APPENDIX J

Water Resources Supporting Documentation

- Table J-1 Wells Data Base (CD-ROM)
- Table J-2 Water Chemistry Data (CD-ROM)
- Drillers Logs of Wells 18,33 & 34
- Numerical Groundwater Model Summary

  Table J-1 Results of Numerical Groundwater Modeling

  Figures

  Groundwater Model Data Files (CD-ROM)
- Brown & Caldwell Groundwater Flow Model & Hydrogeologic Study
- Water/Wastewater Report

Table J-1 Wells Data Base- (CD ROM)

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/16/1989		2240.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/7/1989		2260.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				1/8/1990		2260.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				2/13/1990		2260.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/6/1990		2260.3					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				4/9/1990		2259.9					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				5/10/1990		2260.1					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				6/6/1990		2260.0					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/19/1993		2257.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/17/1993		2257.2					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/30/1994		2256.9					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				12/7/1994		2256.2					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/21/1995		2255.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/15/1995		2256.0					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				2/19/1996		2255.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/18/1996		2255.7					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/6/1997		2255.9					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/18/1997		2254.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/18/1998		2254.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/3/1998		2253.3					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/17/1999		2254.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				10/28/1999		2251.5					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/29/2000		2253.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/7/2000		2253.8					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				4/12/2001		2252.7					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/6/2001		2251.9					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/19/2002		2251.7					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				11/13/2002		2252.2					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				4/1/2003		2253.0					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				10/21/2003		2251.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/23/2004		2251.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				10/26/2004		2252.0					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				3/8/2005		2251.6					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				10/4/2005		2258.2					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				4/4/2006		2249.2					Berenbrock_Marti
24S/38E-16J02M	024S038E16J002M	35.84776817	-117.8707519				10/23/2006		2264.8					Berenbrock_Marti
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				9/10/1992		2252.6					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				9/30/1992		2251.8					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				1/5/1993		2252.5					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				4/7/1994		2249.6					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				12/7/1994		2248.5					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/21/1995		2247.4					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/15/1995		2246.9					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				2/19/1996		2245.8					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/18/1996		2246.2					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/6/1997		2246.4					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/18/1997		2243.0					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/18/1998		2244.9					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/3/1998		2243.0					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/17/1999		2244.4					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				10/28/1999		2242.9					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/29/2000		2242.3					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/7/2000		2244.0					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				4/12/2001		2244.4					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/6/2001		2243.7					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/19/2002		2244.2					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				11/13/2002		2243.9					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				4/1/2003		2243.2					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				10/21/2003		2242.1					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/23/2004		2243.0					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				10/26/2004		2243.1					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				3/8/2005		2242.7					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				10/4/2005		2240.6					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				4/4/2006		2241.7					IWVWD
24S/38E-22E01M	024S038E22E001M	35.84133847	-117.8725718				10/23/2006		2244.0					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				9/10/1992		2239.5					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				9/30/1992		2239.3					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				1/5/1993		2238.3					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				4/7/1994		2237.1					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				12/7/1994		2235.9					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/21/1995		2235.9					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/15/1995		2225.8					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				2/19/1996		2237.4					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/18/1996		2236.2					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/6/1997		2236.9					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/18/1997		2229.8					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/18/1998		2235.6					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/3/1998		2229.1					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/17/1999		2233.8					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				10/28/1999		2228.7					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/29/2000		2228.1					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/7/2000		2231.6					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				4/12/2001		2229.3					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/6/2001		2224.2					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/19/2002		2225.8					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				11/13/2002		2230.8					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				4/1/2003		2227.5					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				10/21/2003		2228.5					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/23/2004		2227.3					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				10/26/2004		2224.9					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				3/8/2005		2243.6					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				10/4/2005		2239.5					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				4/4/2006		2239.7					IWVWD
24S/38E-22E02M	024S038E22E002M	35.84133847	-117.8725718				10/23/2006		2242.2					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				9/10/1992		2198.8					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				9/30/1992		2196.0					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				1/5/1993		2199.0					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				4/7/1994		2197.5					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				12/7/1994		2197.1					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/21/1995		2239.6					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/15/1995		2244.5					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				2/19/1996		2239.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/18/1996		2241.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/6/1997		2243.0					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/18/1997		2242.6					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/18/1998		2242.5					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/3/1998		2239.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/17/1999		2241.9					IWVWD

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FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				10/28/1999		2239.1					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/29/2000		2242.7					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/7/2000		2241.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				4/12/2001		2240.6					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/6/2001		2240.8					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/19/2002		2240.7					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				11/13/2002		2239.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				4/1/2003		2239.8					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				10/21/2003		2238.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/23/2004		2239.6					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				10/26/2004		2239.9					IWVWD
24S/38E-22E03M	024S038E22E003M	35.84133847	-117.8725718				3/8/2005		2243.8					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				9/10/1992		2196.5					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				9/30/1992		2197.2					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				1/5/1993		2197.2					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				4/7/1994		2209.5					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				12/7/1994		2211.8					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/21/1995		2224.7					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/15/1995		2244.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				2/19/1996		2244.2					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/18/1996		2244.6					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/6/1997		2244.6					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/18/1997		2242.7					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/18/1998		2244.0					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/3/1998		2240.3					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/17/1999		2243.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				10/28/1999		2238.9					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/29/2000		2241.2					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/7/2000		2240.4					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				4/12/2001		2240.3					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/6/2001		2239.5					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/19/2002		2240.6					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				11/13/2002		2241.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				4/1/2003		2241.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				10/21/2003		2240.5					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/23/2004		2240.6					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				10/26/2004		2241.4					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				3/8/2005		2245.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				10/4/2005		2243.1					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				4/4/2006		2243.8					IWVWD
24S/38E-22E04M	024S038E22E004M	35.84133847	-117.8725718				10/23/2006		2245.5					IWVWD
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				4/15/1985		2208.6					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				10/28/1999		2183.7					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				3/26/2000		2188.5					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				3/29/2000		2190.6					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				4/12/2001		2189.1					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				11/6/2001		2186.7					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				3/19/2002		2187.9					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				11/13/2002		2185.6					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				10/21/2003		2185.4					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				3/23/2004		2185.2					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				10/26/2004		2185.0					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				10/4/2005		2178.5					Berenbrock_Marti
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				4/4/2006		2184.6					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
24S/38E-33J02M	024S038E33J002M	35.80328389	-117.8720157				10/23/2006		2184.0					Berenbrock_Marti
24S/38E-35E01M	024S038E35E001M	35.80795102	-117.8488557				12/31/1920		2209.3					Berenbrock_Marti
24S/39E-33D01M	024S039E33D001M	35.81100761	-117.7772863				12/31/1920		2195.3					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				12/31/1920		2195.0					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				7/1/1946		2195.0					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				7/1/1953		2195.6					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				7/1/1965		2195.0					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				7/1/1975		2193.3					Berenbrock_Marti
24S/39E-33N01M	024S039E33N001M	35.79939587	-117.7786796				4/15/1985		2189.9					Berenbrock_Marti
24S/40E-19M01M	024S040E19M001M	35.83217315	-117.7059				7/1/1965		2183.4					Berenbrock_Marti
24S/40E-32H01M	024S040E32H001M	35.8055073	-117.6708988				4/15/1985		2175.5					Berenbrock_Marti
24S/40E-33E01M	024S040E33E001M	35.80578509	-117.6695099				7/1/1953		2177.6					Berenbrock_Marti
24S/40E-33E01M	024S040E33E001M	35.80578509	-117.6695099				7/1/1965		2176.9					Berenbrock_Marti
24S/40E-33E01M	024S040E33E001M	35.80578509	-117.6695099				7/1/1975		2178.0					Berenbrock_Marti
24S/40E-33N01M	024S040E33N001M	35.7980075	-117.6686764				4/15/1985		2172.6					Berenbrock_Marti
24S/40E-34E01M	024S040E34E001M	35.80661846	-117.6500649				7/1/1953		2192.3					Berenbrock_Marti
24S/40E-34E01M	024S040E34E001M	35.80661846	-117.6500649				7/1/1965		2172.3					Berenbrock_Marti
24S/40E-34E01M	024S040E34E001M	35.80661846	-117.6500649				7/1/1975		2171.9					Berenbrock_Marti
24S/40E-34E01M	024S040E34E001M	35.80661846	-117.6500649				4/15/1985		2171.7					Berenbrock_Marti
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				4/7/1994		2189.7					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				12/7/1994		2189.8					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/21/1995		2188.9					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/15/1995		2182.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				2/19/1996		2192.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/18/1996		2182.1					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/6/1997		2190.4					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/18/1997		2181.3					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/18/1998		2190.1					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/3/1998		2180.4					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/17/1999		2180.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				10/28/1999		2179.8					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/26/2000		2181.9					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/29/2000		2180.3					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/8/2000		2179.9					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				4/11/2001		2180.1					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				11/7/2001		2180.1					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/20/2002		2181.1					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				4/2/2003		2178.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				10/22/2003		2177.3					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/24/2004		2176.3					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				5/5/2004		2176.9					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				10/27/2004		2176.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				3/9/2005		2178.6					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				10/5/2005		2174.8					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				4/5/2006		2175.5					IWVWD
25S/38E-12L01M	025S038E12L001M	35.77371502	-117.8408613				10/25/2006		2173.6					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				4/7/1994		2187.2					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				12/7/1994		2185.8					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/21/1995		2185.6					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/15/1995		2185.2					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				2/19/1996		2185.9					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/18/1996		2184.8					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/6/1997		2185.7					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/18/1997		2183.8					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/18/1998		2186.2					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/3/1998		2183.4					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/17/1999		2184.3					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				10/28/1999		2183.7					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/26/2000		2183.7					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/29/2000		2184.0					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/8/2000		2183.1					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				4/11/2001		2183.1					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				11/7/2001		2183.1					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/20/2002		2182.2					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				4/2/2003		2181.5					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				10/22/2003		2180.3					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/24/2004		2180.0					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				5/5/2004		2180.0					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				10/27/2004		2179.5					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				3/9/2005		2179.5					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				10/5/2005		2178.5					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				4/5/2006		2176.6					IWVWD
25S/38E-12L02M	025S038E12L002M	35.77371502	-117.8408613				10/25/2006		2177.6					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				4/27/1994		2202.1					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				12/7/1994		2200.7					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/21/1995		2200.7					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/14/1995		2201.2					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				2/19/1996		2201.4					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/18/1996		2200.7					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/6/1997		2201.4					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/18/1997		2200.1					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/18/1998		2201.1					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/3/1998		2199.5					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/17/1999		2199.7					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				10/28/1999		2199.0					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/26/2000		2198.7					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/29/2000		2199.0					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/8/2000		2198.2					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				4/11/2001		2198.6					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				11/7/2001		2197.8					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/20/2002		2197.8					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				4/2/2003		2196.9					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				10/22/2003		2195.8					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/24/2004		2196.5					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				5/5/2004		2196.2					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				10/27/2004		2196.0					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				3/9/2005		2196.0					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				10/5/2005		2195.3					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				4/5/2006		2193.4					IWVWD
25S/38E-12L03M	025S038E12L003M	35.77371502	-117.8408613				10/25/2006		2194.6					IWVWD
25S/38E-12M01M	025S038E12M001M	35.77305377	-117.8451351				1/8/1990		2175.0					KCWA
25S/38E-12M01M	025S038E12M001M	35.77305377	-117.8451351				2/13/1990		2175.5					KCWA
25S/38E-12M01M	025S038E12M001M	35.77305377	-117.8451351				3/6/1990		2175.0					KCWA
25S/38E-12M01M	025S038E12M001M	35.77305377	-117.8451351				6/6/1990		2171.7					KCWA
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				7/1/1946		2205.8					Berenbrock_Marti
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				7/1/1953		2207.9					Berenbrock_Marti
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				7/1/1965		2202.7					Berenbrock_Marti
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				7/1/1975		2201.0					Berenbrock_Marti

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RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				11/7/1989		2182.0					Berenbrock_Marti
25S/38E-13D01M	025S038E13D001M	35.76884057	-117.8442366				2/13/1990		2183.0					Berenbrock_Marti
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/25/1993		2184.6					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/31/1994		2182.9					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/22/1995		2183.5					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/14/1995		2182.4					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				2/20/1996		2182.5					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/13/1996		2181.3					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/6/1998		2181.2					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/3/1999		2180.3					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/25/2000		2181.2					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/31/2000		2180.9					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/16/2000		2179.6					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				4/11/2001		2181.3					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				11/7/2001		2179.3					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/20/2002		2180.8					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				4/2/2003		2179.4					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				10/22/2003		2176.7					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/24/2004		2177.8					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				10/27/2004		2176.8					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				3/9/2005		2178.5					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				10/5/2005		2175.7					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				4/5/2006		2176.5					KCWA
25S/38E-13J01M	025S038E13J001M	35.75856314	-117.8347918				10/25/2006		2174.4					KCWA
25S/38E-13L01M	025S038E13L001M	35.7613408	-117.8395142				4/15/1985		2184.5					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				12/31/1920		2208.5					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				7/1/1946		2215.7					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				7/1/1953		2216.1					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				7/1/1965		2208.6					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				7/1/1975		2202.1					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				4/15/1985		2189.0					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				4/5/1996		2183.0					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/18/1996		2183.3					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/6/1997		2184.4					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/18/1997		2181.7					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/18/1998		2183.0					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/10/1998		2183.5					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/18/1999		2183.0					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				10/28/1999		2179.9					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/29/2000		2182.7					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/8/2000		2182.4					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				4/13/2001		2181.6					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/6/2001		2180.4					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/19/2002		2181.2					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				11/13/2002		2180.5					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				4/1/2003		2180.4					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				10/21/2003		2179.1					Berenbrock_Marti
25S/38E-23G01M	025S038E23G001M	35.7493965	-117.8559034				3/23/2004		2179.3					Berenbrock_Marti
25S/38E-23K01M	025S038E23K001M	35.74460348	-117.8539038				12/31/1920		2203.0					Berenbrock_Marti
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				11/7/1989		2172.0					KCWA
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				1/8/1990		2174.8					KCWA
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				2/13/1990		2175.2					KCWA
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				3/6/1990		2173.8					KCWA
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				4/9/1990		2172.2					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				5/10/1990		2166.5					KCWA
25S/38E-24B01M	025S038E24B001M	35.7542552	-117.8398397				3/25/1995		2171.5					KCWA
25S/38E-24C01M	025S038E24C001M	35.75411875	-117.8420141				12/31/1920		2206.0					Berenbrock_Marti
25S/38E-24G01M	025S038E24G001M	35.74769701	-117.8349367				2/13/1990		2196.5					KCWA
25S/38E-24G01M	025S038E24G001M	35.74769701	-117.8349367				4/9/1990		2194.5					KCWA
25S/38E-24G01M	025S038E24G001M	35.74769701	-117.8349367				5/10/1990		2207.0					KCWA
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				4/20/1994		2183.6					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				12/7/1994		2183.0					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				10/28/1999		2178.8					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				3/26/2000		2179.5					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				3/29/2000		2178.2					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				11/14/2000		2178.4					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				4/13/2001		2178.8					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				11/6/2001		2178.0					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				3/19/2002		2178.3					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				4/1/2003		2177.0					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				10/21/2003		2175.9					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				3/23/2004		2175.4					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				10/26/2004		2174.9					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				3/8/2005		2179.1					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				10/4/2005		2174.1					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				4/4/2006		2174.7					Berenbrock_Marti
25S/38E-25J01M	025S038E25J001M	35.73025047	-117.8315065				10/24/2006		2173.7					Berenbrock_Marti
25S/38E-25J02M	025S038E25J002M	35.73025047	-117.8315065				4/20/1994		2176.1					IWVWD
25S/38E-25J02M	025S038E25J002M	35.73025047	-117.8315065				12/7/1994		2174.3					IWVWD
25S/38E-25J02M	025S038E25J002M	35.73025047	-117.8315065				4/4/2006		2164.6					IWVWD
25S/38E-25J02M	025S038E25J002M	35.73025047	-117.8315065				10/24/2006		2165.7					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				10/28/1999		2111.5					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				3/26/2000		2113.8					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				3/29/2000		2114.0					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				11/14/2000		2112.2					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				4/13/2001		2114.5					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				3/19/2002		2114.6					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				4/1/2003		2113.8					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				10/21/2003		2112.5					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				3/23/2004		2114.6					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				10/26/2004		2112.3					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				3/8/2005		2134.8					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				10/4/2005		2168.3					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				4/4/2006		2167.0					IWVWD
25S/38E-25J03M	025S038E25J003M	35.73025047	-117.8315065				10/24/2006		2164.5					IWVWD
25S/38E-25L01M	025S038E25L001M	35.72939707	-117.8425694				7/1/1953		2209.0					Berenbrock_Marti
25S/38E-25L01M	025S038E25L001M	35.72939707	-117.8425694				7/1/1965		2203.5					Berenbrock_Marti
25S/38E-25L01M	025S038E25L001M	35.72939707	-117.8425694				7/1/1975		2200.0					Berenbrock_Marti
25S/38E-25L01M	025S038E25L001M	35.72939707	-117.8425694				4/15/1985		2185.8					Berenbrock_Marti
25S/38E-25P01M	025S038E25P001M	--	--							500.0	1600			
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				2/12/1998		3164.6					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				5/27/1999		3164.8					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				6/8/1999		3164.9					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				7/13/1999		3164.6					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				8/17/1999		3164.1					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				4/11/2000		3164.8					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				5/9/2000		3164.9					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				7/7/2000		3164.4					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				8/8/2000		3164.0					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				9/12/2000		3163.9					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				11/15/2000		3164.0					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				1/20/2001		3164.0					KCWA
25S/38E-29E01M	025S038E29E001M	35.73328523	-117.9181271				5/8/2001		3164.4					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				2/12/1998		3158.8					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				5/27/1999		3159.0					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				6/8/1999		3158.9					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				7/13/1999		3158.5					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				8/17/1999		3158.2					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				4/11/2000		3158.9					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				5/9/2000		3158.9					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				7/7/2000		3158.4					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				8/8/2000		3158.1					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				9/12/2000		3158.0					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				11/15/2000		3158.2					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				1/20/2001		3158.3					KCWA
25S/38E-29E02M	025S038E29E002M	35.73328523	-117.9181271				5/8/2001		3158.2					KCWA
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				4/7/1994		2186.6					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				12/7/1994		2186.1					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/21/1995		2185.1					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/15/1995		2185.5					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				2/20/1996		2185.5					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/18/1996		2184.6					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/7/1997		2185.1					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/18/1997		2183.6					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/18/1998		2183.4					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/3/1998		2183.1					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/17/1999		2184.3					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				10/28/1999		2181.6					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				4/3/2000		2184.0					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/15/2000		2183.5					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				4/12/2001		2183.4					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/8/2001		2182.5					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/19/2002		2182.1					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				11/13/2002		2182.0					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/31/2003		2181.9					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				10/20/2003		2179.7					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/22/2004		2179.8					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				10/26/2004		2179.7					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				3/7/2005		2179.2					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				10/3/2005		2176.2					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				4/3/2006		2176.5					IWVWD
25S/38E-34G01M	025S038E34G001M	35.71800817	-117.8717367				10/23/2006		2177.7					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				4/7/1994		2178.1					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				12/7/1994		2176.3					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/21/1995		2176.3					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/15/1995		2175.8					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				2/20/1996		2176.0					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/18/1996		2174.7					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/7/1997		2175.4					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/18/1997		2173.2					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/18/1998		2173.9					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/3/1998		2172.9					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/17/1999		2174.7					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				10/28/1999		2169.3					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				4/3/2000		2173.6					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/15/2000		2171.1					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				4/12/2001		2172.2					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/8/2001		2170.3					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/19/2002		2171.3					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				11/13/2002		2169.7					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/31/2003		2169.8					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				10/20/2003		2169.2					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/22/2004		2169.0					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				10/26/2004		2167.8					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				3/7/2005		2168.5					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				10/3/2005		2164.8					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				4/3/2006		2165.6					IWVWD
25S/38E-34G02M	025S038E34G002M	35.71800817	-117.8717367				10/23/2006		2165.7					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				4/7/1994		2176.3					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				12/7/1994		2174.2					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/21/1995		2175.0					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/15/1995		2173.4					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				2/20/1996		2174.1					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/18/1996		2172.9					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/7/1997		2174.1					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/18/1997		2171.0					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/18/1998		2170.7					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/3/1998		2170.2					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/17/1999		2172.4					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				10/28/1999		2167.5					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				4/3/2000		2171.4					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/15/2000		2168.9					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				4/12/2001		2170.1					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/8/2001		2167.8					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/19/2002		2169.3					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				11/13/2002		2167.3					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/31/2003		2168.5					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				10/20/2003		2166.0					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/22/2004		2167.2					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				10/26/2004		2165.6					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				3/7/2005		2166.4					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				10/3/2005		2162.1					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				4/3/2006		2163.0					IWVWD
25S/38E-34G03M	025S038E34G003M	35.71800817	-117.8717367				10/23/2006		2163.5					IWVWD
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/31/1920		2217.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				7/1/1953		2218.4					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/11/1959		2207.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/3/1961		2206.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/24/1962		2206.4					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/23/1963		2206.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				9/9/1964		2206.1					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/30/1965		2206.1					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				7/1/1965		2212.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/19/1965		2205.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/21/1966		2205.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/17/1967		2204.8					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/19/1968		2204.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				9/17/1969		2203.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/14/1970		2203.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/28/1971		2204.0					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/17/1972		2204.1					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/31/1973		2203.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/24/1974		2203.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				7/1/1975		2209.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/23/1975		2202.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/23/1976		2202.0					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/8/1977		2200.8					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/6/1978		2199.6					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/12/1979		2198.6					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/19/1981		2194.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				6/10/1982		2194.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				4/15/1985		2195.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				5/14/1985		2189.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/16/1989		2187.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/7/1989		2186.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				1/8/1990		2187.0					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				2/13/1990		2187.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/6/1990		2187.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				4/9/1990		2186.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				5/10/1990		2186.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				6/6/1990		2186.6					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/19/1993		2185.4					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/18/1993		2184.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/30/1994		2183.4					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				12/8/1994		2183.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/24/1995		2182.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/15/1995		2182.4					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				2/19/1996		2182.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/18/1996		2182.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/7/1997		2183.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/18/1997		2180.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/18/1998		2180.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/11/1998		2180.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/18/1999		2181.6					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/28/1999		2179.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/29/2000		2181.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/14/2000		2180.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				4/17/2001		2180.2					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/6/2001		2179.0					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/19/2002		2179.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				11/13/2002		2178.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				4/1/2003		2178.5					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/21/2003		2177.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/23/2004		2177.9					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/26/2004		2175.7					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				3/8/2005		2177.3					Berenbrock_Marti
25S/38E-35B01M	025S038E35B001M	35.72467485	-117.854514				10/4/2005		2175.1					Berenbrock_Marti
25S/38E-35M01M	025S038E35M001M	35.71552246	-117.8624894				12/31/1920		2210.0					Berenbrock_Marti
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/14/1991		2186.7					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/18/1993		2185.4					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/30/1994		2184.5					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				12/8/1994		2184.0					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/21/1995		2183.7					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/15/1995		2182.9					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				2/19/1996		2183.4					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/18/1996		2183.1					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/7/1997		2183.4					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/18/1997		2182.2					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/18/1998		2183.1					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/11/1998		2181.9					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/18/1999		2182.4					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				10/28/1999		2180.8					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/29/2000		2181.1					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/8/2000		2180.6					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				4/13/2001		2181.0					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/6/2001		2179.8					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				3/19/2002		2180.4					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				11/13/2002		2180.5					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				4/1/2003		2180.2					KCWA
25S/38E-36B01M	025S038E36B001M	35.72386363	-117.8365546				10/21/2003		2178.8					KCWA
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				12/8/1994		2182.6					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				3/21/1995		2183.3					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				3/26/2000		2180.2					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				3/8/2005		2176.1					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				10/4/2005		2175.2					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				4/4/2006		2175.5					Berenbrock_Marti
25S/38E-36G01M	025S038E36G001M	35.71873437	-117.8347105				10/24/2006		2174.3					Berenbrock_Marti
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				12/8/1994		2172.9					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				3/21/1995		2174.9					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				3/26/2000		2167.8					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				3/8/2005		2161.8					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				10/4/2005		2159.6					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				4/4/2006		2158.4					IWVWD
25S/38E-36G02M	025S038E36G002M	35.71873437	-117.8347105				10/24/2006		2155.6					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				12/8/1994		2174.5					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				3/21/1995		2176.5					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				3/23/2000		2160.2					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				3/8/2005		2154.4					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				10/4/2005		2152.8					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				4/4/2006		2155.8					IWVWD
25S/38E-36G03M	025S038E36G003M	35.71873437	-117.8347105				10/24/2006		2153.5					IWVWD
25S/39E-01N01M	025S039E01N001M	35.78494374	-117.7387781				12/31/1920		2190.2					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				12/31/1920		2190.9					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				7/1/1946		2190.3					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				7/1/1953		2190.1					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				7/1/1965		2189.4					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				7/1/1975		2188.9					Berenbrock_Marti
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729				4/15/1985		2187.6					Berenbrock_Marti
25S/39E-02M01M	025S039E02M001M	35.78846028	-117.756619				12/31/1920		2190.6					Berenbrock_Marti
25S/39E-03P01M	025S039E03P001M	35.78474825	-117.7699395				12/31/1920		2194.1					Berenbrock_Marti
25S/39E-04F01M	025S039E04F001M	35.79188737	-117.7878174				12/31/1920		2197.3					Berenbrock_Marti
25S/39E-04P01M	025S039E04P001M	35.78463292	-117.7877458				12/31/1920		2187.0					Berenbrock_Marti
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794							200.0	145	1.97	73	
25S/39E-07K01M	025S039E07K001M	35.77354314	-117.8187951				12/31/1920		2202.7					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/39E-08G01M	025S039E08G001M	35.77729026	-117.8010277				12/31/1920		2206.2					Berenbrock_Marti
25S/39E-09G01M	025S039E09G001M	35.77740754	-117.7832231				12/31/1920		2196.5					Berenbrock_Marti
25S/39E-10Q01M	025S039E10Q001M	35.77026768	-117.7653488				12/31/1920		2194.0					Berenbrock_Marti
25S/39E-11N01M	025S039E11N001M	35.76995239	-117.7572897				12/31/1920		2194.1					Berenbrock_Marti
25S/39E-11N01M	025S039E11N001M	35.76995239	-117.7572897				7/1/1946		2185.5					Berenbrock_Marti
25S/39E-12N01M	025S039E12N001M	35.77078579	-117.7397892				12/31/1920		2187.0					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				12/31/1920		2183.9	108.5	34	0.92	37	Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				4/15/1985		2181.5					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				3/31/1994		2183.6					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				3/22/1995		2183.4					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/15/1995		2182.9					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				2/22/1996		2183.2					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/13/1996		2182.8					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				3/5/1997		2182.4					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/26/1997		2182.5					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				3/18/1998		2181.7					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/5/1998		2182.9					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				3/16/1999		2182.7					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				4/3/2000		2182.5					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/8/2000		2182.4					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				12/12/2003		2181.6					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/4/2004		2181.3					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				11/26/2004		2181.3					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				4/21/2005		2181.4					Berenbrock_Marti
25S/39E-12R01M	025S039E12R001M	35.76939698	-117.7275666				4/19/2006		2181.2					Berenbrock_Marti
25S/39E-14N01M	025S039E14N001M	35.75581494	-117.7563098				12/31/1920		2192.1					Berenbrock_Marti
25S/39E-15C01M	025S039E15C001M	35.76661202	-117.7697646				12/31/1920		2196.0					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				12/31/1920		2202.1					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				7/1/1946		2201.2					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				7/1/1953		2202.1					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				7/1/1965		2196.7					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				11/19/1981		2193.4					Berenbrock_Marti
25S/39E-17D01M	025S039E17D001M	35.7682853	-117.8097912				4/15/1985		2188.7					Berenbrock_Marti
25S/39E-18N01M	025S039E18N001M	35.75495217	-117.829236				12/31/1920		2205.0					Berenbrock_Marti
25S/39E-19K01M	025S039E19K001M	35.74452544	-117.8184978				12/31/1920		2204.0					Berenbrock_Marti
25S/39E-20P01M	025S039E20P001M	35.74098828	-117.8051133				12/31/1920		2214.0					Berenbrock_Marti
25S/39E-21D01M	025S039E21D001M	35.751897	-117.7934016				12/31/1920		2200.3					Berenbrock_Marti
25S/39E-21D01M	025S039E21D001M	35.751897	-117.7934016				7/1/1946		2197.7					Berenbrock_Marti
25S/39E-21D01M	025S039E21D001M	35.751897	-117.7934016				7/1/1953		2198.8					Berenbrock_Marti
25S/39E-21D01M	025S039E21D001M	35.751897	-117.7934016				7/1/1965		2197.1					Berenbrock_Marti
25S/39E-21D01M	025S039E21D001M	35.751897	-117.7934016				7/1/1975		2195.5					Berenbrock_Marti
25S/39E-21M01M	025S039E21M001M	35.74470411	-117.7918018				12/31/1920		2196.5					Berenbrock_Marti
25S/39E-21P01M	025S039E21P001M	35.74023066	-117.7856235				12/31/1920		2194.9					Berenbrock_Marti
25S/39E-22D01M	025S039E22D001M	35.75106384	-117.775901				12/31/1920		2194.8					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				7/1/1946		2192.5					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				7/1/1953		2192.6					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				7/1/1965		2191.2					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				7/1/1975		2189.8					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/15/1985		2187.4					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/13/1996		2184.6					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				3/5/1997		2184.6					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/26/1997		2184.5					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				3/30/1998		2184.2					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/20/1998		2183.9					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				3/16/1999		2184.0					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				10/27/1999		2183.8					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				3/25/2000		2183.7					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/3/2000		2183.7					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/12/2000		2183.6					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/8/2000		2183.4					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/21/2002		2182.8					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				12/12/2003		2182.2					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/21/2004		2182.4					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/4/2004		2182.1					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				11/26/2004		2182.1					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/21/2005		2182.0					Berenbrock_Marti
25S/39E-22J01M	025S039E22J001M	35.74300858	-117.7620117				4/19/2006		2181.8					Berenbrock_Marti
25S/39E-23D01M	025S039E23D001M	35.75218767	-117.7562755				12/31/1920		2190.4					Berenbrock_Marti
25S/39E-24D01M	025S039E24D001M	35.75229825	-117.7384762				12/31/1920		2189.8					Berenbrock_Marti
25S/39E-24D02M	025S039E24D002M	35.75229825	-117.7384762				12/31/1920		2183.5					Berenbrock_Marti
25S/39E-26D02M	025S039E26D002M	35.73689774	-117.7408999				12/31/1920		2192.9					Berenbrock_Marti
25S/39E-26E01M	025S039E26E001M	35.73405128	-117.756104				12/31/1920		2191.5					Berenbrock_Marti
25S/39E-26H01M	025S039E26H001M	35.7330089	-117.7431222				7/1/1953		2187.6					Berenbrock_Marti
25S/39E-26H01M	025S039E26H001M	35.7330089	-117.7431222				7/1/1965		2187.2					Berenbrock_Marti
25S/39E-26H01M	025S039E26H001M	35.7330089	-117.7431222				7/1/1975		2186.3					Berenbrock_Marti
25S/39E-26H01M	025S039E26H001M	35.7330089	-117.7431222				4/15/1985		2185.0					Berenbrock_Marti
25S/39E-27M01M	025S039E27M001M	35.73031086	-117.773864				12/31/1920		2193.5					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				12/31/1920		2198.4					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				7/1/1946		2198.7					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				7/1/1953		2199.2					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				7/1/1965		2197.2					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				7/1/1975		2194.7					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				4/15/1985		2191.0					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				3/19/1996		2187.0					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				11/13/1996		2186.9					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				3/5/1997		2186.9					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				3/30/1998		2186.3					Berenbrock_Marti
25S/39E-28P01M	025S039E28P001M	35.72523098	-117.7856233				4/3/2000		2186.0					Berenbrock_Marti
25S/39E-28R01M	025S039E28R001M	35.72550879	-117.7811787				4/15/1985		2190.1					Berenbrock_Marti
25S/39E-29B01M	025S039E29B001M	35.73739073	-117.8006279				12/31/1920		2197.3					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				7/1/1953		2202.3					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				7/1/1965		2200.6					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				7/1/1975		2197.7					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/15/1985		2190.3					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/19/1996		2186.1					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/13/1996		2185.7					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/5/1997		2186.0					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/16/1999		2184.9					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/3/1999		2184.9					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/25/2000		2184.4					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/30/2000		2184.3					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/12/2000		2184.4					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/16/2000		2183.9					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/11/2001		2184.1					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/7/2001		2183.5					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/20/2002		2183.7					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/21/2002		2183.1					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/2/2003		2183.2					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				10/22/2003		2182.7					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/24/2004		2182.6					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/21/2004		2182.4					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				10/20/2004		2183.0					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				10/27/2004		2182.3					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				11/4/2004		2182.1					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				3/9/2005		2182.2					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				5/12/2005		2182.0					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				10/5/2005		2181.8					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/5/2006		2181.7					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				4/19/2006		2182.5					Berenbrock_Marti
25S/39E-29M01M	025S039E29M001M	35.73217505	-117.812013				10/25/2006		2181.2					Berenbrock_Marti
25S/39E-30B01M	025S039E30B001M	35.73727099	-117.8184235				12/31/1920		2207.5					Berenbrock_Marti
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/25/1993		2194.4					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/31/1994		2193.5					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/22/1995		2193.7					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/14/1995		2196.1					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				2/20/1996		2196.7					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/13/1996		2197.2					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/5/1997		2197.2					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/26/1997		2197.0					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/30/1998		2202.6					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/6/1998		2197.6					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/12/1999		2197.2					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/3/1999		2197.2					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/25/2000		2198.1					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/30/2000		2197.8					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				4/11/2001		2197.4					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				11/7/2001		2197.1					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/20/2002		2197.5					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				4/2/2003		2197.1					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				10/22/2003		2196.6					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/24/2004		2196.4					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				10/27/2004		2196.0					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				3/9/2005		2196.7					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				10/5/2005		2196.1					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				4/5/2006		2196.8					KCWA
25S/39E-30E01M	025S039E30E001M	35.73300824	-117.8267356				10/25/2006		2197.1					KCWA
25S/39E-31D01M	025S039E31D001M	--	--							252.0	850			
25S/39E-31E01M	025S039E31E001M	35.71884185	-117.829791				7/1/1946		2207.4					Berenbrock_Marti
25S/39E-31E01M	025S039E31E001M	35.71884185	-117.829791				7/1/1965		2204.4					Berenbrock_Marti
25S/39E-31E01M	025S039E31E001M	35.71884185	-117.829791				7/1/1975		2189.9					Berenbrock_Marti
25S/39E-31E01M	025S039E31E001M	35.71884185	-117.829791				4/15/1985		2184.3					Berenbrock_Marti
25S/39E-31E01M	025S039E31E001M	35.71884185	-117.829791							164.0	121			
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/17/1989		2139.1					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/31/1994		2186.1					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/22/1995		2188.5					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/14/1995		2188.2					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				2/20/1996		2187.9					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/13/1996		2187.5					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/4/1997		2187.6					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/25/1997		2187.3					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/24/1998		2187.2					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/6/1998		2186.8					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/12/1999		2186.3					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/3/1999		2186.0					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/25/2000		2186.0					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/30/2000		2185.9					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				4/11/2001		2185.4					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				11/7/2001		2184.9					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/20/2002		2185.3					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				4/2/2003		2184.7					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				10/22/2003		2184.0					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/24/2004		2183.9					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				10/27/2004		2183.5					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				3/8/2005		2183.5					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				10/5/2005		2182.7					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				4/5/2006		2182.8					KCWA
25S/39E-31R01M	025S039E31R001M	35.71106436	-117.8156239				10/25/2006		2182.1					KCWA
25S/39E-32E01M	025S039E32E001M	35.71919498	-117.8093422				12/31/1920		2202.5					Berenbrock_Marti
25S/39E-32N01M	025S039E32N001M	35.71194049	-117.8092689				12/31/1920		2204.8					Berenbrock_Marti
25S/39E-32R01M	025S039E32R001M	35.71162005	-117.7989568				12/31/1920		2205.0					Berenbrock_Marti
25S/39E-33Q01M	025S039E33Q001M	35.71211697	-117.7825837				12/31/1920		2200.5					Berenbrock_Marti
25S/39E-34R01M	025S039E34R001M	35.71225952	-117.7603459				12/31/1920		2194.2					Berenbrock_Marti
25S/39E-35N01M	025S039E35N001M	35.7116204	-117.7584				7/1/1953		2191.4					Berenbrock_Marti
25S/39E-35N01M	025S039E35N001M	35.7116204	-117.7584				7/1/1965		2193.9					Berenbrock_Marti
25S/39E-35N01M	025S039E35N001M	35.7116204	-117.7584				7/1/1975		2191.9					Berenbrock_Marti
25S/39E-35N01M	025S039E35N001M	35.7116204	-117.7584							152.0	275	13.24	21	
25S/40E-07M01M	025S040E07M001M	35.77449525	-117.7206844				12/31/1920		2182.0					Berenbrock_Marti
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657				7/1/1953		2184.2					Berenbrock_Marti
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657				7/1/1965		2183.7					Berenbrock_Marti
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657				7/1/1975		2175.4					Berenbrock_Marti
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657				4/15/1985		2176.6					Berenbrock_Marti
25S/40E-11K01M	025S040E11K001M	35.7738416	-117.6386753				4/15/1985		2170.2					Berenbrock_Marti
25S/40E-12Q01M	025S040E12Q001M	35.76828626	-117.6245082				4/15/1985		2157.7					#N/A
25S/40E-18B01M	025S040E18B001M	35.76729367	-117.7117176				12/31/1920		2181.0					Berenbrock_Marti
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881				4/15/1985		2180.3					Berenbrock_Marti
25S/40E-19L01M	025S040E19L001M	35.7457865	-117.7133993				4/15/1985		2172.2					Berenbrock_Marti
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545				4/15/1985		2178.7					Berenbrock_Marti
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545							186.0	96	4.39		
25S/40E-27E01M	025S040E27E001M	35.73467585	-117.66562				7/1/1953		2165.2					Berenbrock_Marti
25S/40E-27E01M	025S040E27E001M	35.73467585	-117.66562				7/1/1965		2164.5					Berenbrock_Marti
25S/40E-27E01M	025S040E27E001M	35.73467585	-117.66562				7/1/1975		2164.0					Berenbrock_Marti
25S/40E-27E01M	025S040E27E001M	35.73467585	-117.66562				4/15/1985		2165.5					Berenbrock_Marti
25S/40E-31N01M	025S040E31N001M	35.71283104	-117.7201288				12/31/1920		2195.1					Berenbrock_Marti
25S/40E-33L01M	025S040E33L001M	35.7160651	-117.678398				4/15/1985		2170.2					Berenbrock_Marti
25S/40E-33L02M	025S040E33L002M	35.7160651	-117.678398				4/15/1985		2169.3					Berenbrock_Marti
25S/40E-35P01M	025S040E35P001M	35.71106536	-117.6439525				7/1/1953		2150.2					Berenbrock_Marti
25S/40E-35P01M	025S040E35P001M	35.71106536	-117.6439525				7/1/1965		2150.3					Berenbrock_Marti
25S/40E-35P01M	025S040E35P001M	35.71106536	-117.6439525				4/15/1985		2151.0					Berenbrock_Marti
25S/40E-35P01M	025S040E35P001M	35.71106536	-117.6439525				3/31/1994		2152.7					Berenbrock_Marti
25S/40E-35P01M	025S040E35P001M	35.71106536	-117.6439525				3/26/2000		2152.4					Berenbrock_Marti
25S/41E-19L01M	025S041E19L001M	35.7488424	-117.6042297				4/15/1985		2155.7					Berenbrock_Marti
25S/41E-19L01M	025S041E19L001M	35.7488424	-117.6042297				4/8/1994		2157.4					Berenbrock_Marti
25S/41E-19L01M	025S041E19L001M	35.7488424	-117.6042297				3/26/2000		2156.8					Berenbrock_Marti
25S/41E-28B01M	025S041E28B001M	35.74287588	-117.5694797				4/15/1985		2171.2					Berenbrock_Marti
26S/38E-01A01M	026S038E01A001M	35.70848711	-117.8312804				12/31/1920		2215.0					Berenbrock_Marti
26S/38E-01H03M	026S038E01H003M	35.70634208	-117.8339577				11/26/2001		2180.6					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/38E-01H03M	026S038E01H003M	35.70634208	-117.8339577				3/19/2002		2180.9					KCWA
26S/38E-01H03M	026S038E01H003M	35.70634208	-117.8339577				11/21/2003		2179.0					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/18/1996		2183.2					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/18/1996		2183.3					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/7/1997		2183.6					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/18/1997		2182.1					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/18/1998		2182.4					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/11/1998		2181.7					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/18/1999		2182.1					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/1/1999		2180.9					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/28/2000		2181.5					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/15/2000		2180.5					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				4/17/2001		2180.7					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/8/2001		2179.7					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/19/2002		2180.0					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				11/13/2002		2179.8					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				4/1/2003		2179.1					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				10/21/2003		2178.6					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/23/2004		2178.8					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				10/26/2004		2177.4					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				3/8/2005		2178.2					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				10/4/2005		2176.7					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				4/4/2006		2176.6					KCWA
26S/38E-01K01M	026S038E01K001M	35.70273104	-117.8350688				10/24/2006		2176.0					KCWA
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				12/31/1920		2214.6					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				4/5/1996		2182.5					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				11/18/1996		2182.8					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/7/1997		2183.1					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				11/18/1997		2181.7					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/18/1998		2181.8					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				11/11/1998		2181.0					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/18/1999		2181.6					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/28/2000		2179.0					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				11/26/2001		2180.0					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/19/2002		2180.2					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				11/18/2002		2178.6					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				4/1/2003		2178.3					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				10/20/2003		2180.1					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/23/2004		2179.7					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				10/25/2004		2176.8					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				3/7/2005		2176.1					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				10/3/2005		2175.8					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				4/3/2006		2174.8					Berenbrock_Marti
26S/38E-02Q01M	026S038E02Q001M	35.69744982	-117.8534008				10/23/2006		2174.7					Berenbrock_Marti
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				7/7/2000		2163.5					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				10/10/2000		2163.0					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				11/15/2000		2163.7					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				11/26/2001		2162.9					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				3/22/2002		2163.2					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				4/4/2003		2160.9					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				10/20/2003		2160.7					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				3/23/2004		2160.3					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				10/25/2004		2160.4					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				3/7/2005		2159.0					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				10/3/2005		2158.9					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				4/3/2006		2158.5					KCWA
26S/38E-02Q02M	026S038E02Q002M	35.6960643	-117.8564581				10/23/2006		2158.3					KCWA
26S/38E-24G01M	026S038E24G001M	35.66130216	-117.835236				12/31/1920		2212.4					Berenbrock_Marti
26S/38E-26G01M	026S038E26G001M	35.6443984	-117.8942362				4/15/1985		2232.7					Berenbrock_Marti
26S/38E-35B01M	026S038E35B001M	35.6371763	-117.8978472				4/15/1985		2235.0					Berenbrock_Marti
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/15/1989		2182.5					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/31/1994		2178.9					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/22/1995		2178.7					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/15/1995		2178.5					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				2/22/1996		2178.3					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/13/1996		2178.0					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/5/1997		2177.7					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/26/1997		2177.6					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/24/1998		2177.5					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/4/1998		2177.5					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/11/1999		2177.2					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/3/1999		2177.0					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/30/2000		2177.0					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/16/2000		2176.7					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				4/11/2001		2176.9					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				11/7/2001		2176.5					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/20/2002		2176.4					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				4/2/2003		2176.3					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				10/22/2003		2176.0					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/24/2004		2175.9					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				10/27/2004		2175.7					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				3/9/2005		2175.9					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				10/5/2005		2175.8					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				4/5/2006		2175.4					KCWA
26S/39E-01A01M	026S039E01A001M	35.70939841	-117.7233991				10/25/2006		2175.4					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/15/1989		2184.9					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/31/1994		2182.5					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/22/1995		2182.9					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/15/1995		2182.6					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				2/22/1996		2182.5					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/13/1996		2182.0					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/5/1997		2182.0					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/26/1997		2182.1					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/24/1998		2181.9					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/4/1998		2181.8					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/11/1999		2181.8					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/3/1999		2182.2					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/30/2000		2182.0					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/16/2000		2181.8					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				4/11/2001		2181.9					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				11/7/2001		2181.6					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/20/2002		2181.6					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				4/2/2003		2181.5					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				10/22/2003		2181.2					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/24/2004		2181.2					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				10/27/2004		2181.1					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				3/9/2005		2181.0					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				10/5/2005		2180.9					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				4/5/2006		2180.8					KCWA
26S/39E-01A02M	026S039E01A002M	35.70939841	-117.7231213				10/25/2006		2180.5					KCWA
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				7/1/1946		2193.0					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				7/1/1953		2193.9					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				7/1/1965		2192.8					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				7/1/1975		2191.0					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				4/15/1985		2188.8					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				4/25/1996		2184.4					Berenbrock_Marti
26S/39E-02C01M	026S039E02C001M	35.7091205	-117.7503443				11/13/1996		2184.6					Berenbrock_Marti
26S/39E-02D01M	026S039E02D001M	35.70745384	-117.7572889				12/31/1920		2195.9					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				4/15/1985		2189.2					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				4/19/1996		2184.8					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/13/1996		2184.6					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/5/1997		2184.7					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/25/1997		2184.5					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/24/1998		2184.3					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/18/1998		2184.1					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/11/1999		2184.2					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/3/1999		2183.5					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/25/2000		2183.2					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/30/2000		2183.2					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/16/2000		2183.0					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				4/11/2001		2183.1					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/7/2001		2182.6					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/20/2002		2182.6					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				11/14/2002		2182.2					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				4/2/2003		2182.3					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				10/22/2003		2181.9					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/24/2004		2182.0					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				10/27/2004		2181.6					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				3/9/2005		2181.4					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				10/5/2005		2181.1					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				4/5/2006		2180.9					Berenbrock_Marti
26S/39E-02N01M	026S039E02N001M	35.69662075	-117.755622				10/25/2006		2180.5					Berenbrock_Marti
26S/39E-04H01M	026S039E04H001M	35.70521662	-117.7778772				12/31/1920		2206.1					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				7/1/1953		2205.5					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				7/1/1965		2203.1					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				7/1/1975		2200.8					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				4/15/1985		2190.6					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				4/1/1994		2186.7					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				12/22/1994		2186.1					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/22/1995		2185.9					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/14/1995		2185.6					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				2/20/1996		2185.4					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/14/1996		2185.0					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/4/1997		2184.7					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/25/1997		2183.2					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/24/1998		2183.1					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/6/1998		2182.6					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/12/1999		2182.3					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/3/1999		2181.9					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/30/2000		2181.7					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/16/2000		2181.2					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				4/11/2001		2182.1					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/7/2001		2180.4					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/20/2002		2180.7					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				11/14/2002		2180.3					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				4/2/2003		2180.2					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				10/22/2003		2179.8					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/24/2004		2179.2					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				10/27/2004		2179.2					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				3/9/2005		2179.1					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				10/5/2005		2178.4					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				4/5/2006		2178.3					Berenbrock_Marti
26S/39E-05F01M	026S039E05F001M	35.70495345	-117.8078458				10/25/2006		2177.7					Berenbrock_Marti
26S/39E-06M02M	026S039E06M002M	35.70126327	-117.8267582				12/31/1920		2205.0					Berenbrock_Marti
26S/39E-07N01M	026S039E07N001M	35.6818982	-117.8297905				7/1/1946		2209.2					Berenbrock_Marti
26S/39E-07N01M	026S039E07N001M	35.6818982	-117.8297905				7/1/1953		2189.3					Berenbrock_Marti
26S/39E-07N01M	026S039E07N001M	35.6818982	-117.8297905				7/1/1965		2202.4					Berenbrock_Marti
26S/39E-07N01M	026S039E07N001M	35.6818982	-117.8297905				7/1/1975		2196.4					Berenbrock_Marti
26S/39E-07N01M	026S039E07N001M	35.6818982	-117.8297905				4/15/1985		2189.1					Berenbrock_Marti
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				3/21/1989		2182.0					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				11/7/1989		2181.5					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				1/8/1990		2181.7					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				2/13/1990		2182.0					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				3/6/1990		2181.3					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				4/9/1990		2180.7					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				5/10/1990		2181.3					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				6/6/1990		2181.4					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				3/19/1993		2181.0					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				11/17/1993		2178.8					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				3/30/1994		2178.5					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				12/8/1994		2177.4					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				3/24/1995		2176.6					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				11/15/1995		2176.1					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				2/19/1996		2176.4					KCWA
26S/39E-07N02M	026S039E07N002M	35.6818982	-117.8297905				11/18/1996		2175.5					KCWA
26S/39E-08E01M	026S039E08E001M	35.689676	-117.8081234				4/15/1985		2188.1					Berenbrock_Marti
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512				7/1/1946		2208.1					Berenbrock_Marti
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512				7/1/1953		2206.8					Berenbrock_Marti
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512				7/1/1965		2202.1					Berenbrock_Marti
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512				7/1/1975		2197.1					Berenbrock_Marti
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512				4/15/1985		2190.4					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				7/1/1946		2201.0					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				7/1/1953		2200.0					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				7/1/1965		2199.0					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				7/1/1975		2193.9					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				4/15/1985		2189.2					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				11/15/1989		2186.4					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				3/22/1994		2181.2					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				4/1/1994		2181.4					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				12/22/1994		2182.1					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664				3/22/1995		2181.2					Berenbrock_Marti
26S/39E-11E01M	026S039E11E001M	35.6882876	-117.7550664							250.0	218	6.65	33	
26S/39E-11E02M	026S039E11E002M	35.69084905	-117.7555044				12/31/1920		2210.3					Berenbrock_Marti
26S/39E-12G01M	026S039E12G001M	35.68884327	-117.7306213				4/15/1985		2188.9					Berenbrock_Marti
26S/39E-12N01M	026S039E12N001M	35.68370471	-117.737652				12/31/1920		2204.0					Berenbrock_Marti
26S/39E-13D01M	026S039E13D001M	35.68007738	-117.7376186				12/31/1920		2196.0					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-13P01M	026S039E13P001M	35.66922253	-117.7330733				12/31/1920		2206.2					Berenbrock_Marti
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/17/1989		2184.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/31/1994		2181.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				12/22/1994		2180.9					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/22/1995		2179.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/14/1995		2180.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				2/20/1996		2180.4					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/14/1996		2166.7					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/4/1997		2166.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/25/1997		2166.2					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/24/1998		2167.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/5/1998		2166.0					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/11/1999		2165.8					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/2/1999		2166.2					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/30/2000		2167.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/16/2000		2168.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				4/10/2001		2168.8					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/7/2001		2169.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/20/2002		2170.3					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				11/14/2002		2172.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				1/22/2003		2173.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				4/2/2003		2172.3					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/24/2004		2173.7					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				10/27/2004		2173.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				3/9/2005		2173.6					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				10/5/2005		2173.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				4/5/2006		2173.5					KCWA
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843				10/25/2006		2173.4					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/17/1989		2135.6					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/31/1994		2124.8					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				12/22/1994		2126.5					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/22/1995		2123.1					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/14/1995		2113.1					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				2/20/1996		2122.3					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/14/1996		2115.8					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/4/1997		2117.1					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/25/1997		2124.2					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/24/1998		2130.8					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/5/1998		2123.9					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/11/1999		2121.4					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/2/1999		2123.0					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/25/2000		2123.8					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/30/2000		2123.4					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/16/2000		2113.9					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				4/10/2001		2129.8					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/7/2001		2111.9					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/20/2002		2120.7					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				11/14/2002		2120.1					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				1/22/2003		2110.7					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				4/2/2003		2123.1					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/24/2004		2123.7					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				10/27/2004		2120.4					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				3/9/2005		2128.7					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				10/5/2005		2110.2					KCWA

