	0.12500	mg/kg	2.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1011454-85	ND	0.13317	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-85	ND	0.13582	0.12500	mg/kg	2.0	109	20	70 - 130	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1565	Used client sample: N										
1,1-Dichloroethene	MS	1011454-85	ND	0.13304	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13641	0.12500	mg/kg	2.5	109	20	70 - 130	
Toluene	MS	1011454-85	ND	0.13065	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13658	0.12500	mg/kg	4.4	109	20	70 - 130	
Trichloroethene	MS	1011454-85	ND	0.13874	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-85	ND	0.13883	0.12500	mg/kg	0.1	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-85	ND	0.049343	0.050000	mg/kg		98.7		70 - 121	
	MSD	1011454-85	ND	0.048122	0.050000	mg/kg		96.2		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-85	ND	0.049731	0.050000	mg/kg		99.5		81 - 117	
	MSD	1011454-85	ND	0.049426	0.050000	mg/kg		98.9		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-85	ND	0.049331	0.050000	mg/kg		98.7		74 - 121	
	MSD	1011454-85	ND	0.049105	0.050000	mg/kg		98.2		74 - 121	

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1609						
TPH - Light Naptha	BTI1609-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1609-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1609-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1609-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1609-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1609-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1609-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1609-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1609-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1609-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1609-BLK1	87.3	%	20 - 145 (LCL - UCL)		
QC Batch ID: BTI1613						
TPH - Light Naptha	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1613-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1613-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1613-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1613-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1613-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1613-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1613-BLK1	98.9	%	20 - 145 (LCL - UCL)		

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Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1609										
TPH - Diesel (FFP)	BTI1609-BS1	LCS	71.557	83.056	mg/kg	86.2		64 - 124		
Tetracosane (Surrogate)	BTI1609-BS1	LCS	3.0532	3.3223	mg/kg	91.9		20 - 145		
QC Batch ID: BTI1613										
TPH - Diesel (FFP)	BTI1613-BS1	LCS	80.925	82.781	mg/kg	97.8		64 - 124		
Tetracosane (Surrogate)	BTI1613-BS1	LCS	3.5637	3.3113	mg/kg	108		20 - 145		

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1609	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
TPH - Diesel (FFP)	MS	1013353-03	ND	62.048	82.508	mg/kg		75.2		52 - 131	
	MSD	1013353-03	ND	64.640	83.056	mg/kg	3.4	77.8	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-03	ND	2.6723	3.3003	mg/kg		81.0		20 - 145	
	MSD	1013353-03	ND	2.7586	3.3223	mg/kg		83.0		20 - 145	
QC Batch ID: BTI1613	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
TPH - Diesel (FFP)	MS	1013353-25	ND	65.153	83.056	mg/kg		78.4		52 - 131	
	MSD	1013353-25	ND	51.755	83.056	mg/kg	22.9	62.3	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-25	ND	3.3909	3.3223	mg/kg		102		20 - 145	
	MSD	1013353-25	ND	3.0128	3.3223	mg/kg		90.7		20 - 145	

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Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1555						
Mercury	BTI1555-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1566						
Antimony	BTI1566-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1566-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1566-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1566-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1566-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1566-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1566-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1566-BLK1	0.35796	mg/kg	2.5	0.25	J
QC Batch ID: BTI1567						
Antimony	BTI1567-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1567-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1567-BLK1	0.079094	mg/kg	0.50	0.077	J
Beryllium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1567-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1567-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1567-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1567-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1567-BLK1	ND	mg/kg	5.0	0.73	

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Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1567						
Vanadium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1567-BLK1	0.61579	mg/kg	2.5	0.25	J
QC Batch ID: BTI1658						
Mercury	BTI1658-BLK1	ND	mg/kg	0.16	0.012	

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Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1555										
Mercury	BTI1555-BS1	LCS	1.4542	1.5000	mg/kg	96.9		75 - 125		
QC Batch ID: BTI1566										
Antimony	BTI1566-BS1	LCS	100.65	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		
Barium	BTI1566-BS1	LCS	102.58	100.00	mg/kg	103		75 - 125		
Beryllium	BTI1566-BS1	LCS	10.399	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1566-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125		
Chromium	BTI1566-BS1	LCS	103.19	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1566-BS1	LCS	104.14	100.00	mg/kg	104		75 - 125		
Copper	BTI1566-BS1	LCS	100.44	100.00	mg/kg	100		75 - 125		
Lead	BTI1566-BS1	LCS	106.62	100.00	mg/kg	107		75 - 125		
Molybdenum	BTI1566-BS1	LCS	102.32	100.00	mg/kg	102		75 - 125		
Nickel	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Selenium	BTI1566-BS1	LCS	9.5899	10.000	mg/kg	95.9		75 - 125		
Silver	BTI1566-BS1	LCS	9.3760	10.000	mg/kg	93.8		75 - 125		
Thallium	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1566-BS1	LCS	108.14	100.00	mg/kg	108		75 - 125		
Zinc	BTI1566-BS1	LCS	103.41	100.00	mg/kg	103		75 - 125		
QC Batch ID: BTI1567										
Antimony	BTI1567-BS1	LCS	101.05	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1567-BS1	LCS	9.8884	10.000	mg/kg	98.9		75 - 125		
Barium	BTI1567-BS1	LCS	104.06	100.00	mg/kg	104		75 - 125		
Beryllium	BTI1567-BS1	LCS	10.515	10.000	mg/kg	105		75 - 125		
Cadmium	BTI1567-BS1	LCS	10.097	10.000	mg/kg	101		75 - 125		
Chromium	BTI1567-BS1	LCS	102.96	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1567-BS1	LCS	103.17	100.00	mg/kg	103		75 - 125		
Copper	BTI1567-BS1	LCS	101.88	100.00	mg/kg	102		75 - 125		
Lead	BTI1567-BS1	LCS	105.49	100.00	mg/kg	105		75 - 125		
Molybdenum	BTI1567-BS1	LCS	101.85	100.00	mg/kg	102		75 - 125		
Nickel	BTI1567-BS1	LCS	103.50	100.00	mg/kg	103		75 - 125		
Selenium	BTI1567-BS1	LCS	9.1315	10.000	mg/kg	91.3		75 - 125		
Silver	BTI1567-BS1	LCS	9.3712	10.000	mg/kg	93.7		75 - 125		
Thallium	BTI1567-BS1	LCS	104.32	100.00	mg/kg	104		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1567										
Vanadium	BTI1567-BS1	LCS	107.87	100.00	mg/kg	108		75 - 125		
Zinc	BTI1567-BS1	LCS	102.43	100.00	mg/kg	102		75 - 125		
QC Batch ID: BTI1658										
Mercury	BTI1658-BS1	LCS	1.4618	1.5000	mg/kg	97.5		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1555	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Mercury	DUP	1013352-05	0.012059	0.015000		mg/kg	21.7		20		J,A02
	MS	1013352-05	0.012059	0.73838	0.73529	mg/kg		98.8		85 - 115	
	MSD	1013352-05	0.012059	0.73985	0.73529	mg/kg	0.2	99.0	20	85 - 115	
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Antimony	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	29.026	100.00	mg/kg		29.0		16 - 119	
	MSD	1013288-01	ND	29.067	100.00	mg/kg	0.1	29.1	20	16 - 119	
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	
Barium	DUP	1013288-01	147.86	143.51		mg/kg	3.0		20		
	MS	1013288-01	147.86	240.61	100.00	mg/kg		92.8		75 - 125	
	MSD	1013288-01	147.86	241.18	100.00	mg/kg	0.6	93.3	20	75 - 125	
Beryllium	DUP	1013288-01	0.89421	0.88155		mg/kg	1.4		20		
	MS	1013288-01	0.89421	10.702	10.000	mg/kg		98.1		75 - 125	
	MSD	1013288-01	0.89421	10.457	10.000	mg/kg	2.5	95.6	20	75 - 125	
Cadmium	DUP	1013288-01	0.33235	0.29947		mg/kg	10.4		20		J
	MS	1013288-01	0.33235	9.8579	10.000	mg/kg		95.3		75 - 125	
	MSD	1013288-01	0.33235	9.6586	10.000	mg/kg	2.1	93.3	20	75 - 125	
Chromium	DUP	1013288-01	20.175	20.542		mg/kg	1.8		20		
	MS	1013288-01	20.175	115.10	100.00	mg/kg		94.9		75 - 125	
	MSD	1013288-01	20.175	112.86	100.00	mg/kg	2.4	92.7	20	75 - 125	
Cobalt	DUP	1013288-01	7.6614	7.5462		mg/kg	1.5		20		
	MS	1013288-01	7.6614	99.201	100.00	mg/kg		91.5		75 - 125	
	MSD	1013288-01	7.6614	97.365	100.00	mg/kg	2.0	89.7	20	75 - 125	
Copper	DUP	1013288-01	19.628	19.377		mg/kg	1.3		20		
	MS	1013288-01	19.628	115.66	100.00	mg/kg		96.0		75 - 125	
	MSD	1013288-01	19.628	113.30	100.00	mg/kg	2.5	93.7	20	75 - 125	
Lead	DUP	1013288-01	7.2603	7.1235		mg/kg	1.9		20		
	MS	1013288-01	7.2603	100.72	100.00	mg/kg		93.5		75 - 125	
	MSD	1013288-01	7.2603	99.382	100.00	mg/kg	1.4	92.1	20	75 - 125	
Molybdenum	DUP	1013288-01	1.1281	1.1938		mg/kg	5.7		20		J
	MS	1013288-01	1.1281	84.626	100.00	mg/kg		83.5		75 - 125	
	MSD	1013288-01	1.1281	82.470	100.00	mg/kg	2.6	81.3	20	75 - 125	
Nickel	DUP	1013288-01	14.944	14.876		mg/kg	0.5		20		
	MS	1013288-01	14.944	109.43	100.00	mg/kg		94.5		75 - 125	
	MSD	1013288-01	14.944	107.64	100.00	mg/kg	1.9	92.7	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Selenium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	7.6892	10.000	mg/kg		76.9		75 - 125	
	MSD	1013288-01	ND	8.7582	10.000	mg/kg	13.0	87.6	20	75 - 125	
Silver	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	8.5742	10.000	mg/kg		85.7		75 - 125	
	MSD	1013288-01	ND	8.3853	10.000	mg/kg	2.2	83.9	20	75 - 125	
Thallium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	91.857	100.00	mg/kg		91.9		75 - 125	
	MSD	1013288-01	ND	89.610	100.00	mg/kg	2.5	89.6	20	75 - 125	
Vanadium	DUP	1013288-01	51.833	51.455		mg/kg	0.7		20		
	MS	1013288-01	51.833	154.17	100.00	mg/kg		102		75 - 125	
	MSD	1013288-01	51.833	151.40	100.00	mg/kg	2.7	99.6	20	75 - 125	
Zinc	DUP	1013288-01	85.886	84.545		mg/kg	1.6		20		
	MS	1013288-01	85.886	177.25	100.00	mg/kg		91.4		75 - 125	
	MSD	1013288-01	85.886	174.57	100.00	mg/kg	3.0	88.7	20	75 - 125	
QC Batch ID: BTI1567	Used client sample: Y - Description: GP-2-15, 09/23/2010 10:55										
Antimony	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	49.482	100.00	mg/kg		49.5		16 - 119	
	MSD	1013353-10	ND	50.149	100.00	mg/kg	1.3	50.1	20	16 - 119	
Arsenic	DUP	1013353-10	16.376	13.639		mg/kg	18.2		20		
	MS	1013353-10	16.376	28.843	10.000	mg/kg		125		75 - 125	
	MSD	1013353-10	16.376	28.011	10.000	mg/kg	6.9	116	20	75 - 125	
Barium	DUP	1013353-10	34.339	34.224		mg/kg	0.3		20		
	MS	1013353-10	34.339	137.84	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	34.339	133.59	100.00	mg/kg	4.2	99.2	20	75 - 125	
Beryllium	DUP	1013353-10	0.49662	0.46754		mg/kg	6.0		20		J
	MS	1013353-10	0.49662	11.174	10.000	mg/kg		107		75 - 125	
	MSD	1013353-10	0.49662	10.865	10.000	mg/kg	2.9	104	20	75 - 125	
Cadmium	DUP	1013353-10	0.094980	0.091620		mg/kg	3.6		20		J
	MS	1013353-10	0.094980	10.482	10.000	mg/kg		104		75 - 125	
	MSD	1013353-10	0.094980	10.158	10.000	mg/kg	3.2	101	20	75 - 125	
Chromium	DUP	1013353-10	4.6239	4.2109		mg/kg	9.3		20		
	MS	1013353-10	4.6239	108.13	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	4.6239	104.75	100.00	mg/kg	3.3	100	20	75 - 125	
Cobalt	DUP	1013353-10	2.9719	2.8861		mg/kg	2.9		20		
	MS	1013353-10	2.9719	105.19	100.00	mg/kg		102		75 - 125	
	MSD	1013353-10	2.9719	102.44	100.00	mg/kg	2.7	99.5	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1567	Used client sample: Y - Description: GP-2-15, 09/23/2010 10:55										
Copper	DUP	1013353-10	4.4165	4.1525		mg/kg	6.2		20		
	MS	1013353-10	4.4165	111.92	100.00	mg/kg		108		75 - 125	
	MSD	1013353-10	4.4165	108.98	100.00	mg/kg	2.8	105	20	75 - 125	
Lead	DUP	1013353-10	1.3142	0.64177		mg/kg	68.8		20		J,A02
	MS	1013353-10	1.3142	106.02	100.00	mg/kg		105		75 - 125	
	MSD	1013353-10	1.3142	102.83	100.00	mg/kg	3.1	102	20	75 - 125	
Molybdenum	DUP	1013353-10	6.4675	5.8465		mg/kg	10.1		20		
	MS	1013353-10	6.4675	110.49	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	6.4675	107.15	100.00	mg/kg	3.3	101	20	75 - 125	
Nickel	DUP	1013353-10	2.1588	1.9962		mg/kg	7.8		20		
	MS	1013353-10	2.1588	103.93	100.00	mg/kg		102		75 - 125	
	MSD	1013353-10	2.1588	100.79	100.00	mg/kg	3.1	98.6	20	75 - 125	
Selenium	DUP	1013353-10	0.98389	ND		mg/kg			20		
	MS	1013353-10	0.98389	10.345	10.000	mg/kg		93.6		75 - 125	
	MSD	1013353-10	0.98389	10.030	10.000	mg/kg	3.4	90.5	20	75 - 125	
Silver	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	9.6761	10.000	mg/kg		96.8		75 - 125	
	MSD	1013353-10	ND	9.3123	10.000	mg/kg	3.8	93.1	20	75 - 125	
Thallium	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	103.45	100.00	mg/kg		103		75 - 125	
	MSD	1013353-10	ND	101.46	100.00	mg/kg	1.9	101	20	75 - 125	
Vanadium	DUP	1013353-10	31.430	29.960		mg/kg	4.8		20		
	MS	1013353-10	31.430	146.13	100.00	mg/kg		115		75 - 125	
	MSD	1013353-10	31.430	141.72	100.00	mg/kg	3.9	110	20	75 - 125	
Zinc	DUP	1013353-10	25.094	24.721		mg/kg	1.5		20		
	MS	1013353-10	25.094	126.46	100.00	mg/kg		101		75 - 125	
	MSD	1013353-10	25.094	126.07	100.00	mg/kg	0.4	101	20	75 - 125	
QC Batch ID: BTI1658	Used client sample: N										
Mercury	DUP	1013284-01	0.015645	ND		mg/kg			20		
	MS	1013284-01	0.015645	0.78145	0.80645	mg/kg		95.0		85 - 115	
	MSD	1013284-01	0.015645	0.81081	0.80645	mg/kg	3.8	98.6	20	85 - 115	

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AECOM 1220 Avenida Acaso Camarillo, CA 93012	**Reported:** 09/28/2010 13:45 Project: Hydrogen Energy California Project Number: [none] Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A09	PQL's were raised due to high concentration of target analytes requiring sample dilution.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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Results of 2010 Review of
Kern County Environmental Health Services
Department Records

Port Organics

INSPECTION REPORT

Dates:	April 12, 2005
Facility Name:	Port Organic Products LTD
Facility Address:	7361 Adhor Road, Buttonwillow
Haz Mat Specialists:	Dan STARKEY / Donna FENTON
EPA ID #:	None
Facility I.D. #:	(NEW) FA0005811/ Seed 1074
	Inspection photographs

At approximately 0830 on April 12, 2005, Donna FENTON, and I, met with Jim ZABEN, General Manager of Port Organic Products LTD. Ken NELSON Jr. the owner was scheduled to meet with us but failed to make the appointment. We asked ZABEN for permission to complete an inspection and take photographs. I asked if Port had filed a Business Plan with our Department. ZABEN stated that the business had been at this location for ten years and to his knowledge has never had a business plan. ZABEN gave permission for the inspection. We asked ZABEN to describe his business. He stated that they blend and provide organic fertilizers to their customers.

The inspection started in the tank farm area. I asked FENTON to photograph the facility as we completed the inspection. There were numerous tanks of varying sizes, some were located inside the concrete secondary containment. I noted the secondary containment structure in poor condition. It was in a deteriorating condition and the leaking tanks and chemically etched concrete provided evidence that previous releases had occurred. The aboveground poly tanks contained: Phosphoric Acid, Sulfuric Acid, Aqua Ammonia 20%, Potash, blended fertilizers, and fish liquids. There is processing equipment that consists of mixing tanks, pumps and blending equipment. During the inspection of the tank farm we observed numerous violations. It was evident that the facility should have filed a Business Plan and CalARP with our Department. I advised ZABEN that the amount of chemicals stored exceeded the threshold quantity for both the Business Plan and CalARP regulations. We observed that all tanks lacked labels identifying the chemical contents. I explained to ZABEN the hazards of not knowing what chemicals are in specific tanks. One tank used to store aqua ammonia 20% was labeled "Fire Water". I informed ZABEN that if the aqua ammonia tank was used as fire water by fireman there could be serious consequences. While walking through the tank farm area FENTON, ZABEN and I were exposed to low levels of ammonia gas from the aqua ammonia storage tanks.

We asked about the material dumped in the soil east of the tank farm. ZABEN stated that the dirt area is the location where solid waste residue collected from the batch processing of fertilizer has been dumped. We advised that the waste could be hazardous and asked if they had analytical information for the waste. ZABEN stated that he had analyzed for the constituents of nitrogen, phosphorus & potassium (NPK) and based on that information some farmers have used the waste as fertilizer. I advised that the solid material looks like a waste and appears to be treated as a waste by being dumped on the ground adjacent to a canal. I informed ZABEN that he is required to test the waste material to determine if it is a hazardous waste.

We then inspected the covered warehouse located west of the tank farm which contained numerous pallets of potash, pallets of bat/bird guano, solid fish parts, totes containing fish liquid, diesel fuel, and 55 gallon drums. There are numerous totes around the warehouse some contained fish liquid, and others were empty. There were empty drums, poly tanks, and totes in deteriorated condition. ZABEN stated that he was trying to get the manufacture to take the totes back, and dispose of the damaged tanks and totes. Waste oil was found in two locations in the yard. It was stored in open unlabeled drums that had been cut in half.

I completed the inspection forms and discussed the violations with ZABEN. I informed him that there were serious violations observed during the inspection and that this Department would be seeking fines through the administrative process.

REPORT OF VIOLATIONS

1. The Respondent violated Health and Safety Code (HSC) Chapter 6.95, Section 25503.5 (a) Failure to file a Hazardous Materials Business Plan with this Department.

   (a) Any business that handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to, or greater than, a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for compressed gas, that is handled in quantities for which an emergency plan is required to be adopted pursuant to Part 30 (commencing with Section 30.1), Part 40 (commencing with Section 40.1), or Part 70 (commencing with Section 70.1), of Chapter 10 of Title 10 of the Code of Federal Regulations (54 Federal Register 14051), or pursuant to any regulations adopted by the state in accordance with those regulations, shall establish and implement a business plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503.

   Port Organic Products LTD has stored and processed chemicals at the 7361 Adhor Road facility for 10 years. They failed to file a Hazardous Materials Business Plan for the hazardous materials stored at this facility.

2. The Respondent violated California Code of Regulations (CCR) Title 19, Section 2745.1 (a) (d) failure to file a California Accidental Release Prevention Program (CalARP) Risk Management Plan (RMP).

(a) *The owner or operator of a stationary source, which handles more than a threshold quantity of a regulated substance in a process, shall determine the applicability of this chapter as set forth in Section 2735.4(a) and shall submit a single RMP to the AA. The RMP shall include the information required by Sections 2745.3 through 2745.9*

(b) *If a determination is made pursuant to section 2735.4 (a)(2) that an existing stationary source must comply with this chapter, the owner or operator shall submit an RMP to the AA after the owner or operator has received a notice from the AA requesting submission of an RMP. The AA shall, in consultation with the owner or operator of a stationary source, establish an RMP submittal date. The AA shall not require submission of the RMP earlier than 12 months or later than 3 years after the notice has been issued to the owner or operator*

This Department set the CalARP Risk Management Plan submittal deadline for all Table 3 Threshold Quantity facilities as January 31, 2002. Port Organic Products failed to register with this Department and submit a CalARP, Risk Management Plan.

3. Respondent violated CCR, Title 19, Division 4, Chapter 4, Article 4, Section 2732, Failure to properly train employees on how to handle hazardous materials.

a) *The business plan shall include a training program which is reasonable and appropriate for the size of the business and the nature of the hazardous materials handled. The training program shall take into consideration the responsibilities of the employees to be trained. The training program shall, at a minimum, include:*
   1) methods for safe handling of hazardous materials;
   2) procedures for coordination with local emergency response organizations;
   3) use of emergency response equipment and supplies under the control of the handler, and
   4) all procedures required by Section 2731 of this Article

b) *The business plan shall include provisions for ensuring that appropriate personnel receive initial and refresher training.*

Port Organics Products LTD employees have not been trained how to recognize and handle hazardous materials as evidenced by discussions with Jim Zaben, General Manager.

4. The Respondent violated 22 CCR Section 66265.31, Failure to operate a facility to minimize the possibility of the release of hazardous waste to the environment which could threaten human health.

Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

The chemical storage tanks used at the facility are not labeled properly. A 6000-gallon poly aqua ammonia (20%) tank is labeled "Fire Water". All tanks lack labels identifying the chemical contents. This violation poses a significant risk to human health and the possibility of mixing incompatible chemicals.

CORRECTIVE ACTIONS

1. Complete a hazardous materials business plan as specified in HSC section 25504 within 14 days of receipt of inspection report dated April 12, 2005.

2. All tanks and containers must be labeled. Tanks are required to be labeled with minimum four inch lettering in a contrasting color placed on opposite sides of the tanks. This requirement shall be completed immediately.

3. The CalARP Risk Management Plan (RMP) registration form shall be submitted within 14 days of receipt of the inspection report dated April 12, 2005.

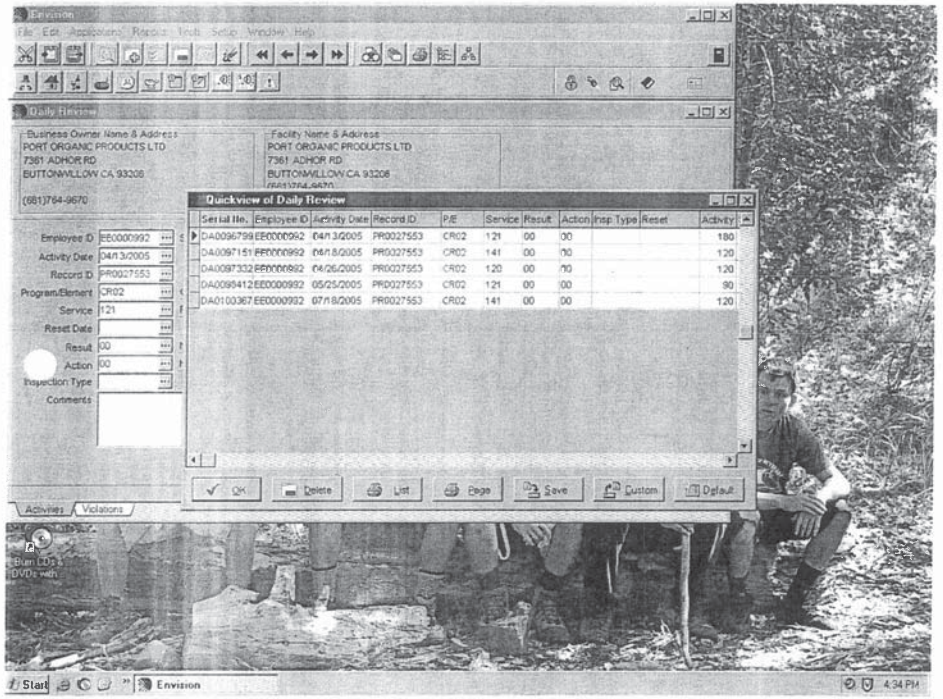
4. The CalARP (RMP) document must be submitted within 90 days of receipt of this Notice of Violation. The RMP Submit format must be used. This requires a hard copy and data disk be submitted to this Department only. All Program 2 prevention documentation shall be included at that time.

5. Properly label, handle and dispose of all hazardous waste stored at 7361 Adhor Road within 14 days.

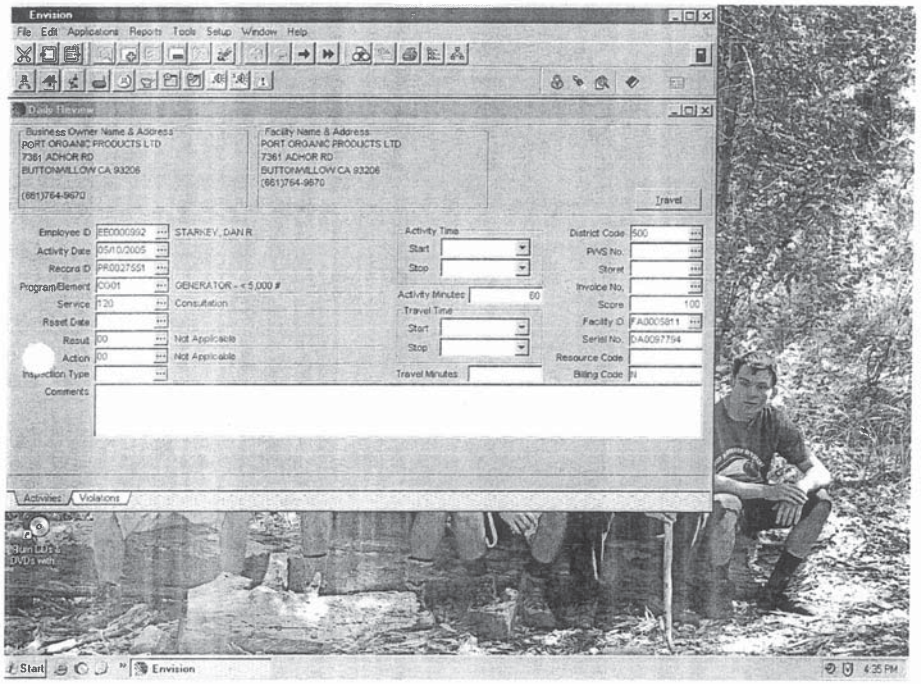
6. Within six (6) months of receipt of this notice, one (1) employee involved in the management of hazardous waste must attend California Compliance School training for hazardous waste generators. The completion certificates must be provided to this Department by November 1, 2005.

cc: File

PortOrganicProducts3.NOV.4.19.05.doc



Thursday, Jul 21, 2005 04:35 PM



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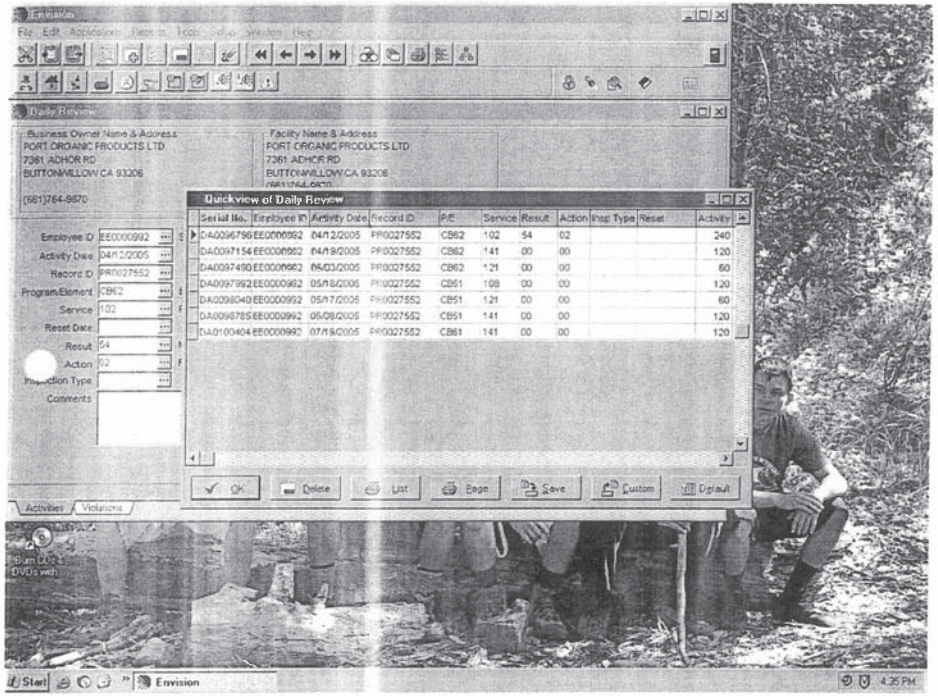

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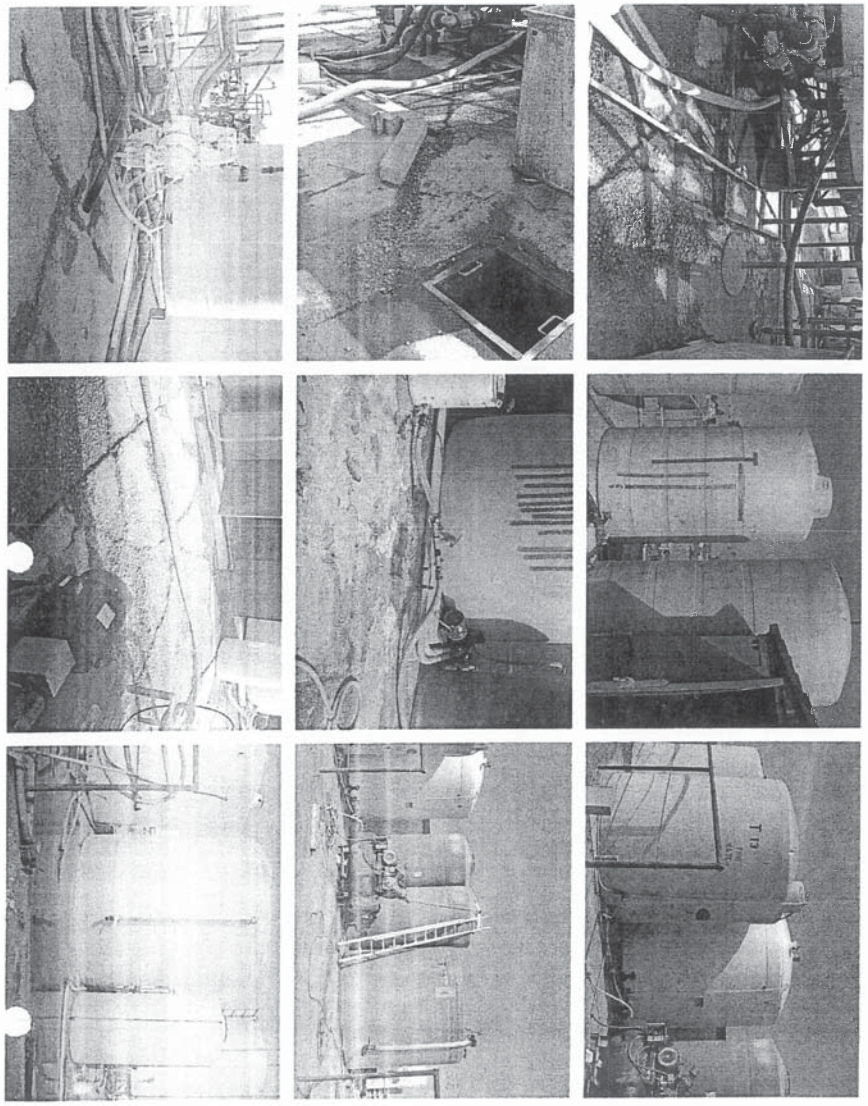


ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

CERTIFIED UNIFIED PROGRAM AGENCY INSPECTION REPORT

Date: 4-12-05

Type of Inspection: ☒ Routine ☐ Re-inspection ☐ Complaint

Programs Inspected: ☒ Business Plan/UFC Article 80 ☐ AST ☒ HW Generator ☐ UST ☒ Cal ARP

Envision Facility ID #: New Facility Business Plan #: 1077
Facility Name: Port Organic Products LTD
Facility Location: 7361 Adhor Rd 93206 City: Buttonwillow

C - Compliant NA - Not Applicable I - Class I Violation II - Class II Violation M - Minor Violation

C	NA	Code	GENERAL REQUIREMENTS	I	II	M	COMMENTS
			TRAINING				
		TR01	Facility has training program appropriate for size of business and nature of hazardous materials handled (Title 19, §2732).	✓			
		TR02	Training documentation is maintained for current personnel (Title 19, §2732).		✓		
			CONTINGENCY/EMERGENCY PLAN				
		ER01	Contingency plan is complete, updated and maintained on site (HSC 6.95, §25504, Title 19 CCR, §2731, Title 22 CCR, §66265.53-54).	✓			
		ER02	Maintains and operates facility to minimize a release of hazardous waste to the environment which could threaten human health (Title 22 CCR, §66265.31).	✓			
		ER03	Maintains all required or appropriate equipment (Title 22 CCR, §66265.32-.34).	✓			
			BUSINESS PLAN				
		BP01	Inventory of hazardous materials is complete (HSC 6.67, §25504, Title 19 CCR §2729).	✓			
		BP02	Site layout/facility maps are accurate (HSC 6.67, §25504, Title 19 CCR §2729).	✓			
			ABOVE GROUND STORAGE TANKS				
# of Tanks: 425 Total Volume: _____ bbls or gal							
Product Stored: ☑ Diesel ☐ Gasoline ☐ Crude Oil ☑ ~~Vegetable~~							
		AT01	SPCC Plan prepared as required (HSC 6.67, §25270)				

Re-inspection Required: ☐ No ☑ Yes ☑ Business Plan/UFC ☑ HW Generator ☐ UST ☐ AST ☑ Cal ARP

CONSENT: Consent to conduct inspection, which may involve obtaining photographs, review and copying of records, and sampling to determine compliance with the Certified Unified Program Agency requirements.

Facility Rep Signature _____ Title _____ Inspector Signature _____

POST INSPECTION INSTRUCTIONS:

- Within five days of correcting all violations, sign and return to the above Agency address. Attention: _____

Signature (Violations have been corrected as noted) Date

COMMENTS PAGE
(Optional)

Envision Facility ID #: _____ BP #: _____

Violation Code #	COMMENTS/NOTES
TR01	Provide information on training program written
TR02	Show documentation of training for haz com & hazardous waste
ER01	Complete a contingency plan for the entire facility
ER01	Waste dumped on the ground must be characterized.
BR01	Provide a complete inventory of all chemicals 14 days.
BP02	Provide a completed site map.
GR00	"Port" has not complied with hazardous waste regs & laws.
GR02	Waste solids must be analized to determine if they meet the hazardous waste determination. (metals, fish-bioassay)
	All containers must be labeled min 4" lettering
	Complete the Cal ARP Registration Form & submit
	a paper copy & disk of RMP Submit* within 14 days.
	All leaking tanks/containers must be repaired or placed out of service.

Violations were observed/discovered as listed above. All violations must be corrected by implementing the action listed by each violation. If you disagree with any of the violations or proposed action, please inform KCEHSD in writing.

All minor violations must be corrected within **30** days or as specified. KCEHSD must be informed in writing, certifying that the violations have been corrected. A false statement that the violations have been corrected is a violation of the law and is punishable by a fine of not less that $2,000 or more than $25,000 for each violation. Your facility may be reinspected at any time.

You may request a meeting with the KCEHSD Program Manager to discuss the inspection findings and/or proposed corrective actions. The issuance of this Inspection Report does not preclude KCEHSD from taking administrative, civil, or criminal action as a result of the violations or that have not been corrected within the time specified.

Facility Rep Signature _____ Title _____ Inspector Signature _____ Date 4.12.05

4-12-05

HAZARDOUS WASTE GENERATOR

Waste Type	Amount	Lbs/Gal	Month/Year
Oil			
Antifreeze			
Filters			
Solvent			
Sludge			

BP # _____

EPA ID #: _____

Tiered Permit: ☐ CESW ☐ CESQT ☐ CA ☐ PBR

C - Compliant NA - Not Applicable I - Class I Violation II - Class II Violation M - Minor Violation

C	NA	Code	HAZARDOUS WASTE REQUIREMENTS	I	II	M	COMMENTS
			Recordkeeping/Documentation				
		GR01	Generator has an EPA ID number	✓			
		GR02	Hazardous waste determination made for all wastes ☐ Analysis ☐ Generator knowledge ☐ Other	✓			
		GR03	Facility personnel demonstrates training/awareness	✓			
		GR04	Manifests/LDR complete/retained for three years				
		GR05	TSDF signed copy of manifest available within 35 days of waste shipment				
		GR06	Bills of lading/receipts available				
		GR07	On-site recycling reported using Recyclable Materials Report				
			Container/Tank Management				
		GC01	Containers are in good condition		✓		
		GC02	Containers are closed except when adding/removing	✓			
		GC03	Containers inspected and documented weekly	✓			
		GC04	Tanks inspected and documented daily				
		GC05	Tanks have appropriate secondary containment	✓			
	✓	GC06	Satellite containers at or near point of generation				
	✓	GC07	Satellite wastes managed as required				
			Accumulation Time Limits				
		GA01	Waste is accumulated less than 90/180/270 days				
		GA02	Empty containers managed within one year				
		GA03	Universal waste accumulated less than one year				
		GA04	Used oil filters off site within 180 days (1 year if <1 ton)				
		GA05	Lead-acid batteries off site within 180 days (1 year if <1 ton)				
			Labeling/Marking				
		GL01	Containers are properly labeled	✓			
		GL02	Excluded recyclable materials marked properly				
		GL03	Universal waste container properly labeled				
		GL04	Used oil filters marked "drained used oil filters"				
		GL05	Date written on spent lead-acid batteries				
		GL06	"Used oil" marked on all used oil tanks containers				
		GL07	Empty containers are marked properly				
			Treatment, Transport and Disposal				
		GT01	Treatment conducted with authorization/permit				
		GT02	Waste sent with authorized transport (gen. eligible)				
		GT03	Waste disposed of to authorized point/party				

POST INSPECTION INSTRUCTIONS:

- Refer to the back of this inspection report for regulatory citations and corrective actions
- Within five days of correcting all violations, sign and return to the Agency at: Kern Co. Environmental Health Services Dept., 2700 "M" Street, Suite 300, Bakersfield, CA 93301, Attention: _____

_____
Signature (Violations have been corrected as noted)

_____
Date

Kern County Environmental Health Services Department
HAZARDOUS MATERIALS MANAGEMENT PROGRAM
CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM
2700 M Street, Suite 300, Bakersfield, CA 93301 • (661) 862-8700, Fax (661) 862-8701

CALARP INSPECTION REPORT

Facility ID: FA0005811 **File #: 001074**

Facility Name: PORT ORGANIC PRODUCTS LTD Inspection Date: 1-25-2007

Street Address: 7361 ADOHR RD EPA ID No: _____

City: BUTTONWILLOW, CA Zip Code: 93206 Number of Employees: _____

Facility Contact: JIM ZABEN Phone No. (661) 764-9670 E-Mail: _____

Refer to Title 19 of the California Code of Regulations (CCR) and Chapter 6.95 of the Health and Safety Code (CHSC). Section 112(r) of the Clean Air Act. The following risk factors are either Present (Y), not Present (N), or not addressed/unknown (N/A)

SURROUNDING POPULATIONS	Y	N	N/A	DOCUMENT REVIEW	Y	N	N/A
On-site Vulnerable Populations		x		Business Plan Current and Accurate	x		
School within 1 mile		x		Emergency Response Plan	x		
Non-industrial Neighboring Uses: Farming							
				Process Hazard Analysis			
				Process Safety Management Elements: Safety Information, Hazard Review	x		
Immediate Neighbors: Farming				Operating Procedures			
				Training Records			
DETECTION AND MONITORING	**Y**	**N**	**N/A**	**MITIGATION EQUIPMENT**	**Y**	**N**	**N/A**
				Site Security: Fenced, Gated			

Inspection Narrative:

Process Description:
Port Organic Products is involved in the manufacture of liquid organic fertilizers. Liquid fish, phosphoric and sulfuric acids, UN32, potassium hydroxide, aqua ammonia and molasses are stored in tanks at ambient temperature. Fish, sulfate of potash, ammonia sulfate, xantham gum, are stored in a covered warehouse. During the manufacturing the temperatures range from 110' F to 135' F in the batch tanks. All materials are utilized without any waste except for undigested fish solids which is transferred to a waste area for sale as compost.

Recommendations
Recalculate the quantity released and the release rate for the Worst Case Scenario and the Alternate Release Scenario in your RMP Submit. The correct data does not significantly alter the distance to endpoint.

Deficiencies / Violations
Operating Procedures must be more detailed outlining the specific valves and switches that are involved for each procedure.

☐ **NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN _____ DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.**

Inspector: KEVIN BEAHM Report Date: 1-25-2007 Received by: MAILED Title: _____

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

January 25, 2007

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA) HAZARDOUS MATERIAL INSPECTION FORM

Date: 01/25/2007 Facility ID: FA0005811 File #: 001074

Facility Name: PORT ORGANIC PRODUCTS LTD	**Inspection Type**
Site Address: 7361 ADHOR RD BUTTONWILLOW, CA 93206	☒ Routine ☐ Reinspection ☐ Complaint
Phone: (661)764-9670	

PROGRAMS INSPECTED:	☒ Business Plan	☒ HW Generator	☐ UST	☐ AGT	☒ CalARP
REINSPECTION REQUIRED:	☐ Business Plan	☐ HW Generator	☐ UST	☐ AGT	☐ CalARP

VIOLATION

YES	NO/NA	VIOL. #	BUSINESS PLAN REQUIREMENTS
☐	☒	BP01	Inventory of hazardous materials is accurate, up to date, and complete [HSC 6.95, 25504, Title 19 CCR 2729].
☐	☒	BP02	Site layout/facility maps are accurate [HSC 6.95,25504; Title 19 CCR 2729].
☐	☒	BP03	Hazardous materials are stored in properly labeled and non-detoriated containers [HSC 25124(b)(3)(A & B)].
☐	☒	ER01	Contingency Plan is complete, updated, and maintained on site [HSC 6.95, 25504;Title 19 CCR 2731 Title 22 CCR 66265.53-54].
☐	☒	ER02	Facility is operated and maintained to prevent/mitigate fire, explosion, or releases of hazardous material or waste which could threaten human health or the environment [Title 22 CCR 66265.31; Title 19 CCR 2731].
☐	☒	ER03	Business has equipment required to, or appropriate for, safely handling hazardous materials [Title 22 CCR 66265.32 & .34].
☐	☒	TR01	Facility has a training program appropriate for the size and complexity of business and nature of hazardous materials handled [Title 19 CCR 2732; Title 22 CCR 66265.16].
☐	☒	TR02	Training documentation is maintained on site for current personnel. [Title 19 CCR 2732;22 CCR 66265.16].

COMMENTS: Go to http://www.co.kern.ca.us/eh/cupaprogram.asp for forms and information.
GPS Coordinates: Latitude: Longtitude:

INSPECTOR: KEVIN E BEAHM DATE: 01/25/2007

HAZARDOUS WASTE GENERATOR

EPA ID NUMBER:

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GR01	Generator has an EPA Identification number to treat, store, dispose, transport, or transfer hazardous waste [Title 22, CCR 66262.12].
☐	☒	GR02	The facility has made an appropriate waste determination for hazardous based on own knowledge or analysis or other [Title 22, CCR 66262.11]
☐	☒	GR03	Facility Personnel demonstrate awareness of proper(legal) hazardous-waste handling procedures. [Title 22, CCR, 66262.34(d)(2)].
☐	☒	GA01	Hazardous waste has not accumulated for more than 90/180/270 days(depending upon volume/circumstances) without the facility having a hazardous waste storage permit [Title 22,CCR, 66262.34(a).]
☐	☒	GA02	Empty containers or inner liners greater than 5 gallons have dates when emptied and are managed properly within one year of date emptied [Title 22, CCR, 66261.7(f)].
☐	☒	GA03	Universal waste is not accumulated at facility for more than one year [Title 22, CCR, 66273.15(a);66273.35(a)].
☐	☒	GA04	The facility disposes used oil filters within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66266.130(c)(4)].
☐	☒	GA05	The facility disposes lead-acid batteries within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66268.81(a)(6)]
☐	☒	GC01	Hazardous waste storage containers are in good condition [Title 22, CCR, 66262.34(a)(1)(A)].
☐	☒	GC02	Containers holding hazardous waste are closed/sealed except when adding/removing waste [Title 22, CCR, 66262.34(a)(1)(A)].]
☐	☒	GC03	The facility documents weekly inspections of hazardous waste storage area/containers [Title 22, CCR, 66265.15(d) and 66262.34(a)(1)(A)].
☐	☒	GC04	The facility documents daily inspections of tanks where hazardous waste is stored [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC05	The facility has adequate secondary containment for hazardous waste tank systems [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC06	Containers utilizing satellite accumulation rules are at or near the point of generation [Title 22, CCR 66262.34(e)(1)(A)].
☐	☒	GC07	Satellite wastes are managed according to the regulations (complete labeling, accumulation times, 55-gallon or 1 quart volume limits, etc.). [Title 22, CCR, 66262.34(e)].
☐	☒	GR04	Manifests or LDRs are properly completed and/or retained by generator for 3 years [Title 22, CCR 66262.23(a)(1); 66263.42;66263.24;66262.34(a)(4)].
☐	☒	GR05	The facility filed an exception report to DTSC after not receiving the signed TSDF copy of a manifest within 35 days [Title 22, CCR, 66262.42].
☐	☒	GR06	The facility has copies of bills of lading or receipts for removal of hazardous wastes [HSC 25160.2-Consolidated manifests/ 66266.81(a)(6)(B)-lead acid batteries/66266.130- oil filters]. The facility shall maintain copies of receipts for at least three years.
☐	☒	GR07	The facility submitted a hazardous waste recycling report [HSC 25143.10]
☐	☒	GT01	The facility is conducting on-site treatment of hazardous waste with a tiered permit [HSC 25189.5(d)]
☐	☒	GT02	Authorized, licensed, and certified hazardous waste haulers are used to transport hazardous waste to appropriate facilities [H&S Code Chapter 6.5 Section 25163].
☐	☒	GT03	Hazardous wastes are sent to authorized disposal facilities [HSC 25189.5].
☐	☒	GT04	Hazardous waste is not disposed to ground, water, or air [HSC 25189.5].

INSPECTOR: KEVIN E BEAHM DATE: 01/25/2007

FACILITY NAME: PORT ORGA ' PRODUCTS LTD ADDRESS: 7361 ADHO' 'D BUTTONWILLOW, CA 9 6 FA ID: FA0005811 FILE ID: 001074

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GL01	Containers of hazardous waste are properly labeled (includes appropriate accumulation date, the words "HAZARDOUS WASTE," the waste composition/physical state, the hazardous properties, and name/address of generator) [Title 22, CCR, 66262.34(f)].
☐	☒	GL02	Containers of excluded recyclable materials are properly labeled [HSC 25143.9(a)].
☐	☒	GL03	Containers of universal waste are properly labeled. [Title 22, CCR, 66273.14 for SQH or 66273.34 for LQH].
☐	☒	GL04	Containers of drained used oil filters are labeled with the words "DRAINED USED OIL FILTERS" [Title 22, CCR, 66266.130(c)(3)].
☐	☒	GL05	Accumulation dates are marked on spent lead-acid batteries [22CCR 66266.81]
☐	☒	GL06	Tanks/containers of used oil destined for recycling are clearly marked with the words "USED OIL" [HSC 25143.9(a)].
☐	☒	GL07	Empty contaminated containers are clearly marked with the date they were emptied [Title 22, CCR, 66261.7(f)].

INSPECTOR: KEVIN E BEAHM DATE: 01/25/2007

FACILITY NAME: PORT ORGA PRODUCTS LTD ADDRESS: 7361 ADHC D BUTTONWILLOW, CA 93206 FA ID: FA0005811 FILE ID: 001074

SUMMARY OF OBSERVATIONS/VIOLATIONS

☒ No violations of underground storage tank, hazardous materials, or hazardous waste laws/regulations were discovered. KERN CUPA greatly appreciates your efforts to comply with all the laws and regulations

☐ Violations were observed/discovered as listed below. All violations must be corrected by implementing the corrective action listed by each violation. If you disagree with any of the violations or corrective actions required, please inform the CUPA in writing.

ALL VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED. CUPA must be informed in writing with a certification that compliance has been achieved. A false statement that compliance has been achieved is a violation of the law and punishable by a fine of not less than $2,000 or more than $25,000 for each violation. Your facility may be reinspected any time during normal business hours. If a second reinspection becomes necessary due to non compliance, a reinspection charge of $85.00 per hour may be charged to the facility.

You may request a meeting with the Program Manager to discuss the inspection findings and/or the proposed corrective actions. The issuance of this Summary of Violations does not preclude the CUPA from taking administrative, civil, or criminal action.

FACILITY NAME: PORT ORGANIC PRODUCTS LTD ADDRESS: 7361 ADHOR RD BUTTONWILLOW, CA 93206 FA ID: FA0005811 FILE ID: 001074

VIOLATIONS

VIOL. NO	VIOL. TYPE	CORRECTIVE ACTION REQUIRED

INSPECTION COMMENTS:

INSPECTOR: KEVIN E BEAHM
DATE: 01/25/2007

SIGNATURE OF FACILITY REP:

Certification: I certify under penalty of perjury that this facility has complied with the corrective actions listed on this inspection form.
Signature of Owner/Operator: [signature] Title: Manager Date: 3/28/07

ENVIRONMENTAL HEALTH S VICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
Web: www.co.kern.ca.us/eh
E-mail: eh@co.kern.ca.us

RESO RCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Animal Control Department
Community and Economic Development Department
Engineering and Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

November 12, 2008

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA) HAZARDOUS MATERIAL INSPECTION FORM

Date: 11/12/2008 Facility ID: FA0001390 File #: 001398

Facility Name: CAUZZA AG PARTNERS - PALM RANCH			Inspection Type		
Site Address: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206			☒ Routine ☐ Reinspection ☐ Complaint		
Phone: (661)764-5523					
PROGRAMS INSPECTED:	☒ Business Plan	☒ HW Generator	☐ UST	☒ AGT	☐ CalARP
REINSPECTION REQUIRED:	☒ Business Plan	☐ HW Generator	☐ UST	☐ AGT	☐ CalARP

VIOLATION

YES	NO/NA	VIOL. #	BUSINESS PLAN REQUIREMENTS
☒	☐	BP01	Inventory of hazardous materials is accurate, up to date, and complete [HSC 6.95, 25504, Title 19 CCR 2729].
☐	☒	BP02	Site layout/facility maps are accurate [HSC 6.95,25504; Title 19 CCR 2729].
☐	☒	BP03	Hazardous materials are stored in properly labeled and non-detoriated containers [HSC 25124(b)(3)(A & B)].
☒	☐	BP04	The hazardous materials inventory shall be submitted annually on or before March 1 [Title 19 CCR 2729.4(b)].
☐	☒	ER01	Contingency Plan is complete, updated, and maintained on site [HSC 6.95, 25504;Title 19 CCR 2731 Title 22 CCR 66265.53-54].
☐	☒	ER02	Facility is operated and maintained to prevent/mitigate fire, explosion, or releases of hazardous material or waste which could threaten human health or the environment [Title 22 CCR 66265.31; Title 19 CCR 2731].
☐	☒	ER03	Business has equipment required to, or appropriate for, safely handling hazardous materials [Title 22 CCR 66265.32 & .34].
☐	☒	TR01	Facility has a training program appropriate for the size and complexity of business and nature of hazardous materials handled [Title 19 CCR 2732; Title 22 CCR 66265.16].
☐	☒	TR02	Training documentation is maintained on site for current personnel. [Title 19 CCR 2732; Title 22 CCR 66265.16].

VIOLATION

			ABOVE GROUND STORAGE TANKS
☒	☐	AT01	SPCC Plan prepared, reviewed, and certified by a registered engineer within last 5 years [HSC 6.67 S25270].

COMMENTS: Go to http://www.co.kern.ca.us/eh/cupaprogram.asp for forms and information.
GPS Coordinates: Latitude: Longtitude:

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

HAZARDOUS WASTE GENERATOR

EPA ID NUMBER:

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GR01	Generator has an EPA Identification number to treat, store, dispose, transport, or transfer hazardous waste [Title 22, CCR 66262.12].
☐	☒	GR02	The facility has made an appropriate waste determination for hazardous based on own knowledge or analysis or other [Title 22, CCR 66262.11]
☐	☒	GR03	Facility Personnel demonstrate awareness of proper(legal) hazardous-waste handling procedures. [Title 22, CCR, 66262.34(d)(2)].
☐	☒	GA01	Hazardous waste has not accumulated for more than 90/180/270 days(depending upon volume/circumstances) without the facility having a hazardous waste storage permit [Title 22,CCR, 66262.34(a).]
☐	☒	GA02	Empty containers or inner liners greater than 5 gallons have dates when emptied and are managed properly within one year of date emptied [Title 22, CCR, 66261.7(f)].
☐	☒	GA03	Universal waste is not accumulated at facility for more than one year [Title 22, CCR, 66273.15(a);66273.35(a)].
☐	☒	GA04	The facility disposes used oil filters within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66266.130(c)(4)].
☐	☒	GA05	The facility disposes lead-acid batteries within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66268.81(a)(6)]
☐	☒	GC01	Hazardous waste storage containers are in good condition [Title 22, CCR, 66262.34(a)(1)(A)].
☐	☒	GC02	Containers holding hazardous waste are closed/sealed except when adding/removing waste [Title 22, CCR, 66262.34(a)(1)(A)].]
☐	☒	GC03	The facility documents weekly inspections of hazardous waste storage area/containers [Title 22, CCR, 66265.15(d) and 66262.34(a)(1)(A)].
☐	☒	GC04	The facility documents daily inspections of tanks where hazardous waste is stored [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC05	The facility has adequate secondary containment for hazardous waste tank systems [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC06	Containers utilizing satellite accumulation rules are at or near the point of generation [Title 22, CCR 66262.34(e)(1)(A)].
☐	☒	GC07	Satellite wastes are managed according to the regulations (complete labeling, accumulation times, 55-gallon or 1 quart volume limits, etc.). [Title 22, CCR, 66262.34(e)].
☐	☒	GR04	Manifests or LDRs are properly completed and/or retained by generator for 3 years [Title 22, CCR 66262.23(a)(1); 66263.42;66263.24;66262.34(a)(4)].
☐	☒	GR05	The facility filed an exception report to DTSC after not receiving the signed TSDF copy of a manifest within 35 days [Title 22, CCR, 66262.42].
☐	☒	GR06	The facility has copies of bills of lading or receipts for removal of hazardous wastes [HSC 25160.2-Consolidated manifests/ 66266.81(a)(6)(B)-lead acid batteries/66266.130- oil filters]. The facility shall maintain copies of receipts for at least three years.
☐	☒	GR07	The facility submitted a hazardous waste recycling report [HSC 25143.10]
☐	☒	GT01	The facility is conducting on-site treatment of hazardous waste with a tiered permit [HSC 25189.5(d)]
☐	☒	GT02	Authorized, licensed, and certified hazardous waste haulers are used to transport hazardous waste to appropriate facilities [H&S Code Chapter 6.5 Section 25163].
☐	☒	GT03	Hazardous wastes are sent to authorized disposal facilities [HSC 25189.5].
☐	☒	GT04	Hazardous waste is not disposed to ground, water, or air [HSC 25189.5].

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

FACILITY NAME: CAUZZA AG PARTNERS - PALM RANCH

ADDRESS: ADOHR AND DAIRY RD BUTTONWILLOW, 93206

FA ID: FA0001390
FILE ID: 001398

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GL01	Containers of hazardous waste are properly labeled (includes appropriate accumulation date, the words "HAZARDOUS WASTE," the waste composition/physical state, the hazardous properties, and name/address of generator) [Title 22, CCR, 66262.34(f)].
☐	☒	GL02	Containers of excluded recyclable materials are properly labeled [HSC 25143.9(a)].
☐	☒	GL03	Containers of universal waste are properly labeled. [Title 22, CCR, 66273.14 for SQH or 66273.34 for LQH].
☐	☒	GL04	Containers of drained used oil filters are labeled with the words "DRAINED USED OIL FILTERS" [Title 22, CCR, 66266.130(c)(3)].
☐	☒	GL05	Accumulation dates are marked on spent lead-acid batteries [22CCR 66266.81]
☐	☒	GL06	Tanks/containers of used oil destined for recycling are clearly marked with the words "USED OIL" [HSC 25143.9(a)].
☐	☒	GL07	Empty contaminated containers are clearly marked with the date they were emptied [Title 22, CCR, 66261.7(f)].