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RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				4/5/2006		2125.7					KCWA
26S/39E-13R04M	026S039E13R004M	35.6663438	-117.722843				10/25/2006		2114.5					KCWA
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				7/1/1946		2208.5					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				7/1/1953		2203.7					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				7/1/1965		2198.2					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				7/1/1975		2190.4					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				4/15/1985		2185.9					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				4/11/1996		2179.1					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/14/1996		2179.2					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/4/1997		2179.2					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/25/1997		2178.9					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/24/1998		2178.5					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/18/1998		2178.6					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/11/1999		2178.3					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/2/1999		2181.1					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/25/2000		2177.6					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/30/2000		2177.5					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/16/2000		2177.1					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				4/11/2001		2177.3					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/7/2001		2176.7					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/20/2002		2176.8					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				11/14/2002		2176.8					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				1/22/2003		2176.2					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				4/2/2003		2175.9					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/24/2004		2175.6					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				10/27/2004		2175.2					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				3/9/2005		2175.3					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				10/5/2005		2174.9					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				4/5/2006		2174.6					Berenbrock_Marti
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663				10/25/2006		2174.6					Berenbrock_Marti
26S/39E-15Q01M	026S039E15Q001M	35.6682879	-117.7672887				12/31/1920		2205.6					Berenbrock_Marti
26S/39E-17F01M	026S039E17F001M	35.67602306	-117.8042687				12/31/1920		2210.1					Berenbrock_Marti
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/17/1989		2183.0					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				4/1/1994		2176.0					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				12/22/1994		2176.0					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/22/1995		2176.3					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/14/1995		2173.9					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				2/20/1996		2174.8					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/14/1996		2172.8					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/4/1997		2173.7					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/25/1997		2171.2					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/24/1998		2172.9					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/6/1998		2170.9					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/12/1999		2172.3					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/3/1999		2169.7					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/30/2000		2171.4					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/16/2000		2168.8					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				4/11/2001		2170.3					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				11/7/2001		2168.2					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/20/2002		2168.7					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				1/22/2003		2165.2					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				4/2/2003		2166.0					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/24/2004		2166.5					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				10/27/2004		2164.4					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				3/9/2005		2166.4					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				10/5/2005		2163.5					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				4/5/2006		2165.1					KCWA
26S/39E-17G02M	026S039E17G002M	35.67634298	-117.804512				10/25/2006		2162.3					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/22/1996		2179.8					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/6/1997		2180.1					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/19/1997		2178.6					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/19/1998		2178.1					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/11/1998		2176.5					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/17/1999		2178.0					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				10/29/1999		2175.6					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/28/2000		2177.2					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/9/2000		2177.0					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				4/17/2001		2176.5					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/7/2001		2175.3					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/19/2002		2175.4					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				11/13/2002		2174.7					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				4/1/2003		2174.8					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				10/21/2003		2173.5					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/25/2004		2173.3					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				10/26/2004		2172.5					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				3/8/2005		2172.8					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				10/4/2005		2172.0					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				4/4/2006		2171.5					KCWA
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343				10/24/2006		2171.5					KCWA
26S/39E-19P01M	026S039E19P001M	35.6527322	-117.8206232							446.0	2500	7	33	
26S/39E-19P01M	026S039E19P001M	35.6527322	-117.8206232							446.0	1984	6.7	358	
26S/39E-19P01M	026S039E19P001M	35.6527322	-117.8206232							446.0	1875		296	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132				7/1/1953		2208.8					Berenbrock_Marti
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132				7/1/1965		2196.8					Berenbrock_Marti
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132				7/1/1975		2194.0					Berenbrock_Marti
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132				4/15/1985		2186.2					Berenbrock_Marti
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132							367.5	750	13	58	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132							367.5	295	2.7	105	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132							367.5	1670	18.98	84	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132							367.5	785	7.91	99	
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				7/10/1996		2178.0					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/15/1996		2177.9					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/6/1997		2178.2					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/19/1997		2177.0					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/18/1998		2177.4					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/10/1998		2176.1					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/17/1999		2176.4					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				10/28/1999		2174.8					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/26/2000		2172.7					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/28/2000		2175.7					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/9/2000		2175.3					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/26/2001		2170.9					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/22/2002		2171.1					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				11/15/2002		2170.3					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				4/3/2003		2169.9					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/25/2004		2169.7					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				10/28/2004		2170.3					KCWA
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				3/8/2005		2170.5					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-20C01M	026S039E20C001M	35.66328768	-117.8072897				10/3/2005		2169.8					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				3/18/1998		2176.1					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				10/28/1999		2173.7					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				3/28/2000		2174.7					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				4/17/2001		2173.9					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				11/9/2001		2173.6					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				3/22/2002		2173.9					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				4/3/2003		2171.8					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				10/23/2003		2171.0					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				3/25/2004		2170.6					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				10/28/2004		2169.4					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				3/8/2005		2170.1					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				10/3/2005		2170.1					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				4/4/2006		2168.6					KCWA
26S/39E-20C02M	026S039E20C002M	35.6632877	-117.8064563				10/24/2006		2168.1					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/15/1996		2177.9					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/10/1997		2177.9					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/19/1997		2177.3					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/18/1998		2176.7					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/3/1998		2176.1					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/17/1999		2176.2					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				10/28/1999		2175.7					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/28/2000		2175.4					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/9/2000		2193.1					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				4/12/2001		2190.5					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/8/2001		2191.0					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/19/2002		2188.0					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				11/15/2002		2187.5					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				4/1/2003		2184.8					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				10/23/2003		2184.4					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/26/2004		2171.3					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				10/28/2004		2181.8					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				3/8/2005		2179.4					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				10/4/2005		2179.2					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				4/3/2006		2176.4					KCWA
26S/39E-20N01M	026S039E20N001M	35.66273207	-117.8150677				10/24/2006		2176.3					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/15/1996		2210.0					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/10/1997		2206.6					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/19/1997		2205.9					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/18/1998		2204.1					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/3/1998		2201.7					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/17/1999		2198.6					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				10/28/1999		2198.1					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/28/2000		2194.4					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/9/2000		2175.4					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				4/12/2001		2175.0					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/8/2001		2174.5					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/19/2002		2174.4					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				11/15/2002		2173.4					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				4/1/2003		2172.8					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/26/2004		2176.2					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				10/28/2004		2171.3					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				3/8/2005		2171.1					KCWA
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				10/4/2005		2170.2					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-20N02M	026S039E20N002M	35.65579723	-117.702581				4/3/2006		2170.0					KCWA
26S/39E-23E01M	026S039E23E001M	35.65717714	-117.7583994				12/31/1920		2209.3					Berenbrock_Marti
26S/39E-24E01M	026S039E24E001M	35.6619407	-117.7374518				12/31/1920		2206.3					Berenbrock_Marti
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986				4/15/1985		2148.7					Berenbrock_Marti
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986				4/19/1996		2138.9					Berenbrock_Marti
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986				11/14/1996		2139.0					Berenbrock_Marti
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986							323.1	1000	12.4	28	
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986							323.1	350	12.4	28	
26S/39E-24K01M	026S039E24K001M	35.65578845	-117.7283986							323.1	255	12.4	28	
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763				7/1/1946		2198.7					Berenbrock_Marti
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763				7/1/1953		2192.0					Berenbrock_Marti
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763				7/1/1965		2179.0					Berenbrock_Marti
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763				7/1/1975		2153.6					Berenbrock_Marti
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763							361.0	800	30	28	
26S/39E-24Q01M	026S039E24Q001M	35.6530107	-117.7286763							361.0	505			
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873				7/1/1953		2184.7					Berenbrock_Marti
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873				7/1/1965		2180.4					Berenbrock_Marti
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873				7/1/1975		2152.5					Berenbrock_Marti
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873							480.0	900	22	41	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873								328	11.5	25	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873								340			
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873								370	25.94	12.6	
26S/39E-25D01M	026S039E25D001M	35.6485663	-117.7397877				12/31/1920		2212.9					Berenbrock_Marti
26S/39E-25D02M	026S039E25D002M	35.64856634	-117.7375654							350.0	180	4	45	
26S/39E-25D02M	026S039E25D002M	35.64856634	-117.7375654							350.0	355	10.5	34	
26S/39E-25E01M	026S039E25E001M	35.6468997	-117.7389543							387.0	230	5	46	
26S/39E-25E01M	026S039E25E001M	35.6468997	-117.7389543							387.0	320	7	46	
26S/39E-25E01M	026S039E25E001M	35.6468997	-117.7389543							387.0	180	4	38	
26S/39E-25N02M	026S039E25N002M	35.63939986	-117.7397876	2390	--		5/1/1973	234	2156					USGS
26S/39E-25Q01M	026S039E25Q001M	35.6374555	-117.7286761				12/31/1920		2208.8					Berenbrock_Marti
26S/39E-25Q01M	026S039E25Q001M	35.6374555	-117.7286761	2379	--		4/1/1953	185	2194					USGS
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				1/9/1990		2145.7					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				2/14/1990		2146.0					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				3/7/1990		2146.5					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				4/10/1990		2146.0					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				3/21/1997		2139.0					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				11/20/1997		2138.8					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				3/19/1998		2139.8					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				11/11/1998		2138.8					KCWA
26S/39E-26B01M	026S039E26B001M	35.63992121	-117.7349649				3/16/1999		2139.1					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				2/1/1993		2147.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				9/1/1993		2145.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				2/1/1994		2148.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				9/1/1994		2147.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				2/1/1995		2151.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				9/1/1995		2150.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				2/1/1996		2150.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				9/1/1996		2147.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				3/21/1997		2145.4					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				11/20/1997		2145.2					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				3/19/1998		2146.2					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				11/11/1998		2145.2					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				3/16/1999		2145.5					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				3/28/2000		2143.0					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				11/9/2000		2142.9					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				4/18/2001		2142.2					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				11/8/2001		2141.6					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				4/1/2003		2140.9					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				3/8/2005		2140.6					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				10/6/2005		2133.5					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				4/4/2006		2140.1					KCWA
26S/39E-26B02M	026S039E26B002M	35.64995514	-117.7503436				10/24/2006		2138.4					KCWA
26S/39E-26C01M	026S039E26C001M	35.6482885	-117.7503435				4/15/1985		2155.2					Berenbrock_Marti
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				4/16/1998		2170.5					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				11/13/1998		2169.2					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				3/17/1999		2170.2					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				11/1/1999		2170.6					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				3/26/2000		2168.5					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				3/28/2000		2169.2					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				11/14/2000		2166.6					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				4/16/2001		2166.7					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				3/21/2002		2165.9					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				11/15/2002		2165.0					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				10/24/2003		2161.7					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				10/28/2004		2160.1					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				3/10/2005		2161.7					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				10/6/2005		2155.8					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				4/4/2006		2160.0					KCWA
26S/39E-26P01M	026S039E26P001M	35.64031396	-117.7518353				10/24/2006		2156.0					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				11/13/1998		2168.9					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				3/17/1999		2169.9					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				11/1/1999		2170.4					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				3/28/2000		2168.5					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				11/14/2000		2166.5					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				4/16/2001		2166.8					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				11/8/2001		2164.6					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				3/21/2002		2165.7					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				11/15/2002		2163.6					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				4/3/2003		2163.3					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				10/24/2003		2162.0					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				3/25/2004		2162.3					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				10/28/2004		2159.7					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				3/10/2005		2161.3					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				10/6/2005		2156.4					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				4/4/2006		2160.0					KCWA
26S/39E-26P02M	026S039E26P002M	35.63836839	-117.7531874				10/24/2006		2157.6					KCWA
26S/39E-27D01M	026S039E27D001M	35.64944983	-117.7739				3/21/2002		2203.2					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/21/1997		2145.3					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				11/19/1997		2137.2					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/19/1998		2143.4					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				11/3/1998		2138.9					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/16/1999		2156.7					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				10/29/1999		2165.5					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/25/2000		2161.8					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/28/2000		2160.9					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				4/17/2001		2136.8					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				11/8/2001		2158.8					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/21/2002		2158.2					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				11/15/2002		2153.4					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				4/3/2003		2154.1					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				10/23/2003		2148.5					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/25/2004		2154.8					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				10/28/2004		2146.6					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				3/10/2005		2139.2					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				10/6/2005		2131.8					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				4/4/2006		2144.7					IWVWD
26S/39E-27D02M	026S039E27D002M	35.64856606	-117.7758998				10/24/2006		2141.8					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/21/1997		2160.4					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				11/17/1997		2154.0					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/19/1998		2158.2					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				11/3/1998		2159.8					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/16/1999		2159.5					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				10/29/1999		2166.6					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/25/2000		2163.0					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/28/2000		2162.2					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				4/17/2001		2151.0					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				11/8/2001		2158.7					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/21/2002		2158.5					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				11/15/2002		2154.1					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				4/3/2003		2156.6					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				10/23/2003		2156.9					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/25/2004		2156.1					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				10/28/2004		2147.9					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				3/10/2005		2154.3					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				10/6/2005		2148.5					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				4/4/2006		2147.7					IWVWD
26S/39E-27D03M	026S039E27D003M	35.64856606	-117.7758998				10/24/2006		2148.4					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/21/1997		2172.8					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				11/17/1997		2168.6					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/19/1998		2170.8					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				11/3/1998		2167.1					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/16/1999		2168.4					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				10/29/1999		2168.5					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/25/2000		2168.3					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/28/2000		2168.5					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				4/17/2001		2165.4					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				11/8/2001		2163.9					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/21/2002		2164.9					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				11/15/2002		2160.1					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				4/3/2003		2162.6					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				10/23/2003		2160.5					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/25/2004		2162.0					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				10/28/2004		2156.9					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				3/10/2005		2160.6					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				10/6/2005		2154.6					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				4/4/2006		2156.8					IWVWD
26S/39E-27D04M	026S039E27D004M	35.64856606	-117.7758998				10/24/2006		2155.2					IWVWD
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				2/1/1993		2178.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				9/1/1993		2179.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				2/1/1994		2182.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				9/1/1994		2172.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				2/1/1995		2179.6					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				9/1/1995		2178.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				2/1/1996		2178.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				9/1/1996		2176.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/21/1997		2174.7					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				11/20/1997		2173.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/19/1998		2173.8					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				11/12/1998		2172.5					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/16/1999		2172.7					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				11/1/1999		2171.2					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/28/2000		2166.8					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				11/9/2000		2166.4					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				4/12/2001		2166.4					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/19/2002		2169.6					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				11/15/2002		2168.9					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/22/2004		2169.4					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				10/28/2004		2165.4					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				3/10/2005		2166.0					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				4/4/2006		2165.5					KCWA
26S/39E-28B01M	026S039E28B001M	35.65099773	-117.7830465				10/24/2006		2164.4					KCWA
26S/39E-28B06M	026S039E28B006M	35.642455	-117.7825665				4/15/1985		2178.5					Berenbrock_Marti
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				2/1/1993		2181.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				9/1/1993		2180.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				2/1/1994		2179.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				9/1/1994		2178.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				2/1/1995		2180.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				9/1/1995		2178.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				2/1/1996		2179.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				9/1/1996		2176.9					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				4/11/1997		2175.4					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/20/1997		2174.0					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/19/1998		2173.8					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/9/1998		2173.1					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/16/1999		2174.0					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/1/1999		2172.3					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/28/2000		2172.3					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/15/2000		2171.3					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				4/18/2001		2171.2					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/8/2001		2170.4					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/19/2002		2170.3					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				11/15/2002		2170.3					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				4/3/2003		2169.2					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				10/23/2003		2167.8					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/25/2004		2168.0					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				10/28/2004		2167.1					KCWA
26S/39E-28C01M	026S039E28C001M	35.6510659	-117.7875668				3/10/2005		2167.0					KCWA
26S/39E-29G01M	026S039E29G001M	35.64703436	-117.7995339				12/31/1920		2204.0					Berenbrock_Marti
26S/39E-29J01M	026S039E29J001M	35.6416216	-117.7945113	2440	272		10/1/1962	251	2189					USGS
26S/39E-30C01M	026S039E30C001M	35.64856565	-117.8214565							340.0	350	10	35	
26S/39E-30C01M	026S039E30C001M	35.64856565	-117.8214565							340.0	126	2.3	55	
26S/39E-30F01M	026S039E30F001M	35.64745456	-117.8214565				4/15/1985		2187.9					Berenbrock_Marti
26S/39E-30F01M	026S039E30F001M	35.64745456	-117.8214565							619.0	2200	27	81	
26S/39E-30F01M	026S039E30F001M	35.64745456	-117.8214565							619.0	1875			
26S/39E-30F01M	026S039E30F001M	35.64745456	-117.8214565							619.0	2000			
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/21/1989		2184.8					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/8/1989		2184.8					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				1/8/1990		2185.3					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				2/13/1990		2185.3					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/8/1990		2185.1					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				4/9/1990		2183.9					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				5/10/1990		2183.3					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/18/1993		2184.6					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/30/1994		2180.2					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				12/9/1994		2177.9					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/24/1995		2177.6					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/16/1995		2177.1					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				2/20/1996		2177.1					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/11/1996		2175.9					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/6/1997		2176.9					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/19/1997		2175.7					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/17/1998		2174.0					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/3/1998		2173.1					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/17/1999		2173.5					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				10/28/1999		2172.9					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/28/2000		2172.8					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/15/2000		2171.8					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				4/18/2001		2171.8					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				11/26/2001		2170.3					KCWA
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785				3/19/2002		2170.6					KCWA
26S/39E-34A01M	026S039E34A001M	35.6338443	-117.759788	2440	--		4/1/1973	245	2195					USGS
26S/39E-34C01M	026S039E34C001M	35.63634416	-117.7683994	2435	--		4/1/1973	239	2196					USGS
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				2/1/1993		2177.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				9/1/1993		2181.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				2/1/1994		2181.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				9/1/1994		2177.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				2/1/1995		2179.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				9/1/1995		2178.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				2/1/1996		2179.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				9/1/1996		2176.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/20/1997		2173.0					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/19/1998		2172.3					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/11/1998		2171.6					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/16/1999		2172.1					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/1/1999		2170.8					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/28/2000		2171.2					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/15/2000		2169.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				4/18/2001		2169.3					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/8/2001		2168.0					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/21/2002		2168.5					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				11/15/2002		2167.4					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				4/3/2003		2166.8					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				10/23/2003		2166.6					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/25/2004		2165.6					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				10/28/2004		2165.0					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				3/10/2005		2164.5					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				10/6/2005		2161.6					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				4/4/2006		2161.8					KCWA
26S/39E-34D01M	026S039E34D001M	35.6365459	-117.7740182				10/24/2006		2162.4					KCWA
26S/39E-34G01M	026S039E34G001M	35.63078875	-117.7658993	2460	340		4/1/1973	265	2195					USGS

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/39E-34R01M	026S039E34R001M	35.6255111	-117.7606213	2460	340		4/1/1973	267	2193					USGS
26S/39E-35C01M	026S039E35C001M	35.63384437	-117.7514545	2410	320		4/1/1973	217	2193					USGS
26S/39E-35E01M	026S039E35E001M	35.63162214	-117.7578435	2440	350		4/1/1973	258	2182					USGS
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				4/16/1998		2171.3					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				11/13/1998		2169.9					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				3/17/1999		2170.1					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				11/1/1999		2168.9					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				3/28/2000		2169.0					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				11/14/2000		2166.8					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				11/8/2001		2165.5					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				3/21/2002		2166.2					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				11/15/2002		2163.9					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				4/3/2003		2164.7					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				3/25/2004		2163.1					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				10/28/2004		2160.4					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				3/10/2005		2161.9					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				10/6/2005		2159.0					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				4/4/2006		2160.6					KCWA
26S/39E-35G01M	026S039E35G001M	35.6336972	-117.7490274				10/24/2006		2158.9					KCWA
26S/39E-35M01M	026S039E35M001M	35.62856665	-117.7575657	2450	--		4/1/1973	251	2199					USGS
26S/39E-36D01M	026S039E36D001M	35.63662215	-117.7386764	2395	--		5/1/1973	234	2161					USGS
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295				4/15/1985		2157.6					Berenbrock_Marti
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295							197.5	35	27		
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183				7/1/1953		2155.0					Berenbrock_Marti
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183				7/1/1965		2157.0					Berenbrock_Marti
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183				7/1/1975		2157.0					Berenbrock_Marti
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183				4/15/1985		2159.0					Berenbrock_Marti
26S/40E-01P01M	026S040E01P001M	35.69831695	-117.6263414				12/31/1920		2162.1					Berenbrock_Marti
26S/40E-01Q01M	026S040E01Q001M	35.69828797	-117.6231185				4/15/1985		2158.8					Berenbrock_Marti
26S/40E-01Q01M	026S040E01Q001M	35.69828797	-117.6231185				3/15/1989		2159.8					Berenbrock_Marti
26S/40E-01Q01M	026S040E01Q001M	35.69828797	-117.6231185				3/23/1995		2161.4					Berenbrock_Marti
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852				7/1/1965		2155.6					Berenbrock_Marti
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852				7/1/1975		2155.2					Berenbrock_Marti
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852				4/15/1985		2155.6					Berenbrock_Marti
26S/40E-03N01M	026S040E03N001M	35.69810004	-117.6667244				12/31/1920		2171.5					Berenbrock_Marti
26S/40E-04E01M	026S040E04E001M	35.70517536	-117.6845781				12/31/1920		2170.5					Berenbrock_Marti
26S/40E-04N01M	026S040E04N001M	35.69800131	-117.6843169				12/31/1920		2177.0					Berenbrock_Marti
26S/40E-04Q01M	026S040E04Q001M	35.6974544	-117.675342				3/15/1989		2174.4					KCWA
26S/40E-04Q01M	026S040E04Q001M	35.6974544	-117.675342				3/31/1994		2176.1					KCWA
26S/40E-05P01M	026S040E05P001M	35.69634326	-117.6956204				4/15/1985		2176.9					Berenbrock_Marti
26S/40E-05P01M	026S040E05P001M	35.69634326	-117.6956204							89.3	247			
26S/40E-05Q01M	026S040E05Q001M	35.69794983	-117.693313				12/31/1920		2173.3					Berenbrock_Marti
26S/40E-06E01M	026S040E06E001M	35.70300966	-117.7225657				12/31/1920		2192.8					Berenbrock_Marti
26S/40E-06E01M	026S040E06E001M	35.70300966	-117.7225657				7/1/1965		2190.2					Berenbrock_Marti
26S/40E-07E01M	026S040E07E001M	35.69061861	-117.7198369				12/31/1920		2196.1					Berenbrock_Marti
26S/40E-08A01M	026S040E08A001M	35.69422327	-117.6890826				12/31/1920		2174.0					Berenbrock_Marti
26S/40E-08Q01M	026S040E08Q001M	35.68343639	-117.6931874				12/31/1920		2185.7					Berenbrock_Marti
26S/40E-09F01M	026S040E09F001M	35.69085104	-117.6798579				12/31/1920		2184.0					Berenbrock_Marti
26S/40E-09G01M	026S040E09G001M	35.69087579	-117.6754602				12/31/1920		2177.5					Berenbrock_Marti
26S/40E-10E01M	026S040E10E001M	35.69092482	-117.6666647				12/31/1920		2175.2					Berenbrock_Marti
26S/40E-10F01M	026S040E10F001M	35.6902324	-117.661175				7/1/1953		2169.5					Berenbrock_Marti
26S/40E-10F01M	026S040E10F001M	35.6902324	-117.661175				7/1/1965		2170.7					Berenbrock_Marti
26S/40E-10F01M	026S040E10F001M	35.6902324	-117.661175				7/1/1975		2172.0					Berenbrock_Marti
26S/40E-10F01M	026S040E10F001M	35.6902324	-117.661175				4/15/1985		2172.6					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-10N01M	026S040E10N001M	35.68189925	-117.668675				12/31/1920		2173.1					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				7/1/1953		2169.7					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				7/1/1965		2170.5					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				7/1/1975		2170.0					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				4/15/1985		2171.3					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				3/14/1989		2175.7					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				3/31/1994		2175.1					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				12/6/1994		2175.1					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				11/14/1995		2174.4					Berenbrock_Marti
26S/40E-11J01M	026S040E11J001M	35.6855104	-117.636452				2/21/1996		2175.0					Berenbrock_Marti
26S/40E-11N01M	026S040E11N001M	35.68368371	-117.6488144				12/31/1920		2172.0					Berenbrock_Marti
26S/40E-12A01M	026S040E12A001M	35.692177	-117.617007				4/15/1985		2164.8					Berenbrock_Marti
26S/40E-12G01M	026S040E12G001M	35.6902326	-117.6217294				7/1/1965		2162.6					Berenbrock_Marti
26S/40E-12G01M	026S040E12G001M	35.6902326	-117.6217294				7/1/1975		2161.6					Berenbrock_Marti
26S/40E-12G01M	026S040E12G001M	35.6902326	-117.6217294				4/15/1985		2164.7					Berenbrock_Marti
26S/40E-12Q01M	026S040E12Q001M	35.68356608	-117.6236738				4/15/1985		2175.1					Berenbrock_Marti
26S/40E-12Q01M	026S040E12Q001M	35.68356608	-117.6236738				3/31/1994		2177.1					Berenbrock_Marti
26S/40E-12Q01M	026S040E12Q001M	35.68356608	-117.6236738				12/6/1994		2176.6					Berenbrock_Marti
26S/40E-12Q01M	026S040E12Q001M	35.68356608	-117.6236738				3/22/1995		2177.9					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				4/15/1985		2181.4					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/14/1989		2185.2					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/31/1994		2184.1					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				12/6/1994		2183.9					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/23/1995		2184.1					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/14/1995		2183.9					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				2/21/1996		2184.0					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/14/1996		2183.2					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/4/1997		2183.3					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/24/1997		2182.9					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/24/1998		2182.8					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/6/1998		2182.6					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/10/1999		2182.5					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/2/1999		2182.4					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/24/2000		2182.4					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/31/2000		2182.3					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/17/2000		2182.1					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				4/10/2001		2182.4					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/9/2001		2182.4					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/20/2002		2182.6					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				11/14/2002		2182.3					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				4/2/2003		2181.6					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				10/22/2003		2180.9					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/24/2004		2182.5					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				3/9/2005		2182.7					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				10/5/2005		2182.8					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				4/5/2006		2182.5					Berenbrock_Marti
26S/40E-12R01M	026S040E12R001M	35.682455	-117.6175626				10/25/2006		2182.7					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				4/15/1985		2185.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/31/1994		2185.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				12/6/1994		2185.1					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/25/1995		2185.8					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/14/1995		2185.1					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				2/21/1996		2185.6					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/14/1996		2184.5					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/4/1997		2185.0					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/24/1997		2184.6					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/6/1998		2184.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/10/1999		2184.5					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/2/1999		2183.8					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/17/2000		2183.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				4/10/2001		2184.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/9/2001		2183.7					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/20/2002		2184.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				11/14/2002		2183.7					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				4/2/2003		2184.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				10/22/2003		2183.8					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/24/2004		2184.3					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				3/9/2005		2185.8					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				10/5/2005		2184.2					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				4/5/2006		2184.7					Berenbrock_Marti
26S/40E-13C01M	026S040E13C001M	35.67689956	-117.6264516				10/25/2006		2184.0					Berenbrock_Marti
26S/40E-13M01M	026S040E13M001M	35.6693997	-117.6331184				4/15/1985		2189.1					Berenbrock_Marti
26S/40E-13M01M	026S040E13M001M	35.6693997	-117.6331184				3/14/1989		2193.0					Berenbrock_Marti
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				4/15/1985		2185.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/15/1989		2190.4					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/31/1994		2189.5					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				12/6/1994		2187.6					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/23/1995		2190.4					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/14/1995		2187.0					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				2/21/1996		2190.0					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/14/1996		2186.6					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/4/1997		2189.5					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/24/1997		2187.7					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/6/1998		2186.0					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/10/1999		2189.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/2/1999		2187.8					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/24/2000		2189.4					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/31/2000		2191.5					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				4/10/2001		2192.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/9/2001		2184.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/20/2002		2191.4					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				11/14/2002		2184.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				4/2/2003		2185.7					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				10/22/2003		2184.3					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/24/2004		2186.1					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				10/27/2004		2184.3					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				3/8/2005		2187.8					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				10/5/2005		2184.5					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				4/5/2006		2185.9					KCWA
26S/40E-14B01M	026S040E14B001M	35.677455	-117.6420076				10/25/2006		2184.4					KCWA
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				4/15/1985		2193.2					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/15/1989		2196.6					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/31/1993		2198.3					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				12/6/1994		2196.7					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/23/1995		2199.0					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/14/1995		2192.5					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				2/21/1996		2197.6					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/14/1996		2192.1					Berenbrock_Marti