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

FACILITY NAME: CAUZZA AG PARTNERS - PALM RANCH

ADDRESS: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206

FA ID: FA0001390
FILE ID: 001398

SUMMARY OF OBSERVATIONS/VIOLATIONS

☐ No violations of underground storage tank, hazardous materials, or hazardous waste laws/regulations were discovered. KERN CUPA greatly appreciates your efforts to comply with all the laws and regulations

☒ Violations were observed/discovered as listed below. All violations must be corrected by implementing the corrective action listed by each violation. If you disagree with any of the violations or corrective actions required, please inform the CUPA in writing.

ALL VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED. CUPA must be informed in writing with a certification that compliance has been achieved. A false statement that compliance has been achieved is a violation of the law and punishable by a fine of not less than $2,000 or more than $25,000 for each violation. Your facility may be reinspected any time during normal business hours. If a second reinspection becomes necessary due to non compliance, a reinspection charge of $85.00 per hour may be charged to the facility.

You may request a meeting with the Program Manager to discuss the inspection findings and/or the proposed corrective actions. The issuance of this Summary of Violations does not preclude the CUPA from taking administrative, civil, or criminal action.

FACILITY NAME: CAUZZA AG PARTNERS - PALM RANCH

ADDRESS: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206

FA ID: FA0001390
FILE ID: 001398

VIOLATIONS

VIOL. NO	VIOL. TYPE	CORRECTIVE ACTION REQUIRED
BP01	CLASS I VIOLATION	Update inventory of hazardous materials.
BP04	MINOR VIOLATION	The inventory shall be reviewed and updated within 30 days.
AT01	CLASS II VIOLATION	Develop a Spill Prevention Control and Countermeasure (SPCC) plan, if appropriate, as required by law. Keep signed copy of plan on premesis.

INSPECTION COMMENTS:

INSPECTOR: LAUREL D FUNK
DATE: 11/12/2008

SIGNATURE OF FACILITY REP:

Certification: I certify under penalty of perjury that this facility has complied with the corrective actions listed on this inspection form.
Signature of Owner/Operator: _____ Title: _____ Date:

BUSINESS OWNER/OPERATOR IDENTIFICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

Page 1 of 1

I. IDENTIFICATION

FACILITY ID# 1: FA0005811 (1 5 - 0 1 0 - 0 0 1 0 7 4)	BEGINNING DATE 100: 02/28/2008 — ENDING DATE 101: 02/28/2009
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: PORT ORGANIC PRODUCTS LTD	BUSINESS PHONE 102: (661) 764-9670
BUSINESS SITE ADDRESS 103: 7361 ADHOR RD	BUSINESS FAX 102a:
BUSINESS CITY 104: BUTTONWILLOW — CA	ZIP CODE 105: 93206 — COUNTY 106: Kern County
DUN & BRADSTREET 106:	PRIMARY SIC 107: 2873 — PRIMARY NAICS 107a: None specified
BUSINESS MAILING ADDRESS 108a: 5060 CALIFORNIA AVE STE 650	
BUSINESS MAILING CITY 108b: BAKERSFIELD — STATE 108c: CA	ZIP CODE 108d: 93309
BUSINESS OPERATOR NAME 109: SHINAULT BAKER AND CO CPAs	BUSINESS OPERATOR PHONE 110:

II. BUSINESS OWNER

OWNER NAME 111: PORT ORGANIC PRODUCTS LTD	OWNER PHONE 112: (661) 764-9670
OWNER MAILING ADDRESS 113: 5060 CALIFORNIA AVE #650	
OWNER MAILING CITY 114: BAKERSFIELD — STATE 115: CA	ZIP CODE 116: 93206

III. ENVIRONMENTAL CONTACT

CONTACT NAME 117: Jim Zaben	CONTACT PHONE 118: (661) 764-9670
CONTACT MAILING ADDRESS 119: 7361 Adohr Rd.	CONTACT EMAIL 119a: jzaben@bak.rr.com
CITY 120: Buttonwillow — STATE 121: CA	ZIP CODE 122: 93206

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME 123: Kenneth N. Nelson Jr.	NAME 128: Roy T. Carroll
TITLE 124: Owner	TITLE 129: General Manager
BUSINESS PHONE 125: (661) 764-9670	BUSINESS PHONE 130: (661) 764-9670
24-HOUR PHONE 126: (661) 667-3460	24-HOUR PHONE 131: (661) 201-1185
PAGER # 127: () -	PAGER # 132: () -

ADDITIONAL LOCALLY COLLECTED INFORMATION: 133
APN: 15904018

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE: Electronic Signature	DATE 134: 04/24/2008	NAME OF DOCUMENT PREPARER 135:
NAME OF SIGNER (print) 136: Jim Zaben	TITLE OF SIGNER 137:	

CONSOLIDATED CONTINGENCY PLAN

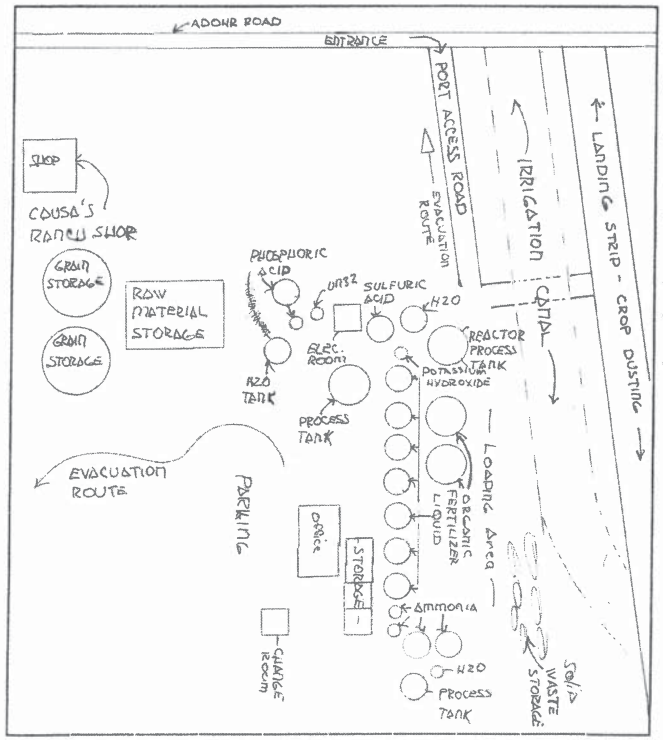
KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Form
SITE MAP

Page ____ of ____

I. FACILITY IDENTIFICATION

FACILITY ID # 1: FA 000 5811	EPA ID # (Hazardous Waste Only) 2:
BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) 3: PORT ORGANIC PRODUCTS LTD	
SITE ADDRESS 103: 7361 ADOHR ROAD — CITY 104: BUTTONWILLOW	ZIP CODE 105: 93206
DATE MAP DRAWN: 04-16-05 — MAP #	SUB-FACILITY # (if needed)



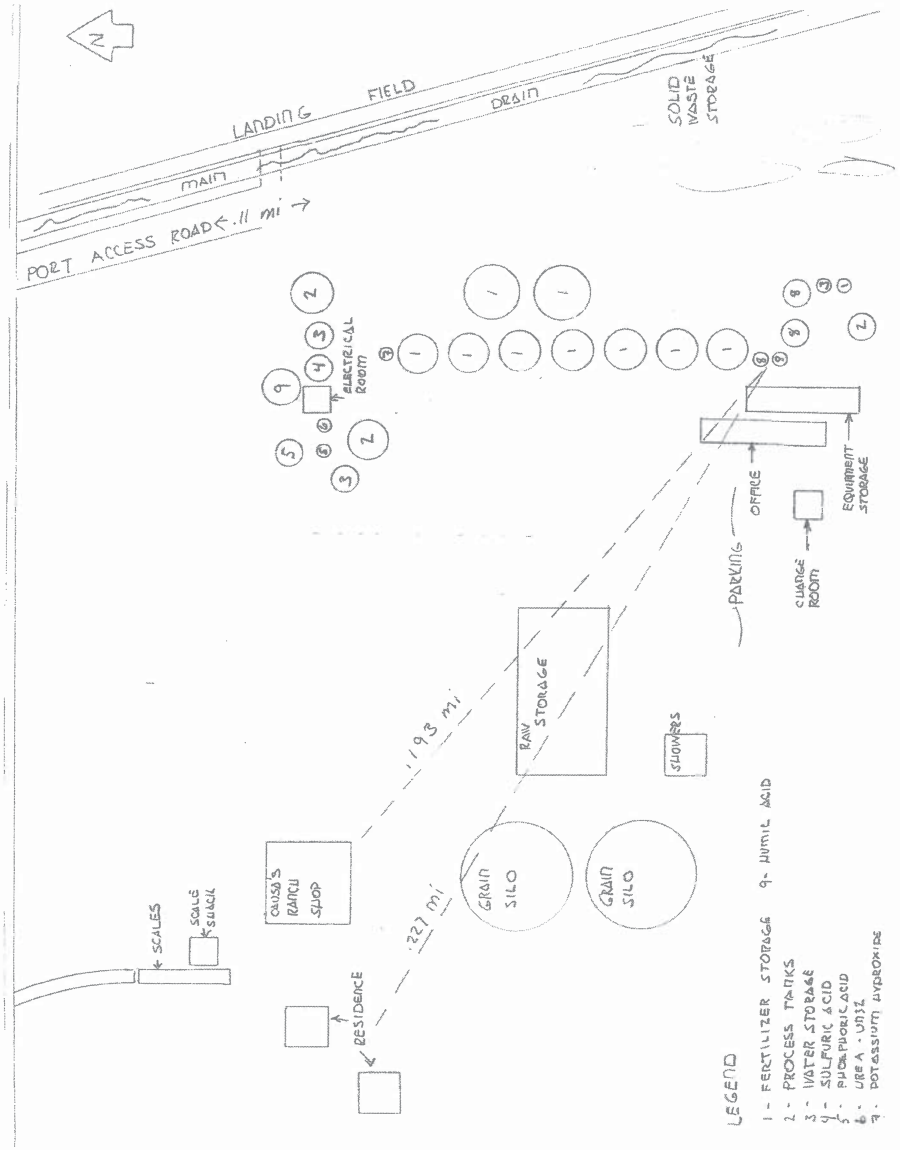
For Site Map

- Loading Areas
- Parking Lots
- Internal Roads
- Storm and Sewer Drains
- Adjacent Property Use
- Locations and Names of Adjacent Streets and Alleys
- Entrance and Exit Points and Roads
- Evacuation Routes

For Storage Map

- Location of Each Storage Area
- Location of Each Hazardous Material Handling Area
- Location of Emergency Response Equipment

NORTH ↑



ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Phone: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY

DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

June 28, 2005

Ken Nelson Jr.
Port Organic Products LLT
P O Box 5203
Buttonwillow, CA 93388

Docket No.DS00009/06-28
Facility ID No. FA0005811

NOTIFICATION OF POTENTIAL FILING OF ADMINISTRATIVE ENFORCEMENT ORDER

On April 12, 2005, representatives from Kern County Environmental Health Services Department, Certified Unified Program Agency (CUPA), conducted an inspection at Port Organic Products LLT, located at 7361 Adhor Road in Buttonwillow. Based on information obtained during the inspection the CUPA is preparing to bring an administrative action against Port Organic Products LLT, pursuant to Section 25187 of the California Health and Safety Code (HSC). The administrative action being considered includes violations of the HSC, Sections 25503.5 (a) and California Code of Regulations (CCR) Title 19, Section 2745.1 (a) (b), 2732, and Title 22, CCR, Section 66262.31. A copy of the Notice of Violations including photographs has previously been sent. Enclosed is a copy of the current penalty regulations.

Prior to assessing penalties against Port Organic Products LLT and issuing the order, the Agency would like to offer you an opportunity to advise us of any information that should be considered on your behalf and initiate settlement discussions. If you have any information relating to the alleged violations, please direct them to:

Joe Canas
Kern County Environmental Health Services Department
2700 "M" Street, Ste. 300
Bakersfield, CA 93301

Please be advised that it is our intention to file an Administrative Enforcement Order against you within the next two weeks, unless you first advise us of substantial reasons not to proceed as planned. Any penalty proposed for violations of HWCL and its implementing regulations will be calculated pursuant to 22CCR, Sections 66272.60 – 66272.69.

Thank you for your prompt attention to this matter. If you have any questions, please feel free to contact Dan Starkey of our staff at (661) 862-8757.

Sincerely,

Joe Canas
Hazardous Materials Specialist IV
Hazardous Materials Management Program

DS:

Enclosures

cc: (DTSC Statewide Compliance Division Regional Branch Chief)
(DTSC State Regulatory Programs Division Liaison)

ds\PortOrganicProductsLLT...ShowCause.Ltr.06.28.05.doc

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

02/06/2008 Page 1 of 2

FACILITY INFORMATION: Site ID: 001074

Facility Name:	PORT ORGANIC PRODUCTS LTD, FA0005811
Physical Location:	7361 ADHOR RD
City:	BUTTONWILLOW, CA
Facility Phone:	(661) 764-9670

OWNER INFORMATION FOR MAILING CORRESPONDENCE ONLY:

Name:	PORT ORGANIC PRODUCTS LTD
In Care of:	SHINAULT BAKER AND CO CPAs
Address:	5060 CALIFORNIA AVE #650
City, State, Zip:	BAKERSFIELD, CA 93309
Contact's Phone:	(661) 764-9670
Environmental Contact's E-Mail Address:	jzaben@bak.rr.com

BILLING INFORMATION ONLY:

Name:	PORT ORGANIC PRODUCTS LTD
In Care of:	SHINAULT BAKER AND CO CPAs
Address:	5060 CALIFORNIA AVE STE 650
City, State, Zip:	BAKERSFIELD, CA 93309
Contact's Phone:	

EMERGENCY CONTACT INFORMATION:

NAME:	TITLE:	NAME:	TITLE:
Day Phone:		Day Phone:	
24 hr Phone:		24 hr Phone:	

REGULATED ACTIVITIES AT THIS FACILITY:

Hazardous Material Business Plan
Hazardous Waste Generator, Less than 5,000 #/year EPA ID #: _____
CAL-ARP COMPLEX SINGLE CATEGORY MODERATE RISK

CERTIFICATION:

PLEASE CHECK ALL THAT APPLY:

- ☐ The most recently submitted hazardous materials business plan and inventory are complete, accurate, and current. There have been no changes in the quantity of any hazardous materials as previously reported. No hazardous materials subject to the inventory requirements are being handled that are not currently listed.
- ☐ I have enclosed a business plan and inventory for the facility described above.
- ☐ Other: _____

I certify, under penalty of perjury, that the information provided above is correct.

Printed Name _____ Title _____

Signature _____ Date _____

Report # 7600

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

AMMONIA AQUA	12,336.00	LBS (POUNDS)	L
SULFURIC ACID	90,600.00	LBS (POUNDS)	L
POTASSIUM HYDROXIDE	12,800.00	LBS (POUNDS)	L
UN 32	16,605.00	LBS (POUNDS)	L
PHOSPHORIC ACID	32,097.00	LBS (POUNDS)	L
Ammonium Sulfate 21-0-0-24	100,000.00	LBS (POUNDS)	S
Sulfate of Potash	200,000.00	LBS (POUNDS)	S
Jenner 8 (Humic Substance)	6,000.00	GALLONS	L
Agrolizer (6-2-0) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Marizyme Fishilizer (4-2-2) Liquid Organic Fertilizer	12,000.00	GALLONS	L
Marizyme Fishilizer (7-1-1) Liquid Organic Fertilizer	6,500.00	GALLONS	L
Marizyme Fishilizer (8-5-2) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Liquid Fish Base	40,000.00	GALLONS	L

Tank and Pump Description List
for Port Organic Products Ltd., Inc.

The following are descriptions and uses of the equipment identified on the attached Plot Plan (see Sheet 2).

Note #1: This was a hole that was dug to insert a secondary containment system. The secondary containment system's purpose was to contain a fiber glass tank. The purpose of placing the tank inside of the secondary containment system was for insulation. Port was doing some testing, for a non organic product, using a conventional agricultural nitrogen source that would flash off nitrogen in the form of ammonia at temperatures above 80 degrees Fahrenheit. The goal was to prevent this loss of nitrogen by keeping the product cool via the insulating effects of below ground storage. The Department of Environmental Health Services informed Port that the system that Port had developed was in their opinion a buried tank. Environmental Health Services then explained the requirements needed to have a buried tank and Port decided that the costs were too great to justify that system. The issue was mitigated with the Department of Environmental Health Services, the equipment was removed and the hole has been filled.

Note #2: (R-2) This is a 6,000 gallon poly crosslink cone bottom tank, used to hydrolyze protein.

Note #3: (R-3) This is a 6,000 gallon poly crosslink cone bottom tank, identical to the one in note #2. It's used to stabilize material and occasionally for hydrolyzing.

Note #4: This is an approximately 4,500 gallon poly crosslink tank that contains 3 inch stainless steel coils. This tank is used to hold water that is preheated (the coils loop through the hot water heater) to be used in the hydrolyzation process.

Note #5: This tank, approximately 5,500 gallons, is made of poly crosslink and is used as an inventory tank for sulfuric acid.

Note #6: This is a 6,000 gallon poly crosslink tank that is used to inventory Humic Acid.

Note #7: This is a 3,000 gallon poly crosslink tank that is used to inventory phosphoric acid.

Note #8: This tank is a 1,300 gallon measuring tank.

Note #9: This tank is a 1,300 gallon measuring tank.

Note #10: This is a 500 gallon tank that has been taken out of service for future use.

Note #11: These are air operated diaphragm pumps, used to load cone bottom tank R-1 (Note #22).

Note #12: This is a 500 gallon measuring tank.

Note #13: This is a vibrating shaker screen that is used to screen the material coming out of cone bottom tank R-2 (Note #2).

Note #14: Scowl to collect tailings generated by cone bottom tank R-2 (Note #2).

Note #15: Air operated diaphragm pump used to inject either phosphoric or sulfuric acid into cone bottom tank R-2 (Note #2) to stabilize hydrolyzed product.

Note #16: Electrically driven centrifugal pump used to circulate cone bottom tank R-2 (Note #2).

Note #17: Wooden form to pour small cement pad. This plan has been abandoned and the forms will be removed.

Note #18: Electrically driven centrifugal pump used to circulate water inside water storage tank #20. This pump is also used to pump water from the water storage tank.

Note #19: Electrically driven centrifugal pump used to circulate water in cooling tower.

Note #20: Poly crosslink water storage tank, capacity approximately 4,500 gallons.

Note #21: Electrically driven centrifugal pump used to circulate cone bottom tank R-1 (Note #22).

Note #22: Cone bottom tank R-1. This is the tank where the final inputs are added and the final screening is done and that product is sent to its designated product storage tank.

Note #23: Scowl used to collect tailings generated from cone bottom tank R-1 (Note #22) shaker screen.

Note #24: Vibrating shaker screen used to clean final product coming out of cone bottom tank R-1 (Note #22).

Note #25: 300 gallon resonance tank, used to collect screened product from cone bottom tank shaker screen (Note #22). The contents of this tank are pumped away to its final product inventory storage tank.

Note #26: Electrically driven centrifugal pump, used to pump finished product from cone bottom tank R-1 (Note #22) resonance tank (Note #25) and to final product inventory tank.

Note #27: Concrete cellar, about 4ft x 4ft x 4ft. This cellar is used to collect rinse water from the concrete pad.

Note #28: 300 gallon resonance tank used to collect cleaned material fro cone bottom tank R-2 (Note #2) and R-3 (Note #3).

Note #29: Electrically driven centrifugal pump, used to transfer product from cone bottom tanks R-2 (Note #2) and R-3 (Note #3) resonance tank to primary inventory storage tank.

Note #30: 1,200 gallon poly crosslink tank, used to store potash.

Note #31: Electrically driven centrifugal pump, used to circulate T-1 (Note #35) and to transfer product from T-1 (Note #35) into tanker truck for delivery.

Note #32: Concrete cellar, 4ft x 4ft x 4ft, used to collect rinse water from the concrete pad.

Note #33: 1,000 cone bottom mix tank, used on infrequent occasions to mix dry inputs with specialty finished products.

Note #34: Electrically driven centrifugal pump used to circulate T-2 (Note #36) and transfer finished product to tanker truck for delivery.

Note #35: (T-1) 10,500 gallon fiberglass finished product inventory tank.

Note #36: (T-2) 10,500 gallon fiberglass finished product inventory tank.

Note #37: (T-3) 10,500 gallon fiberglass finished product inventory tank.

Note #38: (T-4) 6,500 gallon poly crosslink finished product inventory tank.

Note #39: (T-5) 10,500 gallon fiberglass finished product inventory tank.

Note #40: (T-6) 11,500 gallon poly crosslink finished product inventory tank.

Note #41: (T-7) 7,200 gallon poly crosslink finished product inventory tank.

Note #42: (T-8) 14,000 gallon fiberglass finished product inventory tank.

Note #43: (T-9) 5,500 gallon fiberglass finished product inventory tank.

Note #44: (T-14) 20,000 gallon fiberglass primary product inventory tank.

Note #45: (T-15) 20,000 gallon fiberglass primary product inventory tank.

Note #46: Electrically driven centrifugal pump used to circulate and transfer T-14 (Note #44).

Note #47: Electrically driven centrifugal pump used to circulate and transfer T-2 (Note #36).

Note #48 Electrically driven centrifugal pump used to circulate and transfer T-3 (Note #37).

Note #49: Electrically driven centrifugal pump used to circulate and transfer T-4 (Note #38).

Note #50: Electrically driven centrifugal pump used to circulate and transfer T-5 (Note #39).

Note #51: Electrically driven centrifugal pump used to circulate and transfer T-15 (Note #45).

Note #52: Electrically driven centrifugal pump used to circulate and transfer T-6 (Note #40).

Note #53: Electrically driven centrifugal pump used to circulate and transfer T-7 (Note #42).

Note #54: Portable standby air operated diaphragm pump.

Note #55: Electrically driven centrifugal pump used to circulate and transfer T-8 (Note #41).

Note #56: Electrically driven centrifugal pump used to circulate and transfer T-9 (Note #42).

Note #57 & 58 omitted

Note #59: Concrete cellar used to contain rinse water from pad.

Note #60: 6,500 gallon poly crosslink tank used to store micronutrient enhanced water.

Note #61: Stainless steel container, 4ft x 4ft x 4ft, to be used to contain rinse water from future unit that has been put on hold. Planned completion date undetermined.

Note #62: Poly crosslink cone bottom tank 3,200 gallons to be used for hydrolyzing and mixing of product in above future unit.

Note #63: 25 hp. electrically driven air compressor.

Note #64: Sea train containers that are welded and sealed together. They are used to store and secure tools and fittings.

Note #65: Electrically driven centrifugal pump. This pump is not in use.

Note #66: This is a concrete pad that is used to repair pumps and equipment. The poles located on the pad will be used to support a cover for shade and protection from rain.

Note 67: 3,000 gallon horizontal poly crosslink tank, used for temporary portable storage.

Note 68: 3,000 gallon horizontal poly crosslink tank, used for temporary portable storage.

Note 69: (T-10) 11,500 gallon poly crosslink tank that is used to store concentrated liquid fish. This concentrate is a potential input currently being used in tests that will determine its economic. When T-10 is not holding the concentrate it is used to inventory finished product.

Note #70: (T-11) is a fiberglass cone bottom tank that is used to inventory liquid molasses.

Note #71: This is a 1,500 gallon cone bottom crosslink tank that is used to temporarily store test products.

Note #72: This tank is a 1,500 gallon cone bottom poly crosslink tank that is used to temporarily store test products.

Note #73: This is a 6,500 gallon portable poly crosslink tank that is used to inventory agricultural grade phosphoric acid.

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

March 18, 2008

CR 1074 file

Mr. Kenneth Nelson
Port Organic Products LTD
c/o SHINAULT BAKER AND CO CPAs
5060 California Avenue, Suite 650
Bakersfield, CA 93309

SUBJECT: SETTLEMENT AGREEMENT FOR PORT ORGANIC PRODUCTS, LTD (MA 004-09-07)

Dear Mr. Nelson:

This Department has completed the evaluation of all factors associated with the settlement of the administrative enforcement action being considered. Included with this correspondence is a settlement agreement entitled "Consent Order," which was previously discussed.

You have been provided with two signed Consent Order documents. One document is to be countersigned and mailed back to this office with the agreed settlement amount of $9,238.50. The other document is your copy.

If you have any questions, please contact the undersigned at (661) 862-8756.

Sincerely,

Joe Cañas, R.E.H.S.
Hazardous Materials Specialist IV
Unified Hazardous Materials/Waste Program

Enclosures

cc: File

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS MANAGEMENT PROGRAM

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)

In the Matter of: Port Organic Products LTD 7361 Adhor Rd Buttonwillow CA 93206 Facility ID No. FA0005811 Respondent	) Docket No. BH 001-03-08)) **CONSENT ORDER**)))) Health and Safety Code) Section 25404.1.1)

The Kern County Environmental Health Services Department, Certified Unified Program Agency (Agency), and Port Organic Products LTD (Respondent) enter into this Consent Order (Order) and agree as follows:

1.0 Respondent handles and/or stores hazardous materials and operates and/or operated an Underground Storage Tank (UST) at 7361 Adhor Rd in Buttonwillow, California (Site).

2.0 The Agency inspected and/or investigated the Site on September 25, 2007.

3.0 The Agency alleges the following violations:

3.1 Respondent violated Health and Safety Code (HSC) Section 25284 (a)(1), failure to obtain a permit from the Agency to own or operate an underground storage tank.

3.2 The Respondent violated HSC Section 25503.5 (a)(1), failure to provide an accurate, up to date, and complete hazardous materials inventory.

3.3 The Respondent violated HSC Section 25509, failure to provide an accurate site layout/facility map.

4.0 A dispute exists regarding the alleged violations.

5.0 The parties wish to avoid the expense of litigation and to ensure prompt compliance.

6.0 Jurisdiction exists pursuant to HSC Section 25404.1.1.

7.0 Respondent waives any right to additional hearings in this matter.

8.0 This Consent Order shall constitute full settlement of the violations alleged above but does not limit the Agency from taking appropriate enforcement action concerning other violations.

SCHEDULE FOR COMPLIANCE

9.0 The following summarizes the schedule for compliance with this Consent Order:

9.1 The Department acknowledges that compliance with the following items has been achieved within the time frames specified:

9.1.2 Immediately discontinue the use of the unpermitted underground storage tank and arrange for proper removal.

9.1.2 Within 30 days update Port Organic Products LTD hazardous materials inventory to reflect all hazardous materials above regulatory threshold quantities stored at the Site. The Department acknowledges receipt of the updated chemical inventory within the prescribed deadline.

9.1.3 Within 10 days provide an accurate site layout/facility map which discloses where hazardous materials are stored and handled at the Site. The Department acknowledges receipt of the site map within the prescribed compliance deadline.

9. 2 All submittals pursuant to this Consent Order shall be sent to:

Mrs. Barbara Houghton
Kern County Environmental Health Services Department

Certified Unified Program Agency
2700 "M" Street, Suite 300
Bakersfield, CA 93301

9.3 Communications: All communications from Agency shall be communicated to Respondent in writing by the Manager of the Kern County Environmental Health Services Department, Certified Unified Program Agency, or his/her designee. No informal advice, guidance, suggestions, or comments by the Agency regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of its obligation to obtain such formal approvals as may be required.

9.4 Compliance with Applicable Laws: Respondent shall carry out this Order in compliance with all local, State, and federal requirements, including but not limited to requirements to obtain permits and to assure worker safety.

9.5 Liability: Nothing in this Consent Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent, except as provided in this Consent Order. Notwithstanding compliance with the terms of this Consent Order, Respondent may be required to take further actions as are necessary to protect public health or welfare or the environment.

9.6 Government Liabilities: The Kern County Environmental Health Services Department shall not be held liable for injuries or damages to persons or property resulting from acts or omissions by Respondent or related parties in carrying out activities pursuant to this Consent Order, nor shall the County of Kern be held as a party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Consent Order.

9.7 Extension Requests: If Respondent is unable to perform any activity or submit any document within the time required under this Consent Order, the Respondent may, prior to expiration of the time, request an extension of time in writing. The extension request shall include a justification for the delay.

9.8 Extension Approvals: If the Agency determines that good cause exists for an extension, it will grant the request and specify in writing a new compliance schedule.