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FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/4/1997		2196.1					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/24/1997		2192.5					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/24/1998		2197.7					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/6/1998		2191.5					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/10/1999		2194.3					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/2/1999		2191.1					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/31/2000		2192.4					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/17/2000		2189.6					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				4/10/2001		2195.4					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/9/2001		2189.9					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/20/2002		2195.4					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				11/14/2002		2192.1					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				4/2/2003		2197.6					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				10/22/2003		2190.6					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/24/2004		2197.5					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				10/27/2004		2190.4					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				3/9/2005		2197.7					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				10/5/2005		2191.1					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				4/5/2006		2196.4					Berenbrock_Marti
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965				10/25/2006		2192.2					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				12/31/1920		2174.7					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				7/1/1946		2172.6					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				7/1/1953		2174.6					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				7/1/1965		2177.3					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				7/1/1975		2178.2					Berenbrock_Marti
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083				4/15/1985		2179.7					Berenbrock_Marti
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305				4/15/1985		2181.1					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				12/31/1920		2183.6					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				7/1/1946		2201.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				7/1/1953		2194.0					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				7/1/1965		2186.3					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				7/1/1975		2169.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				4/15/1985		2184.2					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				4/1/1994		2187.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				12/6/1994		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/23/1995		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/14/1995		2187.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				2/21/1996		2187.6					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/13/1996		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				12/17/1996		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/4/1997		2187.6					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/24/1997		2188.1					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/24/1998		2188.0					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/6/1998		2187.8					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/11/1999		2187.8					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/2/1999		2187.3					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/24/2000		2187.2					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/31/2000		2187.2					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/17/2000		2187.2					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				4/10/2001		2187.6					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/9/2001		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/20/2002		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				11/14/2002		2187.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				4/2/2003		2187.5					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				10/22/2003		2187.6					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/24/2004		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				10/27/2004		2187.7					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				3/9/2005		2187.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				10/5/2005		2187.4					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				4/5/2006		2187.5					Berenbrock_Marti
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304				10/25/2006		2187.4					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				4/15/1985		2180.9					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/15/1989		2183.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				4/1/1994		2184.4					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				12/6/1994		2183.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/23/1995		2184.7					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/14/1995		2184.6					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				2/21/1996		2185.0					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/13/1996		2184.9					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				12/17/1996		2184.9					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/4/1997		2184.9					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/24/1997		2185.2					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/24/1998		2185.3					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/6/1998		2185.4					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/11/1999		2185.3					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/2/1999		2185.3					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/25/2000		2149.7					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/31/2000		2185.4					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/17/2000		2185.4					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				4/10/2001		2185.5					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/9/2001		2185.7					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/20/2002		2185.7					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				11/14/2002		2185.5					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				4/2/2003		2185.6					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				10/22/2003		2185.6					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/24/2004		2185.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				10/27/2004		2185.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				3/9/2005		2185.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				10/5/2005		2185.8					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				4/5/2006		2185.9					Berenbrock_Marti
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638				10/25/2006		2185.8					Berenbrock_Marti
26S/40E-16B01M	026S040E16B001M	35.67995101	-117.6751682				12/31/1920		2175.0					Berenbrock_Marti
26S/40E-17E01M	026S040E17E001M	35.67621025	-117.7019192				12/31/1920		2197.2					Berenbrock_Marti
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/7/1996		2182.8					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				11/14/1996		2182.6					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/4/1997		2178.8					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				11/25/1997		2178.9					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/24/1998		2179.0					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/11/1999		2178.7					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/25/2000		2182.2					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/31/2000		2178.6					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				11/16/2000		2182.0					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				4/10/2001		2182.0					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				11/7/2001		2181.9					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/20/2002		2182.0					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				11/14/2002		2181.7					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				4/2/2003		2181.7					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				10/22/2003		2181.6					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/24/2004		2181.5					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				10/27/2004		2181.4					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				3/9/2005		2181.4					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				10/5/2005		2181.3					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				4/5/2006		2181.3					KCWA
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422				10/25/2006		2181.1					KCWA
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				12/31/1920		2206.0					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				4/15/1985		2160.3					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/12/1996		2166.3					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				4/11/1996		2154.6					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/14/1996		2155.2					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				12/17/1996		2155.4					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/4/1997		2155.3					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/25/1997		2155.0					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/24/1998		2154.8					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/6/1998		2154.9					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/11/1999		2155.4					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/2/1999		2157.8					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/25/2000		2154.6					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/31/2000		2154.6					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/16/2000		2154.1					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				4/10/2001		2154.2					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/7/2001		2153.9					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/20/2002		2153.9					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				11/14/2002		2154.0					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				4/2/2003		2153.5					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				10/22/2003		2152.9					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/24/2004		2153.7					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				10/27/2004		2153.2					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				3/9/2005		2153.1					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				10/5/2005		2153.1					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				4/5/2006		2153.5					Berenbrock_Marti
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787				10/25/2006		2152.7					Berenbrock_Marti
26S/40E-18E01M	026S040E18E001M	35.6741214	-117.721732				12/31/1920		2201.0					Berenbrock_Marti
26S/40E-18E01M	026S040E18E001M	35.6741214	-117.721732				4/15/1985		2190.5					Berenbrock_Marti
26S/40E-18E02M	026S040E18E002M	35.67610523	-117.7197066				12/31/1920		2205.0					Berenbrock_Marti
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319				12/31/1920		2208.1					Berenbrock_Marti
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319				7/1/1946		2202.0					Berenbrock_Marti
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319				7/1/1953		2192.9					Berenbrock_Marti
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319				7/1/1965		2179.0					Berenbrock_Marti
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319				7/1/1975		2158.2					Berenbrock_Marti
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539				3/25/1993		2134.9					KCWA
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539				4/1/1994		2134.6					KCWA
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539							306.0	450	31.7	14	
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539							306.0	320			
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/17/1993		2133.4					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				4/1/1994		2133.7					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				12/22/1994		2134.9					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/22/1995		2133.7					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/14/1995		2132.9					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				2/20/1996		2133.8					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/14/1996		2132.0					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/4/1997		2133.2					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/25/1997		2133.4					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/24/1998		2133.9					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/6/1998		2133.5					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/11/1999		2133.3					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/2/1999		2134.2					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/30/2000		2133.1					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/13/2000		2132.3					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				4/10/2001		2132.1					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/7/2001		2130.1					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/20/2002		2131.1					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				11/14/2002		2129.6					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				4/2/2003		2131.2					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				10/22/2003		2130.9					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/24/2004		2131.4					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				10/27/2004		2128.8					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				3/9/2005		2130.0					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				10/5/2005		2127.7					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				4/5/2006		2128.6					KCWA
26S/40E-19N02M	026S040E19N002M	35.65380848	-117.720342				10/25/2006		2127.0					KCWA
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205				7/1/1946		2200.1					Berenbrock_Marti
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205				7/1/1953		2191.0					Berenbrock_Marti
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205				7/1/1965		2181.0					Berenbrock_Marti
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205				7/1/1975		2159.0					Berenbrock_Marti
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205				4/15/1985		2147.2					Berenbrock_Marti
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205							261.0	700	39	18	
26S/40E-19P01M	026S040E19P001M	35.652733	-117.7181205							261.0	230			
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				4/13/1993		2154.6					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/17/1993		2154.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/31/1994		2153.9					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				12/22/1994		2153.7					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/22/1995		2153.7					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/14/1995		2153.5					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				2/20/1996		2153.6					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/14/1996		2153.2					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				12/17/1996		2153.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/4/1997		2153.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/25/1997		2153.0					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/24/1998		2153.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/6/1998		2153.0					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/9/1999		2152.9					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/2/1999		2151.8					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/24/2000		2151.7					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/30/2000		2151.8					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/13/2000		2151.2					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				4/10/2001		2151.6					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/7/2001		2151.8					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/20/2002		2151.7					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				11/14/2002		2151.4					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				4/2/2003		2151.8					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				10/22/2003		2151.3					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/24/2004		2151.2					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				10/27/2004		2151.5					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				3/8/2005		2151.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				10/5/2005		2151.1					KCWA
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				4/5/2006		2151.2					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-20L01M	026S040E20L001M	35.65945045	-117.6981681				10/25/2006		2150.9					KCWA
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312				4/15/1985		2154.3					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				4/15/1985		2205.9					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/14/1989		2206.7					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/31/1994		2204.5					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				12/6/1994		2205.6					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/22/1995		2205.6					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/14/1995		2206.7					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				2/21/1996		2206.4					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/13/1996		2206.5					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/4/1997		2205.9					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/24/1997		2206.2					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/24/1998		2205.6					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/6/1998		2205.8					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/10/1999		2205.3					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/2/1999		2204.9					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/25/2000		2204.3					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/31/2000		2204.4					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				11/17/2000		2204.0					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				4/10/2001		2203.9					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				12/12/2003		2203.3					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/24/2004		2203.2					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				10/27/2004		2202.7					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				3/9/2005		2203.5					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				10/5/2005		2203.1					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				4/5/2006		2203.1					Berenbrock_Marti
26S/40E-22H01M	026S040E22H001M	35.661622	-117.6531188				10/25/2006		2202.4					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				4/15/1985		2206.7					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/14/1989		2206.6					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/31/1994		2204.4					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				12/6/1994		2205.7					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/22/1995		2205.6					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/14/1995		2206.7					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				2/21/1996		2206.5					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/13/1996		2206.5					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/4/1997		2205.9					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/24/1997		2206.2					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/24/1998		2205.6					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/6/1998		2182.0					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/10/1999		2205.4					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/2/1999		2204.9					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/31/2000		2204.4					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/17/2000		2204.1					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				4/10/2001		2203.9					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				11/9/2001		2203.7					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/20/2002		2203.9					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				4/2/2003		2203.8					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				10/22/2003		2203.2					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/24/2004		2203.3					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				10/27/2004		2202.9					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				3/9/2005		2203.8					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				10/5/2005		2203.2					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				4/5/2006		2203.4					Berenbrock_Marti
26S/40E-22H02M	026S040E22H002M	35.661622	-117.6531188				10/25/2006		2202.4					Berenbrock_Marti

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KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				4/15/1985		2206.3					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/14/1989		2206.0					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/31/1994		2203.8					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				12/6/1994		2204.9					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/22/1995		2204.9					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/14/1995		2206.0					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				2/21/1996		2205.8					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/13/1996		2205.8					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/4/1997		2205.3					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/24/1997		2205.5					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/24/1998		2204.9					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/6/1998		2205.1					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/10/1999		2204.7					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/2/1999		2204.2					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/31/2000		2203.7					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/17/2000		2203.3					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				4/10/2001		2203.2					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				11/9/2001		2202.9					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/20/2002		2203.1					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				4/2/2003		2203.1					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				10/22/2003		2202.4					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/24/2004		2202.6					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				10/27/2004		2202.2					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				3/9/2005		2203.0					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				10/5/2005		2202.5					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				4/5/2006		2202.6					Berenbrock_Marti
26S/40E-22H03M	026S040E22H003M	35.661622	-117.6531188				10/25/2006		2201.7					Berenbrock_Marti
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/14/1989		2172.7					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				12/6/1994		2168.1					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/22/1995		2168.0					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/14/1995		2167.2					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				2/21/1996		2168.0					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/14/1996		2166.5					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				12/17/1996		2167.0					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/4/1997		2166.6					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/24/1997		2166.0					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/23/1998		2166.8					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/9/1998		2165.5					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/12/1999		2166.3					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/2/1999		2166.1					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/30/2000		2166.2					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/13/2000		2164.4					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				4/10/2001		2165.4					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/9/2001		2165.4					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				11/14/2002		2163.7					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				4/2/2003		2167.4					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				10/22/2003		2164.2					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/24/2004		2164.3					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				10/27/2004		2164.4					KCWA
26S/40E-22N01M	026S040E22N001M	35.65356656	-117.6692303				3/8/2005		2164.6					KCWA
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				7/1/1965		2185.0					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				7/1/1975		2173.0					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				4/15/1985		2163.7					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/14/1989		2154.7					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/25/1993		2150.9					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/30/1994		2149.5					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				12/6/1994		2147.1					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/22/1995		2149.9					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/15/1995		2148.1					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				2/21/1996		2150.8					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/14/1996		2143.9					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				12/17/1996		2145.6					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/4/1997		2147.5					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/24/1997		2143.4					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/23/1998		2147.5					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/6/1998		2141.8					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/9/1999		2147.1					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/2/1999		2138.9					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/25/2000		2144.5					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/31/2000		2144.5					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/17/2000		2139.7					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				4/10/2001		2145.2					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/9/2001		2140.0					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				3/20/2002		2144.8					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				11/14/2002		2138.6					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412				4/2/2003		2142.6					Berenbrock_Marti
26S/40E-22P01M	026S040E22P001M	35.6521777	-117.6653412							850.0	190	246	0.8	
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				4/15/1985		2224.1					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/17/1993		2226.1					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/30/1994		2225.4					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				12/6/1994		2226.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/22/1995		2226.3					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				2/21/1996		2227.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/14/1996		2227.7					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				12/17/1996		2227.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/4/1997		2227.1					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/24/1997		2227.4					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/23/1998		2226.6					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/6/1998		2227.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/10/1999		2226.6					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/2/1999		2226.7					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/25/2000		2225.9					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/31/2000		2225.8					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/17/2000		2225.8					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				4/10/2001		2225.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/9/2001		2225.4					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/20/2002		2225.7					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				11/14/2002		2225.5					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				4/2/2003		2225.9					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				10/22/2003		2225.7					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/24/2004		2225.6					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				10/27/2004		2225.6					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				3/8/2005		2225.7					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				10/5/2005		2225.8					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				4/5/2006		2225.2					Berenbrock_Marti
26S/40E-22P02M	026S040E22P002M	35.6521777	-117.6620078				10/25/2006		2225.0					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				4/15/1985		2167.8					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/14/1989		2161.8					Berenbrock_Marti

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/25/1993		2157.5					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/31/1994		2155.9					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				12/6/1994		2154.0					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/22/1995		2155.0					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/15/1995		2153.2					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				2/21/1996		2154.6					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/14/1996		2151.1					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				12/17/1996		2151.9					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/4/1997		2152.8					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/24/1997		2150.5					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/23/1998		2152.5					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/6/1998		2150.3					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/10/1999		2151.8					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/2/1999		2149.2					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/25/2000		2150.9					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/31/2000		2150.8					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/17/2000		2147.8					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				4/10/2001		2150.7					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/9/2001		2146.7					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/20/2002		2150.1					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				11/14/2002		2147.7					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				10/22/2003		2145.6					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/24/2004		2148.3					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				10/27/2004		2145.4					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				3/9/2005		2148.0					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				10/5/2005		2145.9					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				4/5/2006		2147.4					Berenbrock_Marti
26S/40E-22P03M	026S040E22P003M	35.6532888	-117.6636746				10/25/2006		2145.2					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				4/15/1985		2222.1					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/14/1989		2189.6					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/31/1994		2190.4					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				12/6/1994		2183.2					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/22/1995		2183.8					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/15/1995		2184.5					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				2/21/1996		2184.0					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/14/1996		2182.5					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				12/17/1996		2182.9					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/4/1997		2182.3					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/24/1997		2181.3					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/23/1998		2182.1					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/6/1998		2180.8					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/10/1999		2181.5					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/2/1999		2181.0					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/25/2000		2180.8					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/31/2000		2180.8					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/17/2000		2179.6					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				4/10/2001		2182.4					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/9/2001		2180.3					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/20/2002		2180.6					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				11/14/2002		2181.0					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				10/22/2003		2179.1					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/24/2004		2179.8					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				10/27/2004		2179.6					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				3/9/2005		2180.1					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				10/5/2005		2184.6					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				4/5/2006		2182.0					Berenbrock_Marti
26S/40E-22P04M	026S040E22P004M	35.6532888	-117.6636746				10/25/2006		2181.0					Berenbrock_Marti
26S/40E-22R01M	026S040E22R001M	35.65462945	-117.6535747				12/31/1920		2193.6					Berenbrock_Marti
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073				3/14/1989		2190.0					KCWA
26S/40E-23A02M	026S040E23A002M	35.6632887	-117.6370073				3/14/1989		2191.3					KCWA
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674				4/15/1985		2188.4					Berenbrock_Marti
26S/40E-23B03M	026S040E23B003M	35.6652331	-117.638674				4/15/1985		2189.4					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				7/1/1953		2186.0					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				7/1/1965		2191.7					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				7/1/1975		2191.8					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				4/15/1985		2194.7					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/23/1995		2191.0					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				11/14/1995		2190.6					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				2/21/1996		2190.6					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/4/1997		2190.1					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/24/2000		2188.5					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/31/2000		2188.2					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				11/17/2000		2188.1					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				4/10/2001		2188.5					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/20/2002		2188.3					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				11/14/2002		2188.2					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				4/2/2003		2189.0					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				10/22/2003		2188.8					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				3/24/2004		2188.7					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				10/5/2005		2188.7					Berenbrock_Marti
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298				4/5/2006		2188.7					Berenbrock_Marti
26S/40E-23D01M	026S040E23D001M	35.66328865	-117.6497854				4/15/1985		2189.2					Berenbrock_Marti
26S/40E-23D02M	026S040E23D002M	35.66328865	-117.6497854				4/15/1985		2194.2					Berenbrock_Marti
26S/40E-23J01M	026S040E23J001M	35.65773328	-117.6378406				4/15/1985		2189.0					Berenbrock_Marti
26S/40E-23N01M	026S040E23N001M	35.65465538	-117.6487794				12/31/1920		2203.0					Berenbrock_Marti
26S/40E-24C01M	026S040E24C001M	35.6646776	-117.6278404				7/1/1953		2182.0					Berenbrock_Marti
26S/40E-24C01M	026S040E24C001M	35.6646776	-117.6278404				7/1/1965		2185.0					Berenbrock_Marti
26S/40E-24C01M	026S040E24C001M	35.6646776	-117.6278404				7/1/1975		2184.4					Berenbrock_Marti
26S/40E-24C01M	026S040E24C001M	35.6646776	-117.6278404				4/15/1985		2186.8					Berenbrock_Marti
26S/40E-24C01M	026S040E24C001M	35.6646776	-117.6278404				3/14/1989		2186.1					Berenbrock_Marti
26S/40E-24M01M	026S040E24M001M	35.65801109	-117.6297848				4/15/1985		2186.6					Berenbrock_Marti
26S/40E-24M01M	026S040E24M001M	35.65801109	-117.6297848				3/14/1989		2186.1					Berenbrock_Marti
26S/40E-25C02M	026S040E25C002M	35.64856687	-117.6286735				3/13/1989		2190.3					KCWA
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				4/15/1985		2187.4					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/13/1989		2192.3					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/25/1993		2188.9					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/17/1993		2188.7					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/30/1994		2188.2					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				12/6/1994		2188.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/23/1995		2187.9					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/14/1995		2188.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				2/20/1996		2188.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/13/1996		2187.8					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/3/1997		2187.7					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/24/1997		2187.3					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/23/1998		2186.9					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/6/1998		2186.6					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/10/1999		2186.4					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/2/1999		2186.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/24/2000		2186.0					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/31/2000		2185.9					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/17/2000		2185.3					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				4/10/2001		2185.5					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/9/2001		2185.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/20/2002		2185.2					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				11/14/2002		2184.6					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				4/2/2003		2184.7					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				10/22/2003		2184.3					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/24/2004		2184.1					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				10/27/2004		2183.8					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				3/9/2005		2183.7					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				10/5/2005		2183.5					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				4/5/2006		2183.3					Berenbrock_Marti
26S/40E-26F01M	026S040E26F001M	35.6474557	-117.6439517				10/25/2006		2182.9					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/30/1994		2206.1					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/5/1996		2205.7					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/14/1996		2205.2					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				12/17/1996		2205.0					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/3/1997		2204.7					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/24/1997		2204.8					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/23/1998		2203.5					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/6/1998		2203.3					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/10/1999		2203.0					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/2/1999		2203.5					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/31/2000		2202.0					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/17/2000		2200.6					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				4/10/2001		2200.3					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/9/2001		2200.1					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/20/2002		2199.4					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				11/14/2002		2198.7					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				4/2/2003		2198.8					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/24/2004		2199.0					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				10/27/2004		2199.1					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				3/9/2005		2199.1					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				10/5/2005		2199.7					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				4/5/2006		2200.0					Berenbrock_Marti
26S/40E-27D01M	026S040E27D001M	35.65051108	-117.6667302				10/25/2006		2199.9					Berenbrock_Marti
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/5/1996		2223.8					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/14/1996		2223.5					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				12/17/1996		2223.3					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/3/1997		2223.6					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/24/1997		2223.5					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/23/1998		2223.8					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/6/1998		2224.0					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/10/1999		2223.9					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/2/1999		2223.5					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/31/2000		2223.3					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/17/2000		2223.0					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				4/10/2001		2223.2					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/9/2001		2223.0					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/20/2002		2223.0					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				11/14/2002		2222.4					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				4/2/2003		2223.5					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/24/2004		2223.2					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				10/27/2004		2223.1					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				3/9/2005		2223.7					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				10/5/2005		2223.9					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				4/5/2006		2224.3					KCWA
26S/40E-27D02M	026S040E27D002M	35.6491222	-117.6667301				10/25/2006		2223.8					KCWA
26S/40E-27N01M	026S040E27N001M	35.64078907	-117.6689523	2290	260		5/1/1952	100	2190					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746	2,289.00	--		12/30/1948	98.3	2191					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/15/1952	101.16	2188					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/2/1953	103.68	2185					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/19/1953	104.15	2185					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/15/1954	101.52	2187					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/16/1954	100.98	2188					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/28/1954	109	2180					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/6/1955	104.21	2185					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/14/1955	106.66	2182					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/20/1956	105.37	2184					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/12/1956	112.33	2177					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/8/1957	105.1	2184					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/18/1957	109.91	2179					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/6/1958	105.64	2183					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/17/1958	110.32	2179					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/10/1959	102.35	2187					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/1/1960	105	2184					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/21/1960	104.71	2184					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				2/25/1960	106.11	2183					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				8/3/1960	113.36	2176					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/9/1960	106.46	2183					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/14/1961	116.7	2172					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/8/1961	107.31	2182					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				2/20/1962	105.54	2183					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/26/1962	128.85	2160					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/12/1963	107.74	2181					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/22/1963	109.48	2180					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/13/1964	109.56	2179					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/9/1964	114.81	2174					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/1/1965	110.58	2178					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/19/1965	110.55	2178					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/24/1966	114.3	2175					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/20/1966	111.21	2178					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/14/1967	109.43	2180					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/19/1968	113.67	2175					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/18/1969	115.07	2174					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/28/1971	114.28	2175					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				8/23/1972	117.95	2171					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/18/1972	111.88	2177					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/17/1973	116.18	2173					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/24/1974	115.73	2173					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/31/1976	115.9	2173					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/16/1977	120.1	2169					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				6/29/1978	125.45	2164					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/28/1978	117.88	2171					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				6/1/1979	118.75	2170					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/14/1979	117.52	2171					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				5/27/1980	114.52	2174					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/18/1981	116.32	2173					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				6/11/1982	120.96	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/15/1985	121.09	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/15/1985		2167.8					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/17/1985	120.8	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/23/1986	120.72	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/15/1986	121.09	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				6/25/1986	121.47	2168					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				9/26/1986	121.89	2167					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				5/13/1987	121.94	2167					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/19/1989	122.7	2166					USGS
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/8/1989		2153.9					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				1/8/1990		2167.5					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				2/14/1990		2167.6					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/6/1990		2167.7					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/10/1990		2166.5					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/17/1993		2164.8					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/16/1993		2163.4					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/29/1994		2164.0					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/6/1994		2163.1					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/23/1995		2163.1					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/15/1995		2162.5					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				2/19/1996		2163.3					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/15/1996		2161.9					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				12/17/1996		2163.4					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/3/1997		2163.0					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/26/1997		2163.0					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/23/1998		2162.7					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/3/1998		2161.2					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/15/1999		2162.5					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/29/1999		2160.9					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/31/2000		2161.7					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/10/2000		2160.4					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/10/2001		2161.1					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/6/2001		2158.9					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/20/2002		2160.6					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				11/18/2002		2160.7					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/4/2003		2160.5					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/23/2003		2158.9					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/26/2004		2160.1					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/27/2004		2158.1					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				3/11/2005		2160.2					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/7/2005		2159.2					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				4/3/2006		2160.0					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746				10/25/2006		2158.2					Berenbrock_Marti
26S/40E-28J01M	026S040E28J001M	35.6410668	-117.6711746								152			
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1985		2142.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				4/1/1986		2141.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				8/1/1986		2142.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1987		2142.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				8/1/1987		2140.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1988		2140.6					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1988		2138.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				4/1/1989		2137.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				8/1/1989		2136.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/1/1990		2135.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1990		2134.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1991		2135.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				8/1/1991		2135.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1992		2135.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1992		2128.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1993		2131.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1993		2128.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1994		2133.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1994		2128.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1995		2133.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1995		2129.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				2/1/1996		2133.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				9/1/1996		2129.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/12/1997		2130.5					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				11/13/1998		2129.7					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/15/1999		2131.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				10/29/1999		2126.7					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/25/2000		2129.7					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				11/15/2000		2128.6					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				4/18/2001		2130.3					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				11/14/2001		2129.1					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/22/2002		2129.5					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				11/18/2002		2125.3					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				4/4/2003		2125.8					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				10/24/2003		2127.0					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/26/2004		2127.7					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				10/29/2004		2127.5					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				3/11/2005		2129.1					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				10/7/2005		2127.1					KCWA
26S/40E-29M01M	026S040E29M001M	35.6424555	-117.7033977				4/6/2006		2126.4					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1985		2144.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/1/1986		2143.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				8/1/1986		2144.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1987		2143.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				8/1/1987		2140.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1988		2142.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1988		2140.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/1/1989		2139.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				8/1/1989		2138.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/1/1990		2137.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1990		2136.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1991		2136.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				8/1/1991		2136.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1992		2137.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1992		2135.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1993		2134.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1993		2132.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1994		2135.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1994		2131.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1995		2134.6					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1995		2132.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				2/1/1996		2136.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				9/1/1996		2131.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/12/1997		2132.1					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/20/1997		2131.4					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/20/1998		2132.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/12/1998		2131.4					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/15/1999		2130.5					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/1/1999		2133.7					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/3/2000		2130.9					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/15/2000		2130.2					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/18/2001		2131.4					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/14/2001		2130.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/22/2002		2131.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				11/18/2002		2131.6					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/4/2003		2129.8					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				10/24/2003		2129.0					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/26/2004		2129.5					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				10/29/2004		2129.3					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				3/11/2005		2130.7					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				10/7/2005		2128.5					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				4/6/2006		2130.0					KCWA
26S/40E-29M02M	026S040E29M002M	35.6424555	-117.7033977				10/25/2006		2129.0					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088	2335	300		6/1/1973	173	2162					USGS
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1985		2139.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/1/1986		2138.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				8/1/1986		2138.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1987		2139.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				8/1/1987		2135.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1988		2138.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1988		2133.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/1/1989		2133.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				8/1/1989		2131.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/1/1990		2131.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1990		2129.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1991		2131.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				8/1/1991		2132.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1992		2123.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1992		2127.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1993		2130.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1993		2127.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1994		2130.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1994		2125.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1995		2129.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1995		2125.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				2/1/1996		2129.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				9/1/1996		2125.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/11/1997		2126.0					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/20/1997		2125.1					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/13/1998		2124.5					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/15/1999		2126.7					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/1/1999		2126.3					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/25/2000		2022.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/3/2000		2123.4					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/15/2000		2122.5					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/13/2001		2125.7					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/13/2001		2124.5					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/22/2002		2125.5					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				11/19/2002		2123.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/4/2003		2123.6					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				10/23/2003		2121.3					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				10/29/2004		2122.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				3/11/2005		2124.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				10/7/2005		2120.2					KCWA
26S/40E-29N01M	026S040E29N001M	35.63912227	-117.7045088				4/6/2006		2120.9					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1985		2140.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/1/1986		2140.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				8/1/1986		2139.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1987		2141.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				8/1/1987		2136.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1988		2138.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1988		2135.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/1/1989		2134.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				8/1/1989		2132.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/1/1990		2131.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1990		2129.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1991		2132.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				8/1/1991		2131.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1992		2131.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1992		2130.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1993		2132.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1993		2128.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1994		2131.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1994		2126.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1995		2130.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1995		2126.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				2/1/1996		2130.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				9/1/1996		2125.7					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/12/1997		2126.8					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/20/1997		2126.5					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/19/1998		2127.8					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/12/1998		2125.5					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/15/1999		2128.2					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/1/1999		2126.8					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/3/2000		2124.6					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/15/2000		2123.9					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/13/2001		2126.9					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/13/2001		2124.5					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/22/2002		2126.6					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				11/18/2002		2124.0					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/4/2003		2125.6					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				10/23/2003		2122.2					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/26/2004		2124.0					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				10/29/2004		2123.8					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				3/11/2005		2125.8					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				10/7/2005		2121.9					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				4/6/2006		2122.3					KCWA
26S/40E-29P01M	026S040E29P001M	35.64131355	-117.6980102				10/26/2006		2122.0					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-30C02M	026S040E30C002M	35.65069215	-117.7150828				12/31/1920		2204.9					Berenbrock_Marti
26S/40E-30E01M	026S040E30E001M	35.64707599	-117.7198457				12/31/1920		2209.1					Berenbrock_Marti
26S/40E-30K02M	026S040E30K002M	35.64551097	-117.7131203				7/1/1975		2135.8					Berenbrock_Marti
26S/40E-30Q01M	026S040E30Q001M	35.6380111	-117.7136757	2353	209		8/1/1960	164	2189					USGS
26S/40E-30Q02M	026S040E30Q002M	35.63801115	-117.7100645	2345	280		6/1/1971	191	2154					USGS
26S/40E-30Q05M	026S040E30Q005M	35.6402333	-117.7108979	2345	--		6/1/1973	191	2154					USGS
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315	2374	210		5/1/1952	179	2195					USGS
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1985		2135.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/1/1986		2135.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				8/1/1986		2133.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1987		2135.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				8/1/1987		2130.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1988		2131.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1988		2127.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/1/1989		2128.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				8/1/1989		2125.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				3/1/1990		2125.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1990		2120.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1991		2123.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				8/1/1991		2121.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1992		2124.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1992		2118.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1993		2122.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1993		2119.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1994		2125.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1994		2120.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1995		2123.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1995		2120.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				2/1/1996		2121.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				9/1/1996		2117.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/11/1997		2120.2					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/20/1997		2119.1					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				3/19/1998		2121.0					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/13/1998		2119.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				3/15/1999		2122.2					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/1/1999		2118.6					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/3/2000		2118.5					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/17/2000		2118.3					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/12/2001		2118.8					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/13/2001		2117.2					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				11/18/2002		2115.5					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/3/2003		2116.3					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				10/23/2003		2112.5					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				10/28/2004		2113.8					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				3/10/2005		2116.0					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				10/6/2005		2111.4					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				4/5/2006		2114.4					KCWA
26S/40E-31D01M	026S040E31D001M	35.6346778	-117.7217315				10/25/2006		2112.5					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1985		2133.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				4/1/1986		2134.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				8/1/1986		2133.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1987		2136.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				8/1/1987		2130.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1988		2131.8					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1988		2128.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				4/1/1989		2128.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				8/1/1989		2125.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				3/1/1990		2125.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1990		2120.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1991		2123.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				8/1/1991		2122.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1992		2125.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				8/1/1992		2119.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1993		2122.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1993		2119.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1994		2124.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1994		2119.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1995		2123.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1995		2120.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				2/1/1996		2121.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				9/1/1996		2117.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				3/11/1997		2120.2					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				11/20/1997		2119.4					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				3/19/1998		2119.9					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				11/12/1998		2120.1					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				3/15/1999		2122.6					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				11/1/1999		2119.2					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				4/3/2000		2118.8					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				11/17/2000		2117.5					KCWA
26S/40E-31D02M	026S040E31D002M	35.63567165	-117.7201792				4/12/2001		2119.7					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1985		2136.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/1/1986		2136.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				8/1/1986		2136.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1987		2137.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				8/1/1987		2133.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1988		2134.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1988		2131.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/1/1989		2131.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				8/1/1989		2128.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/1/1990		2128.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1990		2124.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1991		2126.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				8/1/1991		2126.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1992		2127.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1992		2124.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1993		2124.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1993		2123.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1994		2126.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1994		2122.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1995		2125.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1995		2121.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				2/1/1996		2123.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				9/1/1996		2119.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/21/1997		2121.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				11/20/1997		2120.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/19/1998		2120.7					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				11/13/1998		2121.8					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/18/1999		2124.1					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/3/2000		2121.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				11/17/2000		2119.8					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/12/2001		2120.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				11/13/2001		2120.3					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/21/2002		2114.9					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				11/18/2002		2116.5					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/3/2003		2118.2					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				10/23/2003		2113.6					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				3/25/2004		2114.3					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				10/28/2004		2113.6					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				10/6/2005		2113.3					KCWA
26S/40E-31D03M	026S040E31D003M	35.63567165	-117.7201792				4/5/2006		2114.8					KCWA
26S/40E-31D04M	026S040E31D004M	35.6346778	-117.7217315	2375	300		5/1/1973	211	2164					USGS
26S/40E-31D05M	026S040E31D005M	35.6346778	-117.7217315	2377	247		5/1/1973	219	2158					USGS
26S/40E-31D06M	026S040E31D006M	35.6346778	-117.7217315	2374	--		5/1/1973	210	2164					USGS
26S/40E-31D08M	026S040E31D008M	35.63634446	-117.722287	2320	--		5/1/1973	209	2111					USGS
26S/40E-31D09M	026S040E31D009M	35.63634446	-117.722287	2378	--		5/1/1973	217	2161					USGS
26S/40E-31D10M	026S040E31D010M	35.63634446	-117.722287	2376	300		5/1/1973	211	2165					USGS
26S/40E-31D11M	026S040E31D011M	35.63634446	-117.722287	2378	270		5/1/1973	214	2164					USGS
26S/40E-31D12M	026S040E31D012M	35.63634446	-117.722287	2375	260		5/1/1973	211	2164					USGS
26S/40E-31D14M	026S040E31D014M	35.63634446	-117.722287	2375	--		5/1/1973	211	2164					USGS
26S/40E-31D15M	026S040E31D015M	35.63634446	-117.722287	2373	251		5/1/1973	212	2161					USGS
26S/40E-31E01M	026S040E31E001M	35.63023349	-117.722287	2380	303		5/1/1973	221	2159					USGS
26S/40E-31G03M	026S040E31G003M	35.63106685	-117.7128423	2360	300		5/1/1973	202	2158					USGS
26S/40E-31G04M	026S040E31G004M	35.6305113	-117.7111756	2365	310		5/1/1973	211	2154					USGS
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				2/1/1993		2116.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				9/1/1993		2115.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				2/1/1994		2117.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				9/1/1994		2113.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				2/1/1995		2117.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				9/1/1995		2116.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				2/1/1996		2116.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				9/1/1996		2113.0					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				3/12/1997		2112.4					KCWA
26S/40E-31J01M	026S040E31J001M	35.62849584	-117.7067852				11/30/1997		2111.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1985		2137.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/1/1986		2135.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				8/1/1986		2136.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1987		2136.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				8/1/1987		2133.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1988		2133.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1988		2131.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/1/1989		2130.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				8/1/1989		2129.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				3/1/1990		2126.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1990		2125.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1991		2125.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				8/1/1991		2125.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1992		2125.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1992		2121.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1993		2122.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1993		2121.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1994		2123.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1994		2118.9					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1995		2122.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1995		2120.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				2/1/1996		2122.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				9/1/1996		2118.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				3/11/1997		2118.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/20/1997		2117.7					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				3/24/1998		2119.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/12/1998		2118.0					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				3/15/1999		2120.5					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/2/1999		2118.5					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/3/2000		2118.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/15/2000		2114.4					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/18/2001		2116.5					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/13/2001		2113.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				11/18/2002		2114.0					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/3/2003		2114.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				10/23/2003		2111.9					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				10/28/2004		2112.3					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				3/10/2005		2113.4					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				10/6/2005		2109.0					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				4/6/2006		2111.4					KCWA
26S/40E-31K01M	026S040E31K001M	35.62846969	-117.7112282				10/26/2006		2110.6					KCWA
26S/40E-31R01M	026S040E31R001M	35.6238448	-117.7061753	2365	300		5/1/1973	209	2156					USGS
26S/40E-31R02M	026S040E31R002M	35.6257892	-117.7061754	2360	300		5/1/1973	204	2156					USGS
26S/40E-31R03M	026S040E31R003M	35.6257892	-117.7061754	2360	300		5/1/1973	203	2157					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644	2,341.00	279		4/30/1946	141.2	2200					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				5/1/1952	148	2193					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				5/21/1952	148.01	2193					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				7/14/1952	148.44	2193					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/8/1952	148.47	2193					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/8/1952	148.6	2192					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				2/17/1953	148.56	2192					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				4/2/1953	148.64	2192					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				6/23/1953	148.96	2192					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/19/1953	149.58	2191					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/16/1954	149.4	2192					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/28/1954	150.73	2190					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				4/6/1955	150.78	2190					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/12/1955	151.71	2189					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/12/1956	152.12	2189					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/18/1957	152.95	2188					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/17/1958	154.02	2187					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				8/3/1960	155.55	2185					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/7/1961	155.9	2185					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/24/1962	158.59	2182					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/12/1963	157.3	2184					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/22/1963	158.92	2182					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/13/1964	159.6	2181					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/8/1964	161.56	2179					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/31/1965	161.85	2179					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/19/1965	163.25	2178					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/20/1966	165.51	2175					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/14/1967	167.92	2173					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/19/1968	170.12	2171					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				9/18/1969	172.02	2169					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/12/1970	174.03	2167					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/28/1971	177	2164					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				8/24/1972	182.6	2158					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/17/1972	179.3	2162					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/17/1973	181.92	2159					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/24/1974	183.88	2157					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				10/24/1975	186.61	2154					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				12/30/1976	186.9	2154					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				12/16/1977	189.08	2152					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				12/6/1978	189.99	2151					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				12/13/1979	192.22	2149					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/17/1981	196.05	2145					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				4/15/1985		2139.9					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				4/23/1985	200.98	2140					USGS
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/15/1989		2124.0					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				11/8/1989		2120.0					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				1/9/1990		2122.3					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				2/14/1990		2121.6					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/6/1990		2122.0					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				4/10/1990		2120.2					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				5/11/1990		2119.6					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				6/7/1990		2117.8					Berenbrock_Marti
26S/40E-32D01M	026S040E32D001M	35.6355112	-117.7050644				3/18/1993		2119.9					Berenbrock_Marti
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1985		2140.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				4/1/1986		2138.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				8/1/1986		2138.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1987		2139.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				8/1/1987		2136.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1988		2139.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1988		2133.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				4/1/1989		2132.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				8/1/1989		2130.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				3/1/1990		2130.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1990		2128.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1991		2130.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				8/1/1991		2128.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1992		2127.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1992		2126.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1993		2129.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1993		2128.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1994		2130.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1994		2130.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1995		2129.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1995		2126.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				2/1/1996		2129.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				9/1/1996		2125.8					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				4/11/1997		2125.2					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/20/1997		2124.3					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				3/20/1998		2124.7					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/12/1998		2124.5					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/1/1999		2125.6					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				4/3/2000		2124.0					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/13/2000		2122.3					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				4/18/2001		2124.5					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/13/2001		2122.3					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				3/22/2002		2121.5					KCWA
26S/40E-32D02M	026S040E32D002M	35.63766033	-117.7024222				11/18/2002		2123.8					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087	2350	300		8/1/1960	164	2186	300.0	1720	--	--	USGS
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1985		2137.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/1/1986		2136.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				8/1/1986		2137.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1987		2138.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				8/1/1987		2135.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1988		2139.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1988		2125.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/1/1989		2133.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				8/1/1989		2132.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/1/1990		2130.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1990		2130.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1991		2130.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				8/1/1991		2129.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1992		2127.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1992		2125.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1993		2128.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1993		2123.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1994		2128.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1994		2125.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1995		2128.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1995		2126.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				2/1/1996		2127.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				9/1/1996		2126.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/21/1997		2124.8					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/20/1997		2122.7					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/20/1998		2123.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/12/1998		2121.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/15/1999		2124.7					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/2/1999		2119.4					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/3/2000		2113.8					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/13/2000		2116.9					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/13/2001		2115.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/13/2001		2117.2					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/21/2002		2116.5					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				11/18/2002		2116.9					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/4/2003		2118.4					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				10/23/2003		2115.6					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/26/2004		2116.2					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				10/29/2004		2115.8					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				3/11/2005		2121.7					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				10/7/2005		2116.9					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				4/6/2006		2113.5					KCWA
26S/40E-32E01M	026S040E32E001M	35.63245575	-117.7045087				10/26/2006		2114.2					KCWA
26S/40E-32E03M	026S040E32E003M	35.63051135	-117.7036754	2350	280		5/1/1973	196	2154					USGS
26S/40E-32E04M	026S040E32E004M	35.6310669	-117.701453	2345	300		5/1/1973	190	2155					USGS
26S/40E-32E05M	026S040E32E005M	35.63051135	-117.7036754	2350	265		5/1/1973	188	2162					USGS
26S/40E-32F01M	026S040E32F001M	35.63190024	-117.6981197	2335	240		5/1/1973	174	2161					USGS
26S/40E-32F01M	026S040E32F001M	35.63190024	-117.6981197				3/20/1998		2134.2					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1985		2142.5					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				4/1/1986		2140.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				8/1/1986		2141.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1987		2141.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				8/1/1987		2138.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1988		2139.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1988		2133.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				4/1/1989		2133.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				8/1/1989		2130.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/1/1990		2130.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1990		2127.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1991		2129.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				8/1/1991		2126.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1992		2129.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1992		2125.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1993		2127.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1993		2123.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1994		2128.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1994		2124.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1995		2129.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1995		2124.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				2/1/1996		2128.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				9/1/1996		2125.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/11/1997		2124.0					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/20/1997		2123.1					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/20/1998		2124.7					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/12/1998		2121.6					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/15/1999		2125.8					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/1/1999		2122.9					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				4/3/2000		2120.7					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/13/2000		2120.8					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/13/2001		2123.8					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/22/2002		2123.7					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				11/18/2002		2119.8					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				4/4/2003		2121.5					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				10/23/2003		2119.4					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/26/2004		2119.7					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				10/29/2004		2120.0					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				3/11/2005		2122.4					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				10/7/2005		2117.1					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				4/6/2006		2117.1					KCWA
26S/40E-32F02M	026S040E32F002M	35.63405877	-117.6979472				10/26/2006		2116.8					KCWA
26S/40E-32F03M	026S040E32F003M	35.6349557	-117.6986753	2,320	720		1/22/1986	183.02	2137					USGS
26S/40E-32F03M	026S040E32F003M	35.6349557	-117.6986753				9/21/1987	--	--					USGS
26S/40E-32F03M	026S040E32F003M	35.6349557	-117.6986753				1/11/1988	184.18	2136					USGS
26S/40E-32F03M	026S040E32F003M	35.6349557	-117.6986753				3/24/1989	208.87	2111					USGS
26S/40E-32F04M	026S040E32F004M	35.6349557	-117.6986753	2,320	330		1/22/1986	182.27	2138					USGS
26S/40E-32F04M	026S040E32F004M	35.6349557	-117.6986753				9/21/1987	--	--					USGS
26S/40E-32F04M	026S040E32F004M	35.6349557	-117.6986753				1/11/1988	185.84	2134					USGS
26S/40E-32F04M	026S040E32F004M	35.6349557	-117.6986753				3/24/1989	189.28	2131					USGS
26S/40E-32K01M	026S040E32K001M	35.62838889	-117.6961944	2,333.00	620		1/13/1978	177.03	2156					USGS
26S/40E-32K01M	026S040E32K001M	35.62838889	-117.6961944				9/21/1987	obstructed	--					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753	2,368.00	391		12/20/1950	191.11	2177					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				5/21/1952	177.29	2191					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				7/14/1952	181.2	2187					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/8/1952	177.64	2190					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/8/1952	177.74	2190					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				2/17/1953	177.82	2190					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				4/2/1953	177.92	2190					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				6/23/1953	178.17	2190					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/19/1953	178.58	2189					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				3/16/1954	179.52	2188					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/28/1954	179.44	2189					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				4/6/1955	179.91	2188					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/12/1955	180.72	2187					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/12/1956	181.55	2186					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/18/1957	182.47	2186					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/17/1958	177.3	2191					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				8/1/1960	185	2183					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				8/3/1960	185.16	2183					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				11/7/1961	189.86	2178					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/24/1962	193.87	2174					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				3/12/1963	190.64	2177					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/22/1963	197.75	2170					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				3/13/1964	194.06	2174					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/8/1964	197.6	2170					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				3/31/1965	191.26	2177					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				11/19/1965	192.7	2175					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/21/1966	194.25	2174					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				11/14/1967	199.96	2168					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				11/19/1968	203.05	2165					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				9/18/1969	205.79	2162					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/12/1970	208.18	2160					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/28/1971	211.22	2157					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/18/1972	213.51	2154					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/17/1973	215.73	2152					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/24/1974	218.69	2149					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				10/23/1975	223.34	2145					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				12/30/1976	225.98	2142					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753				12/16/1977	obstructed	--					USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753							400.0	1200			USGS
26S/40E-32N01M	026S040E32N001M	35.62467815	-117.7036753							391.0	1200			
26S/40E-32Q01M	026S040E32Q001M	35.6244004	-117.693675	2340	226		5/1/1973	178	2162					USGS
26S/40E-32R02M	026S040E32R002M	35.62412268	-117.6889527	2340	300		5/1/1973	173	2167					USGS
26S/40E-33A01M	026S040E33A001M	35.63384477	-117.6720079	2306	400		1/1/1960	125	2181	400.0	850	8	31	USGS
26S/40E-33A01M	026S040E33A001M	35.63384477	-117.6720079							400.0	250	--	--	USGS
26S/40E-33A02M	026S040E33A002M	35.63690026	-117.670619	2294	350		7/1/1960	118	2176					USGS
26S/40E-33L01M	026S040E33L001M	35.62940039	-117.6792302	2305	200		7/1/1960	119	2186					USGS
26S/40E-33N01M	026S040E33N001M	35.62532909	-117.7018736				12/31/1920		2220.0					Berenbrock_Marti
26S/40E-33P02M	026S040E33P002M	35.6232894	-117.6795079	2312	250		7/1/1960	139	2173					USGS
26S/40E-33P03M	026S040E33P003M	35.62356717	-117.6817302	2314	200		1/1/1960	139	2175		180			USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079	2300	304		8/30/1963	146	2154					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				6/15/1964	146.33	2154					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				7/8/1965	158.8	2141					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/1/1966	146	2154					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/27/1966	146	2154					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/13/1970	145.07	2155					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/22/1971	147.2	2153					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/28/1971	144.49	2156					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/19/1972	146.92	2153					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/24/1974	150.32	2150					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/23/1975	152.77	2147					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				12/30/1976	151.84	2148					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				12/16/1977	154.75	2145					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				12/7/1978	156.76	2143					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				12/13/1979	161.28	2139					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				11/19/1981	160.2	2140					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/22/1985	167.72	2132					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				4/1/1985	166.28	2134					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				4/15/1985		2133.7					IWVWD
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/22/1986	167.72	2132					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				4/15/1986	168.61	2131					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				6/25/1986	170.25	2130					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/26/1986	171.16	2129					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				5/14/1987	168.26	2132					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				5/28/1987	168.39	2132					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/21/1987	172.46	2128					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/11/1988	170.59	2129					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/10/1988	171.35	2129					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				1/17/1989	172.09	2128					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				3/23/1989	170.98	2129					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				10/5/1989	173.72	2126					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				3/23/1990	174.04	2126					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/29/1990	177.46	2123					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				3/26/1991	179.46	2121					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/24/1991	206.32	2094					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				4/17/1992	176.3	2124					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/29/1992	184.22	2116					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				4/7/1993	174.07	2126					USGS
26S/40E-33P04M	026S040E33P004M	35.62301164	-117.6795079				9/28/1993	180.29	2120					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965	2,287.00	162		5/22/1952	92.14	2195					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/2/1953	93.58	2193					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/19/1953	94.47	2193					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/15/1954	94.03	2193					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/16/1954	93.42	2194					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/27/1954	94.74	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/6/1955	94.59	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/6/1955	95.25	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/13/1955	96.19	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/19/1955	96.77	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/29/1955	97.27	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/30/1955	97.48	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/14/1955	97.19	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/16/1955	97.12	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/15/1955	97.06	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/17/1956	96.97	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/16/1956	97.44	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/20/1956	96.17	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/17/1956	96.09	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/16/1956	96.51	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/14/1956	96.89	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/17/1956	97.34	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/9/1956	97.41	2190					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/12/1956	97.67	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/11/1956	97.44	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/14/1956	96.79	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/19/1956	96.5	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/24/1957	95.69	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/19/1957	95.25	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/22/1957	95.28	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/2/1957	95.28	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/18/1957	95.72	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/19/1957	96.17	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/14/1957	96.68	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/18/1957	96.9	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/18/1957	96.54	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/21/1957	96.4	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/19/1957	96.01	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/5/1958	95.51	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/6/1958	95.24	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/8/1958	95.03	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/15/1958	95.16	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/18/1958	95.59	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/15/1958	96.11	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/18/1958	96.33	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/17/1958	96.85	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/10/1958	96.19	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/14/1959	95.82	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/11/1959	95.64	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/9/1959	95.43	2192					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/8/1959	95.55	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/6/1959	95.89	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/10/1959	96.36	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/9/1959	96.9	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/6/1959	97.42	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/16/1959	97.42	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/20/1959	97.22	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/19/1959	97	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/16/1959	96.74	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/20/1960	96.35	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/25/1960	96	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/30/1960	96.1	2191					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/4/1960	96.82	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/1/1960	97.22	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/1/1960	98	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/6/1960	97.73	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/26/1960	97.72	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/3/1960	97.78	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/5/1960	97.85	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/2/1960	97.77	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/9/1960	98.44	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/15/1960	97.23	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/10/1961	96.93	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/15/1961	96.72	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/14/1961	97.08	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/19/1961	97.34	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/22/1961	97.5	2190					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/26/1961	97.65	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/24/1961	97.86	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/22/1961	98	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/21/1961	97.94	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/26/1961	97.74	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/21/1961	97.51	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/19/1961	97.16	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				1/18/1962	96.84	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				2/20/1962	96.7	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/21/1962	96.52	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/24/1962	97.03	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/22/1962	97.35	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/19/1962	97.55	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				7/18/1962	97.71	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/20/1962	98.13	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/18/1962	98.37	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/22/1962	98.45	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/20/1962	98.21	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/13/1962	97.89	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/12/1963	97.65	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/22/1963	98.85	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/13/1964	98.46	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/8/1964	99.37	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/1/1965	98.7	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/19/1965	100.09	2187					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/20/1966	99.99	2187					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/14/1967	98.7	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/19/1968	97.94	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				9/18/1969	97.47	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/12/1970	97.27	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/28/1971	97.27	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/23/1972	97.07	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/17/1972	97.11	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/1/1973	97.07	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/7/1974	97	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/25/1974	97.16	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				3/25/1975	96.78	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				10/23/1975	97.23	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				8/19/1976	97.3	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/23/1976	97.48	2190					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/15/1977	98.99	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/29/1978	98.44	2189					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/30/1978	98.99	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/6/1979	99.49	2188					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/10/1979	100.15	2187					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				5/27/1980	100.54	2186					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/10/1980	101.14	2186					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				11/17/1981	102.1	2185					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				6/15/1982	102.9	2184					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				12/15/1982	103.21	2184					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/19/1984	104.23	2183					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965				4/1/1985	105.24	2182					USGS
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965							270.0	75	6.3	12	
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965							232.0	1020	21.9	47	

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-34N01M	026S040E34N001M	35.6246783	-117.6683965							232.0	1200			
26S/40E-34R01M	026S040E34R001M	35.62559991	-117.6537379				12/31/1920		2204.4					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/13/1989		2183.2					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/17/1993		2179.1					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/30/1994		2178.7					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				12/6/1994		2178.3					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/23/1995		2177.9					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/14/1995		2177.7					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				2/20/1996		2177.4					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/13/1996		2176.8					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/3/1997		2176.4					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/24/1997		2176.2					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/23/1998		2176.6					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/6/1998		2175.5					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/10/1999		2175.1					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/2/1999		2174.6					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/31/2000		2174.3					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/17/2000		2173.7					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				4/10/2001		2173.6					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/9/2001		2173.2					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/20/2002		2172.9					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				11/14/2002		2172.2					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				4/4/2003		2171.8					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				10/22/2003		2171.6					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/24/2004		2171.4					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				10/27/2004		2171.1					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				3/9/2005		2170.8					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				10/5/2005		2170.8					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				4/5/2006		2170.4					Berenbrock_Marti
26S/40E-35H01M	026S040E35H001M	35.63190054	-117.6375624				10/25/2006		2170.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/13/1989		2173.5					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				12/6/1994		2166.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/23/1995		2166.4					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/14/1995		2165.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				2/20/1996		2166.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/13/1996		2164.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/3/1997		2165.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/24/1997		2163.7					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/23/1998		2165.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/6/1998		2163.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/10/1999		2163.6					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/2/1999		2162.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/24/2000		2162.7					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/31/2000		2162.6					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/17/2000		2161.1					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				4/10/2001		2162.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/9/2001		2160.2					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/20/2002		2161.5					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				11/14/2002		2160.1					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				4/2/2003		2160.9					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				10/22/2003		2159.1					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/24/2004		2160.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				10/27/2004		2158.6					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				3/9/2005		2162.4					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				10/5/2005		2158.7					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				4/5/2006		2159.0					Berenbrock_Marti
26S/40E-35H02M	026S040E35H002M	35.63190054	-117.6375624				10/25/2006		2157.8					Berenbrock_Marti
26S/40E-35N01M	026S040E35N001M	35.62562583	-117.6489442				12/31/1920		2206.5					Berenbrock_Marti
26S/40E-35Q01M	026S040E35Q001M	35.62567391	-117.6399562				12/31/1920		2210.0					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				4/15/1985		2182.5					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/13/1989		2181.4					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/17/1993		2177.6					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/16/1993		2177.1					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/30/1994		2176.6					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				12/9/1994		2176.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/23/1995		2175.9					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/13/1995		2175.4					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				2/20/1996		2175.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/14/1996		2174.4					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/3/1997		2174.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/24/1997		2173.8					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/23/1998		2173.5					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/3/1998		2174.0					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/15/1999		2172.7					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				10/29/1999		2172.3					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/24/2000		2177.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/31/2000		2171.9					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/10/2000		2171.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				4/10/2001		2171.1					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/6/2001		2170.4					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/20/2002		2170.2					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				4/4/2002		2169.3					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/18/2002		2169.5					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				10/24/2003		2168.8					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				3/25/2004		2168.7					Berenbrock_Marti
26S/40E-35Q02M	026S040E35Q002M	35.6230118	-117.6414513				11/4/2004		2168.0					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				7/1/1965		2187.0					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				7/1/1975		2189.8					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				4/15/1985		2174.1					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/13/1989		2185.0					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/25/1993		2181.1					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/17/1993		2180.7					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/30/1994		2180.4					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				12/6/1994		2179.8					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/23/1995		2179.5					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/14/1995		2179.8					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				2/20/1996		2178.8					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/13/1996		2178.3					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/3/1997		2178.1					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/24/1997		2177.8					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/23/1998		2179.6					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/6/1998		2177.2					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/10/1999		2176.7					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/2/1999		2176.2					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/31/2000		2176.1					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/17/2000		2175.5					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				4/10/2001		2174.9					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/9/2001		2174.5					Berenbrock_Marti

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FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/20/2002		2175.2					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				4/2/2002		2174.2					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				11/14/2002		2173.6					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				10/22/2003		2173.3					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/24/2004		2172.7					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				10/27/2004		2172.6					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				3/9/2005		2172.6					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				10/5/2005		2172.1					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				4/5/2006		2171.9					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064				10/25/2006		2171.5					Berenbrock_Marti
26S/40E-36A01M	026S040E36A001M	35.63356726	-117.6195064							270.0	75	6.3	12	
26S/41E-07D01M	026S041E07D001M	35.698288	-117.6111737				7/1/1965		2159.0					Berenbrock_Marti
26S/41E-07D01M	026S041E07D001M	35.698288	-117.6111737				7/1/1975		2157.8					Berenbrock_Marti
26S/41E-07D01M	026S041E07D001M	35.698288	-117.6111737				4/15/1985		2158.7					Berenbrock_Marti
26S/41E-07E01M	026S041E07E001M	35.694677	-117.6100625				4/15/1985		2161.7					Berenbrock_Marti
26S/41E-07G01M	026S041E07G001M	35.69634366	-117.6011734				4/15/1985		2156.8					Berenbrock_Marti
26S/41E-07N01M	026S041E07N001M	35.68843426	-117.6136704				12/31/1920		2166.7					Berenbrock_Marti
27S/38E-01F01M	027S038E01F001M	35.61788166	-117.8434452				3/21/1989		2199.2					Berenbrock_Marti
27S/38E-01F01M	027S038E01F001M	35.61788166	-117.8434452				2/13/1990		2198.7					Berenbrock_Marti
27S/38E-01F01M	027S038E01F001M	35.61788166	-117.8434452				3/29/1994		2195.1					Berenbrock_Marti
27S/38E-01F01M	027S038E01F001M	35.61788166	-117.8434452				3/23/1995		2194.0					Berenbrock_Marti
27S/38E-01F01M	027S038E01F001M	35.61788166	-117.8434452				11/8/1995		2198.1					Berenbrock_Marti
27S/38E-01G01M	027S038E01G001M	35.61745505	-117.8386788	2555	400		4/11/1985	343.86	2211					USGS
27S/38E-01G01M	027S038E01G001M	35.61745505	-117.8386788				4/15/1985		2211.1					Berenbrock_Marti
27S/38E-01M01M	027S038E01M001M	35.61301064	-117.8450677				12/31/1920		2345.0					Berenbrock_Marti
27S/38E-01M01M	027S038E01M001M	35.61301064	-117.8450677				7/1/1946		2345.5					Berenbrock_Marti
27S/38E-01M01M	027S038E01M001M	35.61301064	-117.8450677				7/1/1953		2346.6					Berenbrock_Marti
27S/38E-01M01M	027S038E01M001M	35.61301064	-117.8450677				7/1/1965		2346.0					Berenbrock_Marti
27S/38E-01M01M	027S038E01M001M	35.61301064	-117.8450677				7/1/1975		2344.3					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				4/9/1991		2381.7					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				4/29/1991		2381.8					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				6/11/1991		2381.8					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				6/24/1991		2381.8					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				8/22/1991		2381.4					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				10/22/1991		2381.7					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				12/12/1991		2381.6					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				1/28/1992		2381.6					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				2/15/1992		2382.0					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				5/18/1992		2381.6					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				9/10/1992		2381.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				1/5/1993		2381.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				4/7/1994		2380.9					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				12/7/1994		2380.6					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/21/1995		2380.2					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/15/1995		2380.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				2/19/1996		2380.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/12/1996		2380.2					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/6/1997		2380.4					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/21/1997		2380.3					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/17/1998		2380.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/9/1998		2380.0					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/17/1999		2379.9					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				10/27/1999		2379.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/27/2000		2379.7					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/7/2000		2378.9					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				4/17/2001		2379.5					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/5/2001		2378.2					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/18/2002		2378.1					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/12/2002		2379.0					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/31/2003		2378.6					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				11/21/2003		2378.0					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/22/2004		2377.8					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				10/25/2004		2378.2					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				3/7/2005		2378.4					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				10/3/2005		2374.9					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				4/3/2006		2375.0					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				10/23/2006		2376.8					Berenbrock_Marti
27S/38E-02C01M	027S038E02C001M	35.62273254	-117.8584016				12/20/2006		2375.6					Berenbrock_Marti
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				4/9/1991		2386.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				4/29/1991		2386.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				6/11/1991		2386.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				6/24/1991		2386.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				8/22/1991		2386.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				10/22/1991		2386.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				12/12/1991		2386.1					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				1/28/1992		2386.1					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				2/15/1992		2386.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				5/18/1992		2386.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				9/10/1992		2386.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				1/5/1993		2386.1					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				4/7/1994		2385.7					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				12/7/1994		2384.7					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/21/1995		2384.7					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/15/1995		2385.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				2/19/1996		2384.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/12/1996		2384.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/6/1997		2384.4					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/21/1997		2384.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/17/1998		2384.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/9/1998		2383.7					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/17/1999		2384.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				10/27/1999		2383.7					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/27/2000		2383.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/7/2000		2383.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				4/17/2001		2384.2					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/5/2001		2384.6					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/18/2002		2383.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/12/2002		2382.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/31/2003		2382.4					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				11/21/2003		2382.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/22/2004		2382.3					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				10/25/2004		2382.0					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				3/7/2005		2382.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				10/3/2005		2369.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				4/3/2006		2379.5					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				10/23/2006		2381.8					IWVWD
27S/38E-02C02M	027S038E02C002M	35.62273254	-117.8584016				12/20/2006		2369.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				4/9/1991		2377.4					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				4/29/1991		2377.4					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				6/11/1991		2376.2					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				6/24/1991		2377.1					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				8/22/1991		2376.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				10/22/1991		2377.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				12/12/1991		2376.8					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				1/28/1992		2376.8					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				2/15/1992		2376.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				5/18/1992		2376.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				9/10/1992		2377.1					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				1/5/1993		2376.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				4/7/1994		2376.3					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				12/7/1994		2375.4					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/21/1995		2375.3					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/15/1995		2376.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				2/19/1996		2375.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/12/1996		2375.5					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/6/1997		2375.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/21/1997		2376.4					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/17/1998		2376.2					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/9/1998		2375.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/17/1999		2374.4					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				10/27/1999		2374.2					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/27/2000		2373.7					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/7/2000		2373.6					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				4/17/2001		2374.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/5/2001		2373.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/18/2002		2373.4					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/12/2002		2373.1					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/31/2003		2372.8					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				11/21/2003		2372.2					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/22/2004		2372.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				10/25/2004		2372.0					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				3/7/2005		2371.8					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				10/3/2005		2369.5					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				4/3/2006		2369.2					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				10/23/2006		2370.9					IWVWD
27S/38E-02C03M	027S038E02C003M	35.62273254	-117.8584016				12/20/2006		2380.7					IWVWD
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				6/24/1991		2670.9					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				4/7/1994		2668.5					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				12/7/1994		2668.1					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/21/1995		2667.0					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/13/1995		2669.0					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				2/20/1996		2668.3					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/11/1996		2668.5					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/5/1997		2668.5					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/19/1997		2668.7					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/17/1998		2668.6					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/9/1998		2668.5					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/16/1999		2668.5					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				10/27/1999		2668.2					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/27/2000		2667.9					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/7/2000		2668.0					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				4/9/2001		2668.4					Berenbrock_Marti

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/5/2001		2667.8					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/18/2002		2668.3					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/12/2002		2668.7					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/31/2003		2669.1					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				11/21/2003		2668.3					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/22/2004		2667.9					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				10/25/2004		2668.4					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				3/7/2005		2667.9					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				10/3/2005		2666.3					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				4/3/2006		2667.9					Berenbrock_Marti
27S/38E-23F01M	027S038E23F001M	35.57406002	-117.8609703				10/23/2006		2668.3					Berenbrock_Marti
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				4/7/1994		2667.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				12/7/1994		2667.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/21/1995		2666.3					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/13/1995		2668.3					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				2/21/1996		2668.3					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/11/1996		2668.4					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/5/1997		2668.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/19/1997		2668.8					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/17/1998		2668.8					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/9/1998		2668.6					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/16/1999		2668.7					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				10/27/1999		2668.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/27/2000		2668.4					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/7/2000		2668.4					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				4/9/2001		2668.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/5/2001		2668.2					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/18/2002		2668.2					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/12/2002		2668.9					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/31/2003		2668.3					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				11/21/2003		2668.6					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/22/2004		2668.4					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				10/25/2004		2667.8					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				3/7/2005		2668.5					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				10/3/2005		2666.3					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				4/3/2006		2668.4					IWVWD
27S/38E-23F02M	027S038E23F002M	35.57406002	-117.8609703				10/23/2006		2668.3					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				4/7/1994		2663.4					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				12/7/1994		2663.0					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/21/1995		2663.1					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/13/1995		2665.7					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				2/20/1996		2665.4					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/11/1996		2666.1					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/5/1997		2666.2					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/19/1997		2666.5					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/17/1998		2666.7					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/9/1998		2666.6					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/16/1999		2666.6					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				10/27/1999		2666.3					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/27/2000		2666.5					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/7/2000		2666.4					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				4/9/2001		2666.9					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/5/2001		2666.8					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/18/2002		2667.1					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/12/2002		2667.4					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/31/2003		2666.8					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				11/21/2003		2667.2					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/22/2004		2666.7					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				10/25/2004		2667.7					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				3/7/2005		2667.6					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				10/3/2005		2665.3					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				4/3/2006		2667.3					IWVWD
27S/38E-23F03M	027S038E23F003M	35.57406002	-117.8609703				10/23/2006		2667.0					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				4/7/1994		2655.7					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				12/7/1994		2655.5					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/21/1995		2655.8					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/13/1995		2661.0					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				2/20/1996		2663.2					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/11/1996		2663.0					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/5/1997		2663.1					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/19/1997		2663.3					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/17/1998		2663.2					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/9/1998		2663.1					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/16/1999		2662.9					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				10/27/1999		2663.4					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/27/2000		2662.9					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/7/2000		2663.0					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				4/9/2001		2665.3					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/5/2001		2663.3					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/18/2002		2663.6					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/12/2002		2663.6					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/31/2003		2663.1					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				11/21/2003		2663.0					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/22/2004		2662.5					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				10/25/2004		2666.1					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				3/7/2005		2665.8					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				10/3/2005		2663.6					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				4/3/2006		2665.4					IWVWD
27S/38E-23F04M	027S038E23F004M	35.57406002	-117.8609703				10/23/2006		2666.5					IWVWD
27S/39E-02A01M	027S039E02A001M	35.62134469	-117.741454	2435	--		5/1/1973	236	2199					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542	2,440.00	288		8/1/1960	244	2196					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				8/4/1960	243.05	2197					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/20/1966	256.86	2183					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				11/14/1967	248.98	2191					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				11/19/1968	249.81	2190					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				9/17/1969	250.17	2190					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/28/1971	251.88	2188					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/18/1972	252.88	2187					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/17/1973	253.43	2187					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/24/1974	254.38	2186					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				10/24/1975	255.42	2185					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				12/31/1976	256.08	2184					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				1/13/1978	257.01	2183					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				12/21/1978	257.61	2182					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				12/13/1979	258.46	2182					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				12/9/1980	258.92	2181					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				11/18/1981	260.35	2180					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				6/10/1982	260.15	2180					USGS

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FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				4/4/1985	262.21	2178					USGS
27S/39E-02B01M	027S039E02B001M	35.62051135	-117.7464542				4/15/1985		2177.8					Berenbrock_Marti
27S/39E-03C01M	027S039E03C001M	35.6219	-117.7697882	2480	360		4/1/1973	286	2194					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223	2,562.70	514		2/18/1946	347.7	2215					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				7/1/1946		2217.8					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				12/12/1952	347.2	2216					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				4/2/1953	347.12	2216					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				7/1/1953		2216.2					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/17/1954	347.45	2215					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				12/9/1959	350.38	2212					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/8/1961	351.73	2211					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/24/1962	356.9	2206					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/21/1963	352.95	2210					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/9/1964	353.42	2209					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				4/1/1965	353.9	2209					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				7/1/1965		2214.1					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/21/1966	354.36	2208					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/17/1969	356.27	2206					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/14/1970	357.01	2206					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/28/1971	357.7	2205					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/17/1972	358.5	2204					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/31/1973	359.21	2203					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				12/18/1980	365.72	2197					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/19/1981	365.5	2197					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				6/11/1982	365.75	2197					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				12/15/1982	366.48	2196					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/8/1983	366.84	2196					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				8/31/1988	374.52	2188					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/25/1988	372.55	2190					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				1/20/1989	372.15	2191					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				2/6/1989	372.77	2190					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				2/26/1989	372.86	2190					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/21/1989		2191.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/23/1989	372.18	2191					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/4/1989	372.89	2190					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/8/1989		2191.1					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				1/8/1990		2190.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				2/13/1990		2190.0					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/6/1990		2190.3					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/22/1990	373.02	2190					USGS
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				4/9/1990		2189.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				5/10/1990		2189.9					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				6/6/1990		2189.8					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/16/1993		2184.8					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/29/1994		2184.2					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				12/8/1994		2183.3					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/23/1995		2181.9					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/13/1995		2182.5					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				2/20/1996		2182.0					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/3/1996		2182.3					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				9/9/1996		2180.7					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/12/1996		2180.4					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				1/3/1997		2181.1					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/5/1997		2180.1					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/17/1997		2178.7					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/17/1998		2178.7					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/10/1998		2177.4					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/16/1999		2178.4					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				5/18/2000		2175.3					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				11/6/2000		2175.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				4/9/2001		2172.8					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/31/2003		2169.5					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/20/2003		2167.1					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/22/2004		2165.0					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/25/2004		2164.7					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				3/7/2005		2165.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/3/2005		2161.5					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				4/3/2006		2161.6					Berenbrock_Marti
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223				10/23/2006		2159.8					Berenbrock_Marti
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998	2,535	385		7/22/1987	342.17	2193					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				9/19/1987	342.55	2192					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				1/14/1988	342.46	2193					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				6/9/1988	343.2	2192					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/9/1988	343.29	2192					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				1/20/1989	344.06	2191					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				2/6/1989	344.54	2190					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				2/26/1989	344.68	2190					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/20/1989		2189.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/22/1989	344.58	2190					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/5/1989	344.62	2190					USGS
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/8/1989		2188.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				1/8/1990		2188.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				2/13/1990		2188.6					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/6/1990		2187.3					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				4/9/1990		2187.7					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				5/10/1990		2188.0					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				6/6/1990		2188.0					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/18/1993		2185.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/16/1993		2183.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/29/1994		2183.4					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				12/8/1994		2181.3					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/23/1995		2181.2					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/23/1995		2180.4					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				2/19/1996		2180.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				9/3/1996		2179.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/11/1996		2179.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/6/1997		2180.2					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/19/1997		2177.4					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/17/1998		2177.3					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/10/1998		2175.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/16/1999		2175.1					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/27/1999		2172.8					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/27/2000		2172.4					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/6/2000		2171.7					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				4/9/2001		2172.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				11/5/2001		2170.4					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/18/2002		2170.8					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/22/2004		2166.0					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/25/2004		2164.8					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				3/7/2005		2164.7					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/3/2005		2160.8					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				4/3/2006		2161.5					KCWA
27S/39E-08A01M	027S039E08A001M	35.60717786	-117.7983998				10/23/2006		2161.5					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				9/3/1996		2186.9					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				3/5/1997		2186.6					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				11/17/1997		2183.7					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				3/17/1998		2183.6					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				11/10/1998		2182.1					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				3/16/1999		2183.0					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				10/27/1999		2180.0					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				3/24/2000		2292.2					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				3/27/2000		2182.0					KCWA
27S/39E-08M01M	027S039E08M001M	35.59947492	-117.8100658				11/5/2001		2179.3					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556	2,558	1020		5/15/1989	367.73	2190					USGS
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/22/1990	367.55	2190					USGS
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				9/30/1992	371.53	2186					USGS
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				4/7/1993	371.08	2187					USGS
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				9/28/1993	373.2	2185					USGS
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				9/3/1996		2277.5					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/5/1997		2176.5					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				11/17/1997		2175.4					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/17/1998		2174.9					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				11/2/1998		2173.8					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/16/1999		2174.4					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				10/27/1999		2171.3					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/27/2000		2173.7					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				11/6/2000		2173.3					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				4/9/2001		2168.7					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/18/2002		2168.2					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				11/12/2002		2166.3					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/31/2003		2165.7					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				10/20/2003		2162.8					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/22/2004		2162.1					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				10/25/2004		2160.3					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				3/7/2005		2162.5					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				10/3/2005		2156.9					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				4/3/2006		2158.4					KCWA
27S/39E-08M02M	027S039E08M002M	35.60023344	-117.8114556				10/23/2006		2157.9					KCWA
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667	2,551.65	1020		3/24/1989	362.15	2190					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				5/15/1989	362.37	2189					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				6/5/1989	362.57	2189					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				3/23/1990	362.71	2189					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				9/27/1990	362.99	2189					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				3/26/1991	363.05	2189					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				9/24/1991	363.72	2188					USGS
27S/39E-08M03M	027S039E08M003M	35.60023346	-117.8100667				4/17/1992	363.86	2188					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997	2,579.35	1020		5/15/1989	389.47	2190					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				6/5/1989	389.64	2190					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				3/23/1990	390.17	2189					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				9/27/1990	390.28	2189					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				3/26/1991	390.48	2189					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				9/24/1991	390.72	2189					USGS

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				4/17/1992	391.63	2188					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				9/30/1992	393.55	2186					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				4/7/1993	392.81	2187					USGS
27S/39E-08P01M	027S039E08P001M	35.59356699	-117.8033997				9/28/1993	397.87	2181					USGS
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				6/11/1991		2187.1					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				8/22/1991		2188.9					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/22/1991		2186.2					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				12/12/1991		2186.1					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				1/28/1992		2186.0					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				2/15/1992		2186.4					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				5/18/1992		2185.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				9/10/1992		2185.3					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				4/7/1994		2181.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				12/7/1994		2191.1					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/21/1995		2180.3					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/15/1995		2179.2					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				2/20/1996		2179.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				8/29/1996		2185.4					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/11/1996		2177.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/6/1997		2176.5					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/21/1997		2175.6					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/17/1998		2175.2					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/3/1998		2174.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/16/1999		2172.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/28/1999		2174.1					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/25/2000		2172.7					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/28/2000		2172.9					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/15/2000		2172.2					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				4/18/2001		2169.3					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/14/2001		2169.8					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/18/2002		2170.6					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				11/12/2002		2170.1					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/31/2003		2168.9					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/20/2003		2166.7					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/23/2004		2168.5					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/25/2004		2166.0					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				3/10/2005		2164.0					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/4/2005		2162.2					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				4/4/2006		2167.9					Berenbrock_Marti
27S/39E-11D01M	027S039E11D001M	35.60717824	-117.7556209				10/25/2006		2162.9					Berenbrock_Marti
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				9/10/1992		2201.5					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				4/7/1994		2197.7					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				12/7/1994		2198.3					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/21/1995		2195.6					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/13/1995		2177.9					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				2/20/1996		2178.2					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/11/1996		2176.0					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/6/1997		2176.8					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/21/1997		2176.4					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/17/1998		2176.6					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/3/1998		2175.9					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/16/1999		2174.6					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				10/28/1999		2169.5					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/25/2000		2171.6					IWVWD

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/28/2000		2171.7					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/15/2000		2169.3					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				4/18/2001		2174.8					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				11/14/2001		2168.8					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/18/2002		2169.2					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				10/25/2004		2161.5					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				3/10/2005		2161.1					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				10/4/2005		2158.8					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				4/4/2006		2159.1					IWVWD
27S/39E-11D02M	027S039E11D002M	35.60717824	-117.7556209				10/25/2006		2160.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				4/9/1991		2203.1					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				6/11/1991		2203.8					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				8/22/1991		2202.4					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/22/1991		2203.3					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				12/12/1991		2203.6					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				1/28/1992		2203.5					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				2/15/1992		2203.6					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				5/18/1992		2203.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				9/10/1992		2201.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				1/5/1993		2192.3					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				4/7/1994		2201.2					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				12/7/1994		2200.7					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/21/1995		2200.4					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/13/1995		2200.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				2/20/1996		2198.9					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/11/1996		2198.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/6/1997		2199.3					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/21/1997		2198.8					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/17/1998		2198.8					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/3/1998		2198.3					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/16/1999		2196.5					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/29/1999		2193.5					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/25/2000		2195.7					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/28/2000		2196.9					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/15/2000		2194.6					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				4/18/2001		2195.7					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/14/2001		2195.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/18/2002		2194.7					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				11/12/2002		2194.9					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/31/2003		2193.5					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/20/2003		2193.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/23/2004		2193.1					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/25/2004		2192.6					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				3/10/2005		2190.9					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/4/2005		2189.1					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				4/4/2006		2189.0					IWVWD
27S/39E-11D03M	027S039E11D003M	35.60717824	-117.7556209				10/25/2006		2191.3					IWVWD
27S/39E-12D01M	027S039E12D001M	35.6077339	-117.736176	2,505	606		8/9/1988	319.24	2186					USGS
27S/39E-12D01M	027S039E12D001M	35.6077339	-117.736176				3/23/1989	319.55	2185					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883	2,582.30	502		1/23/1986	387.34	2195					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				4/15/1986	387.58	2195					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				6/24/1986	387.75	2195					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				5/13/1987	388.64	2194					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				7/22/1987	388.98	2193					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				9/19/1987	396.95	2185					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				6/9/1988	389.98	2192					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				10/9/1988	388.95	2193					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				2/26/1989	390.85	2191					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				3/22/1989	390.7	2192					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				10/5/1989	391.07	2191					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				3/22/1990	392.06	2190					USGS
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				9/18/1996		2188.5					KCWA
27S/39E-16C01M	027S039E16C001M	35.5974559	-117.7897883				9/22/1996		2188.8					KCWA
27S/39E-16F01M	027S039E16F001M	35.63551066	-117.7892333	2630	2100		5/1/1952	401	2229					USGS
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789	2,635.00	1020		5/15/1989	193.58	2441					USGS
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/22/1990	194.13	2441					USGS
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				7/2/1996		2439.5					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				8/29/1996		2439.5					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/11/1996		2439.4					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/5/1997		2439.3					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/19/1997		2439.4					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/17/1998		2439.3					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/9/1998		2439.1					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/16/1999		2439.0					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				10/27/1999		2438.8					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/24/2000		2438.6					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/27/2000		2438.6					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/7/2000		2438.4					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				4/9/2001		2438.7					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/5/2001		2438.1					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/18/2002		2438.5					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				11/12/2002		2438.0					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/31/2003		2438.3					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				10/20/2003		2437.9					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/22/2004		2438.0					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				10/25/2004		2437.8					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				3/7/2005		2437.7					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				10/3/2005		2437.6					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				4/3/2006		2437.5					KCWA
27S/39E-19E01M	027S039E19E001M	35.57495604	-117.829789				10/23/2006		2437.8					KCWA
27S/39E-22E01M	027S039E22E001M	35.57245659	-117.7758988	2660	485		12/1/1959	451	2209					USGS
27S/39E-35B01M	027S039E35B001M	35.54356856	-117.7489533	2750	--		12/1/1959	230	2520					USGS
27S/39E-35B01M	027S039E35B001M	35.54356856	-117.7489533	2,750.00	282		12/1/1959	230	2520					USGS
27S/40E-01E01M	027S040E01E001M	35.61539006	-117.6304043				12/31/1920		2205.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				4/15/1985		2181.8					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/14/1989		2182.6					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/8/1989		2182.1					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				1/9/1990		2181.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				2/14/1990		2180.8					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/6/1990		2181.8					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				4/10/1990		2181.1					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				5/11/1990		2180.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				6/7/1990		2180.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/17/1993		2178.3					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/16/1993		2177.4					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/29/1994		2177.5					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				12/6/1994		2176.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/23/1995		2176.0					Berenbrock_Marti