PAYMENT

10.0 Respondent shall pay the Agency a total of $9238.50*, of which $5,200 is penalty, $4,037.50 is reimbursement of this Agency's costs. Payment is due within 30 days from the effective date of this Consent Order. Respondent's checks shall be made payable to the Kern County Environmental Health Services Department and be delivered to:

Kern County Environmental Health Services Department
2700 "M" Street, Suite 300
Bakersfield, CA 93301

If Respondent fails to make payment as provided above, Respondent agrees to pay interest at the rate established pursuant to HSC Section 25360.1 and to pay all costs incurred by the Agency in pursuing collection, including attorney's fees.

OTHER PROVISIONS

11.0 Additional Enforcement Actions: By agreeing to this Consent Order, the Agency does not waive the right to take further enforcement actions, except to the extent provided in this Consent Order.

* Amount reflects previous payment by RP of $297.50

11.1 Penalties for Noncompliance: Failure to comply with the terms of this Consent Order may subject Respondent to civil penalties and/or punitive damages for any costs incurred by the Agency or other government agencies as a result of such failure, as provided by HSC Section 25188 and other applicable provisions of law.

11.2 Parties Bound: This Consent Order shall apply to and be binding upon Respondent and its officers, directors, agents, receivers, trustees, employees, contractors, consultants, successors, and assignees, including, but not limited to, individuals, partners, subsidiary and parent corporations, and upon the Agency and any successor Agency that may have responsibility for and jurisdiction over the subject matter of this Consent Order.

11.3 Effective Date: The effective date of this Consent Order is the date it is signed by the Agency.

11.4. Integration: This agreement constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except as provided in this agreement.

11.5 Compliance with Waste Discharge Requirements: Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or the California Regional Water Quality Control Board.

Dated: Feb 08

Signature of Respondent's Representative

Typed or Printed Name and Title
of Respondent's Representative

Dated: 3/20/08

Matthew Constantine, Director
Kern County Environmental Health
Services Department

Results of 2010 Review of
Kern County Environmental Health Services
Department Records

Palm Farms

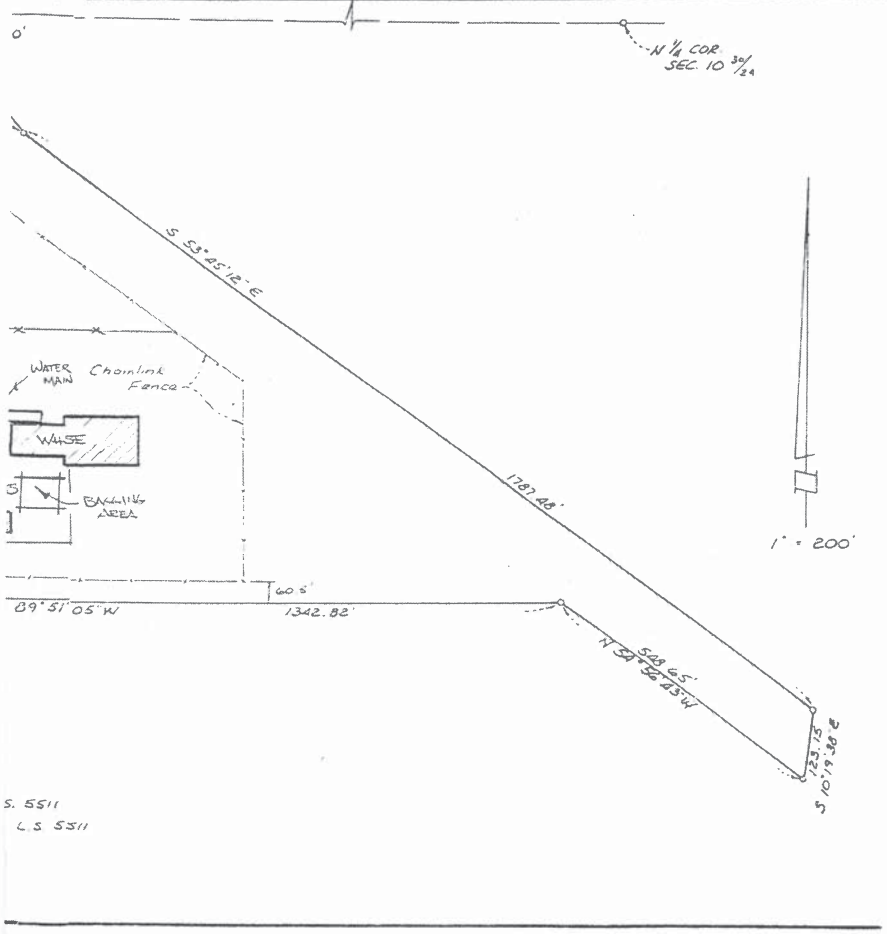
9-91

PREPARED FOR: BANDUCCI ENTERPRISES

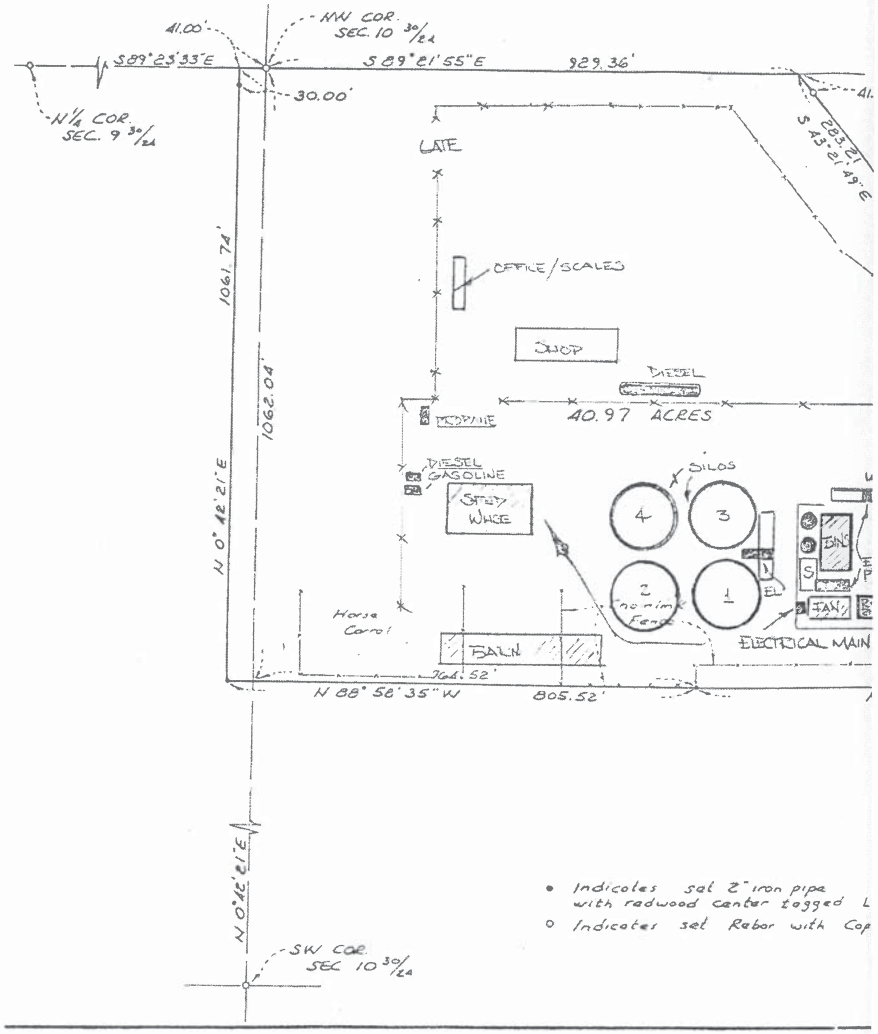
DESCRIPTION: PALM FARMS SURVEY
SEC. 9 & 10, T. 30S., R. 24E., MDM.

DATE: 8/30/89 | DWN. BY: B. Smith | JOB NO.: 89-1839

BOB J. SMITH / GREGORY J. SMITH
PROFESSIONAL LAND SURVEYORS
P.O. Box 464 • Bakersfield, CA 93302-0464
(805) 326-8883



REVISED 1-



• Indicates set 2" iron pipe with redwood center tagged L

o Indicates set Rebar with Cap

BUSINESS OWNER/OPERATOR IDENTIFICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

I. IDENTIFICATION

Page 1 of 1

FACILITY ID# FA0001390 (1 5 - 0 1 0 - 0 0 1 3 9 8)		BEGINNING DATE 02/16/2009	ENDING DATE 02/16/2010
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As): CAUZZA AG PARTNERS - PALM RANCH		BUSINESS PHONE (661) 764-5523	
BUSINESS SITE ADDRESS: ADOHR AND DAIRY RD		BUSINESS FAX	
BUSINESS CITY: BUTTONWILLOW	CA	ZIP CODE 93206	COUNTY Kern County
DUN & BRADSTREET		PRIMARY SIC 0131	PRIMARY NAICS None specified
BUSINESS MAILING ADDRESS: 1600 CORN CAMP RD			
BUSINESS MAILING CITY: BUTTONWILLOW		STATE CA	ZIP CODE 93206-9729
BUSINESS OPERATOR NAME: JOHN CAUZZA		BUSINESS OPERATOR PHONE	

II. BUSINESS OWNER

OWNER NAME: CAUZZA JOHN & LAURA	OWNER PHONE (661) 764-5523	
OWNER MAILING ADDRESS: 1600 CORN CAMP RD		
OWNER MAILING CITY: BUTTONWILLOW	STATE CA	ZIP CODE 93206-9729

III. ENVIRONMENTAL CONTACT

CONTACT NAME: RON CAUZZA	CONTACT PHONE (661) 764-5523	
CONTACT MAILING ADDRESS: 1600 CORN CAMP RD	CONTACT EMAIL: sarah@cstcsafety.com	
CITY: BUTTONWILLOW	STATE CA	ZIP CODE 93206

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME: JOHN CAUZZA	NAME: RON CAUZZA
TITLE: RANCH MANAGER	TITLE: RANCH MANAGER
BUSINESS PHONE: (661) 764-5523	BUSINESS PHONE: (661) 764-5523
24-HOUR PHONE: (661) 332-2801	24-HOUR PHONE: (661) 589-2269
PAGER #: () -	PAGER #: () -

ADDITIONAL LOCALLY COLLECTED INFORMATION:
APN: 104 90 12

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE: Andrew Ingrilis	DATE 02/17/2009	NAME OF DOCUMENT PREPARER
NAME OF SIGNER (print): DOUG PATRICK RSO	TITLE OF SIGNER	

UNIFIED PROGRAM CONSOLIDATED FORM

FACILITY INFORMATION

BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID # 1 5 0 1 0 0 1 3 9 8	EPA ID # (Hazardous Waste Only) CAL000080053
BUSINESS NAME (Same as Facility Name of DBA-Doing Business As): CAUZZA BROTHERS FARMING – PALM RANCH	

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page (OES Form 2730).

Does your facility...	If Yes, please complete these pages of the UPCF....	
A. HAZARDOUS MATERIALS		
Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☒ YES ☐ NO 4	HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION (OES 2731)
B. UNDERGROUND STORAGE TANKS (USTs)		
1. Own or operate underground storage tanks?	☐ YES ☒ NO 5	UST FACILITY (Formerly SWRCB Form A) UST TANK (one page per tank) (Formerly Form B)
2. Intend to upgrade existing or install new USTs?	☐ YES ☒ NO 6	UST FACILITY UST TANK (one per tank) UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank) (Formerly Form C)
3. Need to report closing a UST?	☐ YES ☒ NO 7	UST TANK (closure portion –one page per tank)
C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)		
Own or operate ASTs above these thresholds: ---any tank capacity is greater than 660 gallons, or ---the total capacity for the facility is greater than 1,320 gallons?	☒ YES ☐ NO 8	NO FORM REQUIRED TO CUPAs
D. HAZARDOUS WASTE		
1. Generate hazardous waste?	☒ YES ☐ NO 9	EPA ID NUMBER – provide at the top of this page
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	☐ YES ☒ NO 10	RECYCLABLE MATERIALS REPORT (one per recycler)
3. Treat hazardous waste on site?	☐ YES ☒ NO 11	ONSITE HAZARDOUS WASTE TREATMENT – FACILITY (Formerly DTSC Forms 1772) ONSITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit) (Formerly DTSC Forms 1772 A,B,C,D and L)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	☐ YES ☒ NO 12	CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
5. Consolidate hazardous waste generated at a remote site?	☐ YES ☒ NO 13	REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)
6. Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned onsite?	☐ YES ☒ NO 14	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)

E. LOCAL REQUIREMENTS

(You may also be required to provide additional information by your CUPA or local agency.)

CAUZZA BROTHERS
PALM RANCH
APRIL 2004
NORTH
Not to Scale
Legend:
= Acid Storage
= Air Compressor
= Ammonia Storage
= Battery Storage
= Boiler
= Break Room
= Chemical Storage
= Compressed Gasses
= Diesel Storage
= Door or Gate
= Electrical Shutoff
= Emergency Eyewash/Shower
= Evacuation Area
= Evacuation Route
= Fence-Line
= Fire Alarm
= Fire Extinguisher
= Fire Hydrant
= Fire Sprinkler
= First Aid Kit
= Gasoline Storage
= Gas or Propane Shutoff
= Generator
= High Pressure Washer
= Janitorial Supplies
= Oil Storage
= Pay Telephone
= Propane Storage
= Restroom
= S.C.B.A.
= Stairs
= Sump
= Transformer
= Waste Oil
= Water Pump
= Water Shutoff
= Storage
= Shop
= Laundry Facilities
= Employee Showers
= Irrigation Storage
= Fire Hose
= Office
= Dwelling
= Garage
Sullivan Road
Wasco Way
Highway 58
Dairy Road
Adohr Road
Tupman Road
West Side Canal

CAUZZA BROTHER FARMING
ADOHR & DAIRY ROAD, BUTTONWILLOW CA
FEBRUARY 2009
DAIRY ROAD
ADOHR ROAD
NORTH
Not to Scale
LEGEND:
= Compressed Gasses
= Diesel Storage
= Door or Gate
= Dwelling
= Electrical Shutoff
= Evacuation Area
= Evacuation Route
= Fence-Line
= Garage
= Propane Shutoff
= Office
= Storage
= Shop
= Waste Oil
Shade is available inside the building.
La sombra está disponible dentro del edificio.
The diesel tanks shown below are alongside the Westside Canal, approximately 1/2 mile south of the facility shown above.

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 5 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHWEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
HYDRAULIC OIL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
HYDRAULIC OIL

EHS* ☐ Yes ☒ No 208

CAS# 209
N/A

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 500 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
250	500	500	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 365 222

STORAGE CONTAINER
☐ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 0-100 226	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC 227	☐ Yes ☒ No 228	64742-54-7 229
2 0-20 230	RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED 231	☐ Yes ☒ No 232	64742-01-4 233
3 0-10 234	PROPRIETARY INGREDIENTS 235	☐ Yes ☒ No 236	PROPRIETARY MIXTURE 237
4 0-5 238	ZINC ALKYLDITHIOPHOSPHATE 239	☐ Yes ☒ No 240	68649-42-3 241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA - Please Sign Here

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 7 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHWEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
MOTOR OIL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
MOTOR OIL

EHS* ☐ Yes ☒ No 208

CAS# 209
N/A

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 500 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
250	500	500	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 0-100 226	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC 227	☐ Yes ☒ No 228	64742-54-7 229
2 0-90 230	DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC 231	☐ Yes ☒ No 232	64741-88-4 233
3 0-20 234	RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED 231	☐ Yes ☒ No 232	64742-01-4 237
4 0-10 238	PROPRIETARY INGREDIENTS 235	☐ Yes ☒ No 236	PROPRIETARY MIXTURE 241
5 0-5 242	ZINC ALKYLDITHIOPHOSPHATE 239	☐ Yes ☒ No 240	68649-42-3 245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA - Please Sign Here

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF STORAGE SHED

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
PROPANE

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
PROPANE

EHS* ☐ Yes ☒ No 208

CAS# 209
74-98-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 10,000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☒ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
5,000	10,000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE: 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE ☐ a. AMBIENT ☒ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
WEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 5000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
2500	5000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
WEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No CAR 206

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 5000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
2500	5000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

IF EPCRA, Please Copy Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No CAR 206

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

IF EPCRA, Please Copy Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one Page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE: 222
365

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA – Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one Page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 222
365

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	235	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA – Please Sign Here

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.
DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	231	☐ Yes ☒ No 232	237
4 238	233	☐ Yes ☒ No 236	241
5 242	239	☐ Yes ☒ No 240	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTH OF BARN

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
GASOLINE

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
GASOLINE

EHS* ☐ Yes ☒ No 208

CAS# 209
N/A

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 500 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
250	500	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.
DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 >15 226	TERT-AMYL METHYL ETHER 227	☐ Yes ☒ No 228	994-05-8 229
2 >15 230	ETHER,TERT-BUTYL METHYL 231	☐ Yes ☒ No 232	1634-04-4 233
3 >6 234	TOLUENE 231	☐ Yes ☒ No 232	108-88-3 237
4 8.5<15 238	XYLENE 235	☐ Yes ☒ No 236	1330-20-7 241
5 0.1 - <5% 242	BENZENE 239	☐ Yes ☒ No 240	71-43-2 245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 16 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
EAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
PROPANE

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
PROPANE

EHS* ☐ Yes ☒ No 208

CAS# 209
74-98-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) 216
☒ a. FIRE ☐ b. REACTIVE ☒ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) 221
☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS
* If EHS, amount must be in pounds.

DAYS ON SITE: 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224
☐ a. AMBIENT ☒ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA - Please Sign Here

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 17 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
NORTH OF HOUSE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
PROPANE

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
PROPANE

EHS* ☐ Yes ☒ No 208

CAS# 209
74-98-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) 216
☒ a. FIRE ☐ b. REACTIVE ☒ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) 221
☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS
* If EHS, amount must be in pounds.

DAYS ON SITE: 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224
☐ a. AMBIENT ☒ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA - Please Sign Here

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
LABOR CAMP (APPROX. ¼ MILE WEST OISHOP AREA)

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1 | MAP# (optional) 203: 1 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
PROPANE

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
PROPANE

EHS* ☐ Yes ☒ No 208

CAS# 209
74-98-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☒ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☐ a. AMBIENT ☒ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight of non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here


```
+ CAUZZA BROS FARMING-PALM RANCH ===================== SiteID: 015-010-001398 +
+= Hazmat Inventory ================================ Fixed Containers at Site +
+== Alphabetical Order ================================== Scope: All Materials +
```

Hazmat Common Name...	SpecHaz	EPA Hazards	Frm	DailyMax	Unit	MCP
ACETYLENE	E	F P R IH	G	550.00	FT3	Hi
DIESEL		F IH	L	2500.00	GAL	Low
DIESEL		F IH	L	5000.00	GAL	Low
DIESEL		F IH	L	5000.00	GAL	Low
DIESEL		F IH	L	10000.00	GAL	Low
OXYGEN		P IH	G	550.00	FT3	Low
PROPANE	E	F P IH	L	1000.00	GAL	Ext
PROPANE	E	F P IH	L	500.00	GAL	Ext
PROPANE	E	F P IH	L	500.00	GAL	Ext
WASTE OIL		F IH	L	500.00	GAL	Low

General Information 873-0430

Location: 7361 ADOHR RD
Community: BUTTONWILLOW/TUPMAN-STA 25
Map: 120 Hazard: Unrated
Grid: 9 : 1 AOV: 0.0

Contact Name	Title	Business Phone	24-Hour Phone
DAVID HERREN	Disc	(805) ~~324-5558~~ x	(805) 764-6324
JOHN L. BANDUCCI	Disc	(805) ~~327-4593~~ x	(805) 393-6757

Administrative Data

Mail Addrs: PO BX 2656
City: BAKERSFIELD
Comm Code: 015-250 BUTTONWILLOW/TUPMAN-STA 25
D&B Number:
State: CA Zip: 93303-
SIC Code: 723

Owner: GOLDEN VALLEY GREEN & FEED INC
Address: PO BX 2656
City: BAKERSFIELD
Phone: (805) 323-8131
State: CA
Zip: 93303-

Summary

Po Box 96
Bak 93302

RECEIVED
AUG 9 1993
KCFD HMCU
LIST

I, DAVID HERREN (Type or Print name) Do hereby certify that I have reviewed the attached hazardous materials management plan for GOLDEN VALLEY GREEN (Name of business) along with any corrections constitute a complete and correct management plan for my facility.

David Herren (Signature) 8-6-93 (Date)

Hazmat Inventory Detail in Reference Number Order

02-001 GUSTAFSON PRO-IZED STD. RED SEED DYE — Solid — 3120 LBS — Moderate
>

CAS #: Trade Secret: Yes

Form: Solid Type: Mixture Days: 365 Use: ADDITIVE

Daily Max LBS	Daily Average LBS	Annual Amount LBS
3,120	1,040.00	3,120.00

Storage	Press	Temp	Location
DRUM/BARREL-NONMETAL	Ambient	Ambient	SEED TREATMENT AREA - S SIDE OF PLANT

Conc	Components	MCP	Guide
50.0%	Acetic Acid, Glacial	Moderate	29
50.0%	RHODAMINE DYE 81-88-9	Unrated	0

02-002 VITAVAX 200 FLOWABLE FUNGICIDE — Solid — 4800 LBS — Low
>

CAS #: 0 Trade Secret: Yes

Form: Solid Type: Pure Days: 365 Use: FUNGICIDE

Daily Max LBS	Daily Average LBS	Annual Amount LBS
4,800	2,000.00	4,800.00

Storage	Press	Temp	Location
PLASTIC CONTAINER	Ambient	Ambient	SEED TREATMENT AREA - S SIDE OF

Conc	Components	MCP	Guide
17.0%	RHODAMINE DYE 81-88-9	Unrated	0
17.0%	Thiram	Low	55

02-003 DIESEL — Liquid — 500 GAL — Low
> Fire, Delay Hlth

CAS #: 68476302 Trade Secret: No

Form: Liquid Type: Pure Days: 365 Use: FUEL

Daily Max GAL	Daily Average GAL	Annual Amount GAL
500	250.00	4,000.00

Storage	Press	Temp	Location
ABOVE GROUND TANK	Ambient	Ambient	W SIDE OF COMPOUND - ALONG FENCE

Conc	Components	MCP	Guide
100.0%	Diesel Fuel No.2	Moderate	27

Hazmat Inventory Detail in Reference Number Order

02-004 GASOLINE Liquid 500 GAL Moderate
> Fire, Delay Hlth

CAS #: 8006619 Trade Secret: No

Form: Liquid Type: Pure Days: 365 Use: FUEL

Daily Max GAL	Daily Average GAL	Annual Amount GAL
500	250.00	2,500.00

Storage	Press	Temp	Location
ABOVE GROUND TANK	Ambient	Ambient	W SIDE OF COMPOUND - ALONG FENCE

Conc	Components	MCP	Guide
100.0%	Gasoline	Moderate	27

02-005 PROPANE Liquid 2500 GAL High
> Fire, Pressure

CAS #: 74986 Trade Secret: No

Form: Liquid Type: Pure Days: 365 Use: FUEL

Daily Max GAL	Daily Average GAL	Annual Amount GAL
2,500	700.00	4,000.00

Storage	Press	Temp	Location
FIXED PRESS. CYLINDER	Above	Ambient	W SIDE OF COMPOUND ALONG FENCE

Conc	Components	MCP	Guide
100.0%	Propane	Extreme	22

SECTION 9: EXPLAIN WHAT PRIVATE FIRE PROTECTION SYSTEMS ARE IN PLACE THAT MAY ASSIST EMERGENCY RESPONDERS.

NONE

SECTION 10: LIST THE LOCATION OF ANY WATER SUPPLIES THAT MAY BE USED BY EMERGENCY RESPONDERS.

Water Outlet - North Side of Plant at Above ground unloading area - Presently 1 1/2" rubber hose

Tailwater Canal - Northeast of Plant - Area also includes 1 1/2" Riser for water distribution

I, John L. Banducci, certify that the information submitted on all the business plan forms is accurate and complete. I understand that this information will be used to fulfill my obligations under California Health and Safety Code Division 20 Chapter 6.95 et seq. and Title 42 U.S.G.C. Section 1100 et seq. and false information may be punishable by fine, imprisonment, or both.

Signature | Corporate Secretary (Title) | 7/15/91 (Date)

Results of 2009 Review of
Kern County Environmental Health Services
Department Records

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY

DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

April 19, 2005

Mr. Ken Nelson Jr., Owner
Port Organic Products LTD
P O Box 5203
Buttonwillow, California 93388

SUBJECT: INSPECTION REPORT, REPORT OF VIOLATIONS AND ORDER TO CORRECT FOR PORT ORGANIC PRODUCTS LTD, 7361 ADHOR ROAD, BUTTONWILLOW, CALIFORNIA

Dear Mr. Nelson:

On April 12, 2005, representatives of the Kern County Environmental Health Services Department conducted inspections at Port Organic Products LTD, located at 7361 Adhor Road in Buttonwillow, California. The following inspection report details the observations noted during that inspection. Violations of the California Health and Safety Code (HSC) and the California Code of Regulations (CCR) [Title 22] that were observed during those inspections and the corrective actions necessary to gain compliance are detailed in the attached Inspection Report.

The issuance of this Report of Violations and Order To Correct does not preclude Kern County Environmental Health Services, Hazardous Materials Management Program from taking administrative, civil or criminal action as a result of the violations noted herein. If you have any questions, you may contact me at (661) 862-8757 or Joe Canas at (661) 862-8756. Thank you for your cooperation in this matter.

Sincerely,

Steve McCalley, Director

By: Dan Starkey, R.E.H.S.
Hazardous Materials Specialist III
Unified Hazardous Materials/Waste Program

DS:
ds/PortOrganicsProductsLTD.Cover.Ltr.4.19.05.doc

INSPECTION REPORT

Dates:	April 12, 2005
Facility Name:	Port Organic Products LTD
Facility Address:	7361 Adhor Road, Buttonwillow
Haz Mat Specialists:	Dan STARKEY / Donna FENTON
EPA ID #:	None
Facility I.D. #:	(NEW) FA0005811/ Seed 1074
	Inspection photographs

At approximately 0830 on April 12, 2005, Donna FENTON, and I, met with Jim ZABEN, General Manager of Port Organic Products LTD. Ken NELSON Jr. the owner was scheduled to meet with us but failed to make the appointment. We asked ZABEN for permission to complete an inspection and take photographs. I asked if Port had filed a Business Plan with our Department. ZABEN stated that the business had been at this location for ten years and to his knowledge has never had a business plan. ZABEN gave permission for the inspection. We asked ZABEN to describe his business. He stated that they blend and provide organic fertilizers to their customers.

The inspection started in the tank farm area. I asked FENTON to photograph the facility as we completed the inspection. There were numerous tanks of varying sizes, some were located inside the concrete secondary containment. I noted the secondary containment structure in poor condition. It was in a deteriorating condition and the leaking tanks and chemically etched concrete provided evidence that previous releases had occurred. The aboveground poly tanks contained: Phosphoric Acid, Sulfuric Acid, Aqua Ammonia 20%, Potash, blended fertilizers, and fish liquids. There is processing equipment that consists of mixing tanks, pumps and blending equipment. During the inspection of the tank farm we observed numerous violations. It was evident that the facility should have filed a Business Plan and CalARP with our Department. I advised ZABEN that the amount of chemicals stored exceeded the threshold quantity for both the Business Plan and CalARP regulations. We observed that all tanks lacked labels identifying the chemical contents. I explained to ZABEN the hazards of not knowing what chemicals are in specific tanks. One tank used to store aqua ammonia 20% was labeled "Fire Water". I informed ZABEN that if the aqua ammonia tank was used as fire water by fireman there could be serious consequences. While walking through the tank farm area FENTON, ZABEN and I were exposed to low levels of ammonia gas from the aqua ammonia storage tanks.

We asked about the material dumped in the soil east of the tank farm. ZABEN stated that the dirt area is the location where solid waste residue collected from the batch processing of fertilizer has been dumped. We advised that the waste could be hazardous and asked if they had analytical information for the waste. ZABEN stated that he had analyzed for the constituents of nitrogen, phosphorus & potassium (NPK) and based on that information some farmers have used the waste as fertilizer. I advised that the solid material looks like a waste and appears to be treated as a waste by being dumped on the ground adjacent to a canal. I informed ZABEN that he is required to test the waste material to determine if it is a hazardous waste.

We then inspected the covered warehouse located west of the tank farm which contained numerous pallets of potash, pallets of bat/bird guano, solid fish parts, totes containing fish liquid, diesel fuel, and 55 gallon drums. There are numerous totes around the warehouse some contained fish liquid, and others were empty. There were empty drums, poly tanks, and totes in deteriorated condition. ZABEN stated that he was trying to get the manufacture to take the totes back, and dispose of the damaged tanks and totes. Waste oil was found in two locations in the yard. It was stored in open unlabeled drums that had been cut in half.

I completed the inspection forms and discussed the violations with ZABEN. I informed him that there were serious violations observed during the inspection and that this Department would be seeking fines through the administrative process.