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RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/13/1995		2176.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				2/19/1996		2176.1					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/12/1996		2174.8					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/3/1997		2174.5					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/24/1997		2174.3					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/23/1998		2174.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/3/1998		2173.4					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/15/1999		2173.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				10/28/1999		2172.5					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/25/2000		2172.2					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/31/2000		2172.2					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/10/2000		2171.3					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				4/10/2001		2171.3					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/6/2001		2170.8					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/20/2002		2170.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				11/18/2002		2170.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				4/4/2003		2169.6					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				10/24/2003		2169.2					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/25/2004		2168.9					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				10/29/2004		2168.6					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				3/11/2005		2168.4					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				10/7/2005		2168.2					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				4/6/2006		2168.0					Berenbrock_Marti
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619				10/26/2006		2167.8					Berenbrock_Marti
27S/40E-01M01M	027S040E01M001M	35.61356766	-117.6314509				12/31/1920		2201.3					Berenbrock_Marti
27S/40E-01N01M	027S040E01N001M	35.60813516	-117.6303474				12/31/1920		2232.0					Berenbrock_Marti
27S/40E-01N02M	027S040E01N002M	35.60813516	-117.6303474				12/31/1920		2232.0					Berenbrock_Marti
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/21/1989		2176.9					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				1/9/1990		2176.9					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				2/14/1990		2176.5					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/6/1990		2176.6					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				4/10/1990		2175.9					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				5/11/1990		2176.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/17/1993		2173.2					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/30/1994		2172.1					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				12/6/1994		2171.6					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/23/1995		2170.6					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/13/1995		2170.5					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				2/19/1996		2170.2					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/15/1996		2169.6					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/3/1997		2170.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/24/1997		2160.2					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/23/1998		2169.3					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/3/1998		2168.7					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/19/1999		2168.4					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				10/28/1999		2168.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/25/2000		2167.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/31/2000		2167.2					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/14/2000		2166.7					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				4/11/2001		2167.5					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/6/2001		2165.4					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				11/18/2002		2158.4					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				4/4/2003		2164.3					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				10/24/2003		2163.7					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/26/2004		2163.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				10/29/2004		2163.7					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				3/11/2005		2161.0					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				10/7/2005		2162.6					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				4/6/2006		2162.4					KCWA
27S/40E-02J01M	027S040E02J001M	35.61217878	-117.6358955				10/26/2006		2162.2					KCWA
27S/40E-02N01M	027S040E02N001M	35.6080409	-117.6481151				12/31/1920		2200.0					Berenbrock_Marti
27S/40E-03J01M	027S040E03J001M	35.61245646	-117.653396	2275	150		7/1/1960	83	2192					USGS
27S/40E-03P01M	027S040E03P001M	35.6082898	-117.6645073	2292	120		7/1/1960	83	2209					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959	2,287.00	162		5/22/1952	92.14	2195					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/2/1953	93.58	2193					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/1/1953		2193.7					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/19/1953	94.47	2193					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/15/1954	94.03	2193					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/16/1954	93.42	2194					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/27/1954	94.74	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/6/1955	94.59	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/6/1955	95.25	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/13/1955	96.19	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/19/1955	96.77	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/29/1955	97.27	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/30/1955	97.48	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/14/1955	97.19	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/16/1955	97.12	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/15/1955	97.06	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/17/1956	96.97	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/16/1956	97.44	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/20/1956	96.17	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/17/1956	96.09	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/16/1956	96.51	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/14/1956	96.89	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/17/1956	97.34	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/9/1956	97.41	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/12/1956	97.67	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/11/1956	97.44	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/14/1956	96.79	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/19/1956	96.5	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/24/1957	95.69	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/19/1957	95.25	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/22/1957	95.28	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/2/1957	95.28	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/18/1957	95.72	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/19/1957	96.17	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/14/1957	96.68	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/18/1957	96.9	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/18/1957	96.54	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/21/1957	96.4	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/19/1957	96.01	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/5/1958	95.51	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/6/1958	95.24	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/8/1958	95.03	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/15/1958	95.16	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/18/1958	95.59	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/15/1958	96.11	2191					USGS

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/18/1958	96.33	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/17/1958	96.85	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/10/1958	96.19	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/14/1959	95.82	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/11/1959	95.64	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/9/1959	95.43	2192					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/8/1959	95.55	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/6/1959	95.89	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/10/1959	96.36	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/9/1959	96.9	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/6/1959	97.42	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/16/1959	97.42	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/20/1959	97.22	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/19/1959	97	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/16/1959	96.74	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/20/1960	96.35	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/25/1960	96	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/30/1960	96.1	2191					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/4/1960	96.82	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/1/1960	97.22	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/1/1960	98	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/6/1960	97.73	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/26/1960	97.72	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/3/1960	97.78	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/5/1960	97.85	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/2/1960	97.77	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/9/1960	98.44	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/15/1960	97.23	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/10/1961	96.93	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/15/1961	96.72	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/14/1961	97.08	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/19/1961	97.34	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/22/1961	97.5	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/26/1961	97.65	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/24/1961	97.86	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/22/1961	98	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/21/1961	97.94	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/26/1961	97.74	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/21/1961	97.51	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/19/1961	97.16	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/18/1962	96.84	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/20/1962	96.7	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/21/1962	96.52	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/24/1962	97.03	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/22/1962	97.35	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/19/1962	97.55	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/18/1962	97.71	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/20/1962	98.13	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/18/1962	98.37	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/22/1962	98.45	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/20/1962	98.21	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/13/1962	97.89	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/12/1963	97.65	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/22/1963	98.85	2188					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/13/1964	98.46	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/8/1964	99.37	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/1/1965	98.7	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/1/1965		2188.1					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/19/1965	100.09	2187					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/20/1966	99.99	2187					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/14/1967	98.7	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/19/1968	97.94	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				9/18/1969	97.47	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/12/1970	97.27	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/28/1971	97.27	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/23/1972	97.07	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/17/1972	97.11	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/1/1973	97.07	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/7/1974	97	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/25/1974	97.16	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/25/1975	96.78	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				7/1/1975		2190.1					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/23/1975	97.23	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				8/19/1976	97.3	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/23/1976	97.48	2190					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/15/1977	98.99	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/29/1978	98.44	2189					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/30/1978	98.99	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/6/1979	99.49	2188					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/10/1979	100.15	2187					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/27/1980	100.54	2186					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/10/1980	101.14	2186					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/17/1981	102.1	2185					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/15/1982	102.9	2184					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/15/1982	103.21	2184					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/19/1984	104.23	2183					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/1/1985	105.24	2182					USGS
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/15/1985		2182.1					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/14/1989		2175.2					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/8/1989		2175.2					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				1/9/1990		2175.3					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/14/1990		2174.9					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/6/1990		2175.1					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				4/10/1990		2174.5					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				5/11/1990		2174.5					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				6/7/1990		2174.4					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/17/1993		2171.0					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/16/1993		2170.0					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/29/1994		2170.0					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				12/6/1994		2169.7					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/23/1995		2168.5					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/13/1995		2168.5					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				2/19/1996		2168.3					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/12/1996		2167.7					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/3/1997		2167.4					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/24/1997		2167.1					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/23/1998		2166.7					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/3/1998		2166.2					Berenbrock_Marti

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/15/1999		2165.5					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				10/29/1999		2165.0					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				3/31/2000		2165.0					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/10/2000		2164.2					Berenbrock_Marti
27S/40E-03R01M	027S040E03R001M	35.60828989	-117.6533959				11/18/2002		1968.4					Berenbrock_Marti
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188	2,305.00	273		5/6/1959	126.56	2178					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				1/21/1960	126.64	2178					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				7/1/1960	129	2176					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				7/29/1960	128.65	2176					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/8/1961	129.46	2176					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/25/1962	131.6	2173					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				3/12/1963	129.88	2175					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/22/1963	132.14	2173					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				3/13/1964	131.35	2174					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				9/8/1964	133.99	2171					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				4/2/1965	132.17	2173					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/19/1965	134.19	2171					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/21/1966	133.14	2172					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/14/1967	133	2172					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/18/1968	131.37	2174					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				9/18/1969	126.5	2179					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/12/1970	126.57	2178					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/28/1971	126.85	2178					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				4/23/1972	128.27	2177					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/17/1972	127.69	2177					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/1/1973	129.36	2176					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/24/1974	130.15	2175					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/23/1975	131.05	2174					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				12/31/1976	130.98	2174					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				12/16/1977	133.26	2172					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/30/1978	135.95	2169					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				12/11/1979	137.07	2168					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				12/10/1980	137.91	2167					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				11/17/1981	138.86	2166					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				6/10/1982	141.33	2164					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				4/1/1985	144.77	2160					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				4/15/1985		2160.2					Ridgecrest-BM
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				6/25/1986	146.18	2159					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				9/28/1986	146.75	2158					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				5/13/1987	145.34	2160					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				9/20/1987	145.83	2159					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				1/11/1988	146.67	2158					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				10/28/1988	147.88	2157					USGS
27S/40E-04A01M	027S040E04A001M	35.62134504	-117.6731188				3/23/1989	146.89	2158					USGS
27S/40E-04B01M	027S040E04B001M	35.62217835	-117.6745078	2303	230		1/1/1960	139	2164					USGS
27S/40E-04B02M	027S040E04B002M	35.62217835	-117.6745078	2302	278		7/1/1960	132	2170					USGS
27S/40E-04B02M	027S040E04B002M	35.62217835	-117.6745078							375.0	650			
27S/40E-04C01M	027S040E04C001M	35.6224561	-117.6786746	2312	300		7/1/1960	139	2173					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968	2,315.00	280		1949	122	2193					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				2/5/1959	142	2173					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				8/6/1959	152	2163					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				1/20/1960	142.03	2173					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				2/11/1960	142	2173					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				7/1/1960	142	2173					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				7/29/1960	142.01	2173					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				8/22/1960	147.5	2168					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				2/14/1961	145	2170					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				5/10/1962	147	2168					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				8/6/1962	151	2164					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				10/25/1962	149.86	2165					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				6/18/1963	154	2161					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				2/10/1965	146.2	2169					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				4/1/1965	151.05	2164					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				7/1/1965		2165.4					Berenbrock_Marti
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				9/22/1971	151.2	2164					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				10/28/1971	146.35	2169					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				10/19/1972	148.23	2167					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				10/24/1974	151.12	2164					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				7/1/1975		2156.0					Berenbrock_Marti
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				10/24/1975	159.03	2156					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				12/30/1976	155.26	2160					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				12/16/1977	155.52	2159					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				12/7/1978	157.55	2157					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				12/13/1979	160.52	2154					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				11/19/1981	161.05	2154					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				4/1/1985	171.26	2144					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				4/15/1985		2143.7					Berenbrock_Marti
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				1/22/1986	168.16	2147					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				6/25/1986	169.83	2145					USGS
27S/40E-04C02M	027S040E04C002M	35.6205117	-117.6783968				9/26/1986	171.03	2144					USGS
27S/40E-04D01M	027S040E04D001M	35.62162275	-117.6850636	2326	168		9/1/1952	139	2187					USGS
27S/40E-04L01M	027S040E04L001M	--	--							252.0	1400	30	47	
27S/40E-04L01M	027S040E04L001M	--	--							252.0	950	25	38	
27S/40E-04L02M	027S040E04L002M	35.6144007	-117.67923	2315	280		1/1/1960	142	2173					USGS
27S/40E-04M01M	027S040E04M001M	35.61662288	-117.6820079	2330	220		11/1/1957	149	2181					USGS
27S/40E-04M02M	027S040E04M002M	35.6160673	-117.683119	2330	210		11/1/1957	152	2178					USGS
27S/40E-05C01M	027S040E05C001M	35.62317282	-117.6985041				1/9/1990		2112.7					KCWA
27S/40E-05C01M	027S040E05C001M	35.62317282	-117.6985041				2/14/1990		2119.2					KCWA
27S/40E-05C01M	027S040E05C001M	35.62317282	-117.6985041				3/6/1990		2116.5					KCWA
27S/40E-05C01M	027S040E05C001M	35.62317282	-117.6985041				4/10/1990		2110.7					KCWA
27S/40E-05C01M	027S040E05C001M	35.62317282	-117.6985041				5/11/1990		2108.6					KCWA
27S/40E-06A01M	027S040E06A001M	35.62217817	-117.709231	2390	340		5/1/1973	225	2165					USGS
27S/40E-06C01M	027S040E06C001M	35.6194004	-117.7153422	2415	272		5/1/1973	261	2154					USGS
27S/40E-06C02M	027S040E06C002M	35.6194004	-117.7153422	2415	360		5/1/1973	261	2154					USGS
27S/40E-06D01M	027S040E06D001M	35.6221781	-117.7222869	2,400	720		1/22/1986	263.33	2137					USGS
27S/40E-06D01M	027S040E06D001M	35.6221781	-117.7222869				1/11/1988	obstructed	--					USGS
27S/40E-06D01M	027S040E06D001M	35.6221781	-117.7222869				3/24/1989	279.45	2121					USGS
27S/40E-06D01M	027S040E06D001M	35.6221781	-117.7222869				1/9/1990		2117.7					IWVWD
27S/40E-06D01M	027S040E06D001M	35.6221781	-117.7222869				3/24/2000		2094.7					IWVWD
27S/40E-06D02S	027S040E06D002S	35.6221781	-117.7222869	2,400	720		1/22/1986	266.54	2133					USGS
27S/40E-06D02S	027S040E06D002S	35.6221781	-117.7222869				1/11/1988	271.68	2128					USGS
27S/40E-06D02S	027S040E06D002S	35.6221781	-117.7222869				3/24/1989	274.84	2125					USGS
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1985		2140.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/1/1986		2137.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				8/1/1986		2138.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1987		2138.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				8/1/1987		2135.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1988		2135.9					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1988		2131.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/1/1989		2133.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				8/1/1989		2130.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/1/1990		2128.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1990		2128.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1991		2127.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				8/1/1991		2128.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1992		2127.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1992		2124.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1993		2123.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1993		2122.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1994		2125.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1994		2120.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1995		2124.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1995		2123.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				2/1/1996		2124.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				9/1/1996		2122.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/11/1997		2119.8					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/20/1997		2118.8					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/19/1998		2119.7					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/12/1998		2118.6					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/15/1999		2120.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/2/1999		2120.3					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/3/2000		2118.3					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/17/2000		2118.1					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/12/2001		2116.3					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/13/2001		2114.7					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/21/2002		2116.7					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				11/18/2002		2114.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/3/2003		2115.2					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				10/23/2003		2113.9					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/25/2004		2114.1					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				10/28/2004		2113.5					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				3/10/2005		2112.6					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				10/6/2005		2110.7					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				4/5/2006		2112.3					KCWA
27S/40E-06E01M	027S040E06E001M	35.61711672	-117.7206643				10/25/2006		2112.8					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1985		2138.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/1/1986		2139.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				8/1/1986		2136.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1987		2139.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				8/1/1987		2132.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1988		2137.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1988		2132.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/1/1989		2132.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				8/1/1989		2129.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/1/1990		2129.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1990		2126.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1991		2128.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				8/1/1991		2126.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1992		2125.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1992		2123.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1993		2121.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1993		2124.6					KCWA

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1994		2127.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1994		2120.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1995		2126.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1995		2123.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				2/1/1996		2125.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				9/1/1996		2117.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/11/1997		2122.1					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/20/1997		2123.6					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/19/1998		2123.7					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/12/1998		2118.9					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/15/1999		2122.7					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/2/1999		2120.4					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/3/2000		2119.7					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/17/2000		2119.3					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/12/2001		2120.0					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/13/2001		2116.2					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/21/2002		2118.5					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				11/18/2002		2115.5					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/3/2003		2117.3					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/25/2004		2117.1					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				10/28/2004		2114.3					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				3/10/2005		2114.8					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				10/6/2005		2111.9					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				4/5/2006		2114.5					KCWA
27S/40E-06F01M	027S040E06F001M	35.61714321	-117.716222				10/25/2006		2113.7					KCWA
27S/40E-06G01M	027S040E06G001M	35.6185671	-117.7131199	2415	277		5/1/1973	258	2157					USGS
27S/40E-06H01M	027S040E06H001M	35.61578944	-117.7061752	2395	400		5/1/1973	232	2163					USGS
27S/40E-06J01M	027S040E06J001M	35.6141228	-117.708953	2410	283		5/1/1973	255	2155					USGS
27S/40E-06J02M	027S040E06J002M	35.6132895	-117.706453	2405	320		5/1/1973	253	2152					USGS
27S/40E-06L01M	027S040E06L001M	35.6144005	-117.7158977	2435	385		5/1/1973	287	2148					USGS
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089	2445	312		5/1/1973	278	2167					USGS
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1985		2141.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				4/1/1986		2139.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				8/1/1986		2136.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1987		2139.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				8/1/1987		2133.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1988		2137.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1988		2133.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				4/1/1989		2133.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				8/1/1989		2132.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				3/1/1990		2129.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1990		2127.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1991		2128.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				8/1/1991		2128.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1992		2127.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1992		2124.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1993		2123.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1993		2124.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1994		2127.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1994		2123.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1995		2126.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1995		2123.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				2/1/1996		2125.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				9/1/1996		2121.6					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				3/11/1997		2121.7					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				11/20/1997		2124.1					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				3/19/1998		2124.9					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				11/12/1998		2121.1					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				3/15/1999		2122.5					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				11/2/1999		2119.7					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				4/3/2000		2119.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				11/17/2000		2119.2					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				4/18/2001		2119.8					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				11/18/2002		2115.1					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				4/3/2003		2115.7					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				10/23/2003		2114.6					KCWA
27S/40E-06L02M	027S040E06L002M	35.61384498	-117.7170089				3/26/2004		2114.3					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1985		2136.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				4/1/1986		2138.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				8/1/1986		2132.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1987		2139.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				8/1/1987		2128.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1988		2137.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1988		2129.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				4/1/1989		2130.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				8/1/1989		2126.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				3/1/1990		2127.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1990		2122.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1991		2127.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				8/1/1991		2124.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1992		2127.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1992		2123.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1993		2125.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1993		2123.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1994		2128.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1994		2122.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1995		2127.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1995		2123.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				2/1/1996		2126.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				9/1/1996		2119.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				3/11/1997		2123.1					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				11/20/1997		2124.1					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				3/19/1998		2124.4					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				3/15/1999		2124.2					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				11/2/1999		2118.9					KCWA
27S/40E-06M01M	027S040E06M001M	35.61348934	-117.7206318				4/3/2000		2121.5					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1985		2134.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/1/1986		2136.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				8/1/1986		2130.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1987		2138.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				8/1/1987		2126.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1988		2136.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1988		2126.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/1/1989		2129.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				8/1/1989		2122.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				3/1/1990		2131.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1990		2119.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1991		2126.6					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				8/1/1991		2121.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1992		2126.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1992		2119.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1993		2124.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1993		2122.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1994		2127.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1994		2121.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1995		2126.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1995		2121.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				2/1/1996		2126.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				9/1/1996		2118.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				3/11/1997		2121.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				11/21/1997		2119.2					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				3/19/1998		2123.6					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				11/13/1998		2117.4					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				3/19/1999		2123.2					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				11/2/1999		2116.5					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/3/2000		2119.0					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/11/2001		2120.3					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				11/18/2002		2114.0					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/3/2003		2117.3					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				3/10/2005		2114.8					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				4/5/2006		2114.8					KCWA
27S/40E-06N01M	027S040E06N001M	35.60986195	-117.7205993				10/24/2006		2112.4					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1985		2140.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/1/1986		2143.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				8/1/1986		2138.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1987		2145.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				8/1/1987		2133.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1988		2142.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1988		2134.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/1/1989		2130.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				8/1/1989		2128.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/1/1990		2127.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1990		2127.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1991		2132.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				8/1/1991		2128.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1992		2132.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1992		2130.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1993		2123.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1993		2119.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1994		2127.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1994		2113.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1995		2111.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1995		2113.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				2/1/1996		2112.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				9/1/1996		2109.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/21/1997		2123.3					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/20/1997		2120.8					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/18/1998		2126.1					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/12/1998		2113.6					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/15/1999		2114.5					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/2/1999		2112.7					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/3/2000		2118.7					KCWA

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/10/2000		2120.4					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/11/2001		2124.6					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/13/2001		2121.4					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/21/2002		2119.6					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				11/18/2002		2114.1					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/3/2003		2119.5					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				10/23/2003		2117.6					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/25/2004		2117.9					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				10/28/2004		2116.0					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				3/10/2005		2119.9					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				4/5/2006		2116.8					KCWA
27S/40E-06N02M	027S040E06N002M	35.60986195	-117.7205993				10/25/2006		2114.0					KCWA
27S/40E-07G01M	027S040E07G001M	35.60162305	-117.7136753	2465	410		5/1/1973	288	2177					USGS
27S/40E-07L01M	027S040E07L001M	35.5999564	-117.715342	2480	430		12/1/1958	262	2218					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/1/1962	307	2208					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/24/1962	306.65	2208					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				4/2/1965	308.15	2207					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				7/1/1965		2107.2					Berenbrock_Marti
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/20/1966	308.76	2206					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				11/14/1967	309.7	2205					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				9/17/1969	310.8	2204					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/28/1971	312.33	2203					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/18/1972	312.85	2202					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/17/1973	313.72	2201					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/24/1974	314.4	2201					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				7/1/1975		2199.5					Berenbrock_Marti
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				10/24/1975	315.51	2199					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				12/31/1976	314.98	2200					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				1/13/1978	316.98	2198					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				12/13/1979	323.2	2192					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				12/16/1980	323.66	2191					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				11/18/1981	322.9	2192					USGS
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088				3/15/1989		2189.8					Berenbrock_Marti
27S/40E-07M01M	027S040E07M001M	35.5996786	-117.7220088	2,515.00	335		1962-08	310	2205					USGS
27S/40E-07P01M	027S040E07P001M	35.59523427	-117.7186753	2520	340		5/1/1973	314	2206					USGS
27S/40E-08A01M	027S040E08A001M	35.6080119	-117.6889524	2345	440		12/1/1952	150	2195	440.0	1500			USGS
27S/40E-08C01M	027S040E08C001M	35.60495639	-117.6978415	2,388.00	400		8/18/1976	227	2161					USGS
27S/40E-08C01M	027S040E08C001M	35.60495639	-117.6978415				3/4/1981	233.24	2155					USGS
27S/40E-08C01M	027S040E08C001M	35.60495639	-117.6978415				11/18/1981	237.08	2151					USGS
27S/40E-08Q02M	027S040E08Q002M	35.59440108	-117.6961747	2430	367		6/2/1987	270	2160					USGS
27S/40E-09L03M	027S040E09L003M	35.59717887	-117.682841	2355	264		6/1/1955	166	2189					USGS
27S/40E-09P01M	027S040E09P001M	35.59356784	-117.6822854	2368	230		7/1/1960	183	2185					USGS
27S/40E-09P02M	027S040E09P002M	35.5938456	-117.6811743	2368	268		5/1/1973	192	2176					USGS
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	2299	150		1/1/1960	113	2186					USGS
27S/40E-10A02M	027S040E10A002M	35.60662325	-117.6553404	2287	126		7/1/1960	103	2184					USGS
27S/40E-10A03M	027S040E10A003M	35.60773434	-117.6531181	2287	--		7/1/1960	101	2186					USGS
27S/40E-10A04M	027S040E10A004M	35.60773434	-117.6531181	2295	158		7/1/1960	113	2182					USGS
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	2300	152		7/1/1960	119	2181					USGS
27S/40E-10B01M	027S040E10B001M	35.60440106	-117.6575626				12/31/1920		2205.5					Berenbrock_Marti
27S/40E-10B01M	027S040E10B001M	35.60440106	-117.6575626	2292	252		7/1/1960	109	2183					USGS
27S/40E-10C01M	027S040E10C001M	35.604401	-117.6639517	2296	250		1/1/1960	110	2186					USGS
27S/40E-10C01M	027S040E10C001M	35.604401	-117.6639517							250.0	1900			
27S/40E-10D01M	027S040E10D001M	35.60467877	-117.6695074				12/31/1920		2206.3					Berenbrock_Marti
27S/40E-10D01M	027S040E10D001M	35.60467877	-117.6695074	2301	152		12/1/1950	112	2189					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-10H02M	027S040E10H002M	35.60273446	-117.6525625	2330	--		7/1/1960	143	2187					USGS
27S/40E-10J03M	027S040E10J003M	35.5982901	-117.653118	2350	200		7/1/1960	162	2188					USGS
27S/40E-10J08M	027S040E10J008M	35.6010678	-117.653118	2330	210		7/1/1960	145	2185					USGS
27S/40E-10J09M	027S040E10J009M	35.6010678	-117.6553403	2330	176		7/1/1960	143	2187					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624	2,380.00	262		12/11/1958	195.54	2184					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				1/22/1960	195.93	2184					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				7/1/1960	196	2184					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				7/26/1960	196.43	2184					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/7/1961	196.41	2184					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/25/1962	197.17	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				4/1/1965	198.12	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				7/1/1965		2181.9					Berenbrock_Marti
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/20/1966	199.55	2180					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/14/1967	197.85	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/19/1968	197.2	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				9/18/1969	196.87	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/12/1970	196.75	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/28/1971	196.99	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				8/23/1972	196.62	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/18/1972	196.65	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/1/1973	197.06	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				3/7/1974	196.82	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/25/1974	197.31	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				3/25/1975	197.05	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				7/1/1975		2182.6					Berenbrock_Marti
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				10/23/1975	197.41	2183					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				8/19/1976	197.53	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/23/1976	197.73	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				12/15/1977	198.1	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				6/28/1978	198.5	2182					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/30/1978	198.89	2181					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				6/6/1979	199.4	2181					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				12/11/1979	200.15	2180					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				5/28/1980	200.5	2180					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				12/10/1980	201.99	2178					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				11/17/1981	202.42	2178					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				4/1/1985	205.9	2174					USGS
27S/40E-10R01M	027S040E10R001M	35.5944013	-117.6525624				4/15/1985		2174.1					Berenbrock_Marti
27S/40E-15A01M	027S040E15A001M	35.5921791	-117.6545068	2385	206		5/1/1973	197	2188					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072	2,385.00	240		11/1/1961	196	2189					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/7/1961	196.14	2189					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/7/1961		2186.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/22/1963	198.61	2186					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/22/1963		2183.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/8/1964	201.25	2184					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/8/1964		2181.2					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/1/1965	198.86	2186					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/1/1965		2183.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				7/1/1965		2186.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/19/1965	199.91	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/19/1965		2182.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/20/1966	199.65	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/20/1966		2182.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/14/1967	199.8	2185					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/14/1967		2182.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/19/1968	199.72	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/19/1968		2182.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/8/1969		2182.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/18/1969	199.72	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/12/1970	199.84	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/12/1970		2182.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/28/1971	200.49	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/28/1971		2182.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				8/23/1972	200.5	2185					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				8/23/1972		2182.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/18/1972	200.83	2184					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/18/1972		2181.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/1/1973	201.23	2184					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/1/1973		2181.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/25/1974	201.9	2183					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/25/1974		2180.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				7/1/1975		2183.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/23/1975	202.33	2183					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/23/1975		2180.2					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/23/1976	202.95	2182					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/23/1976		2179.5					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/16/1977	203.69	2181					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/16/1977		2178.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/30/1978	204.37	2181					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/30/1978		2178.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/11/1979	205.85	2179					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/11/1979		2176.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/10/1980	207.33	2178					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/10/1980		2175.2					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/17/1981	208.56	2176					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/17/1981		2173.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/15/1982	210.17	2175					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/15/1982		2172.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/8/1983	210.82	2174					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				9/8/1983		2171.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/19/1984	211.59	2173					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/19/1984		2170.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/1/1985	212.72	2172					USGS
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/1/1985		2169.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/15/1985		2172.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/20/1989		2163.5					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/8/1989		2163.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				1/9/1990		2163.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				2/14/1990		2162.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/6/1990		2162.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/10/1990		2162.5					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				5/11/1990		2162.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				6/7/1990		2162.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/17/1993		2159.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/16/1993		2158.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/29/1994		2158.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/16/1994		2158.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				12/6/1994		2157.1					Berenbrock_Marti

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GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/23/1995		2156.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/13/1995		2156.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				2/19/1996		2156.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/12/1996		2155.8					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/3/1997		2155.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/24/1997		2155.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/23/1998		2154.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/3/1998		2154.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/15/1999		2154.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/28/1999		2153.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/31/2000		2152.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/10/2000		2152.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/10/2001		2151.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/6/2001		2151.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/20/2002		2151.6					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				11/18/2002		2150.7					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/4/2003		2150.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/24/2003		2150.1					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/25/2004		2149.9					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/29/2004		2149.0					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				3/11/2005		2149.4					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/7/2005		2149.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				4/6/2006		2149.3					Berenbrock_Marti
27S/40E-15D01M	027S040E15D001M	35.5905124	-117.6695072				10/26/2006		2149.4					Berenbrock_Marti
27S/40E-15G01M	027S040E15G001M	35.58773476	-117.6603403	2430	291		5/1/1973	227	2203					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118	2,470.00	274		12/16/1959	243.06	2227					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				7/1/1960	231	2239					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				7/27/1960	230.65	2239					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				5/2/1962	246	2224					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/25/1962	244.6	2225					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/22/1963	245.3	2225					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				9/8/1964	247.03	2223					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				4/1/1965	246.39	2224					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/19/1965	244.54	2225					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/20/1966	248	2222					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/14/1967	249.17	2221					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/19/1968	250.2	2220					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/12/1970	253.43	2217					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/28/1971	253.3	2217					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/18/1972	254.57	2215					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/25/1974	252.09	2218					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				3/25/1975	251.02	2219					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				10/23/1975	251.05	2219					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/23/1976	250.8	2219					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				12/16/1977	251.05	2219					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/30/1978	251.34	2219					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				12/11/1979	252.15	2218					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				12/10/1980	253.02	2217					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				11/17/1981	253.53	2216					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				4/19/1984	255.87	2214					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				4/1/1985	256.7	2213					USGS
27S/40E-15L01M	027S040E15L001M	35.58440149	-117.663118				4/15/1985		2213.3					#N/A
27S/40E-17H01M	027S040E17H001M	35.58884568	-117.6906189	2430	320		5/1/1973	247	2183					USGS
27S/40E-17H02M	027S040E17H002M	35.5866235	-117.68923	2435	320		5/1/1973	253	2182					USGS

TABLE J-1
GROUND WATER WELL DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
KERN COUNTY, CALIFORNIA

WELL DATA[1,2]				WELL COMPLETION DATA			GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Well Depth	Pumping Rate	Drawdown	Specific Capacity	COMMENTS
		NAD83	NAD83	feet-msl	feet-bgs		Date	feet-bgs	feet-msl	feet	gpm	feet	gpm/ft	
27S/40E-18D02M	027S040E18D002M	35.59051215	-117.7197864	2345	493		5/1/1973	338	2007					USGS
28S/37E-10K/LM	028S037E10K0/LM	35.48770209	-117.9910449				2/4/1986		2850.0					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				6/18/1996		2811.9					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/12/1996		2812.8					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/5/1997		2812.9					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/19/1997		2812.8					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/17/1998		2813.1					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/9/1998		2813.2					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/17/1998		2813.1					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/8/1999		2812.6					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				10/27/1999		2812.9					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/27/2000		2812.9					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/7/2000		2812.7					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				4/9/2001		2812.7					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/5/2001		2812.9					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/18/2002		2813.0					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				11/12/2002		2813.0					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/31/2003		2813.3					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				10/20/2003		2813.1					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/22/2004		2813.2					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				10/25/2004		2813.4					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				3/7/2005		2813.5					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				10/3/2005		2813.6					KCWA
28S/38E-18F01M	028S038E18F001M	35.50191906	-117.9274063				4/3/2006		2813.6					KCWA
28S/40E-04C01M	028S040E04C001M	35.5344025	-117.6833958	3,080.00	--		12/1/1952	114	2966					USGS
28S/40E-04C01M	028S040E04C001M	35.5344025	-117.6833958				12/8/1952	113.9	2966					USGS

NOTES

1 Data as provided in the USGS National Water Information System Database - http//:nwis/waterdata.usgs.gov/ and the Department of Water Resources Database - http://wdl.water.ca.gov/gw/
2 Only complete data provided by Brown and Caldwell was entered

DEFINITIONS

NAD-83 North American Datum 1983
feet-msl feet above mean sea level
feet-bgs feet below ground surface
Mo month
gpm gallons per minute
gpm/ft gallons per minute per foot of drawdown
(Blank cell) data not provided or available in USGS or DWR database.

Table J-2 Water Chemistry Data (CD-ROM)

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
24S/38E-28Q01M	**024S038E28Q001M**	**35.8141169**	**-117.8745159**	Aug-53	1050	26	7.2			57	63	79	9.3	**486**	**0**	132	35					180			400	
24S/38E-33J02M	**024S038E33J002M**	**35.80328389**	**-117.8720157**	Jun-72	888		7.3	599		118	46	34	9.4	**427**	**0**	149	34	0.4					100	0	480	
24S/38E-33J02M	**024S038E33J002M**	**35.80328389**	**-117.8720157**	Jun-82	1080	25	6.9		37	100	44	81	9.5			140	35	0.7	0.6		8	230			430	
24S/38E-33J02M	**024S038E33J002M**	**35.80328389**	**-117.8720157**	Jan-86																						
24S/38E-33R02M	**024S038E33R002M**	**35.79995065**	**-117.8720156**	Aug-72	1050	24																				
24S/38E-35E01M	**024S038E35E001M**	**35.80689508**	**-117.850904**	Apr-46	1430		8	848	11	29	21	246	15	**344**	**0**	184	172	1.1				4000			160	
24S/39E-33D01M	**024S039E33D001M**	**35.80772899**	**-117.7781241**	Feb-20				704	42	33	19	178	0	**281**	**0**	184	88						130		160	
24S/39E-33D01M	**024S039E33D001M**	**35.80772899**	**-117.7781241**	Apr-46	1900		7.9	918	7	37	28	269	26	**762**	**0**	0.5	237	0.4				3400			210	
24S/39E-33N01M	**024S039E33N001M**	**35.79939587**	**-117.7786796**	Apr-46	885		7.9	530	9	17	32	122	17	**319**	**0**	118	55	0.6				1200			170	
24S/39E-33N01M	**024S039E33N001M**	**35.79939587**	**-117.7786796**	Jan-86	1620		8.8																			
24S/40E-20J01M	**024S040E20J001M**	**35.83189547**	**-117.6745103**	May-53	2100	21	7.6			67	55	272	20	**162**	**0**	153	508								390	
24S/40E-32H01M	**024S040E32H001M**	**35.8055073**	**-117.6708988**	Sep-53	1780												315					4300			54	
24S/40E-33E01M	**024S040E33E001M**	**35.80578509**	**-117.6695099**	Sep-53	2200												390					7500			110	
24S/40E-33N01M	**024S040E33N001M**	**35.7980075**	**-117.6686764**	Jul-53	8780	20	9.2			4.7	2	2000	42	**822**	**300**	190	2200					8400			20	
24S/40E-34E01M	**024S040E34E001M**	**35.80661846**	**-117.6500649**	Jul-53	3330	23	8			275	57	286	26	**172**	**0**	158	900					2700			920	
24S/40E-35J01M	**024S040E35J001M**	**35.8013409**	**-117.618675**	Sep-53	120000												65000					250000			39000	
24S/40E-36M01M	**024S040E36M001M**	**35.8016187**	**-117.6167305**	Jul-53	3350	23	7.9			195	81	350	22	**116**	**0**	130	975					7800			820	
25S/38E-10H01M	**025S038E10H001M**	**35.77717349**	**-117.868404**	Aug-72	540	25																				
25S/38E-10H02M	**025S038E10H002M**	**35.77661797**	**-117.8656262**	Aug-72	695	24.5																				
25S/38E-11E01M	**025S038E11E001M**	**35.77800684**	**-117.8631262**	Aug-72	560	24.5																				
25S/38E-11K02M	**025S038E11K002M**	**35.775507**	**-117.8506258**	Jun-53	580		8.1	350		37	12	71	5	**252**	**0**	60	26	0.8				600			140	
25S/38E-11K02M	**025S038E11K002M**	**35.775507**	**-117.8506258**	Aug-53	560		7.8			26	20	60	4.9	**248**	**0**	47	22					470			150	
25S/38E-11L01M	**025S038E11L001M**	**35.7757847**	**-117.860626**	Jul-87	540	24.5	7.5																			
25S/38E-11L01M	**025S038E11L001M**	**35.7757847**	**-117.860626**	Sep-87					24	24	8.3	61	4.8			41	12	1.4	0.83			380	150	2	94	
25S/38E-11L01M	**025S038E11L001M**	**35.7757847**	**-117.860626**	Jul-88	500	26.5	8		26	26	8.4	74	4.9			40	11	1.3	0.89			510	< 3	1	100	
25S/38E-13D01M	**025S038E13D001M**	**35.76884057**	**-117.8442366**	Apr-46	658		7.8	400	4	6.8	11	115	22	**315**	**0**	0.5	56	0.4				640			62	
25S/38E-13L01M	**025S038E13L001M**	**35.7613408**	**-117.8395142**	Jun-82	820	25	7.6		29	65	21	86	7.3			94	61	0.7	1.7		2	630	< 3		250	
25S/38E-14B02M	**025S038E14B002M**	**35.75522977**	**-117.8497922**	Aug-72	835	24																				
25S/38E-23G01M	**025S038E23G001M**	**35.7493965**	**-117.8559034**	Apr-46	611		7.7	374	25	38	8.2	80	5.3	**210**	**0**	84	34	0.6				340			130	
25S/38E-23J01M	**025S038E23J001M**	**35.74689665**	**-117.8481253**	Apr-86	660	22.5	7.9		30	56	19	64	7.4			75	35	0.5	1.5			360	10	1	220	
25S/38E-24E01M	**025S038E24E001M**	**35.74800775**	**-117.8467364**	Dec-72	610	23																				
25S/38E-24F01M	**025S038E24F001M**	**35.74773**	**-117.8436808**	Dec-72	860																					
25S/38E-24F01M	**025S038E24F001M**	**35.74773**	**-117.8436808**	Dec-72	580																					
25S/38E-25J01M	**025S038E25J001M**	**35.7288416**	**-117.8303468**	Feb-73	1310																					
25S/38E-25J01M	**025S038E25J001M**	**35.7288416**	**-117.8303468**	Apr-86	1260	23	7.6																			
25S/38E-25J01M	**025S038E25J001M**	**35.7288416**	**-117.8303468**	Aug-88	1400			875						**445**	**0**	114	163				< 10				160	
25S/38E-25K02M	**025S038E25K002M**	**35.72995265**	**-117.8389582**	Feb-73	2500																					
25S/38E-25K02M	**025S038E25K002M**	**35.72995265**	**-117.8389582**	Feb-73	1240																					
25S/38E-25N01M	**025S038E25N001M**	**35.72550824**	**-117.8459027**	Jan-73	940																					
25S/38E-25P02M	**025S038E25P002M**	**35.72856375**	**-117.8428471**	Jan-73	1480																					

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
25S/38E-25Q01M	025S038E25Q001M	35.72800825	-117.8384026	Jan-73	1700																					
25S/38E-35M01M	025S038E35M001M	35.7171749	-117.8653476	Aug-53	979		7.6			26	32	156	7	498	0	88	28					800			200	
25S/38E-36A01M	025S038E36A001M	35.72134179	-117.8306245	Apr-86	1330	22	7.7																			
25S/38E-36A01M	025S038E36A001M	35.72134179	-117.8306245	Aug-88	4400			3210						454	0	1220	310				< 10				1300	
25S/38E-36B01M	025S038E36B001M	35.72495278	-117.8356247	Apr-86	935	25	7.8																			
25S/38E-36B01M	025S038E36B001M	35.72495278	-117.8356247	Apr-86	1350	25.5	7.3		39	61	15	200	4.7			180	120	0.6	1.5			1700	8	49	210	
25S/38E-36B01M	025S038E36B001M	35.72495278	-117.8356247	Jul-88	1160			755						396	0	141	95.9				< 10				210	
25S/39E-01N01M	025S039E01N001M	35.78439654	-117.7384005	Apr-46	994		7.4	592	44	30	25	142	14	389	0	79	72	1				1670			180	
25S/39E-02E01M	025S039E02E001M	35.792174	-117.75729	Apr-46	858		7.8		44	43	23	109	9.4	341	0	93	51	1				1800			200	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-05			7.9	788	37	47	34	164	14	417	0	140	114	0.8				2200	0	0	260	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-05			8.2	792	39	39	29	174	13	359	0	120	112	0.8				3100	0	100	220	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-05			7.7	684	43	38	22	160	13	317	0	150	104	0.8				1500	0	120	190	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-05			8	784	29	57	34	164	15	415	0	155	112	0.9				3200	100	0	280	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-05	1130		7.3	791	37	57	7.3	162	15	234	0	170	120	0.5				2400	0	0	170	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Aug-53	1130	23	7.7			51	35	148	13	428	0	139	80					2600			270	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Oct-61	1230		7.9	777	45	53	37	164	15	438	0	136	109	0.8				3200	10		290	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jul-62	1250		7.7	786	43	53	38	176	15	456	0	140	106	0.7				3100	0		290	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Oct-63	1250		7.9	874	40	51	39	161	15	422	0	146	108	0.8				2700	60		290	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Sep-64	1310		8.1	917	31	56	37	156	10	439	0	140	112	0.9				2600	300		290	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-66			7.8	588	38	66	33	178	16	461	0	145	106	0.8				1900	0	0	300	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Sep-66			7.3	804	35	58	24	210	14	429	0	151	152	0.8				4600	0	0	240	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jun-68			8.5	716	32	46	31	164	6.3	237	24	194	116	1.1				2800	0	120	240	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Apr-69																				30		
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jun-72	1180		7.8	830	25	21	21	166	26	281	0	150	88	0.9				3100	0	10	190	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Oct-73	1130		8.2		37	54	27	170	12	385		180	100	1.2				2600	170	30	250	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jun-74	1260		7.8		28	50	32	160	20	400	0	140	110	0.8				1700	160	30	260	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-75	1200		7.8		25	48	35	160	12	395		130	100	0.9				2500		< 10	260	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	May-76	1260		7.8		42	48	35	180	13	134		130	110	1				1780			260	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jul-78	1100		7.4		35	50	34	150	13	390		112	101	1				2700			260	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Mar-80	1400		7.8		38	56	33	178	17.3	386		146	120	0.96				460			270	
25S/39E-04R01M	025S039E04R001M	35.78634066	-117.7786794	Jul-88	1220	26	7.6		48	52	39	170	11			150	110	0.7	0.37			2800	< 3	50	290	
25S/39E-07K01M	025S039E07K001M	35.7760628	-117.8203472	Apr-46	1350		8.1		8	19	36	267	17	470	0	141	126	0.6				4000			200	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05			8.1	568	52	44	28	116	9.6	388	0	79	60	0.9				1300	0	70	220	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05			8.1	580	64	51	23	117	9.1	386	0	85	56	0.8				1600	0	100	220	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05			7.8	504	75	42	15	105	8.7	302	0	74	58	1				780	500	80	160	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05			7.8	616	62	42	9.8	103	10	288	0	74	60	1				2200	300	0	140	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05	805		7.5	563	46	49	26	106	9.6	359	0	92	58	0.8				1600	0	0	230	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	May-05	870		7.5	610	33	48	20	107	8.9	349	0	70	53	1.1				1800	0	10	200	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	Aug-53	956	23	7.9			48	32	121	9.8	410	0	105	58					1800			250	
25S/39E-09J01M	025S039E09J001M	35.7746743	-117.7784015	Oct-61	867		8	556	65	45	27	99	10	374	0	74	58	0.9				1500	100		220	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Jul-62	916		7.7	584	54	46	30	120	9.8	**409**	**0**	84	55	0.7				1400	0		240	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Oct-63	894		7.7	626	55	42	26	98	10	**354**	**0**	78	56	1				1200	220		210	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Sep-64	805		7.7	564	49	43	26	104	6.5	**388**	**0**	78	60	1				1100	300		220	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	May-66			7.5	588	51	55	23	120	8.9	**388**	**0**	82	56	0.9				700	0	0	230	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Sep-66			7.3	608	44	49	19	142	9.1	**388**	**0**	86	54	0.8				1400	100		200	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Jun-68			8.6	600	48	47	24	110	9.4	**346**	**22**	78	60	1.3				1500	0	190	220	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Apr-69																				30		
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	May-69	928		8.1	570		46	31	106	15	**380**	**0**	84	60	0.9				1400			240	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Aug-72	900																					
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Oct-73	830		8.3		48	50	20	100	8.3	**264**	**5**	97	64	1.1				900	1060	30	200	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Feb-74						36			10				48						1100	20		
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Jun-74	900		8.6		48	53	20	110	9.6	**330**	**10**	72	72	0.8				800	310	40	210	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	May-75	800		8.1		40	37	24	100	9.8	**317**		65	53	0.9				800		< 10	190	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	May-76	860		7.8		52	43	24	89	8	**356**		65	57	1.8				1090			210	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Jul-78	800		7.6		53	45	27	102	8.8	**340**		76	55	1.1				1400			220	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	May-79	820		7.7		46	43	29	124	8.5	**337**		90	76	0.86		< 1.00		1500			230	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Mar-80	900		8		57	45	24	110	10.2	**312**				1.1				1300			210	
25S/39E-09J01M	**025S039E09J001M**	**35.7746743**	**-117.7784015**	Jan-89	930	24	7.7		47	46	29	110	9.6			88	59	0.7	0.16			1400	150	75	230	
25S/39E-10E01M	**025S039E10E001M**	**35.7768965**	**-117.7747903**	Apr-46	1040		8.3	608	4	8.4	7.3	219	20	**493**	**0**	3.4	79	0.6				940			51	
25S/39E-12R01M	**025S039E12R001M**	**35.76939698**	**-117.7275666**	Apr-46	892		7.8	566	66	43	34	104	11	**426**	**0**	78	37	0.8				700			250	
25S/39E-12R01M	**025S039E12R001M**	**35.76939698**	**-117.7275666**	Aug-53	1170	21	7.5			39	29	165	16	**362**	**0**	134	112					2900			220	
25S/39E-12R01M	**025S039E12R001M**	**35.76939698**	**-117.7275666**	Jul-78	1100		7.5		34	45	24	162	12	**320**		102	105	1				2900			210	
25S/39E-12R01M	**025S039E12R001M**	**35.76939698**	**-117.7275666**	May-79	1040		7.8		42	38	26	160	13.2	**312**		138	109	1		< 1.00		2700			200	
25S/39E-12R01M	**025S039E12R001M**	**35.76939698**	**-117.7275666**	Mar-80	1200		7.9		45	44	23	182	19.1	**317**		139	148	0.9				2100			200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Apr-55			7.3			43	29	164	3.6	**370**	**0**	134	122	0.5				4800			230	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Oct-61	1180		7.9	777	48	46	25	168	14	**373**	**0**	121	119	0.7				3200	40		290	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jul-62	1180		7.7	745	51	41	27	180	14	**380**	**0**	133	114	0.8				3100	0		210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jun-65	1410		8.2	776	36	61	12	162	9.6	**359**	**0**	97	110	0.8				2000	0		200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	May-66			7.6	776	46	46	24	182	4.1	**371**	**0**	140	114	0.9				1400	0		220	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Sep-66			7.5	764	40	46	22	200	14	**365**	**0**	145	114	0.9				600	0		200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Nov-67			8	746	43	37	23	178	13	**339**	**0**	131	121	1				2200	0		190	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jun-68			8.7	764	38	46	22	175	6.3	**288**	**24**	145	120	1.3				2800	0	120	200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Nov-68			8.4	704	43	44	23	181	12	**259**	**48**	125	114	0.9				2800	0	50	210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Apr-69																				10		
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Oct-69			8	768	48	42	26	164	11	**342**	**0**	150	115	1				1500	0	40	210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jun-70			8.3	748	63	42	24	171	13	**354**	**0**	140	115	1				3400	0	0	210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Oct-70	1060		8.5		41	46	18	165	14	**305**	**7**	145	112	0.8				2300	0	120	190	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jun-71	1060		7.8	738	42	48	22	172	3.7	**307**	**0**	165	118					2800	0	0	210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Oct-71	1100		7.7	766	39	45	23	165	15	**288**	**0**	155	128	0.9				1900	30	0	210	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Oct-73	1130		8.1		41	45	20	190	12	**317**		190	110	1.1				3300	170	70	200	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Feb-74						35			14				120						250	< 4		
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jun-74	1220		8.1		35	46	20	180	14	**350**	**0**	150	120	0.9				2500	110	10	200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	May-75	1180		7.4		30	40	24	170	13	**337**	**0**	130	110	1.1				2500		< 10	200	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	May-76	1130		7.9		20	38	23	170	12	**351**		130	110	1.1				2060			190	
25S/39E-12R02M	**025S039E12R002M**	**35.7699525**	**-117.7250666**	Jul-88	1150	24.5	7.7		52	43	27	180	11			140	120	0.8	0.47			2800	< 3	7	220	
25S/39E-13E01M	**025S039E13E001M**	**35.76356376**	**-117.7397891**	Apr-46	957		7.7	592	56	40	25	127	13	**336**	**0**	101	82	0.8				2000			200	
25S/39E-17D01M	**025S039E17D001M**	**35.7682853**	**-117.8097912**	Apr-46	469		7.7	264	9	33	11	49	8.2	**255**	**0**	9.1	15	0.8				270			130	
25S/39E-19K01M	**025S039E19K001M**	**35.74634135**	**-117.820069**	Apr-46	846		7.7	446	18	41	24	95	9.8	**509**	**0**	2.9	30	0.2				470	0		200	
25S/39E-21B01M	**025S039E21B001M**	**35.75273039**	**-117.7842347**	Apr-46	541		7.9	336	33	420	15	53	5.9	**258**	**0**	61	11	0.4				200			1100	
25S/39E-22B01M	**025S039E22B001M**	**35.7532861**	**-117.7647897**	Apr-46	707		7.9	436	38	43	19	81	9.4	**303**	**0**	75	35	0.4				410			190	
25S/39E-22J01M	**025S039E22J001M**	**35.74300858**	**-117.7620117**	Apr-46	1460		7.7	778	8	4.4	15	280	14	**610**	**0**	1.4	160	0.4				1500			73	
25S/39E-24D01M	**025S039E24D001M**	**35.75245294**	**-117.7406223**	Apr-46	668		7.7			34	19	81	8.7	**277**	**0**	75	29	0.6				420			160	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Feb-56	1450		8.8		40	19	8.4	300	6.8	**380**	**25**	87	200	0.9				3400	80		82	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Apr-56	2580		9.1							**610**	**140**		360								68	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Oct-63	8330		9.5	6530	0	0	20	1800	17	**2400**	**600**	100	720					12000	12000		80	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Sep-64	2730		8.2	1910	7	3.2	23	400	5.4	**670**	**0**	95	290					3900			110	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Oct-70	1420		8.6	990	42	26	7.8	280	5.8	**420**	**12**	98	180	4				1800	800	60	96	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Jun-71	1500		7.7	1050	53	30	17	260	6.1	**400**	**0**	120	180	1.9				2130	0	0	140	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Oct-71	2230		8.4	1560	46	18	9.8	420	8.1	**580**	**53**	140	280	2.5				3800	50	20	84	
25S/39E-26H01M	**025S039E26H001M**	**35.7330089**	**-117.7431222**	Jun-72	1180		7.9	826	21	20	12	210	6.8	**300**	**0**	120	150	2.6				820	0	100	100	
25S/39E-28P01M	**025S039E28P001M**	**35.72523098**	**-117.7856233**	Apr-46	825		7.7	554	58	68	17	76	4.2	**160**	**0**	160	84	0.6				550			240	
25S/39E-30N01M	**025S039E30N001M**	**35.7274528**	**-117.8275689**	Dec-67	1330		7.6	734		62	22	194		**527**	**0**	99	92	0.6					100	0	240	
25S/39E-30N01M	**025S039E30N001M**	**35.7274528**	**-117.8275689**	Dec-72	1280	8.3																				
25S/39E-31E01M	**025S039E31E001M**	**35.71884185**	**-117.829791**	Apr-46	882		8	533	16	20	11	170	3.5	**370**	**0**	95	44	1.1				740			95	
25S/39E-31E01M	**025S039E31E001M**	**35.71884185**	**-117.829791**	Jun-52		24.4																				
25S/39E-31E01M	**025S039E31E001M**	**35.71884185**	**-117.829791**	Oct-52	837	23.3	8.6			18	18	140	4.8	**240**	**8**		50					550			120	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Mar-45			7.7									79	12						200	0	110	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Apr-46	716		7.5	450	50	40	7.5	98	3.1	**164**	**0**	86	87	0.6				1010			130	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Jul-53	752	20	7.9			35	12	96	3.3	**196**	**0**	72	81					700			140	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	May-69	771	22	8.2	460		40	8	103	5	**180**	**0**	79	94	0.7				1160			130	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Oct-70	760		7.3		36	37	11	107	2.9	**159**	**0**	85	110	0.6				1200	0	0	140	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Jun-71	718		7.8	503	43	40	5.6	104	3.2	**188**	**0**	66	90	0.5				680	0	0	120	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Oct-71	758		7.2	530	34	48	5.9	105	3.1	**220**	**0**	70	84	0.4				1200	150	0	140	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Oct-73	780		8		27	29	12	97	3.8	**161**		90	80	0.8				800	70		120	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Jun-74	810		7.1		28	37	7.8	110	2.5	**170**	**0**	78	110	0.8				500	390	< 10	120	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	May-76	750		7.7		41	40	8.8	120	2.3	**234**		78	97	1				1110			140	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Jul-78	680		7.2		31	40	13	100	2.9	**160**		78	80	0.74				1040			150	
25S/39E-35N01M	**025S039E35N001M**	**35.7116204**	**-117.7584**	Mar-80	780		7.9		38	40	6	110	3	**160**		93	92	0.63				1300			130	
25S/40E-03N01M	**025S040E03N001M**	**35.7849523**	**-117.6686763**	Sep-53	8080											870						17000			40	
25S/40E-08A01M	**025S040E08A001M**	**35.7827301**	**-117.6875657**	Jul-53	1790	22	7.9			20	33	322	36	**384**	**0**	206	285					3600			180	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Aug-72	490	23.5																				
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Mar-74	1880		8.2		55	31	18	330	35	380	0	180	310	1.4			48	7000	60		150	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Mar-75	1700	18	8.1		51	32	19	290	39	403	0	160	250	0.1	0.11		180	3900	< 10		160	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Aug-76	1780	20	8		61	29	19	310	33	376	0	150	290	1.5	0.1		150	3800	40		150	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Jun-78	1920	20.5	7.7		56	33	22	330	33	380	0	140	310	1.3	0.05			4000	< 10		170	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	May-79	1900	20.5	7.9		60	38	23	340	36			150	340	1.7	0.03		150	1800	30		190	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	May-80	1800	19.5	7.8		16	34	23	340	35			150	350	0.3	0.08		170	4800	70		180	
25S/40E-08A01M	025S040E08A001M	35.7827301	-117.6875657	Jun-82	1740	20	7.8		65	35	23	330	31			180	300	1.5	< 0.100		170	4000	10	60	180	
25S/40E-11K01M	025S040E11K001M	35.7738416	-117.6386753	May-53	2230	19	8.5			4.1	2.4	554	25	716	29	249	256								20	
25S/40E-11K01M	025S040E11K001M	35.7738416	-117.6386753	Jul-53	2230	19	9			4.2	4.7	508	24	598	92	142	265					7200			30	
25S/40E-11K01M	025S040E11K001M	35.7738416	-117.6386753	Jun-82	2120	19.5	8.5		78	3.4	1.7	520	21			140	260	3.6	< 0.100		230	11000	60	< 10	16	
25S/40E-12M01M	025S040E12M001M	35.772175	-117.6317307	May-53	4100	18	8			12	3.4	1020	39	814	0	388	878								44	
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Jul-88	570	27	8.2		22	33	13	70	5.8			62	24	0.4	0.68			230	3	110	140	
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Jul-99																						
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Oct-99	74		6.3									2	5.5									
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Apr-00																						
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Oct-00	21		5.8									< 2.0	0.6									
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Apr-01	71		7									4	1.4									
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Oct-01	52		4.6									< 3.0	2.4									
25S/40E-16M16M	025S040E16M	#N/A	#N/A	Oct-02	82		7.5									4	1.2									
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	Mar-74	928		8.3		37	29	18	150	16	379	0	120	40	1.3	0.07		17	2900	110		150	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	Mar-75	920	16.5	8		39	29	19	140	19	395	0	91	38	1.3	2.6		14	860	40		150	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	Aug-76	965	20.5	8.4		46	25	18	170	18	441	0	88	40	1.3	2.7		13	900	170		140	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	Jun-78	8400	22	9.3		21	3.6	6	2300	260	1850	1100	1400	540	3.8	0.29			15000	270		34	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	May-79	2800	20	8.7		24	4.5	4.9	650	74			390	160	2	< 0.100		220	4600	150		31	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	May-80	1400	22.5	8.6		38	5.2	5.1	320	47			100	62	0.4	0.01		88	2000	40		34	
25S/40E-18R01M	025S040E18R001M	35.7557863	-117.7072881	Jun-82	965	22	8.5		31	13	9.8	190	29			110	44	1.5	< 0.100		54	1100	570	20	73	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Oct-52	748	18.9	8.6			30	22	97	12	280	8		52					820			170	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Mar-74	784		8.1		52	40	21	93	12	328	0	79	46	0.9	0.06		20	870	< 10		190	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Mar-75	740	20.5	7.7		49	36	23	93	14	327	0	70	60	1	0.05		9	490	40		180	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Aug-76	740	23	7.9		54	42	22	94	12	329	0	78	47	0.9	0.15		18	1000	30		200	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Jun-78	1020	19	8.4		5.5	25	4.7	180	16	290	12	58	120	0.7	0.04			3300	40		82	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	May-79	720	20	8.2		9.1	27	9.1	130	2.9			38	68	0.8	0.01		44	2200	90		100	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	May-80	780	19.5	8.2		15	31	13	120	12			48	51	0.7	0.07		79	1700	10		130	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Jun-82	745	20.8	8.1		28	37	17	110	12			60	48	0.6	< 0.100		42	1300	250	70	160	
25S/40E-20F01M	025S040E20F001M	35.74717545	-117.6989545	Jan-86	675	19	7.8																			
25S/40E-24H01M	025S040E24H001M	35.75078677	-117.6175634	May-53	91200		7.3			26	71	26100	320	572	0	129	39500								360	
25S/40E-24N01M	025S040E24N001M	35.73995365	-117.6292303	Jul-53	8080	20.6	6.4			640	470	520	31	18	0	1100	2500					5300			3500	
25S/40E-25H01M	025S040E25H001M	35.73273164	-117.6172854	May-53	91200		7.3	66400		26	71	26000	320	570	0	130	40000								360	
25S/40E-27E01M	025S040E27E001M	35.73467585	-117.66562	Jul-53	1410	20.6	8.7			17	9.4	300	19	370	28	150	180					1200			81	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
25S/40E-27E01M	**025S040E27E001M**	**35.73467585**	**-117.66562**	Jun-72	1050	23	8.6		60	14	7.5	250	18	**400**	**18**	94	140	0.6	0.01			2000	200		66	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Mar-54	3730	17.2											900					3800			200	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	May-69	1000		8	633		36	27	152	4	**371**	**0**	142	44	1.2				760			200	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Mar-74	26600		9.9		22	0.3	0.1	8300	63	**3570**	**5120**	3800	2200	11	0.01		1500	57000	200		1	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Mar-74	2290	25	8.6		7.6	9	10	450	23	**299**	**8**	90	520	0.6	0.01		14	3800	180		64	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Mar-75	42800	19	10.1		20	4.2	< 0.10	15000	130	**6130**	**12100**	4500	3500	16	< 0.100		3800	120000	300		10	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Mar-75	2100	16	8.6		6	7.6	10	460	29	**311**	**14**	92	510	0.6	0.05		5	3500	< 10		60	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Aug-76	43800	24.5	9.8		15	< 0.10	0.4	15000	84	**4470**	**12400**	4600	3700	18	0.01		4000	120000	300		2	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Aug-76	2310	23	8.6		5.2	8.9	10	440	22	**294**	**16**	91	480	0.7	0.04		6	7700	30		63	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Jun-78	44100	23.5	9.9		60	0.3	0.3	15000	91	**8000**	**10800**	4900	1800	21	0.29			120000	180		2	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Jun-78	2600	23	8.7		6.5	8.2	7.5	530	24	**340**	**20**	110	550	0.5	0.06			3100	50		51	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	May-79	2600	21	8.7		1	6.5	7	470	22			100	490	0.8	0.01		2	190	20		45	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	May-80	52700	21.5	9.3		0.6	5	1	20000	1600			8600	4300	22	1.3		2000	150000	1700		17	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	May-80	2000	20	8.4		60	5	7	480	22			110	490	1.4	0.03		3	3300	60		41	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Jun-82	51600	22	9.9		19	0.4	0.7	15000	86			4600	4300	20	0.1		2900	120000	390	50	4	
25S/40E-33L01M	**025S040E33L001M**	**35.7160651**	**-117.678398**	Jun-82	2250	23.2	8.8		8.5	7.7	6.3	500	20			110	500	0.7	< 0.100		7	3100	90	20	45	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Jul-53	10300	21.7	9.1			5.1	6.1	2600	20	**1400**	**290**	840	2300					13000			38	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Jun-72	8000	25	9.5	7620	51	1.7	0.2	2700	16	**1300**	**940**	750	2100	5.8	0.31			24000	40		5	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Mar-73	850																					
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Oct-86	4060	21	9.4		32	10	6	1000	7.9			150	820	3	0.15			27000	30	20	50	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	May-87	3820	22	9.4		35	41	11	710	6.1			110	550	2.1	0.14			18000	40	30	150	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Mar-89	3350	21.5	9.6		37	44	12	650	6.2			150	530	2.1	0.12			16000	60	20	160	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Apr-90	3010	21.5	9.6		36	45	13	700	6.8			130	480	1.5	0.1			18000	50	20	170	
25S/40E-35P01M	**025S040E35P001M**	**35.71106536**	**-117.6439525**	Mar-91	2790	21	9.6	1740	38	45	12	590	6.4			150	510	1.9	0.15			15000	50	10	160	
25S/41E-19L01M	**025S041E19L001M**	**35.7488424**	**-117.6042297**	Jul-53	19600	22.2	6.6			1400	120	3100	55	**24**	**0**	270	7400					26000			4000	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Dec-69			8.3	4040								320	1500								140	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Oct-70	4750		8.3	2950	37	40	8.8	1040	16	**182**	**0**	350	1360	3.6				8000	0	180	140	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Jun-71	3500		7.5		50	110	28	580	16	**128**	**0**	240	940	1.5				5800		80	390	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Oct-71	3700		7.3	2590	43	75	15	686	16	**137**	**0**	260	996	2				6300	50	60	250	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Aug-72	640	27																				
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Oct-73	4800		8.1		39	38	5.9	1000	15	**166**		300	1300	4.6				10000	5120	60	120	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Jun-74	5300		8.1		30	45	12	1000	20	**180**	**0**	360	1400	4.4				8400	800	90	160	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	May-75	4800		7.8		30	46	6	970	13	**142**		250	1300	0.4				8200		30	140	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	May-76	5200		8.4		14	42	2.9	E 1000	13	**156**		320	1300	1.4				6000			120	
25S/41E-21E01M	**025S041E21E001M**	**35.7535646**	**-117.5736734**	Jul-78	3840		7.3		23	88	32	940	13	**93**		590	1160	2.6				5200			350	
25S/41E-31C01M	**025S041E31C001M**	**35.72828734**	**-117.6058962**	Jul-53	174000	18.9	9.3			0	0	90000	420	**500**	**13100**	17000	110000					560000			0	
26S/37E-26L01M	**026S037E26L001M**	**35.63634227**	**-117.9800716**	Jul-87	400	27.5	7.2																			
26S/38E-01G01M	**026S038E01G001M**	**35.70356434**	**-117.8367355**	Oct-52	906	22.8	8.3			58	16	110	5.1	**140**	**0**		110					400			210	
26S/38E-01G01M	**026S038E01G001M**	**35.70356434**	**-117.8367355**	Mar-73	840																					
26S/38E-01G02M	**026S038E01G002M**	**35.70411989**	**-117.8361799**	Jan-73	830		7.8	546		53	15	120	5.4	**160**	**0**	183	94	0.7						< 10	200	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/38E-01G02M	**026S038E01G002M**	**35.70411989**	**-117.8361799**	Mar-73	850																					
26S/38E-01H03M	**026S038E01H003M**	**35.70634208**	**-117.8339577**	Mar-73	860																					
26S/38E-01L01M	**026S038E01L001M**	**35.7021754**	**-117.8431245**	Mar-73	880																					
26S/38E-02Q01M	**026S038E02Q001M**	**35.6960643**	**-117.8564581**	Apr-46	854		7.7	516	21	35	11	120	5.1	**160**	**0**	160	84	0.8				600			130	
26S/38E-12A01M	**026S038E12A001M**	**35.6924535**	**-117.8311796**	Feb-73	840																					
26S/38E-12A01M	**026S038E12A001M**	**35.6924535**	**-117.8311796**	Feb-73	840																					
26S/38E-12H02M	**026S038E12H002M**	**35.6905091**	**-117.8325685**	Feb-73	780																					
26S/38E-12R01M	**026S038E12R001M**	**35.6827315**	**-117.8311795**	Feb-73	700																					
26S/38E-15Q01M	**026S038E15Q001M**	**35.668287**	**-117.872847**	Aug-53	811	20.6	8			75	22	69	2.9	**188**	**0**	233	24					120			280	
26S/38E-35B01M	**026S038E35B001M**	**35.6371763**	**-117.8978472**	Jun-82	300	29	8.8		15	4	0.51	68	0.9			24	26	0.4	4.1		5	160	30	510	12	
26S/38E-35B01M	**026S038E35B001M**	**35.6371763**	**-117.8978472**	Jan-86	291	22.5	8.1																			
26S/38E-35L01M	**026S038E35L001M**	**35.62745467**	**-117.857846**	Mar-73	400																					
26S/39E-02C01M	**026S039E02C001M**	**35.7091205**	**-117.7503443**	Apr-46	565		7.7	360	46	40	6.7	63	3.1	**130**	**0**	74	60	0.6				400			130	
26S/39E-02N01M	**026S039E02N001M**	**35.69662075**	**-117.755622**	Apr-46	1350		7.4	774	12	9	5.6	267	8.2	**360**	**0**	0.5	240	0.8				5200			46	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Aug-53	898	21	7.8			46	23	140	4.1	**196**	**0**	244	74					410			210	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Sep-64	805		7.6	564	35	61	17	107	1.9	**200**	**0**	175	72	0.8				480	1400		220	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-65	964		8.2		26	58	12	104	4.2	**183**	**0**	120	74	0.7				590	120	0	190	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	May-66			7.5	604	37	59	12	123	4.4	**200**	**0**	175	73	0.8				300	100	0	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Sep-66			7.4	628	35	56	15	145	3.4	**198**	**0**	195	72	0.8				0	0	0	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Oct-67			7.7	576	35	58	11	114	3.5	**195**	**0**	155	78	0.9				400	0	140	190	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-68			8.6	560	30	60	9.8	114	3.2	**159**	**24**	155	76	1				480	0	120	190	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Nov-68			8.3	556	47	57	12	110	3.4	**198**	**0**	160	78	0.9				900	100	100	190	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Oct-69			7.8	624	40	58	13	116	3.5	**202**	**0**	195	74	0.9				30	100	120	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-70			7.9	752	36	57	14	120	3.5	**200**	**0**	190	74	0.9				1350	0	60	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Oct-70	855		8.3		34	61	11	114	3.6	**173**	**0**	190	74	0.7				400	0	60	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-71	905		7.8	633	32	60	13	111	3.7	**181**	**0**	195	76	0.7				510	0	0	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Oct-71	870		7.2	609	32	52	17	110	3.6	**154**	**0**	210	68	0.8				600	50	50	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-72	895		7.5	627	21	56	12	130	3.4	**193**	**0**	210	70	1				0	50	10	200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-72																						
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Oct-73	860		8.2		20	53	13	120	3.2	**166**		220	68	0.9				600	790	60	180	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Feb-74						62			5.3				96						2000	80		
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jun-74	940		7.9		29	56	11	120	3	**200**	**0**	160	92	0.8				300	290	50	180	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	May-75	880		7.8		20	53	10	120	3.2	**176**		160	66	0.7				< 20		40	170	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	May-76	820		7.8		17	54	12	120	3.3	**185**		180	70	1.1				670			180	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jul-78	900		7.4		28	58	15	110	3.3	**180**		180	71	0.88				200			200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Mar-80	950		7.9		35	60	11	120	3.7	**171**		203	76	0.82				710			200	
26S/39E-05F01M	**026S039E05F001M**	**35.70495345**	**-117.8078458**	Jul-88	850	24	7.4		40	59	14	120	3.7			180	75	0.6	< 0.100			510	260	65	200	
26S/39E-06M03M	**026S039E06M003M**	**35.70106445**	**-117.8297908**	Mar-73	810																					
26S/39E-07D03M	**026S039E07D003M**	**35.6957868**	**-117.8278462**	Feb-73	870																					
26S/39E-07D04M	**026S039E07D004M**	**35.69523126**	**-117.8278462**	Feb-73	920																					

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-07J04M	026S039E07J004M	35.6877315	-117.8164569	Mar-73	650																					
26S/39E-07L01M	026S039E07L001M	35.6871759	-117.8250683	Feb-73	770																					
26S/39E-07L01M	026S039E07L001M	35.6871759	-117.8250683	Feb-73	830																					
26S/39E-07P03M	026S039E07P003M	35.6838426	-117.8259016	Jan-73	920																					
26S/39E-07R01M	026S039E07R001M	35.6821761	-117.8131234	Jan-73	1000	24																				
26S/39E-07R01M	026S039E07R001M	35.6821761	-117.8131234	Feb-73	670																					
26S/39E-07R01M	026S039E07R001M	35.6821761	-117.8131234	Mar-73	700																					
26S/39E-07R01M	026S039E07R001M	35.6821761	-117.8131234	Mar-73	660																					
26S/39E-07R01M	026S039E07R001M	35.6821761	-117.8131234	Mar-73	730																					
26S/39E-08E01M	026S039E08E001M	35.689676	-117.8081234	May-87	1350	26	9		29	1.5	0.28	280	2.8			11	58	9.5	< 0.100			5400	40	5	5	
26S/39E-08K01M	026S039E08K001M	35.68800944	-117.799512	Apr-46	613		7.5	386	33	36	7.3	78	2.3	**110**	**0**	117	58	0.6				540			120	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Mar-45			7.9								**0**	52	48						400	0	190	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jan-46	1770		7.4	898		34	11	280	54	**670**	**0**	2.4	180	0.8				7300			130	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Apr-46	1770		7.4	1010	8	34	11	280	54	**670**	**0**	2.4	180	0.8				7300			130	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Apr-46	443		7.7	288	40	33	5.5	51	2.3	**140**	**0**	49	37	0.8				1380			110	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jul-53	441	22	7.9			35	7.5	45	2.4	**138**	**0**	49	38					530			120	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Sep-64	375		8.2	263	35	35	6.8	54	2.2	**127**	**0**	35	48	0.7				1500			120	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-65	539		8.2	316	24	33	6.3	54	2.7	**137**	**0**	27	52	0.1				1440	30	0	110	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	May-66			7.7	312	28	37	4.9	56	2.7	**159**	**0**	38	48	0.8				1000	0	0	110	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Sep-66			7.1	328	32	39	4.4	57	1.9	**145**	**0**	37	50	0.8				1200	100	0	120	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Oct-67			7.9	356	32	35	6.3	58	2.3	**151**	**0**	30	56	0.7				1200	0	0	110	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-68			8.3	312	28	39	5.9	70	2.4	**141**	**0**	48	60	1.1				1510	0	0	120	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Nov-68			8.2	452	29	46	4.9	58	2.4	**159**	**0**	46	58	0.7				1700	0	20	130	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Oct-69			7.8	368	36	41	6.8	56	2.2	**159**	**0**	41	58	0.8				750	0	80	130	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-70			7.6	360	29	44	6.8	64	2.5	**163**	**0**	51	68	0.8				1960	0	0	140	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-71	558		7.6	391	40	47	8.8	60	3	**176**	**0**	37	74	0.6				1320	0	0	150	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Oct-71	605		7.2	423	29	48	7.1	61	2.8	**176**	**0**	39	70	0.5				1900	0	0	150	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-72	635		7.7	445	20	57	7.8	61	2.7	**185**	**0**	48	70	0.8				1900	0	0	170	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-72																						
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Oct-73	620		7.7		33	54	8.8	74	2.1	**171**		69	76	0.9				1600	220	< 10	170	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Feb-74						65			4.9				120						130	10		
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jun-74	770		7.4		23	5.8	88	84	2.2	**220**	**0**	46	100	0.7				1700	330	< 10	180	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	May-75	720		7.3		22	46	10	98	3	**160**	**0**	35	88	0.8				3200		< 10	160	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	May-76	800		7.6		36	67	9.8	110	2.9	**249**		68	88	0.8				2090			210	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Jul-78	700		7.3		28	58	9.8	81	3.5	**200**		36	84	0.74				2300			180	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	May-79	750		7.6		32	53	8.8	91	2.2	**200**		49	97	0.8		< 1.00		2100			170	
26S/39E-12E01M	026S039E12E001M	35.68828777	-117.7211766	Mar-80	780		7.8		32	57	6	84	3.2	**205**		44	96	0.82				2100			170	
26S/39E-12G01M	026S039E12G001M	35.68884327	-117.7306213	Apr-46	450		7.3	270	32	7.2	5.1	57	3.9	**160**	**0**	21	40	0.8				620			39	
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843	May-87	365	26	8		55	29	5	30	2.7			5.1	24	0.8	< 0.100			170	23	77	93	
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843	Apr-90	300	24.5	7.9		53	27	5.2	32	2.8			4.6	24	0.5	< 0.100			180	81	75	89	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843	Mar-91	320	24.5	8	221	56	28	5.3	31	2.9			4.3	24	0.5	< 0.050			160	72	75	92	
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843	Apr-92	343	24.5	7.9		46	30	5.2	32	3			18	29	0.6	< 0.050			170	100	75	96	
26S/39E-13R03M	026S039E13R003M	35.666066	-117.722843	Apr-93	361	24	7.8		55	27	5.1	32	2.8			5.8	25	0.6	< 0.050			190	75	67	88	
26S/39E-14E01M	026S039E14E001M	35.67551008	-117.7575663	Apr-46	380		7.6	209	35	31	7.3	33	5.7	**140**	**0**	36	28	0.8				250			110	
26S/39E-17D03M	026S039E17D003M	35.67800955	-117.8111789	Mar-73	460																					
26S/39E-17M01M	026S039E17M001M	35.67300968	-117.8092343	Mar-73	530																					
26S/39E-18C02M	026S039E18C002M	35.6782872	-117.8242348	Jan-73	555																					
26S/39E-18D01M	026S039E18D001M	35.67967605	-117.826457	Jan-73	570	24																				
26S/39E-18J01M	026S039E18J001M	35.67356517	-117.8153456	Mar-73	500																					
26S/39E-18J03M	026S039E18J003M	35.67106524	-117.8128455	Mar-73	530																					
26S/39E-18J03M	026S039E18J003M	35.67106524	-117.8128455	Mar-73	620																					
26S/39E-18K01M	026S039E18K001M	35.67134297	-117.8181234	May-70	465		7.9	255		37	6.8	46	2.9	**110**	**0**	38	64	0.6					0	20	120	
26S/39E-18R03M	026S039E18R003M	35.66912084	-117.8131233	Mar-73	530																					
26S/39E-18R03M	026S039E18R003M	35.66912084	-117.8131233	Mar-73	580																					
26S/39E-18R06M	026S039E18R006M	35.6680097	-117.8175678	Mar-73	550																					
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Mar-45			7.8									120	260						400	0	210	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Apr-55	631	30	8			50	7.1	71	3.1	**96**	**0**	81	110					100			150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-55	678	23.3											108								160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-56	803	30.6	7.7			66	8.6	78	3.6	**92**	**0**	72	160	0.5							200	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Mar-57	683	29.4											120								170	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Sep-57	665	30	7.1			53	7.3	68	3.5	**94**	**0**	71	120								160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Apr-58	648	29.4				60							110								150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Sep-58	655		7.2			50	7.5	63	2.7	**94**	**0**	70	100								160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Nov-59	787	30.6	7.2			65	9.2	84	4.2	**84**	**0**	99	150	0.6							200	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Aug-60	631	29.4	7.1			50	7.5	64	2.5	**96**	**0**	75	100								160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Aug-61	565		6.9	395	23	48	8.8	58	3.4	**95**	**0**	65	100	0.1				100	50		160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-62	615		8.4	430	28	44	8.3	60	3.1	**49**	**7**	60	120	0.9				150	200		140	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Apr-63	735		7.6	515	30	31	9.8	67	0.8	**83**	**0**	82	120	0.7				90	80		170	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-63	740		8.2	518	31	59	7.8	79	1.3	**85**	**0**	78	130	0.6				300	0		180	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	May-64	588		7.6	410	33	46	7.8	66	4.1	**93**	**0**	58	110	0.6				350			150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Sep-64	545		8.1	382	31	46	6.3	68	2.5	**110**	**0**	53	110	0.8				240			140	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-65	737		8.2	496	23	53	6.8	69	3	**88**	**0**	48	110	0.7				190	0	0	160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	May-66			7.6	348	30	40	5.9	61	2.6	**110**	**0**	56	70	0.8				0	0	0	120	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Sep-66			7.1	352	29	35	5.9	57	1.9	**120**	**0**	57	56	0.8				400	0	0	110	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-68			8.1	500	26	54	7.3	77	2.6	**100**	**0**	78	120	1.1				390	0	0	160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jul-68	642																					
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Nov-68			7.9	532	27	53	4.4	76	2.6	**110**	**0**	73	110	0.8				700	0	500	150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-69			7.9	508	33	51	7.1	71	2.6	**110**	**0**	82	100	0.8				0	0	80	160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-70			7.8	424	28	54	4.1	74	2.7	**120**	**0**	79	100	0.8				1100	0	0	150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-70	805		7.9		28	64	7.8	86	3.2	**85**	**0**	95	160	0.7				200	100	120	190	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-71	665		7.6	466	34	49	5.8	65	3	110	0	62	98	0.7				100	0	0	150	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-72	670		7.6	470	19	53	5.8	68	2.6	98	0	73	100	0.9				310	0	0	160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Oct-73	800		7.9		27	59	7.8	89	2.8	93		91	140	0.9				300	50	< 10	180	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jun-74	1060		7.3		19	77	7.8	100	3.4	88	0	82	220	0.7				100	4460	70	220	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	May-75	900		7.5		19	72	5	120	3.5	54		90	200	0.5				< 20		< 10	200	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	May-76	920		7.8		29	74	7.8	120	3.3	88		78	190	1.5				230			220	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Jul-78	710		7.3		23	53	5.9	72	3.2	83		79	97	1				380			160	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	May-79	850		7.8		28	74	9.8	95	3.4	54		101	185	0.86		< 1.00		340			220	
26S/39E-19Q01M	026S039E19Q001M	35.73550827	-117.8170132	Mar-80	770		8.1		29	56	4	75	2.9	73		57	110	1.02				360			160	
26S/39E-23E01M	026S039E23E001M	35.65717714	-117.7583994	Apr-46	388		7.7	240	30	28	6.3	39	3.5	110	0	47	32	0.6				240			96	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-60	350		7.9	247	34	25	7.8	33	2.9	120	0	36	24	0.6				200	0		94	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Apr-63	440		7.9	308	32	27	7.3	33	0.9	100	0	41	36	0.6				20	120		98	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-63	358		8.2	251	32	35	5.9	30	1.5	120	0	48	24	0.5				300	0		110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	May-64	420		7.9	295	34	27	7.8	39	2.8	130	0	27	34	0.5				450			100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Sep-64	375		7.8	263	35	37	5.9	31	2.5	140	0	33	36	0.7				70			120	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jun-65	501		8.2	268	26	27	7.8	32	3.2	120	0	24	32	0.7				140	10	0	100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	May-66			7.8	236	32	28	7.3	34	3.4	120	0	33	30	0.8				250	0	0	100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Sep-66			7.4	276	30	34	5.9	47	2.3	120	0	46	32	0.7				500	0	0	110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-67			7.9	236	31	32	5.9	33	2.6	130	0	33	30	0.6				200	0	0	100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jun-68			8.6	228	27	30	5.9	42	2.3	120	10	38	32	1.1				330	100	0	100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Nov-68			8.2	224	28	33	3.9	45	2.5	130	0	44	32	0.6				1300	100	20	98	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-69			7.9	280	36	34	6.3	42	2.5	130	0	48	32	0.7				0	0	40	110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jun-70			7.8	216	32	34	6.3	52	2.6	130	0	55	41	0.7				1300	0	0	110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-70	384		8.2	270	30	37	5.4	37	3	120	0	53	30	0.5				360	0	120	110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-71	365		6.9	256	30	31	6.3	36	3.2	120	0	37	30	0.6				300	50	0	100	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jun-72	360		7	252	21	28	6.8	33	2.9	120	0	36	24	0.8				200	0	50	98	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Oct-73	350		8.1		30	24	4.9	43	2.8	112		38	32	0.8				400	90		80	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Feb-74						26			2.9				21						20	< 2		
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jun-74	380		7.6		23	26	6.8	41	2.6	130	0	34	36	0.6				300	200	10	92	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	May-75	400		7.1		24	35	6	46	2.2	107		44	31	0.4				500		30	110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	May-76	400		7.7		13	32	7.8	46	2.4	117		52	31	0.9				200			110	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Jul-78	470		7.4		27	38	6	23	2.4	84		49	42	0.68				180			120	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	May-79	380		7.9		34	34	9.8	35	2.3	102		50	34	0.72		< 1.00		250			120	
26S/39E-23J01M	026S039E23J001M	35.6602327	-117.7439546	Apr-86	445	24	8		33	35	5.4	36	2.6			49	29	0.6	1.2			220	52	7	110	
26S/39E-24E01M	026S039E24E001M	35.6596772	-117.7397878	Apr-46	401		7.8	257	31	31	6.3	40	2.7	110	0	51	30	0.4				250			100	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-60	298		8.8	210	27	18	0.5	46	1.5	92	11	29	19	0.6				200	20		47	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Apr-63	290		8.8	203	18	5.6	1.5	46	0.7	61	140	18	16	0.6				100	120		20	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-63	298		8.8	209	26	16	3.4	48	11	110	12	30	20	0.5				430	0		54	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	May-64	292		8.7	200	33	12	2.9	48	2	71	22	18	32	0.5				500			40	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Sep-64	355		8	249	34	27	5.9	33	2.9	120	0	36	32	0.7				100			92	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	May-66			8.8	216	32	12	3.4	50	2.8	**88**	**16**	23	18	0.7				300	0	0	44	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Sep-66			7.5	256	30	26	6.8	47	2.7	**120**	**0**	38	28	0.7				1200	0	0	93	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-67			7.9	196	29	25	3.9	41	2.4	**120**	**0**	48	30	0.5				100	0	0	78	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jun-68			8.5	184	23	16	3.4	48	1.8	**110**	**7**	30	24	1.1				280	0	0	54	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Nov-68			8.2	204	28	19	2.9	51	2	**120**	**0**	33	24	0.6				700	200	20	60	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-69			8.6	236	28	17	4.4	49	1.9	**120**	**7**	33	22	0.8				0	0	40	60	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jun-70			7.9	176	29	20	6.8	45	2.3	**120**	**0**	35	26	0.8				1230	0	0	78	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-70	360		8.2		31	35	5.8	35	2.7	**110**	**0**	51	34	0.5				200	0	0	110	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jun-71	351		8.2	246	33	22	2.9	45	2.7	**120**	**0**	32	26	0.6				590	0	0	68	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-71	319		7.7	223	27	20	4.4	44	2.6	**120**	**0**	29	24	0.7				1000	20	0	68	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jun-72	330		8	231	20	22	4.9	44	2.1	**120**	**0**	30	26	0.8				320	0	20	76	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Oct-73	340		8.1		18	29	< 0.10	46	2.6	**112**		35	28	0.9				200	100		72	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jun-74	360		7.8		21	18	4.9	46	1.8	**120**	**0**	29	32	0.7				200	110	10	64	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	May-75	350		8.2		20	18	5	58	2.2	**98**		30	30	0.6				< 20		< 10	64	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	May-76	310		8.5		47	19	5.9	62	2.2	**93**	**12**	28	22	1.1				200			72	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Jul-78	360		7.7		23	21	5	27	2.4	**100**		34	29	0.8				280			72	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	May-79	310		8.1		31	22	8.8	39	2.4	**98**		41	29	0.72		< 1.00		230			92	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Mar-80	410		8.2		25	22	3	42	3.6	**88**		38	36	0.74				250			67	
26S/39E-24M01M	026S039E24M001M	35.65606616	-117.7406211	Sep-85	332	25.5			33	29	6	35	2.9			42	25	0.5	1.3			170	3	12	97	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Mar-45			7.6								**0**	12	27						0	0	27	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Jan-46			8.1		18						**0**	17	19						100		66	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Jun-52	388	26.1	7.9	257	39	32	7.8	36	3.8	**120**	**0**	44	26	0.5				150	0		110	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Oct-52	391	26.1											27								110	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-54	278	27.8											13						90		32	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Apr-55	231	27.2	7.7			4.8	1.6	52	3.2	**140**	**0**	5.8	9.6	0.6				150			19	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Oct-55	283	26.7	8.2			10	1.4	51	3.2	**140**	**0**	10	12	0.9				190			31	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Oct-55	413	26.1	7.4			34	7.6	36	3.1	**120**	**0**	59	28	0.6				200			120	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Oct-56	262	28.3	7.8			8.7	1.5	45	4.8	**130**	**0**	0.1	14	0.9							28	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Oct-56	361	26.7	7.7			29	6.7	33	4.1	**120**	**0**	38	26	0.5							100	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Mar-57	246	27.8											95								15	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-57	371	26.7	7			30	9	32	5	**120**	**0**	47	28								110	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-57	385	26.7	7.1			34	6.6	34	3.9	**120**	**0**	53	29								110	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Mar-58	360	30.6	8	237	37	13	3	59	2.6	**140**	**0**	28	20	1				200	10		45	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Apr-58	243	28.3				< 15.0							10								38	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Apr-58	392	26.1				52							30								130	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-58	305		7.7			19	6	38	5.5	**130**	**0**	27	21								72	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-58	416		7.4			36	8.8	39	2.4	**170**	**0**	31	30								130	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Sep-58	348		8.1			4	0	78	1	**180**	**0**	18	13								10	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Nov-59	353	33.9	9.1			2.8	1	82	0.8	**130**	**26**	21	14	0.8							11	
26S/39E-24R01M	026S039E24R001M	35.65301075	-117.7247873	Aug-60	343	30	8			15	3.5	53	2.2	**140**	**0**	31	18								52	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Aug-61	440		7.3	310	27	16	3.9	49	2.7	**130**	**0**	15	24	0.7				200	0		56	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-62	870		8.3	260	30	4	0.5	68	1.3	**120**	**0**	10	24	0.8				280	260		12	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Oct-63	315		8.4	221	28	21	4.4	39	1.9	**100**	**5**	34	24	0.4				180	0		70	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Oct-63	315		8.4	221	28	21	4.4	39	1.9	**100**	**5**	34	24	0.4				180	0		70	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	May-64	352		8.4	240	31	19	4.9	46	1.9	**88**	**12**	23	30	0.5				400			68	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Sep-64	355		8.6	249	30	14	2.9	52	1.9	**90**	**22**	18	24	0.7				130			48	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-65	456		9.1	284	25	13	2.9	54	2.4	**78**	**34**	16	22	0.8				200	110	0	44	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	May-66			8.8	208	30	12	3.2	56	3.3	**120**	**10**	26	20	0.9				0	0	0	44	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Sep-66			7.8	244	26	13	2.9	64	2.3	**130**	**0**	22	24	0.8				0	100	0	44	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Oct-67			8	212	30	26	6.1	37	2.9	**130**	**0**	42	30	0.6				100	0	0	90	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-68			8.5	252	22	12	1.5	64	1.8	**120**	**14**	23	24	1.1				560	0	0	36	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-68																			10	< 1.4		
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Nov-68			8.2	232	24	21	2.4	55	2.3	**130**	**0**	31	24	0.6				400	100	50	62	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-70			7.8	244	31	33	5.4	47	2.9	**130**	**0**	48	33	0.7				1100	0	0	100	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-71	363		9	254	26	18	8.3	60	2	**140**		43	30	0.8				480	0	0	44	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Oct-71	345		8	242	26	16	1.5	57	2.2	**130**	**0**	27	22	0.7				500	0	0	46	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-72	340		8.6	238	15	12	2.7	64	1.8	**120**	**10**	24	29	1				880	0		41	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Oct-73	300		8.3		28	13	3.9	49	1.6	**98**	**5**	33	24	0.9				300	540		48	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	Jun-74	370		8.3		29	13	2	62	1.3	**130**	**0**	17	32	0.8				200	220		40	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	May-79	370		9		27	13	3.9	56	1.9	**68**	**12**	24	29	0.86		< 1.00		360			48	
26S/39E-24R01M	**026S039E24R001M**	**35.65301075**	**-117.7247873**	May-87	360	30.5	9		29	10	2.3	62	1.9			21	21	0.8	1.2			260	< 3	9	34	
26S/39E-25C01M	**026S039E25C001M**	**35.65162185**	**-117.734232**	Oct-52	651	21.1	8.1			59	13	48	3.6	**110**	**0**		76					120			200	
26S/39E-25C01M	**026S039E25C001M**	**35.65162185**	**-117.734232**	Nov-67	476		7.9	203		33	8.3	38		**58**	**0**	44	40	0.6					< 100		120	
26S/39E-25C01M	**026S039E25C001M**	**35.65162185**	**-117.734232**	Jan-88	400			251						**108**	**< 1**	51.9	30.6								120	
26S/39E-25E01M	**026S039E25E001M**	**35.6468997**	**-117.7389543**	Oct-52	432	25.6											29								120	
26S/39E-25E01M	**026S039E25E001M**	**35.6468997**	**-117.7389543**	Feb-67			8.1	281		36	7.8	37	4.5	**100**	**0**	49	30	0.4						0	120	
26S/39E-25E01M	**026S039E25E001M**	**35.6468997**	**-117.7389543**	Sep-67	415		7.8	290	10	35	10	84	2.3	**120**	**0**	48	35	0.5				480			130	
26S/39E-25E01M	**026S039E25E001M**	**35.6468997**	**-117.7389543**	Feb-86	405		7.2																			
26S/39E-25E01M	**026S039E25E001M**	**35.6468997**	**-117.7389543**	May-87	450	26	7.9		36	34	7	35	2.1			47	32	0.7	2.9			220	5	10	110	
26S/39E-27C01M	**026S039E27C001M**	**35.64828835**	**-117.7689551**	Nov-72	405																					
26S/39E-27C01M	**026S039E27C001M**	**35.64828835**	**-117.7689551**	Mar-73	440																					
26S/39E-27C01M	**026S039E27C001M**	**35.64828835**	**-117.7689551**	Jan-88	440			269						**113**	**< 1**	50.9	30.2								120	
26S/39E-28B04M	**026S039E28B004M**	**35.6499548**	**-117.7859**	May-05	425		7.6			27	12	55	4.7	**140**	**0**	67	33					50	100		120	
26S/39E-28B04M	**026S039E28B004M**	**35.6499548**	**-117.7859**	Apr-73	405																					
26S/39E-28L02M	**026S039E28L002M**	**35.6421772**	**-117.787011**	Mar-73	410																					
26S/39E-30J01M	**026S039E30J001M**	**35.6435658**	**-117.8161785**	Oct-52	431		8.1			28	4.8	55	2.7	**130**	**0**		31					140			90	
26S/39E-30J01M	**026S039E30J001M**	**35.6435658**	**-117.8161785**	Jun-53	434		8.1	320		28	3.8	59	2.5	**128**	**0**	59	33	0.5				100			86	
26S/39E-30J01M	**026S039E30J001M**	**35.6435658**	**-117.8161785**	Apr-61	437		7.7	264	39	26	7.5	52	2.1	**131**	**0**	56	27	0.8				180			96	
26S/39E-30J01M	**026S039E30J001M**	**35.6435658**	**-117.8161785**	May-87	430			253						**126**	**< 126**	58	24.2				< 20				92	
26S/39E-30J01M	**026S039E30J001M**	**35.6435658**	**-117.8161785**	Sep-87																						