REPORT OF VIOLATIONS

1. The Respondent violated Health and Safety Code (HSC) Chapter 6.95, Section 25503.5 (a) Failure to file a Hazardous Materials Business Plan with this Department.

   (a) *Any business that handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to, or greater than, a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for compressed gas, that is handled in quantities for which an emergency plan is required to be adopted pursuant to Part 30 (commencing with Section 30.1), Part 40 (commencing with Section 40.1), or Part 70 (commencing with Section 70.1), of Chapter 10 of Title 10 of the Code of Federal Regulations (54 Federal Register 14051), or pursuant to any regulations adopted by the state in accordance with those regulations, shall establish and implement a business plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503.*

   Port Organic Products LTD has stored and processed chemicals at the 7361 Adhor Road facility for 10 years. They failed to file a Hazardous Materials Business Plan for the hazardous materials stored at this facility.

2. The Respondent violated California Code of Regulations (CCR) Title 19, Section 2745.1 (a) (d) failure to file a California Accidental Release Prevention Program (CalARP) Risk Management Plan (RMP).

(a) *The owner or operator of a stationary source, which handles more than a threshold quantity of a regulated substance in a process, shall determine the applicability of this chapter as set forth in Section 2735.4(a) and shall submit a single RMP to the AA. The RMP shall include the information required by Sections 2745.3 through 2745.9*

(b) *If a determination is made pursuant to section 2735.4 (a)(2) that an existing stationary source must comply with this chapter, the owner or operator shall submit an RMP to the AA after the owner or operator has received a notice from the AA requesting submission of an RMP. The AA shall, in consultation with the owner or operator of a stationary source, establish an RMP submittal date. The AA shall not require submission of the RMP earlier than 12 months or later than 3 years after the notice has been issued to the owner or operator*

This Department set the CalARP Risk Management Plan submittal deadline for all Table 3 Threshold Quantity facilities as January 31, 2002. Port Organic Products failed to register with this Department and submit a CalARP, Risk Management Plan.

3. Respondent violated CCR, Title 19, Division 4, Chapter 4, Article 4, Section 2732, Failure to properly train employees on how to handle hazardous materials.

a) *The business plan shall include a training program which is reasonable and appropriate for the size of the business and the nature of the hazardous materials handled. The training program shall take into consideration the responsibilities of the employees to be trained. The training program shall, at a minimum, include:*
   1) methods for safe handling of hazardous materials;
   2) procedures for coordination with local emergency response organizations;
   3) use of emergency response equipment and supplies under the control of the handler, and
   4) all procedures required by Section 2731 of this Article

b) *The business plan shall include provisions for ensuring that appropriate personnel receive initial and refresher training.*

Port Organics Products LTD employees have not been trained how to recognize and handle hazardous materials as evidenced by discussions with Jim Zaben, General Manager.

4. The Respondent violated 22 CCR Section 66265.31, Failure to operate a facility to minimize the possibility of the release of hazardous waste to the environment which could threaten human health.

Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

The chemical storage tanks used at the facility are not labeled properly. A 6000-gallon poly aqua ammonia (20%) tank is labeled "Fire Water". All tanks lack labels identifying the chemical contents. This violation poses a significant risk to human health and the possibility of mixing incompatible chemicals.

CORRECTIVE ACTIONS

1. Complete a hazardous materials business plan as specified in HSC section 25504 within 14 days of receipt of inspection report dated April 12, 2005.

2. All tanks and containers must be labeled. Tanks are required to be labeled with minimum four inch lettering in a contrasting color placed on opposite sides of the tanks. This requirement shall be completed immediately.

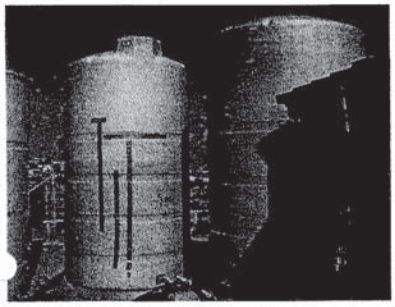
3. The CalARP Risk Management Plan (RMP) registration form shall be submitted within 14 days of receipt of the inspection report dated April 12, 2005.

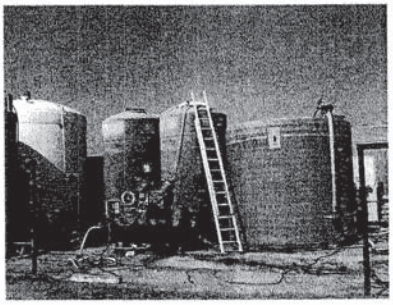
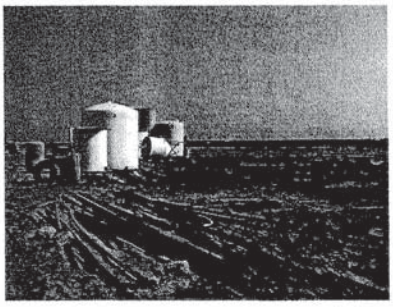
4. The CalARP (RMP) document must be submitted within 90 days of receipt of this Notice of Violation. The RMP Submit format must be used. This requires a hard copy and data disk be submitted to this Department only. All Program 2 prevention documentation shall be included at that time.

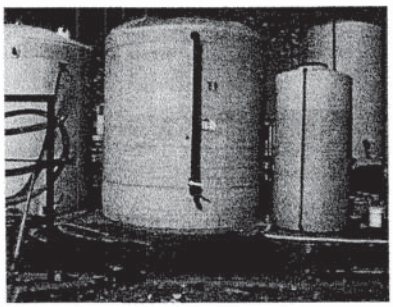
5. Properly label, handle and dispose of all hazardous waste stored at 7361 Adhor Road within 14 days.

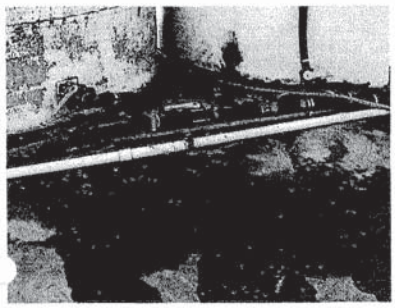
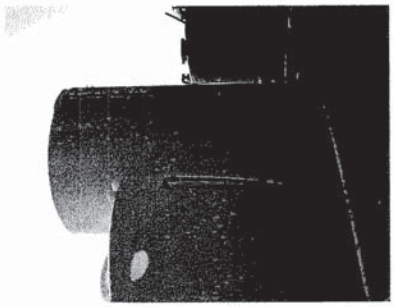
6. Within six (6) months of receipt of this notice, one (1) employee involved in the management of hazardous waste must attend California Compliance School training for hazardous waste generators. The completion certificates must be provided to this Department by November 1, 2005.

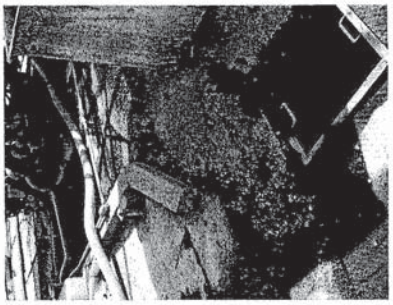
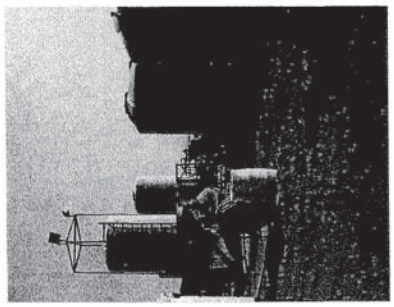
cc: File

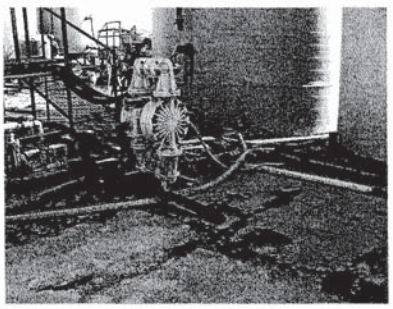


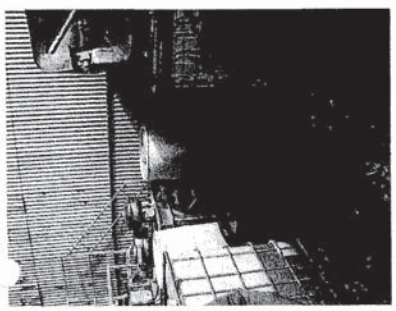
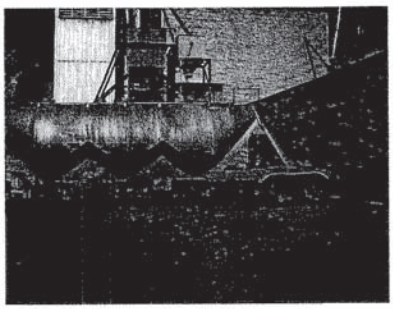
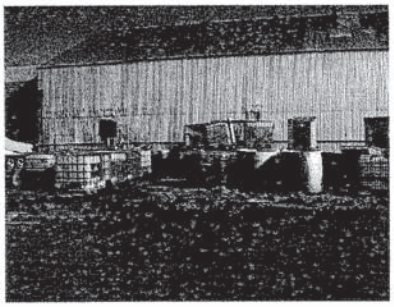
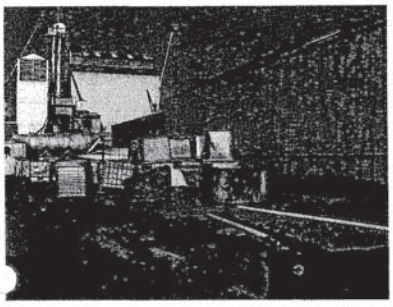
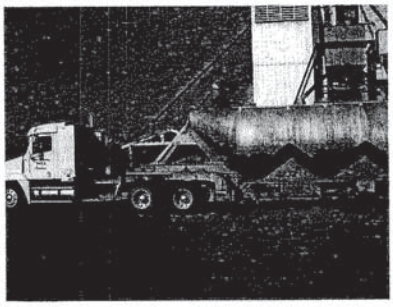



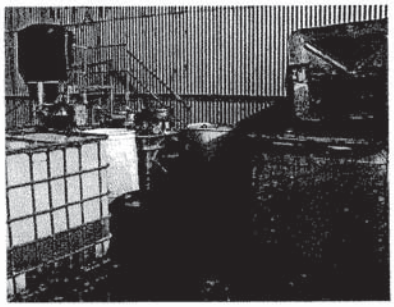


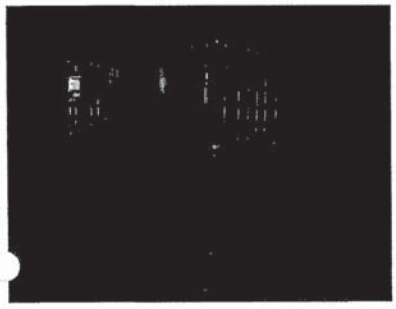



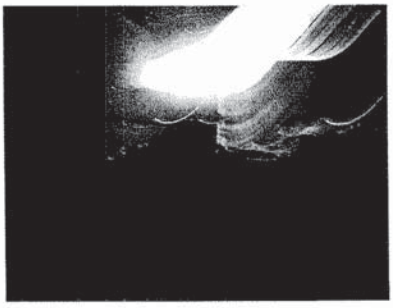











#1074

ENVIRONMENTAL HEALTH SER . CES DEPARTMENT
STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RE. JURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

December 7, 2005

Mr. Ken Nelson Jr., Owner
Port Organic Products LTD
P O Box 5203
Bakersfield, California 93388

RE: Port Organic Products LTD Settlement Agreement

Dear Mr. Nelson:

This Department has completed the evaluation of all factors associated with the settlement of the administrative enforcement action being considered. Included with this correspondence is a settlement agreement entitled "Consent Order" which was previously discussed.

You have been provided with two signed Consent Order documents. One document is to be counter signed and mailed back to this office with the agreed settlement amount of $ 7,250. The other document is your copy.

If you have any questions please contact me at (661) 862-8756.

Sincerely,

Steve McCalley, Director

By: Joe Canas, REHS
Hazardous Materials Specialist IV
Hazardous Materials Management Program

DS:

ds/PortOrganicProductsLTD.Consent.cover.ltr.11.28.05

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS MANAGEMENT PROGRAM

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)

In the Matter of:	) Docket No. DS00009/10-11
	) Facility ID No. FA0005811
Port Organic Products LTD	)
7361 Adhor Road	)
Buttonwillow, CA 93206	)
	)
	) Health and Safety Code
Respondent	) Section 25187
	)

The Kern County Environmental Health Services Department, Certified Unified Program Agency (Agency) and Port Organic Products LTD (Respondent) enter into this Consent Order (Order) and agree as follows:

1. Respondent operated a business that lacked a Hazardous Materials Business Plan (HMBP) and California Accidental Release Prevention Program (CalARP), Risk Management Plan for the Port Organic Products, LTD facility located at 7361 Adhor Road, Buttonwillow, CA.

2. The Agency inspected the Site on April 12, 2005.

4. The Agency provided an Inspection Report and Report of Violations of activities to the Respondent on April 19, 2005.

5. The Agency alleges the following violations:

5.1 Respondent violated Health and Safety Code (HSC) Chapter 6.95, Section 25503.5 (a) in that Respondent failed to complete and submit a HMBP with this Department.

5.2 Respondent violated California Code of Regulations (CCR) Title 19, Section 2745.1 (a) in that Respondent failed to complete and submit a CalARP Risk Management Plan to this Department.

5.4 Respondent violated CCR, Title 19, Division 4, Chapter 4, Article 4, Section 2732 in that Respondent failed to train employees how to handle hazardous materials.

5.5 Respondent violated CCR, Title 22, Section 66265.31 in that Respondent failed to operate a facility to minimize the possibility of a release of hazardous waste to the environment which could threaten human health.

6. Respondent disputes the alleged violations.

7. The parties wish to avoid the expense of litigation and ensure prompt compliance.

8. Jurisdiction exists pursuant to Health and Safety Code (HSC) section 25187.

9. Respondent waives any right to a formal hearing in this matter. Respondent agrees that due process has been provided with respect to this matter.

10. This Consent Order shall constitute full settlement of the violations alleged above but does not limit the Agency from taking appropriate enforcement action concerning other violations.

SCHEDULE FOR COMPLIANCE

11 Respondent shall comply with the following:

11.1 Maintain updated Hazardous Materials Business Plan in accordance with HSC, Section 25503.5. *Business Plan has been submitted and is complete.*

11.2 Maintain current CalARP Risk Management Plan in accordance with CCR, Section 2745.10. *CalARP Risk Management Plan has been submitted and is up to date.*

11.3 Provide proof of completion of the hazardous materials training for management of hazardous materials. *The training must be completed by November 30, 2005. Training was completed prior to November 30, 2005.*

11.4 Submittals: All submittals from Respondent pursuant to this Consent Order shall be sent to:

Mr. Dan Starkey
Kern County Environmental Health Services Department
Certified Unified Program Agency
2700 "M" Street, Suite 300
Bakersfield, CA 93301

11.5 Communications: All communications from Agency shall be communicated to Respondent in writing by the Program Supervisor, of the Kern County Environmental Health Services Department, Certified Unified Program Agency, or his/her designee. No informal advice, guidance, suggestions, or comments by the Agency regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of its obligation to obtain such formal approvals as may be required.

11.5 Compliance with Applicable Laws: Respondent shall carry out this Order in compliance with all local, State, and federal requirements, including but not limited to requirements to obtain permits and to assure worker safety.

11.6 Liability: Nothing in this Consent Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent, except as provided in this Consent Order. Notwithstanding compliance with the terms of this Consent Order, Respondent may be required to take further actions as are necessary to protect public health or welfare or the environment.

11.7 Government Liabilities: The Kern County Environmental Health Services Department shall not be held liable for injuries or damages to persons or property resulting from acts or omissions by Respondent or related parties specified in paragraph 12.2, in carrying out activities pursuant to this Consent Order, nor shall the County of Kern be held as a party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Consent Order.

11.8 Extension Requests: If Respondent is unable to perform any activity or submit any document within the time required under this Consent Order, the Respondent may, prior to expiration of the time, request an extension of time in writing. The extension request shall include a justification for the delay.

11.9 Extension Approvals: If the Agency determines that good cause exists for an extension, it will grant the request and specify in writing a new compliance schedule.

PAYMENT

Respondent shall pay the Agency a total of $ 7,250 of which $ 6,100 is penalty, $ 1,150 is reimbursement of this Agency's costs. Payment is due within 30 days from the effective date of this Consent Order. Respondent's check shall be made payable to the Kern County Environmental Health Services Department and shall be delivered to:

Mr. Joe Canas
Kern County Environmental Health Department
2700 "M" Street Suite 300
Bakersfield, CA 93301

If Respondent fails to make payment as provided above, Respondent agrees to pay interest at the rate established pursuant to HSC δ 25360.1 and to pay all costs incurred by the Agency in pursuing collection, including attorney's fees.

OTHER PROVISIONS

12. Additional Enforcement Actions: By agreeing to this Consent Order, the Agency does not waive the right to take further enforcement actions on any other incidents, except to the extent provided in this Consent Order.

12.1 Penalties for Noncompliance: Failure to comply with the terms of this Consent Order may subject Respondent to civil penalties and/or punitive damages for any costs incurred by the Agency or other government agencies as a result of such failure, as provided by HSC section 25188 and other applicable provisions of law.

12.2 Parties Bound: This Consent Order shall apply to and be binding upon Respondent and its officers, directors, agents, receivers, trustees, employees, contractors, consultants, successors, and assignees, including but not limited to individuals, partners, subsidiary and parent corporations, and upon the Agency and any successor Agency that may have responsibility for and jurisdiction over the subject matter of this Consent Order.

12.3 Effective Date: The effective date of this Consent Order is the date it is signed by the Agency.

12.4. Integration: This agreement constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except as provided in this agreement.

Dated: _____

_____
Signature of Respondent's Representative

_____
Type or Printed Name and Title
Of Respondent's Representative

Dated: 12-6-05

Steve McCalley, Director
Kern County Environmental Health
Services Department

PortOrganicProductsLTD.ConsentOrder.11.28.05

BUSINESS OWNER/OPERATOR IDENTIFICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 302
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

Page 1 of 1

☐ NEW BUSINESS ☐ OUT OF BUSINESS ☐ REVISE/UPDATE (EFFECTIVE 12/05/2006)

I. IDENTIFICATION

FACILITY ID# FA0005811 (1 5 - 0 1 0 - 0 0 1 0 7 4)
BEGINNING DATE 100 02/13/2006
ENDING DATE 101 02/13/2007
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 102 PORT ORGANIC PRODUCTS LTD
BUSINESS PHONE 103 (661) 764-9670
BUSINESS SITE ADDRESS 7361 ADHOR RD
CITY 104 BUTTONWILLOW
ZIP CODE 105 93206
DUN & BRADSTREET
SIC CODE (4 digit #) 106 2873
COUNTY 107 Kern County
BUSINESS OPERATOR NAME 108 SHINAULT BAKER AND CO CPAs
BUSINESS OPERATOR PHONE 109 (661) 764-9670

II. BUSINESS OWNER

OWNER NAME 110 PORT ORGANIC PRODUCTS LTD
OWNER PHONE 111 (661) 764-9670
OWNER MAILING ADDRESS 112 5060 CALIFORNIA AVE STE 650
CITY 113 BAKERSFIELD
STATE 114 CA
ZIP CODE 115 93206

III. ENVIRONMENTAL CONTACT

CONTACT NAME 116 Jim Zaben
CONTACT PHONE 117 (661) 764-9670
CONTACT MAILING ADDRESS 118 7361 Adohr Rd.
CITY 119 Buttonwillow
STATE 120 CA
ZIP CODE 121 93206

IV. EMERGENCY CONTACTS

-PRIMARY-
NAME 122 Kenneth N. Nelson Jr.
TITLE 123 Owner
BUSINESS PHONE 124 (661) 764-9670
24-HOUR PHONE 125 (661) 667-3460
PAGER # 126 0 -

-SECONDARY-
NAME 127 Jim Zaben
TITLE 128 General Manager
BUSINESS PHONE 129 (661) 764-9670
24-HOUR PHONE 130 (661) 201-9598
PAGER # 131 0 -

ADDITIONAL LOCALLY COLLECTED INFORMATION: 132
APN: 15904018
Environmental Contact E-Mail Address: jzaben@bak.rr.com

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE 133
Shahrouz Inglidaw
DATE 134 12/05/2006
NAME OF DOCUMENT PREPARER 135
NAME OF SIGNER (print) 136 James Zaben
TITLE OF SIGNER 137

Penalty Calculations

Facility Port Organic Products LTD Docket No. DS 0009/7-05 PCA ___ Case Code ___ WP___ MPC___ Page 1 of 1 Date of Inspection 04-12-05

#	Citation	Violation	Potential for Harm	Extent of Deviation	# of Times Violation Occurred	Statutory Maximum	Initial Penalty	Intent Factor	Economic Benefit	Multi-day	Base Penalty	Coop-eration	Prophylactic	Compliance	Final Payment
1	H&SC Sec. 25503.5 (a)	Failure to file a HMBP	Major	Major	10 years	$2,000/ day	$ 2,000	NA	$ 5,000	$2,400 *	$9,400	- $ 2,350	NA	- $ 2500	$ 4,500
2	T19 Sec. 15.1 (a) (d)	Failure to file a CalARP RMP	Major	Major	5 years	$ 2,000/ day	$ 2,000	NA	$850	$2,400 *	$5,250	-$ 1,320	NA	- $ 380	$ 3,520
					Continues	$4,000	$ 2,000	NA	$ 5,850	$ 4,800	$ 14,650	- $ 3,670	NA	NA	$ 8,020
													Sub Total Violations		**$ 8,020**

*** Multiday calculated at 2% of $ 2,000 X 60 days**

Departmental Costs +$ 1,150
Compliance School Costs - $ 2,000

TOTAL SETTLEMENT AMOUNT $ 7,250

DS:
H:ds/AEO\PortOrganics.11.28.05.HM73

BUSINES OWNER/OPERATOR IDENT ICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

☐ NEW BUSINESS ☐ OUT OF BUSINESS ☐ REVISE/UPDATE (EFFECTIVE 02/13/2007)

Page 1 of 1

I. IDENTIFICATION

FACILITY ID# FA0005811	1 5 - 0 1 0 - 0 0 1 0 7 4 1	BEGINNING DATE 100: 02/13/2006	ENDING DATE 101: 02/13/2007
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: PORT ORGANIC PRODUCTS LTD		BUSINESS PHONE 102: (661) 764-9670	
BUSINESS SITE ADDRESS 103: 7361 ADHOR RD			
CITY 104: BUTTONWILLOW	CA	ZIP CODE 105: 93206	
DUN & BRADSTREET 106:		SIC CODE (4 digit #) 107: 2873	
COUNTY 108: Kern County			
BUSINESS OPERATOR NAME 109: SHINAULT BAKER AND CO CPAs		BUSINESS OPERATOR PHONE 110:	

II. BUSINESS OWNER

OWNER NAME 111: PORT ORGANIC PRODUCTS LTD		OWNER PHONE 112: (661) 764-9670
OWNER MAILING ADDRESS 113: 5060 CALIFORNIA AVE STE 650		
CITY 114: BAKERSFIELD	STATE 115: CA	ZIP CODE 116: 93206

III. ENVIRONMENTAL CONTACT

CONTACT NAME 117: Jim Zaben		CONTACT PHONE 118: (661) 764-9670
CONTACT MAILING ADDRESS 119: 7361 Adohr Rd.		
CITY 120: Buttonwillow	STATE 121: CA	ZIP CODE 122: 93206

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME 123: Kenneth N. Nelson Jr.	NAME 128: Jim Zaben
TITLE 124: Owner	TITLE 129: General Manager
BUSINESS PHONE 125: (661) 764-9670	BUSINESS PHONE 130: (661) 764-9670
24-HOUR PHONE 126: (661) 667-3460	24-HOUR PHONE 131: (661) 201-9598
PAGER # 127: () -	PAGER # 132: () -

ADDITIONAL LOCALLY COLLECTED INFORMATION: 133

APN: 15904018

Environmental Contact E-Mail Address: jzaben@bak.rr.com

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTAT: Electronic Signature	DATE 134: 02/13/2007	NAME OF DOCUMENT PREPARER 135:
NAME OF SIGNER (print) 136: James Zaben	TITLE OF SIGNER 137:	

BUSINES OWNER/OPERATOR IDENT CATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

☐ NEW BUSINESS ☐ OUT OF BUSINES ☐ REVISE/UPDATE (EFFECTIVE 03/17/2006)

Page 1 of 1

I. IDENTIFICATION

FACILITY ID# FA0005811	1 5 - 0 1 0 - 0 0 1 0 7 4 1	BEGINNING DATE 100: 02/13/2006	ENDING DATE 101: 02/13/2007
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3: PORT ORGANIC PRODUCTS LTD		BUSINESS PHONE 102: (661) 764-9670	
BUSINESS SITE ADDRESS 103: 7361 ADHOR RD			
CITY 104: BUTTONWILLOW	CA	ZIP CODE 105: 93206	
DUN & BRADSTREET 106:		SIC CODE (4 digit #) 107: 2873	
COUNTY 108: Kern County			
BUSINESS OPERATOR NAME 109: SHINAULT BAKER AND CO CPAs		BUSINESS OPERATOR PHONE 110:	

II. BUSINESS OWNER

OWNER NAME 111: PORT ORGANIC PRODUCTS LTD		OWNER PHONE 112: (661) 764-9670
OWNER MAILING ADDRESS 113: 5060 CALIFORNIA AVE STE 650		
CITY 114: BAKERSFIELD	STATE 115: CA	ZIP CODE 116: 93206

III. ENVIRONMENTAL CONTACT

CONTACT NAME 117: Jim Zaben		CONTACT PHONE 118: (661) 764-9670
CONTACT MAILING ADDRESS 119: 7361 Adohr Rd.		
CITY 120: Buttonwillow	STATE 121: CA	ZIP CODE 122: 93206

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME 123: Kenneth N. Nelson Jr.	NAME 128: Jim Zaben
TITLE 124: Owner	TITLE 129: General Manager
BUSINESS PHONE 125: (661) 764-9670	BUSINESS PHONE 130: (661) 764-9670
24-HOUR PHONE 126: (661) 667-3460	24-HOUR PHONE 131: (661) 201-9598
PAGER # 127: () -	PAGER # 132: () -

ADDITIONAL LOCALLY COLLECTED INFORMATION: 133

APN: 15904018

Environmental Contact E-Mail Address: jzaben@bak.rr.com

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTAT: Electronic Signature	DATE 134: 03/17/2006	NAME OF DOCUMENT PREPARER 135:
NAME OF SIGNER (print) 136: James Zaben	TITLE OF SIGNER 137:	

BUSINESS ACTIVITIES

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

Page 1 of ___

I. FACILITY IDENTIFICATION

FACILITY ID # FA 000 5811 (1) | EPA ID # (Hazardous Waste Only) (2)

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) (3)
Port Organic Products, LTD

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page (KC Form 2730).

Does your facility…	If Yes, please complete these pages of the UPCF….	
A. HAZARDOUS MATERIALS		
Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☒ YES ☐ NO 4	HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION (KC Form 2731) CONSOLIDATED CONTINGENCY PLAN (KC Form 2733) SITE MAP (KC Form 2734)
B. UNDERGROUND STORAGE TANKS (USTs)		
1. Own or operate underground storage tanks?	☐ YES ☒ NO 5	UST FACILITY (KC Form A) UST TANK (one page per tank) (KC Form B)
2. Intend to upgrade existing or install new USTs?	☐ YES ☒ NO 6	UST FACILITY UST TANK (one per tank)
3. Need to report closing a UST?	☐ YES ☒ NO 7	UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank) (KC Form C) UST TANK (closure portion –one page per tank)
C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)		
Own or operate ASTs above a total capacity for the facility of greater than 1,320 gallons?	☐ YES ☒ NO 8	NO FORM REQUIRED TO KCEHSD
D. HAZARDOUS WASTE		
1. Generate hazardous waste?	☐ YES ☒ NO 9	EPA ID NUMBER – provide at the top of this page WASTE GENERATOR FORM (KC Form 2735)
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	☐ YES ☒ NO 10	RECYCLABLE MATERIALS REPORT (one per recycler) (KC Form 2732)
3. Treat hazardous waste on site?	☐ YES ☒ NO 11	ONSITE HAZARDOUS WASTE TREATMENT – FACILITY (KC Form 1772f) ONSITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit) (KC Form 1772u)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	☐ YES ☒ NO 12	CERTIFICATION OF FINANCIAL ASSURANCE (KC Form 1232)
5. Consolidate hazardous waste generated at a remote site?	☐ YES ☒ NO 13	REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION (KC Form 1196)
6. Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned onsite?	☐ YES ☒ NO 14	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (KC Form 1249)
E. LOCAL REQUIREMENTS		(15)
Have Regulated Substances (RS) stored on site at greater than the threshold quantities established by the California Accidental Release Program (Cal ARP)? A RS is any substance listed in Section 2770.5 of CCR Title 19, Division 2, Chapter 4.5.	☒ YES ☐ NO 15	REGULATED SUBSTANCES REGISTRATION (KC Form 2736) RISK MANAGEMENT PLAN (when required)

BUSINESS OWNER/OPERATOR IDENTIFICATION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

☐ NEW BUSINESS ☐ OUT OF BUSINESS ☐ REVISE/UPDATE (EFFECTIVE / /) Page ___ of ___

I. IDENTIFICATION

FACILITY ID# FA 000 5811 (1) | BEGINNING DATE (100) | ENDING DATE (101)

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) (3): Port Organic Products LTD | BUSINESS PHONE (102): 661-764-9670

BUSINESS SITE ADDRESS (103): 7361 Adohr Rd.