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/39E-30J01M	026S039E30J001M	35.6435658	-117.8161785	Jul-88	445	30.5	8.1		36	31	4.9	55	2.3			54	27	0.6	1.7			200	< 3	< 1.0	98	
26S/39E-34H01M	026S039E34H001M	35.63078879	-117.7620103	Apr-73	410																					
26S/39E-34H01M	026S039E34H001M	35.63078879	-117.7620103	Apr-73	410																					
26S/39E-34R01M	026S039E34R001M	35.6255111	-117.7606213	Apr-73	420																					
26S/39E-35C01M	026S039E35C001M	35.63384437	-117.7514545	Apr-73	440																					
26S/39E-36D01M	026S039E36D001M	35.63662215	-117.7386764	May-73	650																					
26S/40E-01A01M	026S040E01A001M	35.7088433	-117.6167295	Jul-53	154000	20	9.4			2.3	3.8	65000	260	**2300**	**11500**	8600	79000					210000			21	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Apr-46	1000		7.6	609	44	51	8.2	144	3.9	**170**	**0**	120	150	1				910			160	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Mar-54	19100	24.4	9.6			0	1.9	5400	64	**1400**	**2400**	1600	3500					151000			8	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Mar-54	52700	20											20000					73000			22	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Mar-73	840																					
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Mar-73	840																					
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Jun-82	16600	23	9.6		8.3	4.9	0.8	4200	44			950	3300	8.7	0.14		640	160000	80	10	16	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Jun-85	18400	24.5	9.7		110	0.1	< 0.1	4200	45			560	1500	9	< 0.100			160000	70	< 10		
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Jun-85	18400	24.5	9.7																			
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Sep-86	15900	24.5			110	1.3	0.4	4300	44			1100	3200	9.6	< 0.100			160000	120	< 10	5	
26S/40E-01A02M	026S040E01A002M	35.7077322	-117.6167295	Jun-87	18500	24			69	1.7	0.3	4300	42			950	3700	3.7	< 0.100			170000	740	20	5	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	Jul-53	66600	21.1	7.9			270	120	18000	340	**140**	**0**	2300	27000					16000			1200	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	Jun-72		21	7.9	43600	11	100	65	16000	340	**240**	**0**	1600	25000	2.1	0.04			32000	140		520	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	Jun-78	65600	23	7.7		10	100	74	18000	360	**150**	**0**	1800	26000	1.6	0.19			35000	180		550	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	May-79	96000	21.5	7.8		21	210	140	26000	470			800	39000	1.2	5.6		28	910	400		1100	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	May-80	78500	19.5	7.8		12	200	120	24000	650			2900	37000	1.5	4.8		180	51000	200		990	
26S/40E-01J01M	026S040E01J001M	35.69856576	-117.6181183	Jun-82	71400	21	8		13	150	88	20000	350			2100	31000	1.9	0.86		180	37000	350	100	740	
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852	Jun-78	10200	31	6.5		3.2	14	1.2	2200	30	**9**	**0**	290	3300	6	0.11			48000	140000		40	
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852	May-79	10800	27	7.2		2.8	6.1	1.3	2300	34			330	3300	5.7	0.01		9	50000	1800		21	
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852	May-80	10600	32	7.2	6020	4.8	7	2	2200	33			330	3000	5.6	0.03		8				26	
26S/40E-01Q02M	026S040E01Q002M	35.69689909	-117.6272852	Jun-82	10900	20.5	7.9		3.4	8.1	1.1	2300	27			310	3600	5.7	< 0.100		20	48000	6200	260	25	
26S/40E-04Q01M	026S040E04Q001M	35.6974544	-117.675342	May-87	875	21	9		49	20	4.3	110	4.7			52	120	0.7	0.23			1700	12	6	68	
26S/40E-04Q01M	026S040E04Q001M	35.6974544	-117.675342	Jul-87	890	24.5	10.1																			
26S/40E-05F01M	026S040E05F001M	35.7043986	-117.700065	Apr-46	619		7.9	376	45	24	4.5	95	5.9	**160**	**0**	43	83	1.1				950			78	
26S/40E-06C01M	026S040E06C001M	35.7096762	-117.7167323	Jan-73	900																					
26S/40E-06C01M	026S040E06C001M	35.7096762	-117.7167323	May-87	90000	20.5	10.1		48	3.1	0.75	24000	74			5200	14000	150	< 0.100			270000	620	18	11	
26S/40E-06C01M	026S040E06C001M	35.7096762	-117.7167323	Jul-87		20	10																			
26S/40E-06D01M	026S040E06D001M	35.7093984	-117.7225658	May-87	16000	23.5	10.1		34	2.9	1.2	4000	10			120	2700	11	< 0.100			84000	80	20	12	
26S/40E-06D01M	026S040E06D001M	35.7093984	-117.7225658	May-87	14400	24	9.7		22	3.1	1	3500	17			210	2800	10	< 0.100			130000	140	20	12	
26S/40E-06D01M	026S040E06D001M	35.7093984	-117.7225658	Jul-87	21300	21	9.9																			
26S/40E-06E01M	026S040E06E001M	35.70300966	-117.7225657	Apr-46	564		7.7	348	44	37	6.4	69	2.7	**150**	**0**	47	67	0.8				770	0		120	
26S/40E-07N01M	026S040E07N001M	35.68106585	-117.6883978	Jan-20				242	35	30	5.3			**120**	**0**	37	32						80		97	
26S/40E-07N01M	026S040E07N001M	35.68106585	-117.6883978	Apr-46	356		7.4	236	57	27	8.9	32	4.3	**160**	**0**	6.2	30	1				160			100	
26S/40E-07N01M	026S040E07N001M	35.68106585	-117.6883978	Apr-46	348		7.7	219	37	27	4.6	38	2.3	**140**	**0**	12	30	0.6				210			86	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-08Q01M	**026S040E08Q001M**	**35.6813436**	**-117.6914534**	Apr-46	489		7.7	298	18	22	4.6	79	3.9	**230**	**0**	0.5	39	1				5240			74	
26S/40E-09A01M	**026S040E09A001M**	**35.6949545**	**-117.6720086**	May-87	950	23	8		54	41	6.7	110	4.6			76	130	0.7	0.2			2100	16	57	130	
26S/40E-10E01M	**026S040E10E001M**	**35.68856577**	**-117.6692307**	Jan-20				2010	31	4.4	1.7			**330**	**170**	5.3	800						90		18	
26S/40E-10E01M	**026S040E10E001M**	**35.68856577**	**-117.6692307**	Apr-46	2580		8.2	1450	25	14	3.3	520	12	**330**	**0**	1.9	640	1.1				13500			49	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Apr-46	560	22	7.3	358	34	39	7.8	62	2.7	**113**	**0**	100	51	0.8				520			130	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Apr-46	1010		8.2	647	47	9.8	3.1	220	2.1	**360**	**0**	1.4	130	1.1				12000			37	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Aug-49			8	322	20	31	11	62		**104**	**0**	95	52								120	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Mar-51			8.6	359	28	40	7.3	69		**122**		95	53								130	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Oct-52	570	27.8	8.3			41	8.9	64	2.9	**128**	**0**		50					460			140	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Jul-53	1730	21.1	9.1			10	6	390	6	**400**	**98**	14	280					12000			50	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Jan-71	526		7.9	335		37	7.8	73	3.6	**122**	**0**	72	77	0.6						0	120	
26S/40E-10N01M	**026S040E10N001M**	**35.68189925**	**-117.668675**	Apr-86	935	25	7.8																			
26S/40E-11A01M	**026S040E11A001M**	**35.69384357**	**-117.6370077**	Jul-53	85900	28.3	9.3			2.5	4.1	27000	550	**2660**	**3920**	4700	32000					260000			23	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Jul-53	1840	21.7	5.6			51	9.2	320	12	**18**	**0**	150	500					2600			160	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Jun-72	8000	21	7.1	5880	78	110	30	1900	36	**190**	**0**	490	2900	2	0.16			9400	5900		400	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Mar-74	6760		10.2		5.2	11	2.7	1400	32	**0**	**103**	350	1800	1.4	0.05		13	7400	70		39	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Mar-75	5760	17	11.3		1.4	3.5	0.1	1200	38	**0**	**140**	250	1400	1.4	0.08		1	6900	< 10		9	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Aug-76	3690	26.5	10.4		22	8.2	3.8	750	23	**27**	**106**	140	970	1.3	0.08		75	4300	60		36	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	Jun-78	12500	24	8.8		48	97	29	2700	53	**210**	**7**	820	3700	1.7	3.3			15000	30		360	
26S/40E-11J01M	**026S040E11J001M**	**35.6855104**	**-117.636452**	May-80	4260	20.5	9.1		13	16	7	920	25			220	1100	1.3	0.09		29	6300	40		69	
26S/40E-11J03M	**026S040E11J003M**	**35.6857882**	**-117.636452**	Aug-84	14100	27	7.3		100	170	57	3300	50			940	4900	2.6	0.41			2400	60	20	670	
26S/40E-11J03M	**026S040E11J003M**	**35.6857882**	**-117.636452**	Jun-85	15000	18.5	7.1		52	150	46	3200	42			1200	4800	2.9	0.98			26000	50	< 10	560	
26S/40E-11J03M	**026S040E11J003M**	**35.6857882**	**-117.636452**	Jul-88	11600	27.5	7.5		110	87	44	2800	32			1000	3800	2.7	0.12			21000	30	10	400	
26S/40E-11NO2S	**026S040E11N0O2S**	**35.68162156**	**-117.6508968**	Jan-46	508		7.3	316	33	41	6.8	47	2.7	**99**	**0**	60	63	0.6				200	0		130	
26S/40E-11NO2S	**026S040E11N0O2S**	**35.68162156**	**-117.6508968**	Apr-46	1060		8.2	788	51	5.4	5.1	250	3.1	**580**		1.4	76	3				34500			34	
26S/40E-11NO2S	**026S040E11N0O2S**	**35.68162156**	**-117.6508968**	Aug-84	2060	21	7.7		69	47	13	370	13			130	460	1.6	< 0.100			6600	20	20	170	
26S/40E-12A01M	**026S040E12A001M**	**35.692177**	**-117.617007**	Jun-78	6900	28.5	6.2		8.4	180	16	1100	32			310	1800	3.4	0.03		16	8500	95000	1100	520	
26S/40E-12A01M	**026S040E12A001M**	**35.692177**	**-117.617007**	May-79	6100	20.5	6.4		10	160	15	1000	16			1500	1300	3.3	0.01		1	9100	96000		460	
26S/40E-12A01M	**026S040E12A001M**	**35.692177**	**-117.617007**	May-80	6010	24.5	6.8		11	160	15	1100	33			360	1900	4.5	0.1		1	12000	68000		460	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jul-53	876	21.1	8.2			16	6	170	7.5	**270**	**0**	40	120					5900			64	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-72	650	21	8.3	520	59	19	3.3	160	4.5	**310**	**0**	4.7	110	1.4	0.02			6800	260		61	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Mar-74	757		8.3		8.7	16	2.9	150	4.4	**289**	**0**	11	87	1.2	0.19		5	11000	50		52	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Mar-75	700	17	7.3		17	25	3.6	140	4.9	**267**	**0**	11	110	1.3	0.03		< 1	6900	< 10		77	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Aug-76	780	22	7.5		24	24	3.5	140	3.8	**245**	**0**	9.9	130	1.4	0.13		5	6700	60		74	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-78	910	23	7.5		10	25	3.5	150	4.9	**270**	**0**	12	150	1.2	0.07			3300	< 10		77	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-78	11300	26.5	5.6		0.4							36	2300	0.7	0.02		4	2800	110000	1200		
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	May-79	5000	28	6.2		4.4	91	5.5	550	13			98	1500	2.1	0.01		0	4700	150000		250	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-79	750	22	7.8		49	22	3.4	150	4.5			7.4	110	1.5	0.11		9	7000	< 10		69	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	May-80	750	22.5	8		42	19	3.3	150	5.7			3.8	110	1.4	0.15		8	7100	80		61	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	May-80	3200	23.5	6.8		9.7	92	6	580	14			320	1200	2.9	0.02		1	7600	140000		250	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-82	730	22	7.6		22	22	3.3	160	4.1			8	130	1.4	0.1		3	6700	20	440	69	
26S/40E-12G01M	**026S040E12G001M**	**35.6902326**	**-117.6217294**	Jun-82	4590	20.5	6.3		8.4	83	4.3	530	12			310	1500	2.4	< 0.100		20	6900	340000	2000	230	
26S/40E-12Q01M	**026S040E12Q001M**	**35.68356608**	**-117.6236738**	Jun-78	2780	21	8.6		1	43	11	460	15			220	620	1.8	2		4	4200	2000	< 10	150	
26S/40E-12Q01M	**026S040E12Q001M**	**35.68356608**	**-117.6236738**	May-79	2250	24	8.8		0.2	26	4.2	480	17			130	690	1.6	< 0.100		5	2700	< 10		82	
26S/40E-12Q01M	**026S040E12Q001M**	**35.68356608**	**-117.6236738**	May-80	2080	25.5	8.8		1.6	22	8	410	15			170	510	1.7	0.82		18	4500	110		88	
26S/40E-12Q01M	**026S040E12Q001M**	**35.68356608**	**-117.6236738**	Jun-85	2500				< 1.0	17	3.5	460	15			220	580	1.4	0.17			3900	30	< 10	57	
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	Apr-46	411		7.4	274	41	36	5.6	38	2.7	**120**	**0**	45	33	0.6				170			110	
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	Jan-73	1050	10																				
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	Feb-73	590																					
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	Jun-78	3500	23	8.3		1.3	85	22	620	21			410	800	1.4	5.6		3	8200	< 10	20	300	
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	Jun-79	3200	21.5	6.9		1.2	69	20	600				130	850	1.5	1.1		2	6600	30		250	
26S/40E-12R01M	**026S040E12R001M**	**35.682455**	**-117.6175626**	May-80	2900	20.5	7.9		2.3	82	25	560	19			440	730	1.3	3.3		2	8400	4600		310	
26S/40E-13C01M	**026S040E13C001M**	**35.67689956**	**-117.6264516**	Jun-72	3100	22	7.1	2680	21	200	19	540	20	**180**	**0**	130	1100	1.6	0.18			3500	10		580	
26S/40E-13C01M	**026S040E13C001M**	**35.67689956**	**-117.6264516**	Jun-78	3800	35	6.5		17	160	18	560	17			190	1100	1.6	0.04		3	4000	550	110	470	
26S/40E-13C01M	**026S040E13C001M**	**35.67689956**	**-117.6264516**	Jun-79	3600	19	7.2		11	160	20	600	20			180	1100	1.4	0.11		2	4000	80		480	
26S/40E-13C01M	**026S040E13C001M**	**35.67689956**	**-117.6264516**	May-80	3050	32	7		13	160	19	570	16			180	1000	1.4	0.04		2	5300	480		480	
26S/40E-13C01M	**026S040E13C001M**	**35.67689956**	**-117.6264516**	Jun-82	3490	19	7		14	160	20	520	14			180	1000	1.5	< 0.100		1	4000	1400	230	480	
26S/40E-13M01M	**026S040E13M001M**	**35.6693997**	**-117.6331184**	Jun-72	1800	19	4.9	1180	18	54	2.2	190	4.3	**6**	**0**	130	550	5.7	0.47			2600	110000		140	
26S/40E-13M01M	**026S040E13M001M**	**35.6693997**	**-117.6331184**	Jun-78	2600	23	6.1		10	4.7	0.3	68	1.3	**0**	**0**	120	690	12	0.23			1900	400000		13	
26S/40E-13M01M	**026S040E13M001M**	**35.6693997**	**-117.6331184**	May-80	2380	31	6.1		2.6	18	1	180	2.3			110	770	7.4	0.05		1	2000	400000		49	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Jun-72	5500	20	7.6	3780	67	320	62	810	20	**330**	**0**	620	1400	0.6	2.8			4400	260		1100	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Jun-78	2850	22	7.4		59	91	18	480	13	**350**	**0**	260	530	0.9	3.5			5500	40		300	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	May-79	2500	22	7.4		58	87	17	470	3.1			260	480	1.2	3.2		230	5300	60		290	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Apr-80	2000	20.5	7.4									240			2							
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	May-80	2000	20	7.5		76	55	11	390	10			210	340	1.3	2.1		310	4700	80		180	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Jun-82	2390	20.5	7.5		73	84	25	450	11			190	520	1.5	1.6		230	3500	120	30	310	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Aug-84	5580	19	7.4		69	270	54	800	20			550	1300	1	< 0.100			6400	30	20	900	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Jun-85	4200	20	7		52	170	34	680	17			430	890	1	2.9			4900	40	20	560	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Apr-86	5500	18.5	7.4		72	200	50	800	19			670	1200	1	3.4			6700	70	40	710	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	May-87	6400	23.5	7.9		69	250	57	890	19			710	1300	1.2	3.1			7900	60	100	860	
26S/40E-14B01M	**026S040E14B001M**	**35.677455**	**-117.6420076**	Jul-88	4770	22	7.5		70	190	45	830	15			580	1000	1.1	3.1			6300	10	50	660	
26S/40E-14H01M	**026S040E14H001M**	**35.67245516**	**-117.6392297**	Jun-72	1900	22	4.6	1770	11	70	49	300	3.6	**0**	**0**	410	540	15	0.21			4300	150000		380	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Jun-72	1350	21.5	7.6	1070	69	41	13	280	12	**510**	**0**	220	160	1.2	1.3			1100	110		160	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Jun-78	2400	24	7.5		56	85	25	520	16	**460**	**0**	500	250	0.9	0.43			3400	710		320	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	May-79	2500	24	7.4		56	110	33	420	9.5			580	250	0.9	0.18		11	3500	2700		410	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Apr-80	2700	22.5	7.6									730			0.62							
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	May-80	2550	21.5	7		50	120	53	470	21			850	260	1	0.18		42	3600	5000		520	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Aug-84	2320	21	7.5		67	120	36	400	16			570	320	0.6	< 0.100			2800	2100	40	450	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Jun-85	2600	22.5	7.4		74	120	35	410	17			370	390	0.7	0.67			2900	1200	46	450	
26S/40E-14L01M	**026S040E14L001M**	**35.67217736**	**-117.6458965**	Jun-88	2200	24	7.3		71	73	23	390	10			250	340	1.2	3			3700	1300	40	280	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-14L01M	026S040E14L001M	35.67217736	-117.6458965	Jul-88	530	28.5	7.3		35	38	6	51	2.3			63	55	0.6	1.5			160	1400	18	120	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Apr-46	870		7.9	620	64	7	12	200	2.4	390	0	2.9	89	1.8				76000			67	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Mar-53	764	20											17								260	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Jul-53	811	21.1	8.6			8.5	2.6	190	2.5	320	22	24	79					10000			32	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Sep-54	822	21.7											79						870		24	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Jan-55	794		7.9	585		84	32	66	3.8	264	0	223	16	1				180			340	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Apr-55	715	21.1	8.2			5.7	2.9	180	3.2	360	0	10	73	1				14000			26	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Oct-55	799	22.2											74								34	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Oct-56	751	21.7											75								27	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Sep-57	786	22.2											76								36	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Sep-58	752	22.2	8								0		72								33	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Jun-72	620	23	8.4		60	6	1.3	150	2.3	330	0	14	51	1.4	0.01			15000	40		20	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Mar-74	749		8.7		47	6.2	0.8	170	3.5	323	30	17	50	1.4	0.12		13	13000	780		19	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Mar-75	695	20.5	8.3		40	7.3	1.5	160	5.5	351	0	16	45	1.4	0.57		19	13000	530		24	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Aug-76	640	22	7.5		46	7.3	1.6	160	3	373	0	17	49	1.2	0.09		14	15000	910		25	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Jun-78	820	22.5	8.5		40	7.5	1.5	180	3.2	380	8	53	53	1.1	0.06			15000	890		25	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	May-79	820	26	8.4		40	6.7	1.2	190	3.3			28	53	1.1	0.04		13	1700	700		22	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Apr-80	850	24.5	8.3									25			0.04							
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	May-80	820	25.5	8.4		48	7.1	1.4	190	3.2			23	61	1.1	0.17		18	20000	1200		24	
26S/40E-15E01M	026S040E15E001M	35.67662159	-117.6695083	Jun-82	790	24.5	8.5		16	8.4	1.4	190	2.8			12	64	1.1	< 0.100		14	21000	1000	30	27	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Apr-46	4240		9.1	3750	18	2.4	2.9	1100		1700	390	44	320	4.8				270000			18	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Apr-55	5340	22.2	8.8			7	3.5	1500	16	1600	800	72	410	2.4				199000			32	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Oct-55	5770	23.3											430								20	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Oct-56	5500	22.8											410								20	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Sep-57	5680	22.2				6.4							440								16	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Sep-58	5480		8.9										430									
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Mar-74	6270		9		41	1.4	0.6	1800	16	1800	1070	19	460	9.5	0.04		24	420000	1600		6	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Mar-75	6220	20.5	8.9		38	2.7	0.7	1800	18	1950	984	43	460	6	0.12		85	420000	40		10	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Aug-76	6280	24	9		8.5	0.6	0.9	1800	14	1940	1050	48	310	7.3	< 0.100		100	400000	770		5	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Jun-78	6800	23.5	9		50	2.4	13	1700	15	3200	330	27	460	9.7	1.5			420000	240		60	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	May-79																		440000			5	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	May-80	5500	23	8.6		43	3	8	1800	18			19	430	10	0.09		33	390000	590		40	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	May-87	360	22	8.8		30	4.9	0.64	52	3.7			6.7	7.2	3.2	< 0.100			600	23	7	15	
26S/40E-15E02M	026S040E15E002M	35.67578828	-117.6692305	Jul-87	300	26	7.3																			
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	Apr-46	1980		8	1340	36	3.2	4.7	500	8.2	1180	0	1.9	92	6.1				15400			27	
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	Feb-73	640																					
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	Jun-78	1990	26	8.2		18	4.2	3	490	7.6	1120	0	11	110	5.4	0.03			14000	660		23	
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	May-79	1800	25	8.2		2.8	4.7	1.9	490	8.7			13	83	7	0.1		6	170000	710		20	
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	Apr-80	2000	25.5	8.4									4			0.1							
26S/40E-15N01M	026S040E15N001M	35.66717736	-117.6692304	May-80	1850	24.5	8.2		27	3	2	500	7.5			2.6	81	6	0.17		8	17000	560		16	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638	Jun-82	1380	25	8.8		26	34	5.6	270	7.2			190	77	1	< 0.100		6	17000	180	10	110	
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638	Aug-84	4220	23	8.2		57	5.4	3.3	980	16			860	170	1.7	< 0.100			72000	110	40	28	
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638	Jun-85	4150	25	8.4																			
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638	Jun-85	4150	25	8.4		58	5.9	3.9	990	18			950	160	1.5	< 0.100			74000	110	47	31	
26S/40E-15N02M	026S040E15N002M	35.6696773	-117.6675638	Jul-88	3950	26	8.6		56	5.3	4.6	1200	15			1100	160	1.5	< 0.100			69000	110	40	32	
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422	Jun-72	400	23	7.9	308	39	31	5.6	52	5	**160**	**0**	63	35	0.9	0.1			190	20		100	
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422	Mar-73	500																					
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422	Aug-84	436	22.5	7.9		42	30	5.7	43	4.1			34	22	0.8	< 0.100			210	140	50	99	
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422	Jun-85	410	24	9.3		47	32	5.8	45	4			37	22	0.7	< 0.100			190	460	42	100	
26S/40E-17J01M	026S040E17J001M	35.6727327	-117.6903422	Jul-88	415	25	7.5		45	30	6	43	4.2			40	24	0.8	< 0.100			200	220	31	100	
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787	Oct-55	364	23.9	8.5			13	1.3	66	12	**170**	**5**	23	20					710			38	
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787	Oct-56	339	23.9											17								26	
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787	Sep-57	347	24.4				< 14.0							20								36	
26S/40E-17N01M	026S040E17N001M	35.6668994	-117.704787	Sep-58	362	25	7.3										16									
26S/40E-17R01M	026S040E17R001M	35.66745504	-117.6897866	Jun-72	390	23	7.4	304	52	33	5.7	47	5.3	**160**	**0**	43	31	0.8	0.02			230	30		110	
26S/40E-17R01M	026S040E17R001M	35.66745504	-117.6897866	Aug-84	478	22.4	7.8		52	37	6.5	45	4.7			43	27	0.7	< 0.100			220	50	30	120	
26S/40E-17R01M	026S040E17R001M	35.66745504	-117.6897866	Jun-85	440	24	6		55	35	6.5	47	4.8			44	28	0.7	< 0.100			220	54	32	110	
26S/40E-17R01M	026S040E17R001M	35.66745504	-117.6897866	Jul-88	450	24.5	7.8		52	32	6.3	42	4.8			41	28	0.7	< 0.100			200	21	29	110	
26S/40E-18E01M	026S040E18E001M	35.6741214	-117.721732	Apr-46	1120		8.3	898	49	3.4	1.8	280	6.6	**750**		4.3	21	3.2				38000			16	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Apr-46	1050		8.3	648	6	2.4	0.1	260	14	**650**	**0**	1	12	2.5				770			6	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Sep-54	359	23.9											29						1500		61	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Apr-55	363	26.1	8			13	5.7	63	4	**180**	**0**	12	24	0.8				370			56	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Jan-89	1300	33	9		29	3.7	0.56	320	3.4			13	160	3.7	< 0.100			3500	44	1	12	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Mar-89	650	33.5	8.9		33	12	2.4	120	4			19	37	1.6	< 0.100			680	27	7	40	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Apr-90	2090	33.5	8.1												< 0.100							
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Mar-91	390	32	8.2	261	65	26	6.2	44	5.3			3.3	29	0.8	< 0.050			420	18	42	90	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Apr-92	321	33	7.9		56	27	6.5	28	5			2.3	27	0.7	< 0.050			160	82	60	94	
26S/40E-18N01M	026S040E18N001M	35.6663438	-117.7217319	Apr-93	359	31	7.9		60	24	5.9	37	4.5			3	22	0.9	< 0.050			330	26	54	84	
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539	Mar-45			7.7			67	30				**0**	24	28						0	0	97	
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539	Jan-46			7.5			68	34				**0**	24	23								100	
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539	Apr-46	353		7.7	242	54	29	8.1	29	4.7	**120**	**0**	33	25	0.8				110			110	
26S/40E-19N01M	026S040E19N001M	35.6546774	-117.7214539	Oct-52	371	25.6											25								110	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Mar-45			7.7								**0**	34	3.4						0	0	100	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Apr-46	406		7.8	261	40	30	7.8	43	5.9	**150**	**0**	38	28	0.8				300			110	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Oct-52	371	25.6											25								110	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Oct-52	435				0								30						0		110	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Oct-52	582	28.3	8.1			41	8	64	2.9	**110**	**0**		78					150			140	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Jun-53	379	25.6	7.7			31	8.5	34	4.9	**120**	**0**	46	28								110	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Jun-53	577	27.8	7.6	366	38	43	6.8	64	2.7	**110**	**0**	70	76	3.6				240			140	
26S/40E-20N01M	026S040E20N001M	35.65273308	-117.70312	Sep-54	578	28.3											76						40		120	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Nov-59	358	30.6	7.4			30	9	32	4.9	**120**	**0**	47	28	0.5							110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Aug-61	510		7.3	355	27	40	5.9	58	2.6	**110**	**0**	60	74	0.6				200	50		120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-62	595		8.2	415	30	44	7.8	65	3.2	**100**	**0**	60	100	0.6				120	300		140	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Apr-63	630		7.6	441	34	35	6.8	56	0.6	**95**	**0**	80	56	0.6				50	70		120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	May-64	530		7.9	370	35	35	5.9	60	4.3	**110**	**0**	60	70	0.5				350	120		110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Sep-64	415		8	291	33	38	5.9	59	2	**110**	**0**	61	62	0.7				130			120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-65	514		8.3	368	29	34	7.8	56	2.5	**100**	**0**	49	56	0.8				170	30		120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	May-66			7.9	332	14	35	5.9	61	3	**120**	**0**	69	52	0.7				0	0	0	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Sep-66			7.2	336	32	31	5.4	50	2	**120**	**0**	68	44	0.7				400	0	0	100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Oct-67			8	320	31	34	3.9	65	2.1	**120**	**0**	65	52	0.7				0	0	0	100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-68			8.1	336	38	34	4.4	66	2	**130**	**0**	73	52	0.8				490	0	0	100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Nov-68			8.1	304	27	35	4.4	65	2.1	**120**	**0**	70	50	0.6				200	0	50	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Oct-69			7.9	368	37	32	7.8	59	1.9	**120**	**0**	88	42	0.7				0	0	80	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-70			7.7	328	27	32	6.1	65	2.2	**120**	**0**	82	44	0.9				870	100	0	100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Oct-70	465		8.2	325	32	30	6.8	62	2.1	**120**	**0**	78	46	1.5				50	0	180	100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-71	511		7.7	358	36	36	6.1	60	3	**120**	**0**	67	50	0.6				350	0	0	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Oct-71	488		7.3	342	26	36	6.8	63	2.1	**120**	**0**	81	48	0.4				200	20	0	120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-72	500		7.7	350	21	38	3.9	55	2.2	**115**	**0**	67	45	0.7				520	0	0	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-72																						
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Nov-72	425	17.8																				
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Oct-73	520		7.9		29	37	4.9	74	2.4	**102**	**0**	93	56	0.8				400	90	< 10	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jun-74	545		7.4		24	35	2.9	62	1.7	**110**	**0**	60	60	0.7				100	30		100	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	May-76	510		7.8		34	35	6.8	66	1.9	**117**		58	48	1				250			120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Jul-78	520		7.4		28	35	6.8	61	2.2	**92**		86	46	0.8				200			120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	May-79	520		7.8		36	32	9.8	60	2.7	**98**		110	55	0.8		< 1.00		250			120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Mar-80	440		9.2		26	2	0.5	83	0.54	**59**	**43**	13	68	0.84				540			6	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Mar-80	720		7.9		29	54	4	73	2.9	**78**		84	116	0.84				360			150	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Sep-85	470	27	6.9		35	37	5.6	60	2.4			93	39	0.6	1.5			170	10		120	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Sep-86	480	29			35	35	5.3	58	2.6			86	35	0.6	1.5			170	5	< 1.0	110	
26S/40E-20N01M	**026S040E20N001M**	**35.65273308**	**-117.70312**	Dec-86	480	25.5	7.8		37	37	5.5	61	2.3			91	34	0.6	1.5			190	34	< 1.0	120	
26S/40E-21E01M	**026S040E21E001M**	**35.66134408**	**-117.6872864**	Jun-72	340	24	7.9	280	54	16	3.4	53	11	**150**	**0**	25	31	1.1	0.11			240	50		54	
26S/40E-21E01M	**026S040E21E001M**	**35.66134408**	**-117.6872864**	Aug-84	350	25	8.2		48	11	2.3	53	10			5.6	22	1	< 0.100			210	90	20	37	
26S/40E-21E01M	**026S040E21E001M**	**35.66134408**	**-117.6872864**	Jun-85	340	24.5	7.9			13	2.8	51	12			6.5	24	0.9	< 0.100			210	160	22	44	
26S/40E-21E01M	**026S040E21E001M**	**35.66134408**	**-117.6872864**	Jun-85	340	24.5	7.9																			
26S/40E-21K01M	**026S040E21K001M**	**35.65578869**	**-117.6778416**	Mar-45			7.7									27	34						200		63	
26S/40E-21K01M	**026S040E21K001M**	**35.65578869**	**-117.6778416**	Jan-46			7.5		18							34	25									
26S/40E-21K01M	**026S040E21K001M**	**35.65578869**	**-117.6778416**	Apr-46	1160		7.3	430	8	7.6	2.8	87	50	**580**	**0**	1.9	53	0.4				120			31	
26S/40E-21K01M	**026S040E21K001M**	**35.65578869**	**-117.6778416**	Jul-57	314	26.7				32							26								80	
26S/40E-21K01M	**026S040E21K001M**	**35.65578869**	**-117.6778416**	May-79	800		7.6		38	54	12	128	3.6	**171**		191	71	1		< 1.00		640			180	
26S/40E-22A01M	**026S040E22A001M**	**35.66495526**	**-117.6531189**	May-87	9400	22	7.5		68	420	320	1500	59			5200	400	1.1	1.2			12000	50	160	2400	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-22A01M	**026S040E22A001M**	**35.66495526**	**-117.6531189**	Jul-88	6100	24.5	7.5		70	310	320	960	45			3700	310	1	2.1			5100	30	40	2100	
26S/40E-22A01M	**026S040E22A001M**	**35.66495526**	**-117.6531189**	Mar-89	8100	22	7.9		57	370	360	1600	48			5300	380	1.2	0.9			12000	60	180	2400	
26S/40E-22J01M	**026S040E22J001M**	**35.65828874**	**-117.6558966**	Jun-72	4000	25	7.6	4180	68	360	230	530	54	**250**	**0**	2300	260	2.6	1			1600	60		1800	
26S/40E-22J01M	**026S040E22J001M**	**35.65828874**	**-117.6558966**	Oct-83					66	190	150	430	39			1500	240	2.6				2300	40		1100	
26S/40E-22J01M	**026S040E22J001M**	**35.65828874**	**-117.6558966**	Aug-84	3160	25	7.4		69	170	150	440	42			1500	240	2.7	1.1			2500	1200	190	1000	
26S/40E-22J01M	**026S040E22J001M**	**35.65828874**	**-117.6558966**	Jun-85	3600	28	7.1		83	190	150	410	41			1300	220	2.3	1.3			2100	1500	130	1100	
26S/40E-22J01M	**026S040E22J001M**	**35.65828874**	**-117.6558966**	Jul-88	3100	28	7.1		69	170	140	370	29			1200	210	2.3	1			1900	30	170	1000	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-60	1180		7.8	697	34	95	20	85	3.4	**62**	**0**	95	260	0.4				100	10		320	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-63	1790		8.2	1250	24	160	11	150	2.7	**42**	**0**	180	400	0.5				250	30		460	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	May-64	1100		7.6	770	34	77	23	92	2.1	**83**	**0**	100	230	0.4				400			290	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Sep-64	1010		7.9	707	31	96	11	86	3.5	**76**	**0**	90	230	0.7				100			280	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jan-65	1670		7.1	1170	25	160	10	160	5	**15**	**0**	150	440	0.7				60	0		430	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jan-65	1870			1400	28	130	11	130	7.4	**49**	**0**	120	360	0.7				80	0		360	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jan-65	1560		7.6	1090	30	110	9	110	7.2	**78**	**0**	98	300	0.6				150	0		320	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Aug-65	1000		8.2	798	26	78	10	69	3.6	**76**	**0**	51	170	0.6				380	20	0	240	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	May-66			8	716	34	82	12	77	3.9	**85**	**0**	75	180	0.6				300	0	0	250	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Sep-66			7.3	792	29	80	9.8	92	3.2	**87**	**0**	78	180	0.6				300	0	0	240	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-67			8.1	456	33	44	5.9	66	2.4	**110**	**0**	55	88	0.8				0	100	0	130	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-67			7.7	712	32	78	8.9	72	3.1	**83**	**0**	62	180	0.6				0	0	0	230	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-68			8.1	632	26	78	7.8	72	3	**85**	**0**	78	180	1				250	0	0	230	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Nov-68			8	840	33	95	9.3	90	3.6	**71**	**0**	88	230	0.6				200	200	50	280	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-69			7.9	572	34	80	12	71	3.1	**88**	**0**	92	170	0.7				0	0	40	250	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-70			7.7	736	31	86	16	72	3.5	**98**	**0**	89	190	0.7				1020	0	0	280	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-70	855				28	75	14	74	3.7	**73**		91	180	0.5				400	0	60	240	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-71	892		7.7	624	34	77	14	68	3.7	**76**	**0**	84	180	0.4				640	0	0	250	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-71	842		7.4	589	29	80	13	68	3.4	**73**	**0**	85	180	0.6				600	20	0	250	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-72	1400	25.5	7.4	1040	67	89	35	190	17	**340**	**0**	350	120	2.7	0.93			1100	110		370	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-72	935		7.7	655	24	83	11	69	3.4	**68**	**0**	98	174	0.8				0	0	0	250	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-72																						
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-74	895		7.5		24	70	11	94	2.9	**68**	**0**	91	180	0.6				100	100	10	220	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	May-75	730		7.3		21	58	9	84	2.7	**68**		80	130	0.5				< 20		< 10	180	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	May-76	760		7.5		13	61	8.8	89	3.3	**93**		91	130	1.4				250			190	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jul-78	800		7.5		20	69	8.8	56	3.3	**59**		79	140	0.68				140			210	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	May-79	700		7.8		32	59	12	65	2.5	**63**		84	122	0.72		< 1.00		360			200	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Mar-80	740		8.1		32	63	7	64	2.8	**73**		81	128	0.6				320			180	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Oct-83					56	90	72	230	22			390	260	1.4				900	70		520	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Aug-84	1930	24	7.4		49	110	65	250	25			420	270	1.6	0.94			1200	430	240	540	
26S/40E-22K01M	**026S040E22K001M**	**35.6563443**	**-117.6581189**	Jun-85	2130	25	7.3		58	130	69	240	22			530	220	1.5	2			970	1400	140	610	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Jul-53	913		8.2			3.8	2.5	210	7.4	**530**	**0**	6	30					4900			20	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Sep-54	864	24.4											26						950		11	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Apr-55	720	23.9	8.6			3.5	2.3	170	5.2	**370**	**20**	18	24	2.2				3100			18	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Oct-55	669	25.6											23								13	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Oct-56	594	24.4											22								16	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Sep-57	524	23.9											21								22	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Sep-58	502	24.4	8.1								**0**		23								33	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Nov-68			8.5	432	45	19	12	94	6.7	**170**	**12**	120	24	1.6				600	300	40	110	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Jun-72	750	25	8.1		54	40	23	100	9.2	**200**	**0**	230	24	2.2	0.06			440	80		190	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Mar-74	960		8.2		48	48	26	110	12	**207**	**0**	280	23	2.8	0.08		42	1300	30		230	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Mar-75	1040	20.5	8.2		47	58	35	110	14	**203**	**0**	340	20	0.7	0.03		110	810	< 10		290	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Aug-76	1060	25	8.3		56	66	36	120	12	**199**	**0**	350	21	2.1	0.04		150	420	70		310	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Jun-78	1410	23	7.9		50	98	56	130	15	**220**	**0**	510	30	2	1.3			560	90		480	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	May-79	1480	25.5	7.9		52	110	61	130	17			620	21	2.6	0.22		170	560	90		530	
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	Apr-80	1650	24.5	7.9									660			0.03							
26S/40E-22N01M	**026S040E22N001M**	**35.65356656**	**-117.6692303**	May-80	1400	22	7.7		32	110	70	1100	23			650	17	2.4	0.02		250	620	40		560	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Oct-83					26	2.5	1.1	540	7.2			28	210	5.2				13000	70		11	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Oct-83					59	23	19	66	14			200	28	0.3				410	10		140	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Aug-84	2160	27	8.8		35	1.7	0.56	540	7.7			10	250	5	< 0.100			35000	90		7	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Aug-84	1100	26	7.7		59	91	23	100	14			340	96	0.5	0.63			330	90	20	320	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Jan-86	1940	24.5	9.6		2.6	2.5	0.4	440	15			11	200	4.7	< 0.100			11000	70	5	8	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Jan-86	2210	24.5	7.5		56	220	60	150	26			940	140	0.4	0.63			540	100	80	800	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Jun-86	2120	26	7.4		32	160	66	690	28			1600	500	0.5	< 0.100			460	36	57	670	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	May-87	2220	27	8.8		26	2.1	0.7	520	7.1			11	230	5.1	< 0.100			15000	110	20	8	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	May-87	2250		7.3		63	270	65	170	20			1100	140	0.5	1.1			710	90	130	940	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	May-87	365	28.5	8.2		27	21	1.7	40	1.4			40	27	0.8	1.5			150	24	9	59	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Aug-88	2220	27.5	8.8		39	1.2	0.6	650	7.1			8.6	220	4.6	< 0.100			14000	100	< 10	5	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Aug-88	1670	25.5	7.4		62	170	41	130	11			670	110	0.5	0.9			520	40	15	590	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Mar-89	2200	27	8.9		39	1.6	0.7	540	7.7			9.7	210	4.5	< 0.100			14000	120	< 10	7	
26S/40E-22P03M	**026S040E22P003M**	**35.6532888**	**-117.6636746**	Mar-89	1800	25	8		60	190	49	140	33			750	110	0.1	0.95			550	14	140	680	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-72	3100	22	8.1	2140	63	40	14	710	25	**540**	**0**	320	620	4	1.2			5200	50		160	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-72	2050	22.5	8.3	1400	74	15	5.3	430	16	**390**	**0**	61	430	2.3	0.02			3300	70		59	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Jun-72	750	25	7.8	612	37	16	3.1	180	8.3	**380**	**0**	110	29	2.3	0.02			1600	90		53	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Jun-78	3600	24	7.6		54	48	16	700	25	**520**	**0**	320	640	2.2	0.65			9600	20		190	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Jun-78	2250	23.5	7.9		59	14	5.6	440	16	**400**	**0**	58	440	2.1	0.07			6400	20		58	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-79	3000	25	7.6		55	50	13	700	24			400	700	2	0.38		81	9600	100		180	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-79	2000	25.5	8		61	21	6.5	410	17			54	420	2.2	< 0.100		16	6300	< 10		79	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Apr-80	3600	24	7.8									490			0.5							
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-80	3600	24.5	7.8		59	62	18	800	27			560	750	2	0.39		84	12000	40		230	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	May-80	2000	24.5	8.2														19					
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Jun-82	5060	24.5	7.9		61	130	41	1100	34			1400	880	1.8	0.35		80	12000	2100	80	490	
26S/40E-23A01M	**026S040E23A001M**	**35.6632887**	**-117.6370073**	Jun-82	2120	24	8.2		70	16	5.6	420	14			65	430	2.4	< 0.100		6	6900	140	< 10	63	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Oct-83					28	1.8	0.9	560	7.9			60	260	6.7				19000	220		8	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Oct-83					6.9	36	60	1500	32			2200	920	1.3				19000	50		340	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Aug-84	770	24	8.2		60	6.8	2.6	190	7.7			20	32	1.9	< 0.100			1700	120	20	28	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jun-85	760	25.5	8.1		59	5.3	2.2	160	7.5			6.9	25	1.9	< 0.100			1800	120	29	22	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jan-86	2960	23	9.3		8.9	3	< 1.0	670	10					6.7					80	< 10		
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jan-86	2780	22.5	9.1																			
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jan-86	6800	22	8.7		35	42	58	1000	31			2300	1000	1.1	< 0.100			1700	330	100	340	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Apr-86	960	22	8.3		64	9.8	4.1	200	9.4			74	53	1.9	0.21			1700	100	25	41	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jun-86	3500	26.5	9		34	3	7	710	17			390	380	6	< 0.100			18000	12000	230	36	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	Jun-86	7320	25.5	8.4		60	100	80	1500	40			2300	1000	1.1	< 0.100			18000	160	70	580	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	May-87	2900	24.5	9		14	3.2	1.8	720	11			330	370	6	< 0.100			19000	180	20	15	
26S/40E-23A01M	026S040E23A001M	35.6632887	-117.6370073	May-87	8500	23	8.3		46	56	86	1600	38			2300	1100	1.7	< 0.100			19000	40	100	490	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jun-72	5000	25	7.8	5480	57	170	130	1200	41	**390**	**0**	2900	320	1.4	2			15000	60		960	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Aug-84	5850	23	7.9		66	100	140	1300	41			3100	270	1.3	3.3			12000	500	130	830	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jun-85	6500	26	7.1		76	110	160	1300	42			3000	260	1.3	3.4			12000	400	120	940	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-86	7000	22.5	7.5		73	40	140	1300	42			3000	260	1.4	3.4			12000	160	210	680	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Oct-86	2100	23.5	8.6		46	6.4	2	400	9.3			52	370	2.1	< 0.100			5500	38	8	24	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	May-87	2180	24.5	8.7		54	2.7	1.2	440	13			42	340	2.6	< 0.100			5800	40	20	12	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	May-87	2150	24	8.8		48	2.7	1.2	430	12			31	250	2.5	< 0.100			5700	60	10	12	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jun-87	7200	25	7.7		68	120	150	1300	41			3200	210	1.2	3.7			10000	200	170	920	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jul-88	2150	25	8.8		22	3.9	1.5	470	10			38	240	2.2	< 0.100			5900	20	< 10	16	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jul-88	5900	26.5	7.9		72	88	170	1300	36			3200	210	1.1	3.2			10000	220	160	920	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Jan-89	2000	23.5	8.8		52	3.4	1.7	470	12			58	320	2.3	< 0.100			5200	50	10	15	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Mar-89	2150	24	8.7		59	5	3	460	11			70	360	2.5	< 0.100			5600	20	< 10	25	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Mar-89	1980	21.5	8.9		48	1.9	1.1	420	2.9			26	290	2.7	< 0.100			6000	46	5	9	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Mar-89	6300	23	7.7		72	100	160	1200	38			3200	210	1.3	3.1			11000	570	150	910	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-90	2210	22	8.6		53	6.2	3.7	470	14			130	350	2.1	< 0.100			6100	30	< 10	31	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-90	2270	22.5	8.7		54	8.1	4.4	520	14			110	300	1.9	< 0.100			6900	70	< 10	38	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Mar-91	2120	23.5	8.7	1320	53	6.2	3.7	470	14			110	370	2.7	< 0.050			6100	20	< 10	31	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Mar-91	1980	23	8.9	1200	48	2.2	1.3	440	14			29	310	2.8	< 0.050			6400	70	< 10	11	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-92	2230	22	8.3		60	9.8	5.5	460	12			97	410	1.9	< 0.050			5700	22	4	47	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-92	2330	22	8.7		53	9.3	6.2	490	14			150	320	2.4	< 0.050			6500	40	< 10	49	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-93	2170	23	8.5		59	6.3	3.6	450	12			94	320	2.4	< 0.050			6200	20	< 10	31	
26S/40E-23B02M	026S040E23B002M	35.6652331	-117.638674	Apr-93	2000	24.5	8.6		52	2.3	1.2	440	12			31	300	2.9	0.61			6500	< 10	< 10	11	
26S/40E-23C01M	026S040E23C001M	35.6638442	-117.6467298	Jul-53	5980	21.1	6.8			690	74	610	20	**20**	**0**	1000	1600					7800			2000	
26S/40E-23G01M	026S040E23G001M	35.66162206	-117.6428408	Sep-64	375		7.8	263	33	34	4.9	38	2.6	**98**	**0**	48	40	0.8				170			100	
26S/40E-23G01M	026S040E23G001M	35.66162206	-117.6428408	May-69	454		8.1	270		36	6	42	4	**98**	**0**	58	45	0.8				120			110	
26S/40E-23G01M	026S040E23G001M	35.66162206	-117.6428408	May-72	15100	22	7.8	10900	60	120	64	3800	61	**370**	**0**	3700	3000	3	0.1			23000	100		560	
26S/40E-23G01M	026S040E23G001M	35.66162206	-117.6428408	Jun-72	7100	24	7.6	7160	70	470	380	890	88	**200**	**0**	4100	260	2.7	2.4			12000	30		2700	
26S/40E-23G01M	026S040E23G001M	35.66162206	-117.6428408	Jun-72	9000	25	7.7	16500	49	430	990	3000	70	**420**	**0**	10000	470	4.8	1.5			9000	50		5100	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-72	5500	24	7.5	5400	53	390	220	880	43	**280**	**0**	3200	190	3.1	0.04			7600	360		1900	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-78	5900	26	7.2		76	300	310	700	76	**190**	**0**	3200	200	2	1.6			3300	40		2000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-78	13200	25	7.2		37	140	830	2600	72	**340**	**0**	8600	460	2.9	1.1			16000	300		3800	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-78	6800	25	7.8		49	250	250	990	44	**270**	**0**	3300	250	2.3	4.9			8300	60		1700	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-79	5760	23	7.2		73	310	290	600	75			3000	260	2.1	2.3		910	3200	80		2000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-79	14100	23.5	7.4		39	120		2600	64			8300	380	3	0.88		19	15000	690		300	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-79	5500	24	7.7		56	210	330	1000	46			3700	220	2.1	0.21		91	1900	410		1900	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Apr-80	5200	25	7									2900			1.5							
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-80	5320	23	6.9			350	270	580	73			2700	210	2.9	1.5		990	4400	190		2000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-80	13400	23.5	7.1		43	430	770	2500	68			8600	410	3	0.6		94	15000	2500		4200	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	May-80	8160	24	7.4		60	190	420	1300	53			4300	290	2.2	0.03		190	11000	3300		2200	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-82	5140	25	7.3		79	510	280	620	69			3300	250	2.2	1.6		880	3200	60	180	2400	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-82	12700	25	7.3		40	500	910	2500	57			9000	420	3.1	0.2		100	1500	2300	330	5000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-82	6430	25.2	7.7		59	400	400	1100	41			4400	220	2.3	< 0.100		130	9400	320	490	2600	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Oct-83					42	360	730	2300	55			7900	420	2.9				17000	80		3900	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Aug-84	9140	22	7.8		59	110	94	2200	39			2600	1700	2.4	< 0.100			30000	170	110	670	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Aug-84	3940	23.5	7.3		78	490	260	560	61			3000	240	2.1	1.6			3000	150	120	2300	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Aug-84	4290	24	7.7		63	280	280	880	35			3500	160	2	< 0.100			8400	760	230	1900	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-85	9750	23	7.6		40	90	92	2100	38			2400	1700	2.4	< 0.100			29000	220	110	600	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-85	5500	24.5	6.8		87	510	270	570	65			3300	230	2	1.5			3000	140	220	2400	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-85	12500	25.5	7.2		40	430	700	2400	56			8600	450	2.6	0.87			13000	4200	340	4000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-85	5100	26.5	7.5		72	260	280	870	39			3000	130	1.9	< 0.100			8100	250	240	1800	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Apr-86	7000	22	7.7		71	330	370	980	38			3700	210	2.1	< 0.100			8500	70	390	2300	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-87	9200	26	7.4		69	450	450	1400	45			5500	260	2.1	< 0.100			11000	990	460	3000	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-88	4800	27	7.2		83	500	290	540	53			3100	210	2	1.2			2600	120	260	2400	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jun-88	11000	26	7.2		46	440	670	2400	49			8100	430	2.7	1.4			11000	520	290	3900	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jul-88	8550	24	7.9		67	87	86	2000	31			2300	1400	2.3	< 0.100			25000	180	100	570	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Jul-88	6000	27	7.5		73	190	530	1500	40			5100	210	1.9	< 0.100			9300	160	400	2700	
26S/40E-23G01M	**026S040E23G001M**	**35.66162206**	**-117.6428408**	Mar-89	9400	24.5	7.5		74	410	510	1400	46			5700	200	2.1	< 0.100			10000	710	480	3100	
26S/40E-23J01M	**026S040E23J001M**	**35.65773328**	**-117.6378406**	May-72	2600	22	8.2	1720	69	30	12	540	17	**400**	**0**	210	510	2.6	0.83			3800	220		120	
26S/40E-24C01M	**026S040E24C001M**	**35.6646776**	**-117.6278404**	Jul-53	1240	22.2	7.8			88	7.3	140	9	**120**	**0**	85	280					430			250	
26S/40E-24C01M	**026S040E24C001M**	**35.6646776**	**-117.6278404**	May-72	3200	21	8.1	2500	31	44	17	760	9.4	**660**	**0**	460	570	5.6	16			3700	100		180	
26S/40E-24C01M	**026S040E24C001M**	**35.6646776**	**-117.6278404**	Jun-78	3500	21.5	6		13	41	13	540	8.1	**0**	**0**	480	710	4.6	1.4			7300	56000		160	
26S/40E-24C01M	**026S040E24C001M**	**35.6646776**	**-117.6278404**	May-80	2400	20	6.7		8.9	10	4	550	5.4			250	610	4.9	0.79		4	5800	14000		41	
26S/40E-24C01M	**026S040E24C001M**	**35.6646776**	**-117.6278404**	Jun-82	3070	19.5	6.1		20	24	4.1	580	4.2			310	880	2.1	2.1		36	6300	170000	1500	77	
26S/40E-24M01M	**026S040E24M001M**	**35.65801109**	**-117.6297848**	Jun-72	2800	25	7.8	2100	53	19	9.1	710	14	**670**	**0**	630	260	3.7				6000	40		85	
26S/40E-24M01M	**026S040E24M001M**	**35.65801109**	**-117.6297848**	Jun-72	7500	22	7.2	6080	56	440	120	1200	89	**190**	**0**	540	2500	0.8	9.4			4400	60		1600	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Apr-46	384		7.7	246	32	32	5.6	37		**110**	**0**	55	28	0.8				210			100	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Feb-54	1690	32.2	8.6	1090	45	3.4	0.6	410	7.1	**770**	**24**	23	150	4				3000	80		11	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Mar-54	1430	21.7	7.6			9.6	24	230	18	**140**	**0**	83	310					1800			120	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Jun-72	1450	24	7.6	1200	78	100	44	180	23	**190**	**0**	640	28	2	0.06			590	50		430	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Jun-72	1400	27	8.8	1050	30	2.1	0.4	370	4.9	**700**	**49**	18	140	2.7	0.1			4700	120		7	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Jun-78	1620	29.5	9		4.3	2.5	0.4	370	5	**680**	**62**	9.4	150	2.7	0.04			3900	70		8	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	May-79	1380	29	9		5.1	2.1	0.3	340	5.2			5.3	140	2.5	< 0.100		8	1900	60		6	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	May-80	1600	27	8.6		29	2.9	1.2	430	8.6			7.3	140	0.7	0.16		13	7000	190		12	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Oct-83					80	92	48	150	21			560	34	2.3				540	130		430	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Aug-84	1430	24	7.5		78	98	53	160	22			660	42	2.3	< 0.100			550	1700	100	470	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Jun-85	1800	26	6.8		82	110	57	170	23			660	56	2	0.1			610	3300	130	510	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	May-87	1820	31	8.6		41	1.7	0.53	410	4.4			12	150	3.5	< 0.100			4900	60	5	6	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Jul-88	2180	28.5	7.2		77	150	76	210	20			960	96	1.8	< 0.100			510	180	81	690	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Aug-88	1880	32	8.6		39	1.7	0.52	440	4.1			13	140	2.9	< 0.100			4700	35	3	6	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Mar-89	1880	31	8.6		39	2.2	0.78	430	4.8			18	140	2.9	< 0.100			5100	45	5	9	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Apr-90	1850	31.5	8.6		42	1.8	0.67	430	4.7			9.7	140	3.3	< 0.100			5300	260	7	7	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Mar-91	1800	300	8.7	1120	39	1.8	0.5	410	4.9			12	140	3.4	< 0.050			5000	35	3	7	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Apr-92	1860	31	8.6		38	2.8	1	430	6.5			16	150	4.5	< 0.050			5900	250	17	11	
26S/40E-24R01M	**026S040E24R001M**	**35.65217794**	**-117.6195067**	Apr-93	1810	29	8.5		42	1.9	0.69	440	4.7			12	140	3.5	< 0.050			5200	38	3	8	
26S/40E-25C02M	**026S040E25C002M**	**35.64856687**	**-117.6286735**	Apr-05			7.8									63	68						0	0	110	
26S/40E-25C02M	**026S040E25C002M**	**35.64856687**	**-117.6286735**	Jan-20				285	42	37	6.3			**128**	**0**	46	32						3700		120	
26S/40E-25C02M	**026S040E25C002M**	**35.64856687**	**-117.6286735**	May-75	600		8.4		30	38	13	78	5.6	**93**		77	84	0.6				500			150	
26S/40E-25C02M	**026S040E25C002M**	**35.64856687**	**-117.6286735**	May-87	1710	24	8		56	60	16	230	9			240	280	1.2	0.85			1300	< 3	35	220	
26S/40E-26B01M	**026S040E26B001M**	**35.64912235**	**-117.6417294**	Jul-53	2370	23.3	7.8			190	33	240	10	**120**	**0**	330	500					1700			620	
26S/40E-26B01M	**026S040E26B001M**	**35.64912235**	**-117.6417294**	Sep-53	1950												480					1800			480	
26S/40E-26B01M	**026S040E26B001M**	**35.64912235**	**-117.6417294**	Apr-73	420																					
26S/40E-26B01M	**026S040E26B001M**	**35.64912235**	**-117.6417294**	Jul-88	2150	25.5	7.9		22	150	46	230	22			810	120	0.6	1.7			660	20	100	560	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Aug-61	420		7.4	335	27	35	5.9	58	2.6	**110**	**0**	60	60	0.6				200	0		110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-62	605		8.4	420	25	39	6.3	70	3	**95**	**7**	60	96	0.6				150	280		120	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Sep-64	470		8.2	329	37	35	4.4	63	2.1	**110**	**0**	53	56	0.7				80			110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-65	626		8.4		29	34	6.8	69	2.8	**95**	**7**	49	72	0.8				250		0	110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	May-66			8.2	360	34	37	5.4	72	3.3	**110**	**0**	65	75	0.8				0	0	0	110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Sep-66			7.3	336	30	31	5.4	59	9.3	**120**	**0**	61	54	0.8				0	0	0	100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	May-67			8	400	32	42	7.8	77	2.9	**110**	**0**	80	98					350	100	0	140	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Oct-67			7.9	368	30	41	5.9	77	2.6	**110**	**0**	75	91	0.8				0	0	0	130	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Nov-68			8.2	296	29	38	4.9	70	2.5	**110**	**0**	65	74	0.6				800	0	150	110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Oct-69			8	336	35	32	6.8	68	2.2	**120**	**0**	75	58	0.8				0	0	80	110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-70			7.9	332	31	35	3.9	68	2.3	**120**	**0**	72	58	0.9				900	100	0	100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Oct-70	482		8.1		31	32	6.8	66	2.1	**110**	**0**	72	60	0.7				500	50	180	110	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-71	514		7.6	360	35	34	3.9	65	2.6	**120**	**0**	52	62	0.7				280	0	0	100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Oct-71	500		7	350	28	34	3.9	64	2.4	**112**	**0**	67	52	0.4				500	0	0	100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	May-72	1300	23	8.1	952	70	55	17	220	13	**220**	**0**	180	220	0.6	0.02			1700	60		210	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-72																						