CITY (104): Buttonwillow | CA | ZIP CODE (105): 93206

DUN & BRADSTREET (106) | SIC CODE (4 digit #) (107): 2873

COUNTY (108): Kern County

BUSINESS OPERATOR NAME (109) | BUSINESS OPERATOR PHONE (110)

II. BUSINESS OWNER

OWNER NAME (111): Ken Nelson, Jr | OWNER PHONE (112): 661-764-9670

OWNER MAILING ADDRESS (113): PO Box 5203

CITY (114): Bakersfield | STATE (115): CA | ZIP CODE (116): 93388

III. ENVIRONMENTAL CONTACT

CONTACT NAME (117): Jim Zaben | CONTACT PHONE (118): 661-764-9670

CONTACT MAILING ADDRESS (119): PO Box 5203

CITY (120): Bakersfield | STATE (121): CA | ZIP CODE (122): 93388

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME (123): Ken Nelson, Jr.	NAME (128): Jim Zaben
TITLE (124): Owner	TITLE (129): General Manager
BUSINESS PHONE (125): 661-764-9670	BUSINESS PHONE (130): 661-764-9670
24-HOUR PHONE (126): 661-667-3460	24-HOUR PHONE (131): 661-201-9598
PAGER # (127): —	PAGER # (132): —

ADDITIONAL LOCALLY COLLECTED INFORMATION (133): APN: ___-___-___-___

Environmental Contact E-Mail Address: jzaben@bak.rr.com

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	DATE (134)	NAME OF DOCUMENT PREPARER (135)
Jim Zaben	4-16-05	Jim Zaben
NAME OF SIGNER (print) (136)	**TITLE OF SIGNER (137)**	
Jim Zaben	General Manager	

CONSOLIDATED CONTINGENCY PLAN

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Form
COVER PAGE

Page ___ of ___

I. FACILITY IDENTIFICATION

FACILITY ID # FA 000 5811 1

EPA ID # (Hazardous Waste Only)

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As)
Port Organic Products LTD

The Consolidated Contingency Plan provides businesses a format to comply with the emergency planning requirements of the following two written hazardous materials emergency response plans required in California:

- Hazardous Materials Business Plan (HSC Chapter 6.95 Section 25504 (b) and 19 CCR Sections 2729-2732),
- Hazardous Waste Generator Contingency Plan (22 CCR Section 66264.52), and,

This format is designed to reduce duplication in the preparation and use of emergency response plans at the same facility, and to improve the coordination between facility response personnel and local, state and federal emergency responders during an emergency.

A copy of the plan shall be submitted to this Department and at least one copy of the plan shall be maintained at the facility for use in the event of an emergency and for inspection by the local agency. Describe below where a copy of your Contingency Plan, including the hazardous material inventories, Training Records, and Site Map(s), are located at your business:

PLAN CERTIFICATION

I certify under penalty of law that I have personally examined and I am familiar with the information provided by this plan and to the best of my knowledge the information is accurate, complete, and true.

Printed Name of Owner/ Operator	Title of Owner/Operator
Signature of Owner/ Operator	Date

We appreciate the effort of local businesses in completing these plans and are available to assist in any manner. If you have any questions, please contact this Department at (661) 862-8700.

B. Emergency Medical Facility

List the closest emergency medical facility that will be used by your business in the event of an accident of injury caused by a release or threatened release of a hazardous material

HOSPITAL/CLINIC: Southwest Urgent Care — PHONE NO: 661-322 2273

ADDRESS: 6401 Truxtun Avenue

CITY: Bakersfield — ZIP CODE: 93309

C. Private Emergency Response

DOES YOUR BUSINESS HAVE A PRIVATE ON-SITE EMERGENCY RESPONSE TEAM? ☐ Yes ☒ No

If yes, provide an attachment that describes what policies and procedures your business will follow to notify your on-site emergency response team in the event of a release or threatened release of hazardous materials.

CLEANUP/DISPOSAL CONTRACTOR

List the contractor that will provide cleanup services in the event of a release.

NAME OF CONTRACTOR: — PHONE NO: - -

ADDRESS:

CITY: — ZIP CODE:

D. Arrangements with Emergency Responders

If you have made special (i.e. contractual) arrangements with any police department, fire department, hospital, contractor, or State or local emergency response team to coordinate emergency services, describe those arrangements in the space below:

E. Evacuation Plan

1. The following alarm signal(s) will be used to begin evacuation of the facility *(check all which apply)*:

☒ Verbal ☐ Telephone *(including cellular)* ☐ Alarm System ☐ Public Address System ☐ Intercom
☐ Pagers ☐ Portable Radio ☐ Other *(specify)*: Two-way radio - Nextel

2. ☐ Evacuation map is prominently displayed throughout the facility.

3. ☐ Name of individual(s) responsible for coordinating evacuation including spreading the alarm and confirming the business has been evacuated: Jim Zaben

F. Earthquake Vulnerability

Identify areas of the facility where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☐ Hazardous Waste/ Hazardous Materials Storage Areas ☐ Production Floor ☐ Process Lines
☐ Bench/ Lab ☐ Waste Treatment ☒ Other: Poly Tanks

Identify mechanical systems where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☐ Utilities ☐ Sprinkler Systems ☐ Cabinets ☐ Shelves
☐ Racks ☐ Pressure Vessels ☐ Gas Cylinders ☒ Tanks
☒ Process Piping ☒ Shutoff Valves ☐ Other:

IV. Emergency Equipment

22 CCR, Section 66265.52(e) [as referenced by Section 66262.34(a)(3)] requires that emergency equipment at the facility be listed. Completion of the following Emergency Equipment Inventory Table meets this requirement.

EMERGENCY EQUIPMENT INVENTORY TABLE

1. Equipment Category	2. Equipment Type	3. Location	4. Description*
Personal Protective, Equipment, Safety Equipment, and First Aid Equipment	☒ Cartridge Respirators	Office	NIOSH approved full face
	☐ Chemical Monitoring Equipment *(describe)*		
	☐ Chemical Protective Aprons/Coats		
	☒ Chemical Protective Boots	office	Rubber knee High boots
	☒ Chemical Protective Gloves	office	Poly rubber gloves
	☐ Chemical Protective Suits *(describe)*		
	☐ Face Shields		
	☒ First Aid Kits/Stations *(describe)* 2	office	Complete Osha approved
	☐ Hard Hats		
	☐ Plumbed Eye Wash Stations		
	☐ Portable Eye Wash Kits *(i.e. bottle type)*		
	☐ Respirator Cartridges *(describe)*		
	☒ Safety Glasses/Splash Goggles	office	Ansi approved clear & clear
	☐ Safety Showers		
	☐ Self-Contained Breathing Apparatuses (SCBA)		
	☐ Other *(describe)*		
Fire Extinguishing Systems	☐ Automatic Fire Sptinkler Systems		
	☐ Fire Alarm Boxes/Stations		
	☐ Fire Extinguisher Systems *(describe)*		
	☐ Other *(describe)*		
Spill Control Equipment and Decontamination Equipment	☐ Absorbents (describe)		
	☒ Berms/Dikes (describe)	plant	plant is surrounded by dikes
	☐ Decontamination Equipment (describe)		
	☐ Emergency Tanks (describe)		
	☐ Exhaust Hoods		
	☐ Gas Cylinders Leak Repair Kits (describe)		
	☐ Neutralizers (describe)		
	☐ Overpack Drums		
	☐ Sumps (describe)		
	☐ Other (describe)		
Communications and Alarm Systems	☐ Chemical Alarms (describe)		
	☐ Intercoms/ PA Systems		
	☐ Portable Radios		
	☐ Telephones		
	☐ Underground Tank Leak Detection Monitors		
	☒ Other (describe)	each person	Nextel two-way & phone
Additional Equipment (Use Additional Pages if Needed.)			

* *Describe the equipment and its capabilities. If applicable, specify any testing/maintenance procedures/intervals. Attach additional pages, numbered appropriately, if needed.*

SITE MAP

A site plan and storage map must be included with your Contingency Plan. For relatively small facilities, these documents may be combined into one drawing. Since these drawings are intended for use in emergency response situations, larger facilities *(generally those with complex and/or multiple buildings)* should provide an overall site plan and a separate storage map for each building/storage area. A blank Facility Site Map has been provided on the reverse side of this page. You may complete that page or attach any other drawing(s) which contain(s) the information required below. Drawings are to be no larger than 11" x 17". Blue prints are not acceptable.

1. **Site Plan:** This drawing shall contain, at a minimum, the following information:

   a. Site Orientation (north, south, etc.)
   b. Date the map was drawn
   c. Locations of all buildings and other structures
   d. Parking lots and internal roads
   e. Outside hazardous materials storage or use areas
   f. Storm drain, sanitary sewer drain inlets, and dry wells
   g. All wells (water, monitoring of underground tank systems, etc) if applicable
   h. Evacuation routes, emergency exits, and staging/meeting areas
   i. Adjacent property use
   j. Locations and names of adjacent streets and alleys
   k. Entrance and exit points/roads

2. **Storage Map(s):** The map(s) shall contain, at a minimum, the following information:

   a. General purpose of each section/area within each building (*e.g. "Office Area", "Manufacturing Area", etc)*
   b. Location of each hazardous material/waste storage, dispensing, use, or handling area *(e.g. individual underground tanks, aboveground tanks, storage rooms, etc.)*.
   c. Entrances to and exits from each building and hazardous material/waste room/area
   d. Location of each utility emergency shut-off point *(i.e. gas, water, electric)*
   e. Location of each monitoring system control panel *(e.g. underground tank monitoring, toxic gas monitoring, etc)*

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
PORT ORGANIC PRODUCTS LTD

CHEMICAL LOCATION 201
7361 Adohr Road

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # FA 000 5811 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
Ammonia > 20%

TRADE SECRET ☐ Yes ☐ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207
Aqua Ammonia

EHS* 208
☒ Yes ☐ No
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209
7664-41-7

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 6000 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217
#6168/6000 gallon

MAXIMUM DAILY AMOUNT 218
#6168/6000 gallons

ANNUAL WASTE AMOUNT 219
none

STATE WASTE CODE 220
—

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.
6168

DAYS ON SITE: 222
7

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

	%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1	20 (226)	Ammonia Solutions (227)	☒ Yes ☐ No (228)	7664-41-7 (229)
2	(230)	(231)	☐ Yes ☐ No (232)	(233)
3	(234)	(235)	☐ Yes ☐ No (236)	(237)
4	(238)	(239)	☐ Yes ☐ No (240)	(241)
5	(242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
Port Organic Products LTD

CHEMICAL LOCATION 201
7361 Adohr Road

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # FA 000 5811 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
Sulfuric Acid

TRADE SECRET ☐ Yes ☒ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207
Sulfuric Acid

EHS* 208
☒ Yes ☐ No
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209
7664-93-9

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 6000 gallon 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217
3000/45,300

MAXIMUM DAILY AMOUNT 218
6000/90,600#

ANNUAL WASTE AMOUNT 219
None

STATE WASTE CODE 220
—

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 222

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225
☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

	%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1	15.1 (226)	Sulfuric Acid (227)	☒ Yes ☐ No (228)	(229)
2	(230)	(231)	☐ Yes ☐ No (232)	(233)
3	(234)	(235)	☐ Yes ☐ No (236)	(237)
4	(238)	(239)	☐ Yes ☐ No (240)	(241)
5	(242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3

CHEMICAL LOCATION 201 | CHEMICAL LOCATION CONFIDENTIAL EPCRA 202 ☐ YES ☐ NO

FACILITY ID # 1 | MAP# (optional) 203 | GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205 | TRADE SECRET ☐ Yes ☐ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207 | EHS* ☐ Yes ☐ No 208
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☐ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☐ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217 | MAXIMUM DAILY AMOUNT 218 | ANNUAL WASTE AMOUNT 219 | STATE WASTE CODE 220

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221 | DAYS ON SITE: 222
* If EHS, amount must be in pounds.

STORAGE CONTAINER
☐ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON 223

STORAGE PRESSURE ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☐ No 228	229
2 230	231	☐ Yes ☐ No 232	233
3 234	235	☐ Yes ☐ No 236	237
4 238	239	☐ Yes ☐ No 240	241
5 242	243	☐ Yes ☐ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

HAZARDOUS WASTE GENERATOR

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Form

Page ___ of ___

I. FACILITY INFORMATION

FACILITY ID # 1 | EPA ID # (Hazardous Waste Only) 2

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) 3 | # OF EMPLOYEES A

II. TYPE OF GENERATOR

PLEASE CHECK THE BOX THAT APPLIES B

	RCRA GENERATOR (FEDERAL WASTE)	NON-RCRA GENERATOR (CALIFORNIA WASTE ONLY)
LARGE QUANTITY GENERATOR (>1000 KG HAZARDOUS WASTE PER MONTH	☐	☐
SMALL QUANTITY GENERATOR (>100 KG BUT <1000 KG HAZARDOUS WASTE PER MONTH)	☐	☐
CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (<100 KG HAZARDOUS WASTE PER MONTH)	☐	☐

III. WASTE STREAM IDENTIFICATION

PLEASE COMPLETE THE TABLE BELOW. (SEE INSTRUCTIONS ON THE BACK FOR CODES AND EXPLANATIONS)

PROCESS C	WASTE DESCRIPTION D	WASTE ID E	AMOUNT PER YEAR F	UNITS G	STORAGE METHOD H	DISPOSAL METHOD I

I certify that the information provided herein is true and accurate to the best of my knowledge.

OWNER/OPERATOR NAME J | OWNER/OPERATOR TITLE K

OWNER/OPERATOR SIGNATURE | DATE L

1074

ENTERED

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☒ADD ☐DELETE ☐REVISE 200 Page 1 of 1

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
PORT ORGANIC PRODUCTS LTD

CHEMICAL LOCATION 201
7361 ADOHR ROAD

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # FA 000 5811 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
Ammonia ≥ 20% conc

TRADE SECRET ☐ Yes ☒ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207
Aqua Ammonia

EHS* ☒ Yes ☐ No 208
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209
7664-41-7

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 6000 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☒ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
12,336	12,336	none	—

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 7 222

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

	%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1	20 (226)	Ammonia (227)	☒ Yes ☐ No (228)	7664.41.7 (229)
2	(230)	(231)	☐ Yes ☐ No (232)	(233)
3	(234)	(235)	☐ Yes ☐ No (236)	(237)
4	(238)	(239)	☐ Yes ☐ No (240)	(241)
5	(242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

(7/02 revised) KC Form 2731

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☒ADD ☐DELETE ☐REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
PORT ORGANIC PRODUCTS LTD

CHEMICAL LOCATION 201
7361 ADOHR ROAD

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # FA 000 5811 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
Sulfuric Acid

TRADE SECRET ☐ Yes ☒ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207
Sulfuric Acid

EHS* ☒ Yes ☐ No 208
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209
7664-93-9

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 6000 gallon 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
45,300	90,600	None	—

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 7 222

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

	%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1	93 (226)	Sulfuric Acid (227)	☒ Yes ☐ No (228)	7664-93-9 (229)
2	(230)	(231)	☐ Yes ☐ No (232)	(233)
3	(234)	(235)	☐ Yes ☐ No (236)	(237)
4	(238)	(239)	☐ Yes ☐ No (240)	(241)
5	(242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

(7/02 revised) KC Form 2731

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☒ ADD ☐ DELETE ☐ REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As): PORT ORGANIC PRODUCTS LTD 3

CHEMICAL LOCATION: 7361 Adohr Road 201

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202: ☐ YES ☐ NO

FACILITY ID #: F A 0 0 0 S 8 1 1 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205: Potassium Hydroxide

TRADE SECRET 206: ☐ Yes ☒ No — If Subject to EPCRA, refer to instructions

COMMON NAME 207: KOH

EHS* 208: ☒ Yes ☐ No — *If EHS if "Yes", all amounts below must be in pounds

CAS# 209: 1310-58-3

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) 211: ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE

RADIOACTIVE 212: ☐ Yes ☒ No

CURIES 213: —

PHYSICAL STATE (Check one item only) 214: ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS

LARGEST CONTAINER 215: 1000 gallon

FED HAZARD CATEGORIES (Check all that apply) 216: ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
12,800	12,800	None	—

UNITS* (Check one item only) 221: ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS — * If EHS, amount must be in pounds.

DAYS ON SITE: 222: 7

STORAGE CONTAINER 223:
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224: ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225: ☐ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 (226)	(227)	☐ Yes ☐ No (228)	(229)
2 (230)	(231)	☐ Yes ☐ No (232)	(233)
3 (234)	(235)	☐ Yes ☐ No (236)	(237)
4 (238)	(239)	☐ Yes ☐ No (240)	(241)
5 (242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☒ ADD ☐ DELETE ☐ REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As): PORT ORGANIC PRODUCTS LTD 3

CHEMICAL LOCATION: 7361 Adohr Road 201

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202: ☐ YES ☒ NO

FACILITY ID #: F A 0 0 0 S 8 1 1 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205: Urea Ammonium Nitrate

TRADE SECRET 206: ☐ Yes ☒ No — If Subject to EPCRA, refer to instructions

COMMON NAME 207: UN 32

EHS* 208: ☒ Yes ☐ No — *If EHS if "Yes", all amounts below must be in pounds

CAS# 209: 57-13-6

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) 211: ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE

RADIOACTIVE 212: ☐ Yes ☒ No

CURIES 213: —

PHYSICAL STATE (Check one item only) 214: ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS

LARGEST CONTAINER 215: ~~1000 gallons~~ 1500 gallons

FED HAZARD CATEGORIES (Check all that apply) 216: ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
16,605	16,605	None	—

UNITS* (Check one item only) 221: ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS — * If EHS, amount must be in pounds.

DAYS ON SITE: 222: 7

STORAGE CONTAINER 223:
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM
☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO
☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER
☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON
☐ q. RAIL CAR ☐ r. OTHER

STORAGE PRESSURE 224: ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225: ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 < 1% (226)	Ammonium Nitrate (227)	☐ Yes ☐ No (228)	6484-52-2 (229)
2 (230)	(231)	☐ Yes ☐ No (232)	(233)
3 (234)	(235)	☐ Yes ☐ No (236)	(237)
4 (238)	(239)	☐ Yes ☐ No (240)	(241)
5 (242)	(243)	☐ Yes ☐ No (244)	(245)

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
HAZARDOUS MATERIALS
(one page per material per building or area)

☒ ADD ☐ DELETE ☐ REVISE 200 Page ___ of ___

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
PORT Organic Products LTD

CHEMICAL LOCATION 201
7361 Adohr Road

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # F A 0 0 0 5 8 1 1 1 1

MAP# (optional) 203

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
Phosphoric Acid

TRADE SECRET ☐ Yes ☒ No 206
If Subject to EPCRA, refer to instructions

COMMON NAME 207

EHS* ☒ Yes ☐ No 208
*If EHS if "Yes", all amounts below must be in pounds

CAS# 209
7732-18-5

FIRE CODE HAZARD CLASSES (Not currently required by KCEHSD) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 2700 gallons 215

FED HAZARD CATEGORIES (Check all that apply) ☐ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☒ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
32,097	32,097	None	—

UNITS* (Check one item only) ☐ a. GALLONS ☐ b. CUBIC FEET ☒ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 7 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ b. UNDERGROUND TANK ☐ c. TANK INSIDE BUILDING ☐ d. STEEL DRUM ☐ e. PLASTIC/NONMETALLIC DRUM ☐ f. CAN ☐ g. CARBOY ☐ h. SILO ☐ i. FIBER DRUM ☐ j. BAG ☐ k. BOX ☐ l. CYLINDER ☐ m. GLASS BOTTLE ☐ n. PLASTIC BOTTLE ☐ o. TOTE BIN ☐ p. TANK WAGON ☐ q. RAIL CAR ☐ r. OTHER 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

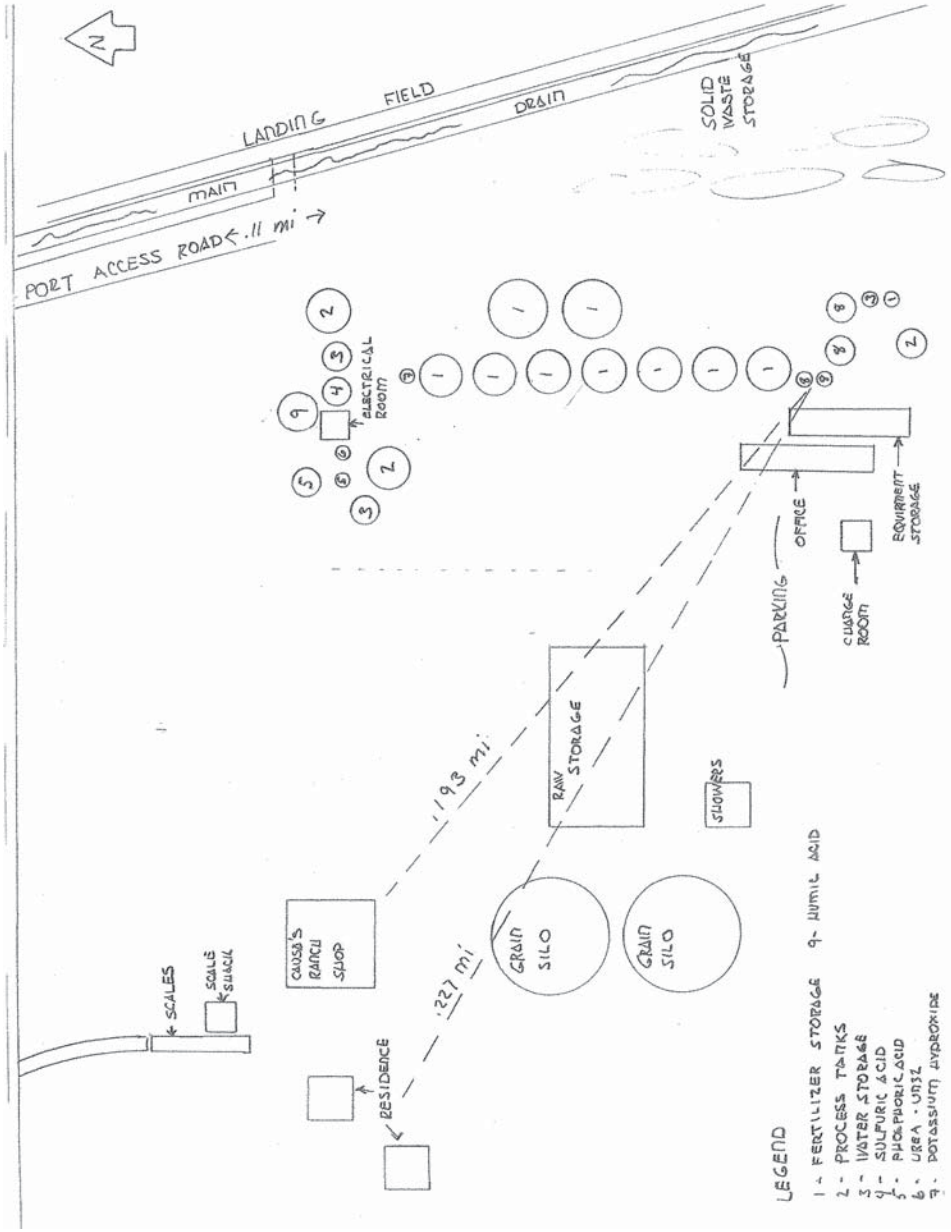
%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☐ No 228	229
2 230	231	☐ Yes ☐ No 232	233
3 234	235	☐ Yes ☐ No 236	237
4 238	239	☐ Yes ☐ No 240	241
5 242	243	☐ Yes ☐ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

(7/02 revised) KC Form 2731



FA000581

PORT ORGANIC PRODUCTS LTD

Environmental & Emergency Contacts

Ba

Owner & Business Information

	Chemical Name	Location	Max Daily Amount	Unit of M
View	AMMONIA AQUA		12336.0000	Pounds
View	PHOSPHORIC ACID		32097.0000	Pounds
View	POTASSIUM HYDROXIDE		12800.0000	Pounds
View	SULFURIC ACID		90600.0000	Pounds
View	UN 32		16605.0000	Pounds

file # 001074

RMP Report for Port Organic Products Ltd.

Section 1. Registration Information

1.1 Source Identification: **Facility ID: 74** There were no reportable accidents in the last 5 years.

a. Facility Name: Port Organic Products Ltd.

b. Parent Company #1 Name:

c. Parent Company #2 Name:

1.2 EPA Facility Identifier:

1.3 Other EPA Systems Facility ID: FA0005811

1.4 Dun and Bradstreet Numbers (DUNS):

a. Facility DUNS:

b. Parent Company #1 DUNS:

c. Parent Company #2 DUNS:

1.5 Facility Location Address:

a. Street 1: 7361 Adohr Road

b. Street 2:

c. City: Buttonwillow **d. State:** CA **e. Zip:** 93206 -

f. County: Kern

Facility Latitude and Longitude:

g. Lat. (dd.dddddd): 35.203410 **h. Long. (ddd.dddddd):** -119.235540

i. Lat/Long Method: P2 Public Land Survey - Quarter Section

j. Lat/Long Description: FC Facility Centroid

k. Horizontal accuracy measure (m): 1000

l. Horizontal Reference Datum Code: 001 North American Datum of 1927

m. Source Map Scale Number:

1.6 Owner or Operator:

a. Name: Kenneth N. Nelson Jr.

b. Phone: (661) 764-9670

Mailing address:

c. Street 1: PO Box 5203 **d. Street 2:**

e. City: Buttonwillow **f. State:** CA **g. Zip:** 93388 -

1.7 Name and title of person or position responsible for part 68 (RMP) implementation:

a. Name of person: James J. Zaben

b. Title of person or position: General Manager

c. Email address: jzaben@bak.rr.com

1.8 Emergency contact:

a. Name: Jim Zaben

b. Title: General Manager

c. Phone: (661) 764-9670

d. 24-hour phone: (661) 201-9598

e. Ext. or PIN:

f. Email address: jzaben@bak.rr.com

1.9 Other points of contact:

a. Facility or Parent Company E-Mail Address:

b. Facility Public Contact Phone:

c. Facility or Parent Company WWW Homepage Address:

1.10 LEPC: Region 5 LEPC Inland South

1.11 Number of full time employees on site: 7

1.12 Covered by:

a. OSHA PSM: Yes

b. EPCRA 302: No

c. CAA Title V: No **Air operating permit ID:**

1.13 OSHA Star or Merit Ranking: No

1.14 Last Safety Inspection (by an External Agency) Date:

1.15 Last Safety Inspection Performed by an External Agency: OSHA

1.16 Will this RMP involve predictive filing?: No

1.18 RMP Preparer Information:

a. Name: James J. Zaben

b. Telephone: (661) 764-9670

c. Street1: 7361 Adohr Road

d. Street2:

e. City: Buttonwillow

f. State: CA **g. ZIP:** 93206 -

Section 1.17 Process(es)

a. Process ID: 145 **Program Level** 2 liquid organic fertilizer

b. NAICS Code

325314 Fertilizer (Mixing Only) Manufacturing

c. Process Chemicals

c.1 Process Chemical (ID / Name)	c.2 CAS Nr.	c.3 Qty (lbs.)
159 Ammonia (conc 20% or greater)	7664-41-7	12,336

Section 2. Toxics: Worst Case

Toxics: Worst Case ID 75

2.1 a. Chemical Name: Ammonia (conc 20% or greater)

b. Percent Weight of Chemical (if in a mixture):

2.2 Physical State: Liquid

2.3 Model used: EPA's RMP*Comp(TM)

2.4 Scenario: Liquid spill & Vaporization

2.5 Quantity released: 6,168 **lbs**

2.6 Release rate: 616.8 **lbs/min**

2.7 Release duration: 10.0 **mins**

2.8 Wind speed: 1.5 **m/sec**

2.9 Atmospheric Stability Class: F

2.10 Topography: Rural

2.11 Distance to Endpoint: 0.60 **mi**

2.12 Estimated Residential population within distance to endpoint: 7

2.13 Public receptors within distance to endpoint:

a. Schools:	No	**d. Prisons/Correction facilities:**	No
b. Residences:	Yes	**e. Recreation areas:**	No
c. Hospitals:	No	**f. Major commercial, office or, industrial areas:**	No

g. Other (Specify):

2.14 Environmental receptors within distance to endpoint:

a. National or state parks, forests, or monuments: No

b. Officially designated wildlife sanctuaries, preserves, or refuges: No

c. Federal wilderness areas: No

d. Other (Specify):

2.15 Passive mitigation considered:

a. Dikes:	No	d. Drains:	Yes
b. Enclosures:	No	e. Sumps:	No
c. Berms:	No	f. Other (Specify):	

2.16 Graphic file name:

Section 3. Toxics: Alternative Release

Toxics: Alternative Release ID: 70

3.1 a. Chemical Name: Ammonia (conc 20% or greater)

b. Percent Weight of Chemical (if in a mixture):

3.2 Physical State: Liquid

3.3 Model: EPA's RMP*Comp(TM)

3.4 Scenario: Vessel leak

3.5 Quantity released: 6,168 lbs

3.6 Release rate: 616.8 lbs/min

3.7 Release duration: 10.0 mins

3.8 Wind speed: 3.0 m/sec

3.9 Atmospheric Stability Class: D

3.10 Topography: Rural

3.11 Distance to Endpoint: 0.20 mi

3.12 Estimated Residential population within distance to endpoint: 7

3.13 Public receptors within distance to endpoint:

a. Schools:	No	d. Prisons/Correction facilities:	No
b. Residences:	Yes	e. Recreation areas:	No
c. Hospitals:	No	f. Major commercial, office, or industrial areas:	No

g. Other (Specify):

3.14 Environmental receptors within distance to endpoint:

a. National or state parks, forests, or monuments: No

b. Officially designated wildlife sanctuaries, preserves, or refuges: No

c. Federal wilderness areas: No

d. Other (Specify):

3.15 Passive mitigation considered:

a. Dikes:	No	d. Drains:	Yes
b. Enclosures:	No	e. Sumps:	Yes
c. Berms:	No	f. Other (Specify):	

3.16 Active mitigation considered:

a. Sprinkler systems:	No	f. Flares:	No
b. Deluge system:	No	g. Scrubbers:	No
c. Water curtain:	No	h. Emergency shutdown systems:	No
d. Neutralization:	No	i. Other (Specify):	
e. Excess flow valve:	No		

3.17 Graphic file name:

Section 4. Flammables: Worst Case --- No Data To Report

Section 5. Flammables: Alternative Release --- No Data To Report

Section 6. Accident History --- No Data To Report

Section 7. Prevention Program 3 --- No Data To Report

Section 8. Prevention Program 2

Process ID: 145 liquid organic fertilizer

Prevention Program ID: 27

Prevention Program Description: manufacturer of liquid organic ferilizer

8.1 NAICS Code: 325314

8.2 Chemicals: Chemical Name
Ammonia (conc 20% or greater)

8.3 Safety Information:

a. The date of the most recent review or revision of the safety information: 04/12/2005

b. Select all Federal or state regulations or industry-specific design codes and standards used to demonstrate compliance with the safety information requirement:

NFPA 58 (or state law based on NFPA 58):	No	ANSI Standards:	No
OSHA (29 CFR 1910.111):	Yes	ASME Standards:	No
ASTM Standards:	No	None:	No

Other (Specify):

Comments:

8.4 Hazard review:

a. The date of completion of most recent hazard review or update: 04/12/2005

b. The expected or actual date of completion of all changes resulting from the hazard review: 07/12/2005

c. Major hazards identified:

Toxic release:	Yes	Overpressurization:	No	Earthquake:	Yes
Fire:	No	Corrosion:	No	Floods (flood plain):	No
Explosion:	No	Overfilling:	No	Tornado:	No
Runaway reaction:	No	Contamination:	No	Hurricanes:	No
Polymerization:	No	Equipment failure:	No	Other (Specify):	
		Loss of cooling, heating, electricity, instrument air:	No		

d. Process controls in use:

Vents:	No	Emergency air supply:	No	Other (Specify):
Relief valves:	No	Emergency power:	No	
Check valves:	No	Backup pump:	No	
Scrubbers:	No	Grounding equipment:	No	
Flares:	No	Inhibitor addition:	No	
Manual shutoffs:	No	Rupture disks:	No	
Automatic shutoffs:	No	Excess flow device:	No	
Interlocks:	No	Quench system:	Yes	
Alarms and procedures:	No	Purge system:	No	
Keyed bypass:	No	None:	No	

e. Mitigation systems in use:

Sprinkler system:	No	Water Curtain:	No
Dikes:	No	Enclosure:	No
Fire walls:	No	Neutralization:	No
Blast walls:	No	None:	Yes
Deluge system:	No	Other (Specify):	

f. Monitoring/detection systems in use:

Process area detectors:	No	None:	Yes
Perimeter monitors:	No	Other (specify):	

g. Changes since last hazard review or hazard review update:

Reduction in chemical inventory:	No	Installation of perimeter monitoring systems:	No

Increase in chemical inventory:	No	Installation of mitigation systems:	No
Change process parameters:	No	None recommended:	No
Installation of process controls:	No	None:	Yes
Installation of process detection systems:	No	Other (Specify):	

8.5 The date of the most recent review or revision of operating procedures: 04/12/2005

8.6 Training:

a. The date of the most recent review or revision of training programs: 05/11/2005

b. The type of training provided: Classroom: Yes On the job: No

Other training (Specify):

c. The type of competency testing used:

Written tests:	Yes	Observation:	No
Oral tests:	No	Other (Specify):	
Demonstration:	No		

8.7 Maintenance:

a. The date of the most recent review or revision of maintenance procedures: 04/12/2005

b. The date of the most recent equipment inspection or test: 04/12/2005

c. Equipment most recently inspected or tested: Pumps, hoses, and valves

8.8 Compliance audits:

a. The date of the most recent compliance audit: 01/25/2007

b. Expected or actual date of completion of all changes resulting from the compliance audit: 07/12/2005

8.9 Incident investigation:

a. The date of the most recent incident investigation (if any):

b. Expected or actual date of completion of all changes resulting from the investigation:

8.10 The date of the most recent change that triggered a review or revision of safety information, the hazard review, operating or maintenance procedures, or training:

Section 9. Emergency Response

9.1 Written Emergency Response (ER) Plan:

a. Is facility included in written community emergency response plan? Yes

b. Does facility have its own written emergency response plan? Yes

9.2 Does facility's ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)? Yes

9.3 Does facility's ER plan include procedures for informing the public and local agencies responding to accidental releases?	Yes
9.4 Does facility's ER plan include information on emergency heath care?	Yes
9.5 Date of most recent review or update of facility's ER plan:	01/05/2005
9.6 Date of most recent ER training for facility's employees:	01/05/2005

9.7 Local agency with which facility's ER plan or response activities are coordinated:

a. Name of agency: Kern County Fire Department

b. Telephone number: (661) 324-6551

9.8 Subject to:

a. OSHA Regulations at 29 CFR 1910.38:	Yes
b. OSHA Regulations at 29 CFR 1910.120:	No
c. Clean Water Act Regulations at 40 CFR 112:	No
d. RCRA Regulations at 40 CFR 264, 265, and 279.52:	No
e. OPA-90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	No
f. State EPCRA Rules/Law:	No
g. Other (Specify):	

Executive Summary

Excutive Summary
Port Organic Products, Ltd.

EHS Procedure

NH3 Emergency Procedures
Emergency Procedures

Any accidental or unintentional release of ammonia to the atmosphere is an emergency. The seriousness depends on the amount release and the number of persons, animals or crops in the danger zone. Every bulk plant must have an emergency plan or procedure. EPA's Risk Management Program requires that local emergency responders be familiar with the plant's facilities and the methods for handling an ammonia emergency. Each employee must also be familiar with the emergency procedures. Most ammonia emergencies can be avoided. They are primarily caused by carelessness, error, or just plain negligence in maintaining or using equipment. Studies show the principle causes of ammonia emergencies are:
1. Broken riser pipes caused by driving off without disconnecting the hose.
2. Ruptured hoses caused by using faulty or damaged hoses.
3. Ruptured hoses caused by hydrostatic relief valves not operating properly.
4. Defective valves or inoperative excess flow valves. A defective valve can mean the difference between a minor release and the loss of an entire tank of ammonia.
5. Collision or upset of truck or nurse trailer.

Emergency Equipment

Self Contained Breathing Apparatus (SCBA) - Positive-pressure open-circuit until that has a full face-piece and

breathing air cylinder that will last up to 30 minutes.
These respirators must be used when entering or re-entering atmospheres of unknown ammonia concentrations or high concentrations that are known or suspected to be immediately dangerous to life and health. Sue of this equipment should be limited to trained personnel only. The face-piece for this equipment must be fitted to the wearer.

Gas Masks -These full face-piece respirators utilize canisters that absorb the ammonia before it reaches the wearer. Canisters cannot be used in a high ammonia concentration; therefore, they should be used only for escape purposes in an emergency. At 300 ppm concentration in the atmosphere only a self-contained breathing apparatus (SCBA) will provide adequate protection.
Gloves, Boots, Raincoats, Jackets, and Pants - These should be made of rubber or other ammonia-proof material to prevent burns to the skin.
Detection Equipment - Various ammonia and oxygen detection equipment may be necessary to determine the safety of the atmosphere at or approaching the site of an ammonia release.

What to do in an Emergency
Remain calm, assess the situation and use extreme caution. (Note: All employees must be familiar with a facility's emergency response procedures.)
Call the police and fire departments.

1. Remove injured persons only if this can be done without injury to yourself.
2. Block off all other accesses to the emergency area.
3. Evacuate people from areas that may be affected by the emergency.
4. Detour motorists from downwind areas.
>>>The following should be attempted ONLY by trained personnel<<<
1. Approach the accident from upwind and shut off the valves if possible.
2. Apply a fog of water to the ammonia plume before it leaves the property.
3. Close the valves between the tank and the leak. This must be done by a trained person wearing a self-contained breathing apparatus and protective clothing.
Attach a life line (rope) that leads to a second person away from the leak. This person must also have an air-supplied respirator available in case the fist respirator fails or for an additional rescue or emergency assistance.
If the leak cannot be shut off by valves, continue spraying with water and transfer the product to other tanks.
4. Notify National Response Center immediately if the release of anhydrous ammonia is greater than 100 pounds at 800-424-8802. (Delay in reporting may result in substantial penalties.)
5. Notify state agencies as soon as possible.

What to do in case of Accident or Injury

Water and plenty of it is the only first aid treatment. If a person comes in contact with a spray of ammonia liquid or vapor, flushing with large quantities of clean water is essential. This is the reason why 5-gallon containers of water are carried on nurse trailers and applicators and large tanks of water or emergency showers are located at the bulk plant. These tanks must be large enough to completely submerge someone.

Contact with Skin and Mucous Membrane

Get the victim to clean water in a hurry. Put the injured part of the body under water of if necessary get the victim into the tank or under the shower. Remove clothing and shoes while in the water as clothing may be frozen to body. Continue flushing with water for at least 15 minutes. Under no conditions should salves or ointments be applied for at least 24 hours.

Contact with the Eyes

If even a small quantity of ammonia enters the eyes, flush with a large amount of clean water for at least 15 minutes. Hold the eyelids apart. Call a doctor. After the first 15-minute period of flushing, if a physician is not available, continue flushing for a second 15-minute period. Do not apply oils or oily ointments. Get the victim to a physician, preferably an eye specialist, as soon as possible.

Inhalation

Take the victim to an uncontaminated area. If the exposure has been slight concentrations for a short time, usually no treatment is required. When there is severe exposure to higher concentrations, oxygen can be administered, but only by qualified personnel or a physician. If the patient is not breathing, begin artificial

respiration immediately and call the nearest hospital or doctor. Never attempt to give anything by mouth to an unconscious patient. Keep the victim warm (not hot), and have them rest.

Taken Internally

If liquid anhydrous ammonia has been swallowed, call a physician immediately. If the patient is conscious and able, he should drink large amounts of water to dilute the chemical. Do not induce vomiting if the patient is in shock, extreme pain or is unconscious. If vomiting begins, place the patient face down with head lower than hips. (This prevents vomit from entering the lungs and causing further injury or death.)

RMP Validation Errors/Warnings --- No Data To Report

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

January 25, 2007

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA) HAZARDOUS MATERIAL INSPECTION FORM

Date: 01/25/2007 Facility ID: FA0005811 File #: 001074

Facility Name: PORT ORGANIC PRODUCTS LTD	**Inspection Type**
Site Address: 7361 ADHOR RD BUTTONWILLOW, CA 93206	☒ Routine ☐ Reinspection ☐ Complaint
Phone: (661)764-9670	

PROGRAMS INSPECTED:	☒ Business Plan	☒ HW Generator	☐ UST	☐ AGT	☒ CalARP
REINSPECTION REQUIRED:	☐ Business Plan	☐ HW Generator	☐ UST	☐ AGT	☐ CalARP

VIOLATION

YES	NO/NA	VIOL. #	BUSINESS PLAN REQUIREMENTS
☐	☒	BP01	Inventory of hazardous materials is accurate, up to date, and complete [HSC 6.95, 25504, Title 19 CCR 2729].
☐	☒	BP02	Site layout/facility maps are accurate [HSC 6.95,25504; Title 19 CCR 2729].
☐	☒	BP03	Hazardous materials are stored in properly labeled and non-detoriated containers [HSC 25124(b)(3)(A & B)].
☐	☒	ER01	Contingency Plan is complete, updated, and maintained on site [HSC 6.95, 25504;Title 19 CCR 2731 Title 22 CCR 66265.53-54].
☐	☒	ER02	Facility is operated and maintained to prevent/mitigate fire, explosion, or releases of hazardous material or waste which could threaten human health or the environment [Title 22 CCR 66265.31; Title 19 CCR 2731].
☐	☒	ER03	Business has equipment required to, or appropriate for, safely handling hazardous materials [Title 22 CCR 66265.32 & .34].
☐	☒	TR01	Facility has a training program appropriate for the size and complexity of business and nature of hazardous materials handled [Title 19 CCR 2732; Title 22 CCR 66265.16].
☐	☒	TR02	Training documentation is maintained on site for current personnel. [Title 19 CCR 2732;22 CCR 66265.16].

COMMENTS: Go to http://www.co.kern.ca.us/eh/cupaprogram.asp for forms and information.
GPS Coordinates: Latitude: **Longtitude:**

INSPECTOR: KEVIN E BEAHM **DATE:** 01/25/2007

HAZARDOUS WASTE GENERATOR

EPA ID NUMBER:

VIOLATIONS YES	VIOLATIONS NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GR01	Generator has an EPA Identification number to treat, store, dispose, transport, or transfer hazardous waste [Title 22, CCR 66262.12].
☐	☒	GR02	The facility has made an appropriate waste determination for hazardous based on own knowledge or analysis or other [Title 22, CCR 66262.11]
☐	☒	GR03	Facility Personnel demonstrate awareness of proper(legal) hazardous-waste handling procedures. [Title 22, CCR, 66262.34(d)(2)].
☐	☒	GA01	Hazardous waste has not accumulated for more than 90/180/270 days(depending upon volume/circumstances) without the facility having a hazardous waste storage permit [Title 22,CCR, 66262.34(a).]
☐	☒	GA02	Empty containers or inner liners greater than 5 gallons have dates when emptied and are managed properly within one year of date emptied [Title 22, CCR, 66261.7(f)].
☐	☒	GA03	Universal waste is not accumulated at facility for more than one year [Title 22, CCR, 66273.15(a);66273.35(a)].
☐	☒	GA04	The facility disposes used oil filters within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66266.130(c)(4)].
☐	☒	GA05	The facility disposes lead-acid batteries within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66268.81(a)(6)]
☐	☒	GC01	Hazardous waste storage containers are in good condition [Title 22, CCR, 66262.34(a)(1)(A)].
☐	☒	GC02	Containers holding hazardous waste are closed/sealed except when adding/removing waste [Title 22, CCR, 66262.34(a)(1)(A)].]
☐	☒	GC03	The facility documents weekly inspections of hazardous waste storage area/containers [Title 22, CCR, 66265.15(d) and 66262.34(a)(1)(A)].
☐	☒	GC04	The facility documents daily inspections of tanks where hazardous waste is stored [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC05	The facility has adequate secondary containment for hazardous waste tank systems [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC06	Containers utilizing satellite accumulation rules are at or near the point of generation [Title 22, CCR 66262.34(e)(1)(A)].
☐	☒	GC07	Satellite wastes are managed according to the regulations (complete labeling, accumulation times, 55-gallon or 1 quart volume limits, etc.). [Title 22, CCR, 66262.34(e)].
☐	☒	GR04	Manifests or LDRs are properly completed and/or retained by generator for 3 years [Title 22, CCR 66262.23(a)(1); 66263.42;66263.24;66262.34(a)(4)].
☐	☒	GR05	The facility filed an exception report to DTSC after not receiving the signed TSDF copy of a manifest within 35 days [Title 22, CCR, 66262.42].
☐	☒	GR06	The facility has copies of bills of lading or receipts for removal of hazardous wastes [HSC 25160.2-Consolidated manifests/ 66266.81(a)(6)(B)-lead acid batteries/66266.130- oil filters]. The facility shall maintain copies of receipts for at least three years.
☐	☒	GR07	The facility submitted a hazardous waste recycling report [HSC 25143.10]
☐	☒	GT01	The facility is conducting on-site treatment of hazardous waste with a tiered permit [HSC 25189.5(d)]
☐	☒	GT02	Authorized, licensed, and certified hazardous waste haulers are used to transport hazardous waste to appropriate facilities [H&S Code Chapter 6.5 Section 25163].
☐	☒	GT03	Hazardous wastes are sent to authorized disposal facilities [HSC 25189.5].
☐	☒	GT04	Hazardous waste is not disposed to ground, water, or air [HSC 25189.5].

INSPECTOR: KEVIN E BEAHM **DATE:** 01/25/2007

VIOLATIONS YES	VIOLATIONS NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GL01	Containers of hazardous waste are properly labeled (includes appropriate accumulation date, the words "HAZARDOUS WASTE," the waste composition/physical state, the hazardous properties, and name/address of generator) [Title 22, CCR, 66262.34(f)].
☐	☒	GL02	Containers of excluded recyclable materials are properly labeled [HSC 25143.9(a)].
☐	☒	GL03	Containers of universal waste are properly labeled. [Title 22, CCR, 66273.14 for SQH or 66273.34 for LQH].
☐	☒	GL04	Containers of drained used oil filters are labeled with the words "DRAINED USED OIL FILTERS" [Title 22, CCR, 66266.130(c)(3)].
☐	☒	GL05	Accumulation dates are marked on spent lead-acid batteries [22CCR 66266.81]
☐	☒	GL06	Tanks/containers of used oil destined for recycling are clearly marked with the words "USED OIL" [HSC 25143.9(a)].
☐	☒	GL07	Empty contaminated containers are clearly marked with the date they were emptied [Title 22, CCR, 66261.7(f)].

INSPECTOR: KEVIN E BEAHM **DATE:** 01/25/2007

FACILITY NAME: PORT ORGA : PRODUCTS LTD **ADDRESS:** 7361 ADHC :D BUTTONWILLOW, CA 93206 **FA ID:** FA0005811 **FILE ID:** 001074

SUMMARY OF OBSERVATIONS/VIOLATIONS

☒ No violations of underground storage tank, hazardous materials, or hazardous waste laws/regulations were discovered. KERN CUPA greatly appreciates your efforts to comply with all the laws and regulations

☐ Violations were observed/discovered as listed below. All violations must be corrected by implementing the corrective action listed by each violation. If you disagree with any of the violations or corrective actions required, please inform the CUPA in writing.

ALL VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED. CUPA must be informed in writing with a certification that compliance has been achieved. A false statement that compliance has been achieved is a violation of the law and punishable by a fine of not less than $2,000 or more than $25,000 for each violation. Your facility may be reinspected any time during normal business hours. If a second reinspection becomes necessary due to non compliance, a reinspection charge of $85.00 per hour may be charged to the facility.

You may request a meeting with the Program Manager to discuss the inspection findings and/or the proposed corrective actions. The issuance of this Summary of Violations does not preclude the CUPA from taking administrative, civil, or criminal action.

FACILITY NAME: PORT ORGANIC PRODUCTS LTD **ADDRESS:** 7361 ADHOR RD BUTTONWILLOW, CA 93206 **FA ID:** FA0005811 **FILE ID:** 001074

VIOLATIONS

VIOL. NO	VIOL. TYPE	CORRECTIVE ACTION REQUIRED

INSPECTION COMMENTS:

INSPECTOR: KEVIN E BEAHM **SIGNATURE OF FACILITY REP:**
DATE: 01/25/2007

Certification: I certify under penalty of perjury that this facility has complied with the corrective actions listed on this inspection form.
Signature of Owner/Operator: _____ **Title:** Manager **Date:** 3/29/07

Kerı unty Environmental Health Services Depai nt
HAZARDOUS MATERIALS MANAGEMENT PROGRAM
CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM
2700 M Street, Suite 300, Bakersfield, CA 93301 • (661) 862-8700, Fax (661) 862-8701

CALARP INSPECTION REPORT

Facility ID: FA0005811 **File #: 001074**

Facility Name: PORT ORGANIC PRODUCTS LTD Inspection Date: 1-25-2007
Street Address: 7361 ADOHR RD EPA ID No:
City: BUTTONWILLOW, CA Zip Code: 93206 Number of Employees:
Facility Contact: JIM ZABEN Phone No. (661) 764-9670 E-Mail:

Refer to Title 19 of the California Code of Regulations (CCR) and Chapter 6.95 of the Health and Safety Code (CHSC), Section 112(r) of the Clean Air Act. The following risk factors are either present (Y), not present (N), or not addressed/unknown (N/A)

SURROUNDING POPULATIONS	Y	N	N/A	DOCUMENT REVIEW	Y	N	N/A
On-site Vulnerable Populations		x		Business Plan Current and Accurate:	x		
School within 1 mile		x		Emergency Response Plan	x		
Non-Industrial Neighboring Uses: Farming							
				Process Hazard Analysis			
				Process Safety Management Elements: Safety Information, Hazard Review	x		
Immediate Neighbors: Farming				Operating Procedures			
				Training Records			
DETECTION AND MONITORING	**Y**	**N**	**N/A**	**MITIGATION EQUIPMENT**	**Y**	**N**	**N/A**
				Site Security: Fenced, Gated			

Inspection Narrative:

Process Description:
Port Organic Products is involved in the manufacture of liquid organic fertilizers. Liquid fish, phosphoric and sulfuric acids, UN32, potassium hydroxide, aqua ammonia and molasses are stored in tanks at ambient temperature. Fish, sulfate of potash, ammonia sulfate, xantham gum, are stored in a covered warehouse. During the manufacturing the temperatures range from 110' F to 135' F in the batch tanks. All materials are utilized without any waste except for undigested fish solids which is transferred to a waste area for sale as compost.

Recommendations
Recalculate the quantity released and the release rate for the Worst Case Scenario and the Alternate Release Scenario in your RMP Submit. The correct data does not significantly alter the distance to endpoint.

Deficiencies / Violations
Operating Procedures must be more detailed outlining the specific valves and switches that are involved for each procedure.

☐ **NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN _____ DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.**

Inspector: KEVIN BEAHM Report Date: 1-25-2007 Received by: MAILED Title: _____

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: *eh@co.kern.ca.us*

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

November 14, 2007

Kenneth Nelson
PORT ORGANIC PRODUCTS LTD
7361 Adhor Road
Buttonwillow, CA 93206

SUBJECT: INSPECTION REPORT AND REPORT OF VIOLATIONS
FOR PORT ORGANIC PRODUCTS LTD
7361 ADHOR ROAD, BUTTONWILLOW, CA 93206

On September 25, 2007 the Kern County Environmental Health Services Department (KCEHSD) conducted a complaint inspections/investigations at 7361 Adhor Rd, Buttonwillow, CA, at PORT ORGANIC PRODUCTS LTD. The enclosed inspection report details the observations and violations noted during the inspection/investigation. Violations of the California Health and Safety Code (HSC) noted during the inspection and corrective actions necessary to gain compliance are detailed in the enclosed report as well.

Please feel free to contact me at (661) 862-8725 with any questions or concerns you may have regarding this matter.

Sincerely,

Michael Aranda

Environmental Health Specialist
Unified Hazardous Materials/Waste Program

MA:Enclosure

INSPECTION REPORT

Date:	09-25-2007		
Facility Name:	PORT ORGANIC PRODUCTS LTD		
Facility Address:	7361 Adhor Rd, Buttonwillow, CA 93206	EPA ID #:	none
Specialist/Inspector:	Michael Aranda	Facility ID#:	FA0005811

INVESTIGATION/INSPECTION NARRATION

On September 25, 2007 at approximately 1300 hours Barbara HOUGHTON and I visited Port Organic Products, located at 7361 Adhor Rd in Buttonwillow, to conduct a complaint investigation concerning mismanagement of hazardous waste generated at the facility, lack of Personal Protective Equipment (PPE) for employees, and the allegation of an unpermitted 10,000 gallon underground storage tank (UST) containing aqueous ammonia.

HOUGHTON and I entered the facility's office and spoke with Becky PULLEN, Shane AMES, and Isaac NELSON. HOUGHTON explained the reason for our visit and the allegations of the complaint. PULLEN stated that the allegations were probably provided by a disgruntled employee, John FAUBUS, who was recently terminated by Port Organic. I.NELSON stated that FAUBUS was escorted from the premises by Sheriff deputies on 9/24/07 for refusing to leave the facility grounds. I asked I.NELSON if HOUGHTON and I would be permitted to perform an inspection of the site to investigate the allegations. I.NELSON said he had no objection to us performing the inspection, but would need to obtain permission to consent to the inspection from Ken NELSON, owner/operator of Port Organic. I.NELSON also inquired as to what the inspection would entail. HOUGHTON explained to I.NELSON that we would conduct a routine inspection of the site and would consist of a review of the facility's records, a walk through of the facility, taking photographs, and possibly obtaining samples for analytical testing. I.NELSON asked what specific records we would need to review. I told him we would need to see their Business Plan documents, employee training records, Material Safety Data Sheets, Policy and Procedures manuals (for hazardous material), California Accidental Release Prevention Program (CalARPP) documents, and their Site/Facility Layout map. I.NELSON and AMES explained that Jim ZABEN, former Plant Manager of Port Organic, was the individual responsible for maintaining those documents, but ZABEN had ended his employment with Port Organic earlier in the month. I informed I.NELSON that ZABEN is listed as an emergency contact for Port Organic for our Department, and if ZABEN is no longer employed with Port Organic, the facility would need to update their emergency contact information. I.NELSON left the office to attempt to contact K.NELSON via cell phone. He returned shortly thereafter and stated K.NELSON had consented to allow HOUGHTON and I to perform the inspection, but K.NELSON requested to be present during the facility walk through. We agreed to wait for K.NELSON. I.NELSON and

AMES attempted to retrieve the requested documents.

When the documents were provided HOUGHTON and I reviewed the facility's MSDSs, Employee Policy and Procedure manual, Environmental Health and Safety manual, and laboratory analytical documents. While reviewing the documents, I.NELSON said Roy CARROL, Port Organic's environmental consultant, was en route to the facility to assist HOUGHTON and I with any questions or concerns we had while performing the inspection.

K.NELSON arrived at the facility and inquired as to the reason for our visit to Port Organic. I explained to him that HOUGHTON and I were investigating allegations of possible mismanagement of hazardous waste generated at the facility, lack of PPE for employees, and the allegation of an unpermitted 10,000 gallon underground storage tank containing aqueous ammonia. K.NELSON said that Port Organic does not generate any hazardous waste and has analytical records to support his coment. Additionally, K.NELSON stated there were no USTs at the site. K.NELSON informed me that occasionally employees do not follow the facility's safety protocols, but when that does occur the employee is penalized with reprimands, including leave without pay.

K.NELSON, HOUGHTON, and I began our site inspection at a barn just west of the facility's fertilizer processing yard. K.NELSON explained to us that fish meal is stored in the barn and is transferred from the barn to one of the facility's reactors, where the protein in the fish meal is enzymatically digested to release nitrogen and the by-product is used as an organic fertilizer. Along the west wall of the barn I observed four 55 gallon poly drums, labeled "ALCALASE" that were full. I asked K.NELSON what the Alcalase product was used for. He stated it is an ingredient used for their organic fertilizer, which assists with the breakdown of proteins. Along the east wall of the barn, next to the barn door, I observed an unlabeled white 55 gallon poly drum and two 55 gallon drums labeled hydraulic oil. I asked K.NELSON about the contents of the white poly drum and he informed me it contained waste oil. Along the north wall of the barn I observed two large compressed gas cylinders, one labeled "OXYGEN" and the other labeled "ACETYLENE". A review of the facility's most recent Hazardous Material Business Plan inventory, updated on February 13, 2007 by ZABAN, does not list Alcalase, waste oil, hydraulic oil, oxygen, or acetylene.

We exited the barn and walked back toward the fertilizer processing yard. Roy CARROL arrived at the facility shortly thereafter. K.NELSON explained to us how Port Organic's organic fertilizer is processed from raw materials such as fish meal and bat guano and mixed with specific enzymes and other ingredients. The breakdown of the raw materials results in an organic fertilizer that Port Organic sells to farming industries. K.NELSON explained that the processed product leaves the reactors and is fed through a screen, which separates the large undigested material from the finished product. The finished product is then plumbed into one of the aboveground storage tanks, located just south of the reactor and east of the office trailer. Directly east of the reactor were two aboveground tanks, one containing sulfuric acid and the other containing phosphoric acid. HOUGHTON asked what the acids were used for. K.NELSON

explained that the acids are used as stabilizers, which lower the pH of the processing material in the reactor. I asked K.NELSON if Port Organic had a written policy and procedure detailing how and when acid is added to the reactor. K.NELSON stated he was unaware of any such document on file at Port Organic, but that CARROL would look into the matter further and if necessary would develop and generate such protocols. K.NELSON said the process of when to add the acids "has not yet been perfected yet" and "we almost got it down". I asked K.NELSON to elaborate, and he stated that strong caustics and strong acids do not "mix well" and occasionally the acid is added to the process at the wrong time. K.NELSON also informed me that this had not happened in a long time.

Southeast of the reactor I observed waste water run-off pooling around a square drainage sump, with etched concrete around it. I asked K.NELSON where the sump leads to. He told me it is plumbed to an irrigation canal, located to the northeast of the processing plant. I asked K.NELSON if he could show me where the effluent drained to and he obliged. Along the irrigation canal I observed a metal drain pipe which K.NELSON indicated to be the drainage for his waste water run-off. The drain pipe was approximately two to two and half inches in diameter, designed to allow effluent to drain directly into the irrigation canal. K.NELSON stated he has an agreement with the neighboring farmers, to allow them to use his run-off, which according to K.NELSON contains "fertilizer". I informed K.NELSON that the run-off from his facility is considered industrial wastewater and that the current method of disposal does not comply with wastewater discharge requirements. I told K.NELSON he may need to explore the idea of implementing a wastewater reclamation system for the facility.

When returned to the processing area I asked K.NELSON where aqueous ammonia is stored at the facility. K.NELSON informed me there was no ammonia currently being stored at the facility. I asked K.NELSON if Port Organic was to store ammonia, where would it be stored. K.NELSON told me the ammonia would be stored in a tank directly south of the organic fertilizer tank farm. K.NELSON then told me the tanks which were used to store aqueous ammonia were not in use at this time, the former ammonia tank area was now being occupied by organic fertilizer tanks. I informed K.NELSON the change in the facility's operation may constitute a change in their process and would require Port Organic to notify KCEHSD of the change. I then asked K.NELSON if Port Organic had planned on storing aqueous ammonia in the near future, and he responded saying they would. I asked K.NELSON what he uses the ammonia for and he said "it's used for testing" of a "home & garden" product Port Organic plans to mass produce and sell commercially to the public. I then asked K.NELSON "is there any ammonia currently being stored on site?". K.NELSON said there was no ammonia being stored at the facility. CARROLL stated "there are no underground tanks anywhere on site."

We walked to the east of the processing area where I observed several large empty poly containers along the east fence line. One of the containers had a crack approximately three feet from the bottom of the tank. I asked I.NELSON about the crack and he stated the tank was hit with a forklift. I.NELSON then stated the tank was empty when it was struck by the forklift. I asked I.NELSON if he knew what type of substance the tank had previously stored, and he

informed me he believed it was used to store organic fertilizer. South of the office building I observed a two hundred and fifty (250) gallon tote labeled "DIESEL". I asked I.NELSON if the container did contain diesel and he replied "yes". ". A review of the facility's most recent Hazardous Material Business Plan inventory, updated on February 13, 2007 by ZABAN, does not list diesel.

I observed a scrubber system along the east fence line and asked K.NELSON what it was used for. He told me it was used to minimize the odor produced when organic fertilizers are put into holding tanks. I asked K.NELSON to further explain the process, but I was unable to understand his explanation.

I walked to the north, toward a red plywood structure, and asked K.NELSON what was in the structure. K.NELSON told me "it's a container." I asked K.NELSON if there was anything in the container, and in turn he asked I.NELSON if there was anything in the container. K.NELSON then said he believed the container was empty, but was not sure. K.NELSON then stated there might be product in the container. I asked K.NELSON what he meant by "product" and he stated there may be "aqua ammonia" in the tank. I then asked K.NELSON how much aqua ammonia was in the tank and he stated "about a thousand gallons". I asked K.NELSON about the containers capacity and the duration of time the container has been in the ground. K.NELSON said the container has a capacity of ten thousand gallons and had been placed in the ground approximately one month. I informed K.NELSON that the container in the ground constituted an underground storage tank and would therefore have to comply with applicable UST laws and regulations. I asked K.NELSON if he informed KCEHSD of the change in his process and he stated he had not. I asked K.NELSON if he had obtained permits and oversight by KCEHSD to place the tank in the ground and he stated he had not. CARROL exclaimed "this is not an underground storage tank". I informed CARROL and K.NELSON that if ten percent or more of the tank's capacity is below grade, it is considered to be an underground storage tank. CARROL stated he was unaware that the placing of the tank in the ground constituted the tank as being an underground storage tank. I again explained to CARROL and K.NELSON that based on UST laws and regulations, the placing of the tank into the ground meets the criteria of a UST. I asked K.NELSON why he placed the tank in the ground and he explained he had it put in the ground to reduce the amount of vapors produced. I asked K.NELSON if he could elaborate and he told me "the ground keeps it cool" thus decreasing the amount of vapors produced by the aqua ammonia in the tank. K.NELSON then said the ammonia was needed for the testing of his home and garden product,and as soon as the testing was complete they would not be using aqua ammonia.

I asked K.NELSON if he could remove the plywood on top of the plywood structure so that HOUGHTON and I could view the tank. K.NELSON agreed, and removed a section of the plywood at the northwest corner of the structure. Immediately after the removal of the plywood section I detected a noticeable odor of ammonia and experienced irritation of the eyes, mucus membrane linings of the nasal passages, airway and lungs. HOUGHTON asked K.NELSON if the tank was "product tight" and he responded in a manner to suggest he was unsure. I looked into the structure and observed a ten-thousand gallon fiberglass tank with fabricated metal

secondary containment. The dimensions of the tank measured approximately 10' in diameter with a 30' depth. HOUGHTON asked K.NELSON if the tank was properly sealed in order to prevent the release of contents. K.NELSON stated Port Organic had used sealant to ensure the port openings and valve connections were properly sealed and secured. I observed at the top of the tank a port opening lid secured with expansion foam. The expansion foam was used in an effort to minimize the potential for exposure resulting in human harm or release to the environment, I asked K.NELSON and CARROL to place the plywood back on the top of the structure and to not attempt to remove the UST. I informed K.NELSON that although the UST was placed in the ground without obtaining a Permit to Construct an Underground Storage Tank from KCEHSD, the UST was still under the permitting authority of KCEHSD. I told K.NELSON the tank would eventually have to be removed from the ground, because KCEHSD would not grant a UST permit to Port Organic for operation their UST. A permit would not be issued since the tank was installed without KCEHSD oversight and did not meet the requirements of Title 23 of the California Code of Regulations, governing the storage of hazardous substances in underground storage tanks . K.NELSON stated he would remove the tank from the ground, but would not do so until directed by KCEHSD. I told K.NELSON I did not want Port Organic to remove the tank from the ground until Port Organic provided me with a written procedure for the removal of the UST. I told K.NELSON and CARROL the procedures would need to include all hazards associated with the tank's removal, methods for inerting the tank, equipment to be used for its removal, applicable air monitoring, and policies and procedures addressing the removal process as well as workers' safety.

I then asked K.NELSON what his plans were for the aqua ammonia. He told me he was using it for testing of his home and garden fertilizer. I asked K.NELSON if he had done any recent testing. He told me he had. I asked K.NELSON what the testing process entails. He told me aqua ammonia is taken from the UST and transferred into a smaller aboveground tank (while pointing to a blue 100 gallon poly tank adjacent to the northeast reactor) and then injected into the reactor during the fertilizer production process. I asked K.NELSON if Port Organic had any written policy and procedure for the transfer and injection of the aqua ammonia into the reactor. K.NELSON stated Port Organic had no such written policy that he was aware of. I asked K.NELSON if Port Organic had any respiratory protection devices to be worn by the workers during the transfer and injection process. I.NELSON stated that Port Organic has a mask that the workers use. He and AMES led me to a container at the northwest corner of the office building and showed me an air purifying respirator (APR) with ammonia cartridges. I asked I.NELSON "how do the workers know when the cartridges are saturated and need to be replaced?" I.NELSON did not answer. I asked if there were any additional cartridges for the APR. AMES went into the office and retrieved two packaged ammonia cartridges. I informed I.NELSON that Port Organic may need to develop a respiratory protection plan for their employees.

HOUGHTON and I performed an exit interview with I. and K. NELSON, CARROL, AMES, and other Port Organic personnel.

REPORT OF VIOLATIONS

1. Violation of HSC 6.7, §25284 (a)(1). Failure to obtain a permit to own or operate an underground storage tank.

   (a)(1) Except as provided in subdivision (c), no person may own or operate an underground storage tank unless a permit for its operation has been issued by the local agency to the owner or operator of the tank, or a unified program facility permit has been issued by the local agency to the owner or operator of the unified program facility on which the tank is located.

   It was determined during the inspection that PORT ORGANIC PRODUCTS. LTD was operating a ten thousand (10,000) gallon fiberglass underground storage tank, containing approximately one thousand (1,000) gallons of aqueous ammonia without a permit from this Department.

2. Violation of HSC 6.95 §25503.5 (a)(1). Failure to provide an accurate, up to date, and complete hazardous materials inventory.

   (a) (1) A business, except as provided in subdivisions (b), (c), and (d), shall establish and implement a business plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503, if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time during the reporting year that is any of the following:

   (A) Equal to, or greater than, a total weight of 500 pounds or a total volume of 55 gallons.
   (B) Equal to, or greater than, 200 cubic feet at standard temperature and pressure, if the substance is compressed gas.

   At the time of the inspections PORT ORGANIC PRODUCTS. LTD had not listed Alcalase, waste oil, hydraulic oil, oxygen, acetylene, or diesel on its Business Plan chemical inventory as required.

3. Violation of HSC §25509 (a)(5). Failure to provide an accurate site layout/facility map.

   (a) The annual inventory form shall include, but shall not be limited to, information on all of the following which are handled in quantities equal to or greater than the quantities specified in subdivision (a) of Section 25503.5:...

   (5) Sufficient information on how and where the hazardous materials disclosed in paragraphs (1), (2), and (3) are handled by the business to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency responses to potential releases of the hazardous materials.

   PORT ORGANIC PRODUCTS. LTD intentionally relocated a ten thousand (10,000) gallon capacity aboveground tank formerly used to store aqueous ammonia aboveground, to an underground location on the facility. By performing this act Port Organic potentially endangered emergency response personnel by failing to supply sufficient information concerning where the aqueous ammonia was being stored at the site. Additionally, K.NELSON was reluctance to disclose the location of the aqueous ammonia tank. He initially stated Port Organic was not storing aqueous ammonia, that the aboveground tanks which had previously held aqueous ammonia were now being used to store organic fertilizer. Only after some probing did Port Organic Products LTD reveal the location of the underground tank containing aqueous ammonia.

CORRECTIVE ACTIONS

1. Immediately discontinue the operation of the ten thousand gallon fiberglass underground storage tank containing aqueous ammonia.

2. Immediately submit to this Department a written work plan which outlines procedures for the removal of the underground storage tank system.

3. Within thirty days update the hazardous material business plan inventory to include all chemicals, above threshold quantities, stored on site.

4. Within thirty days provide an accurate site map which provides sufficient information as to where Port Organic Products LTD stores and/or handles hazardous materials at 7361 Adhor Rd.

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
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RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Animal Control Department
Community and Economic Development Department
Engineering and Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

April 18, 2008

Mr. Kenneth Nelson
Port Organic Products LTD
c/o SHINAULT BAKER AND CO CPAs
5060 California Avenue, Suite 650
Bakersfield, CA 93309

SUBJECT: SETTLEMENT AGREEMENT FOR PORT ORGANIC PRODUCTS, LTD (BH 001-03-08)

Dear Mr. Nelson:

This Department has completed the evaluation of all factors associated with the settlement of the administrative enforcement action being considered. Included with this correspondence is a settlement agreement entitled "Consent Order," which was previously discussed.

Enclosed you will find Revision 1 of the agreement that addresses the updated payment schedule that was recently discussed. You have again been provided with two signed Consent Order documents. One document is to be countersigned and returned to this office with the first payment of $3,079.50. The other document is your copy.

If you have any questions, please contact the undersigned at (661) 862-8756.

Sincerely,

Joe Cañas, R.E.H.S.
Hazardous Materials Specialist IV
Unified Hazardous Materials/Waste Program

Enclosures

cc: File

COPY

Printed on Recycled Paper

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS MANAGEMENT PROGRAM

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)

In the Matter of: Port Organic Products LTD 7361 Adhor Rd Buttonwillow CA 93206 Facility ID No. FA0005811 Respondent	) Docket No. BH 001-03-08)) **CONSENT ORDER – Revision 1**)))) Health and Safety Code) Section 25404.1.1)

The Kern County Environmental Health Services Department, Certified Unified Program Agency (Agency), and Port Organic Products LTD (Respondent) enter into this Consent Order (Order) and agree as follows:

1.0 Respondent handles and/or stores hazardous materials and operates and/or operated an Underground Storage Tank (UST) at 7361 Adhor Rd in Buttonwillow, California (Site).

2.0 The Agency inspected and/or investigated the Site on September 25, 2007.

3.0 The Agency alleges the following violations:

3.1 Respondent violated Health and Safety Code (HSC) Section 25284 (a)(1), failure to obtain a permit from the Agency to own or operate an underground storage tank.

3.2 The Respondent violated HSC Section 25503.5 (a)(1), failure to provide an accurate, up to date, and complete hazardous materials inventory.

3.3 The Respondent violated HSC Section 25509, failure to provide an accurate site layout/facility map.

4.0 A dispute exists regarding the alleged violations.

5.0 The parties wish to avoid the expense of litigation and to ensure prompt compliance.

6.0 Jurisdiction exists pursuant to HSC Section 25404.1.1.

7.0 Respondent waives any right to additional hearings in this matter.

8.0 This Consent Order shall constitute full settlement of the violations alleged above but does not limit the Agency from taking appropriate enforcement action concerning other violations.

SCHEDULE FOR COMPLIANCE

9.0 The following summarizes the schedule for compliance with this Consent Order:

9.1 The following items must be in compliance within the time frame specified:

9.1.2 Immediately discontinue the use of the unpermitted underground storage tank and arrange for proper removal.

9.1.2 Within 30 days update Port Organic Products LTD hazardous materials inventory to reflect all hazardous materials above regulatory threshold quantities stored at the Site. The Department acknowledges receipt of the updated chemical inventory within the prescribed deadline.

9.1.3 Within 10 days provide an accurate site layout/facility map which discloses where hazardous materials are stored and handled at the Site. The Department acknowledges receipt of the site map within the prescribed compliance deadline.

9. 2 All submittals pursuant to this Consent Order shall be sent to:

Mrs. Barbara Houghton
Kern County Environmental Health Services Department
Certified Unified Program Agency
2700 "M" Street, Suite 300
Bakersfield, CA 93301

COPY

9.3 Communications: All communications from Agency shall be communicated to Respondent in writing by the Manager of the Kern County Environmental Health Services Department, Certified Unified Program Agency, or his/her designee. No informal advice, guidance, suggestions, or comments by the Agency regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of its obligation to obtain such formal approvals as may be required.

9.4 Compliance with Applicable Laws: Respondent shall carry out this Order in compliance with all local, State, and federal requirements, including but not limited to requirements to obtain permits and to assure worker safety.

9.5 Liability: Nothing in this Consent Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent, except as provided in this Consent Order. Notwithstanding compliance with the terms of this Consent Order, Respondent may be required to take further actions as are necessary to protect public health or welfare or the environment.

9.6 Government Liabilities: The Kern County Environmental Health Services Department shall not be held liable for injuries or damages to persons or property resulting from acts or omissions by Respondent or related parties in carrying out activities pursuant to this Consent Order, nor shall the County of Kern be held as a party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Consent Order.

COPY

9.7 Extension Requests: If Respondent is unable to perform any activity or submit any document within the time required under this Consent Order, the Respondent may, prior to expiration of the time, request an extension of time in writing. The extension request shall include a justification for the delay.

9.8 Extension Approvals: If the Agency determines that good cause exists for an extension, it will grant the request and specify in writing a new compliance schedule.

PAYMENT

10.0 Respondent shall pay the Agency a total of $9238.50*, of which $5,200 is penalty, $4,037.50 is reimbursement of this Agency's costs. The penalty must be paid in three equal payments of $3079.50 per month beginning in April 2008; the final payment is due by June 30, 2008. Respondent's checks shall be made payable to the Kern County Environmental Health Services Department and be delivered to:

Kern County Environmental Health Services Department
2700 "M" Street, Suite 300
Bakersfield, CA 93301

If Respondent fails to make payment as provided above, Respondent agrees to pay interest at the rate established pursuant to HSC Section 25360.1 and to pay all costs incurred by the Agency in pursuing collection, including attorney's fees.

* Amount reflects previous payment by RP of $297.50

COPY

OTHER PROVISIONS

11.0 Additional Enforcement Actions: By agreeing to this Consent Order, the Agency does not waive the right to take further enforcement actions, except to the extent provided in this Consent Order.

11.1 Penalties for Noncompliance: Failure to comply with the terms of this Consent Order may subject Respondent to civil penalties and/or punitive damages for any costs incurred by the Agency or other government agencies as a result of such failure, as provided by HSC Section 25188 and other applicable provisions of law.

11.2 Parties Bound: This Consent Order shall apply to and be binding upon Respondent and its officers, directors, agents, receivers, trustees, employees, contractors, consultants, successors, and assignees, including, but not limited to, individuals, partners, subsidiary and parent corporations, and upon the Agency and any successor Agency that may have responsibility for and jurisdiction over the subject matter of this Consent Order.

11.3 Effective Date: The effective date of this Consent Order is the date it is signed by the Agency.

11.4. Integration: This agreement constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except as provided in this agreement.

11.5 Compliance with Waste Discharge Requirements: Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or the California Regional Water Quality Control Board.

Dated: _____

_____
Signature of Respondent's Representative

COPY

_____
Typed or Printed Name and Title
of Respondent's Representative

Dated: _____

_____
Matthew Constantine, Director
Kern County Environmental Health
Services Department

COPY

Attention: Mike Aranda
Environmental Heath Services Department
2700 "M" Street
Bakersfield, CA 93301

December 23, 2007

Immediately after Kern County Environmental Heath Services Department Inspection, on September 25, 2007 @ Port Organic Products LTD. 7361 Adhor Road, Port Organic Products (POP), discontinued the operation of the ten thousand gallon fiberglass underground storage tank containing less than 300 gallons aqua ammonia.

Upon receiving verbal permission from Mike Aranda and requiring no UST removal permit for recent 10,000 gallon tank project partially expose and mostly buried, we started the following procedure.

Tank Closure Procedures Overview
POP personnel followed a health and safety plan specific to the hazards associated with the tank closure project.

The following procedures were used during our removal project: OSHA 2226 - Excavations, OSHA, 29 CFR Part 1926, Occupational Safety and Health Standards - Excavations, OSHA, 29 CFR Part 1910, Occupational Safety and Health Standards and NIOSH "Criteria for a Recommended Standard - Working in Confined Space."

Aqua Ammonia was removed from tank prior to tank removal and properly managed and converted into fertilizer by Ken Nelson. The tank was triple washed and inspected. After the tank had been exposed and all the liquids removed, monitoring of the atmosphere in the tank was performed for potentially dangerous conditions such as a gas, high vapor level and a low Oxygen content. No vapors were present. Tank cleaning consisted of wiping, squeegeeing, and removing all liquids to the last drop from the tank. All liquids generated as a result of the tank cleaning process were used in fertilizer mixture.

After tank cleaning, the tank was lifted via Eagle Trucking and Crane Service, Inc. in its entirety from the excavation and inspected aboveground. At this time no holes were noted in the tank, evidence of a release was not observed in the tanks steel secondary, the steel secondary was removed a few days later and no evidence of release were observed at this time. Also, a gas and fume detector was used and showed no reading of any detectable problems. The excavation was backfilled to original grade via backhoe rented from United Rental and 6 Truckloads of clean dirt purchased from Mashburn Transportation Services, Inc.

Our initial and immediate cost for removing tank and secondary has been $ 5100.07 in equipment rental, BW Gas Alert Micro Multi-4 Gas Detector for future and dirt (see attached receipts) labor approximately $ 3,500.00 to $ 4,000.00. Our anticipated cost for labor & cutting up and salvaging steel secondary is estimated to be around $ 3,000.00 to $ 4,000.00.

We have tried our very best to address this violation head-on. It is important to us to maintain our livelihood and the livelihood of our many employees and customers who depend on us.
A fine or penalty of any kind would be a detriment to our monthly operating budget and us. We would like to ask that the money and the tremendous amount of effort we have put into this tank violation is a lesson well learned and one we will not repeat.

Sincerely,

Ken Nelson
Port Organic Products, LTD

Ray T. Carroll
Port Organic Products, LTD

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

FACILITY INFORMATION: Site ID: 001074

Facility Name:	PORT ORGANIC PRODUCTS LTD, FA0005811
Physical Location:	7361 ADHOR RD
City:	BUTTONWILLOW, CA
Facility Phone:	(661) 764-9670

OWNER INFORMATION FOR MAILING CORRESPONDENCE ONLY:

Name:	PORT ORGANIC PRODUCTS LTD
In Care of:	SHINAULT BAKER AND CO CPAs
Address:	5060 CALIFORNIA AVE #650
City, State, Zip:	BAKERSFIELD, CA 93309
Contact's Phone:	(661) 764-9670
Environmental Contact's E-Mail Address:	jzaben@bak.rr.com

BILLING INFORMATION ONLY:

Name:	PORT ORGANIC PRODUCTS LTD
In Care of:	SHINAULT BAKER AND CO CPAs
Address:	5060 CALIFORNIA AVE STE 650
City, State, Zip:	BAKERSFIELD, CA 93309
Contact's Phone:	_____

EMERGENCY CONTACT INFORMATION:

NAME:	TITLE:	NAME:	TITLE:
Day Phone:		Day Phone:	
24 hr Phone:		24 hr Phone:	

REGULATED ACTIVITIES AT THIS FACILITY:

Hazardous Material Business Plan

Hazardous Waste Generator, Less than 5,000 #/year EPA ID #: _____

CAL-ARP COMPLEX SINGLE CATEGORY MODERATE RISK

CERTIFICATION:

PLEASE CHECK ALL THAT APPLY:

☐ The most recently submitted hazardous materials business plan and inventory are complete, accurate, and current. There have been no changes in the quantity of any hazardous materials as previously reported. No hazardous materials subject to the inventory requirements are being handled that are not currently listed.

☐ I have enclosed a business plan and inventory for the facility described above.

☐ Other: _____

I certify, under penalty of perjury, that the information provided above is correct.

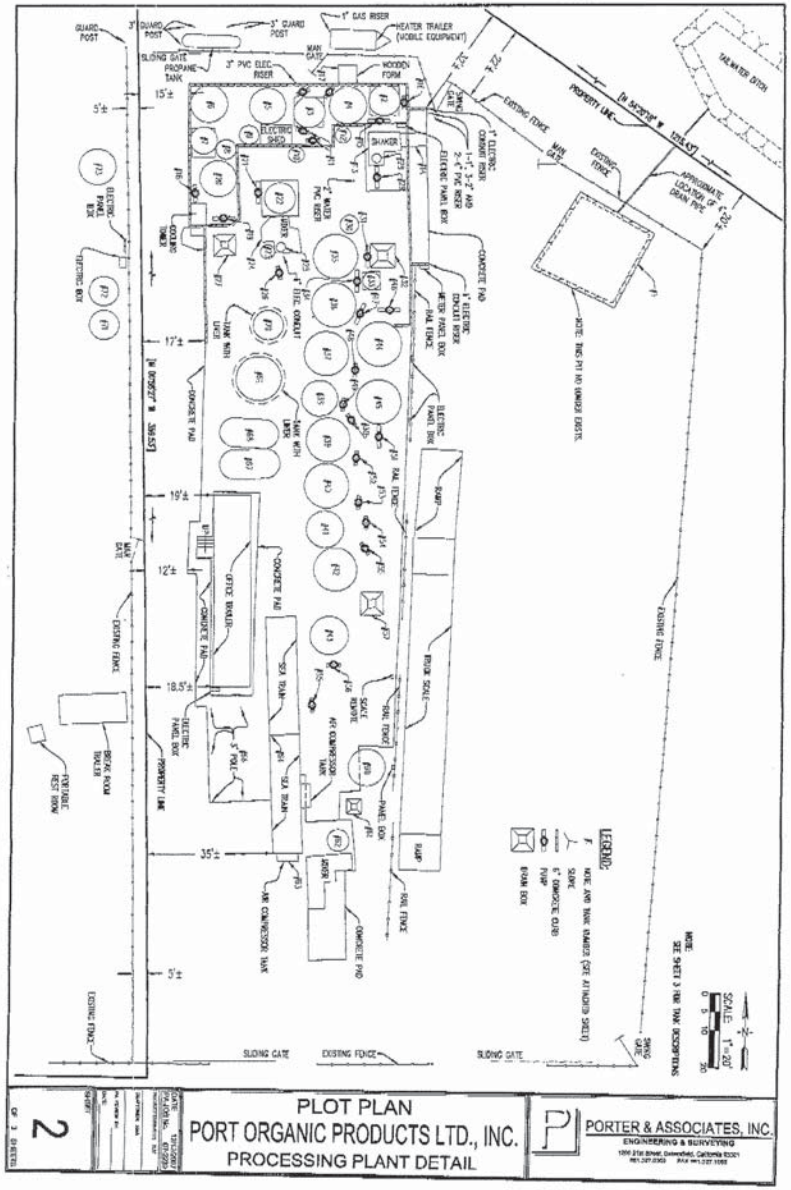
Printed Name _____ Title _____

Signature _____ Date _____

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT

HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

AMMONIA AQUA	12,336.00	LBS (POUNDS)	L
SULFURIC ACID	90,600.00	LBS (POUNDS)	L
POTASSIUM HYDROXIDE	12,800.00	LBS (POUNDS)	L
UN 32	16,605.00	LBS (POUNDS)	L
PHOSPHORIC ACID	32,097.00	LBS (POUNDS)	L
Ammonium Sulfate 21-0-0-24	100,000.00	LBS (POUNDS)	S
Sulfate of Potash	200,000.00	LBS (POUNDS)	S
Jenner 8 (Humic Substance)	6,000.00	GALLONS	L
Agrolizer (6-2-0) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Marizyme Fishilizer (4-2-2) Liquid Organic Fertilizer	12,000.00	GALLONS	L
Marizyme Fishilizer (7-1-1) Liquid Organic Fertilizer	6,500.00	GALLONS	L
Marizyme Fishilizer (8-5-2) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Liquid Fish Base	40,000.00	GALLONS	L


PLOT PLAN
PORT ORGANIC PRODUCTS LTD., INC.
PROCESSING PLANT DETAIL
PORTER & ASSOCIATES, INC.
ENGINEERING & SURVEYING
2
OF 3 SHEETS
SCALE 1"=20'
0 5 10 20
LEGEND
SLIDING GATE
EXISTING FENCE
PROPERTY LINE
TAILWATER DITCH
APPROXIMATE LOCATION OF DRAIN PIPE
HEATER TRAILER (MOBILE EQUIPMENT)
1" GAS RISER
3" GUARD POST
3" PVC ELEC. RISER
WOODEN FORM
MAIN GATE
SHAKER
ELECTRIC SHED
CONCRETE PAD
ELECTRIC PANEL BOX
METER PANEL BOX
RAIL FENCE
RAMP
OFFICE TRAILER
SEA TRAIN
SCALE HOUSE
AIR COMPRESSOR TANK
PANEL BOX
ARCHIVE REF. BOOK
BREAK ROOM TOILETS
ROSEMARY LANE
5'±
15'±
17'±
19'±
12'±
18.5'±
35'±