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-72	550			385		34	4.4	64	2.5	**120**	**0**	63	51	1				680	0	0	100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Oct-73	660		7.7		23	42	6.8	78	2.4	**83**		89	100	1.4				200	450		130	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Feb-74						33			1.7				50						390	10		
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-74	545		7.4		20	32	4.9	64	1.8	**110**	**0**	64	64	0.7				100	290		100	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	May-75	470		7.2		22	32	3	76	2.2	**103**		60	57	0.7				< 20		< 10	94	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	May-76			7.9		35	34	2.9	87	2.3	**112**		79	48	1.1				150			96	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jun-82	1840	24.5	7.5		68	97	33	270	17			440	270	0.7	< 0.100		13	1900	30	20	380	
26S/40E-26F01M	**026S040E26F001M**	**35.6474557**	**-117.6439517**	Jul-88	2150	25.5	7.7		18	110	40	270	13			490	270	0.5	< 0.100			1800	210	10	440	
26S/40E-27D01M	**026S040E27D001M**	**35.65051108**	**-117.6667302**	Oct-70	377		8.1	212		34	5.9	45	2.2	**79**	**0**	43	36	0.9						20	110	
26S/40E-27D01M	**026S040E27D001M**	**35.65051108**	**-117.6667302**	Jun-72	390	26	8.1	262	48	24	5.8	35	10	**120**	**0**	39	25	0.6	1.8			150	10		84	
26S/40E-27D01M	**026S040E27D001M**	**35.65051108**	**-117.6667302**	Jul-88	2350	26.5	7.9		90	140	70	220	32			1200	E 35.0	0.8	< 0.100			500	< 10	130	1400	
26S/40E-27E03M	**026S040E27E003M**	**35.64662229**	**-117.6658967**	Mar-73	410																					
26S/40E-27E03M	**026S040E27E003M**	**35.64662229**	**-117.6658967**	Jul-88	640	26.5	9.1																			
26S/40E-27E03M	**026S040E27E003M**	**35.64662229**	**-117.6658967**	Feb-89	660	25.5	8.3		56	31	9.4	88	8.3			180	18	1.6	< 0.100			400	23	15	120	
26S/40E-27N01M	**026S040E27N001M**	**35.64078907**	**-117.6689523**	Mar-45			8								**0**	7.4	2.1						600	0	29	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Jun-53	440		8			8.4	2.2	98	8.8	**190**	**0**		22								30	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Jun-53	502		7.8			28	5.5	63	6.8	**140**	**0**	56	44								92	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	955		5.7		47.4	31.6	3.88	140	2.22			39.1	260		0.83			213	14300	393	95	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	548	27	6.5	356	38.9	27.9	5.71	74.7	2.51			41.2	109	0.45	1.36			176	4660	133	94	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	838		6.4		48.5	30.9	4.75	125	2.11			37.9	232		0.7			201	13400	330	97	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	630		6.4		45.4	22.3	3.86	94.8	2.15			39.8	149		1.02			185	7870	197	72	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	595		6.5		44.9	20.3	3.55	88.1	2.05			39.2	137		1.04			185	7640	176	65	
26S/40E-28A01M	**026S040E28A001M**	**35.65134437**	**-117.6717303**	Mar-05	511		7.8		40.1	23.1	4.58	68.8	2.3			39.2	99.9		1.32			180	3710	116	77	
26S/40E-28A03M	**026S040E28A003M**	**35.65106659**	**-117.6736748**	Jun-53	440		8			8.4	2.2	98	8.8	**190**	**0**	65	22								30	
26S/40E-28H01M	**026S040E28H001M**	**35.64523339**	**-117.6742303**	Jun-53	579	24.4	7.7			35	8.3	69	14	**120**	**0**	130	34								120	
26S/40E-28H01M	**026S040E28H001M**	**35.64523339**	**-117.6742303**	Nov-59	624		7.8	357		41	11	71		**130**	**0**	100	65						100		150	
26S/40E-28H01M	**026S040E28H001M**	**35.64523339**	**-117.6742303**	Sep-85	440	29.5	6.3		19	27	3.3	66	2.9			130	E 16.0	0.4	2.5			80		130	81	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Jun-72	400	27	8.3	298	55	16	2.9	60	12	**130**	**0**	59	21	1.2	0.05			190	20		52	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Feb-74						28			15				28						40			
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Jun-78	520	27.5	8		53	22	4.3	64	14			78	26	1.3	0.06		1	360	< 10	< 10	73	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Jun-79	580	24	7.9		56	35	7.5	69	17			130	39	1.2	< 0.100		1	280	20		120	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	May-80	580	21	8.1		43	30	6.4	82	10			120	50	1	0.57		8	550	70		100	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Jun-82	760	25	7.9		59	54	11	93	21			250	52	0.8	< 0.100		< 1	350	80	20	180	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Aug-84	904	24	7.8		57	69	15	78	23			280	50	0.6	< 0.100			380	40	20	240	
26S/40E-28J01M	**026S040E28J001M**	**35.6410668**	**-117.6711746**	Jan-86	830	23.5	7.6																			
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Mar-70	426		8.8	246		1.2	0.2	98	0.6	**82**	**20**	16	70	1.3					0	0	4	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Nov-70	357		8.2	246		30	7.3	44	4.9	**110**	**0**	58	34	0.6						0	110	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Jun-75	425		8.9			1.2	7.8	88	1.8	**98**	**16**	46	47	1.2				300		< 10	35	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Feb-77	395		9.1			48	49	100	1.1	**110**	**24**	53	48	1.1						< 10	32	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Feb-77																						

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Feb-77	395		9.1			4.8	4.9	103	1.1	**110**	**24**	53	48	1.1						< 10	32	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	Nov-78	370		8.8			16	5.1	68		**61**	**27**	33	50	0.9							60	
26S/40E-29F01M	**026S040E29F001M**	**35.64551104**	**-117.699231**	May-87	375	32	8.9		33	13	3.5	60	1.9			27	36	0.9	2.5			390	20	< 1.0	47	
26S/40E-30C02M	**026S040E30C002M**	**35.6496775**	**-117.7167315**	Apr-46	294		5.9	202	10	9.6	2.6	34	9.4	**80**	**0**	4.3	34	0.4				130			35	
26S/40E-30E01M	**026S040E30E001M**	**35.6457887**	**-117.7214538**	Apr-46	294		5.9	202	10	9.6	2.6	34	9.3	**80**	**0**	1.4	34	0.4				130			35	
26S/40E-30E01M	**026S040E30E001M**	**35.6457887**	**-117.7214538**	Feb-74						1.4			0.1				40						30			
26S/40E-30E02M	**026S040E30E002M**	**35.64717757**	**-117.7189538**	Aug-53	341	26.7	8			18	10	34	4	**120**	**0**	31	24					140			86	
26S/40E-30E02M	**026S040E30E002M**	**35.64717757**	**-117.7189538**	Feb-86	383		7.2																			
26S/40E-30E02M	**026S040E30E002M**	**35.64717757**	**-117.7189538**	May-87	410	27	8.1		38	29	8.6	32	4			39	27	0.6	2.4			150	14	15	110	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Aug-64	385		8.7	200		11	4.6	56		**85**	**14**	24	36	0.7					100		47	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Mar-70	357		8.4	207		8.8	4.4	64	1.9	**89**	**14**	16	45	1					0	0	40	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Jun-75	345		8.8			6	6.1	86	2.8	**99**	**11**	53	48	1				500		< 10	40	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Mar-77	335		9			8	6.1	76	2.3	**90**	**17**	41	43	1.3						< 10	45	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Mar-77	335		9			8	6.1	76	2.3	**90**	**17**	41	43	1.3						< 10	45	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Nov-78	350		9.1			8	5.4	69		**49**	**42**	20	43	1.1							42	
26S/40E-30K01M	**026S040E30K001M**	**35.6429722**	**-117.7136944**	Jan-86	364	29.5	8.5																			
26S/40E-30K03M	**026S040E30K003M**	**35.64245549**	**-117.712009**	Nov-72	445	25.6																				
26S/40E-30K03M	**026S040E30K003M**	**35.64245549**	**-117.712009**	Oct-74	382		8.7			7.2	3.4	79	1.6	**72**	**18**	35	52	0.6							32	
26S/40E-30K03M	**026S040E30K003M**	**35.64245549**	**-117.712009**	Jun-75	510		9			< 0.10	5.4	110	1	**70**	**16**	58	80	1				300		< 10	22	
26S/40E-30K03M	**026S040E30K003M**	**35.64245549**	**-117.712009**	Mar-77	470		9.2			< 0.10	2.4	118	0.9	**59**	**27**	60	79	1.4							10	
26S/40E-30K03M	**026S040E30K003M**	**35.64245549**	**-117.712009**	Nov-78	470		9.1			8	2.4	120		**52**	**30**	75	85	1.1							30	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	410		8.4		24.9	21.4	5.85	46.7	2.72			35.7	44.5		3.8			136	6	0.5	77	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	454		9		35	6.49	1.28	83.3	1.16			24.6	46.5		1.16			708	< 6	1.4	21	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	392		8.7		23.1	13.3	3.35	57.7	2			29.5	38.3		3.08			209	< 6	0.5	47	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	481		9		43.8	2.67	0.027	93.3	0.57			23.5	50.9		< 0.06			1020	< 6	1.2	7	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	479		8.9		43.4	2.79	0.028	94	0.64			23.6	48.1		< 0.06			1040	< 6	2.5	7	
26S/40E-30K04M	**026S040E30K004M**	**35.64143056**	**-117.7131667**	Jun-06	716		8.7		46.8	4.81	0.031	134	1.04			39.4	113		< 0.06			1580	< 6	5.4	12	
26S/40E-31R01M	**026S040E31R001M**	**35.6238448**	**-117.7061753**	May-73	520																					
26S/40E-32D01M	**026S040E32D001M**	**35.6355112**	**-117.7050644**	Apr-46	298		7.5	162	6	18	2.9	38	3.9	**110**	**0**	0.5	37	0.8				180			57	
26S/40E-32D01M	**026S040E32D001M**	**35.6355112**	**-117.7050644**	Sep-46	299		7.7	160	3	18	2.9	39	4.7	**110**	**0**	0.5	38	0.6				130			57	
26S/40E-32D01M	**026S040E32D001M**	**35.6355112**	**-117.7050644**	Jul-53	325	27.2	8.2			19	5.9	37	2.7	**100**	**0**	30	24					100			72	
26S/40E-32E01M	**026S040E32E001M**	**35.63245575**	**-117.7045087**	Jul-53	476	26.7	8			36	8.4	42	3.3	**110**	**0**	25	64					160			120	
26S/40E-32E02M	**026S040E32E002M**	**35.63328907**	**-117.7031198**	Jun-72	400	27	8	306	28	32	8.5	42	3.1	**100**	**0**	44	51	0.5	4.9			150	40		110	
26S/40E-32F03M	**026S040E32F003M**	**35.6349557**	**-117.6986753**	Jan-86	880	33	8.5																			
26S/40E-32F03M	**026S040E32F003M**	**35.6349557**	**-117.6986753**	May-87	775	33.5	9.1		53	3.5	0.06	150	0.8			28	110	0.8	< 0.100			880	< 3	3	9	
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Nov-77	600		8.8	370		6	1	116	4	**76**	**66**	60	87	1				400			16	
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Dec-77	540		9.1			2.8	3.7	175	2	**93**	**20**	56	162	0.8							22	
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Nov-78	335		8.3			13	6.3	60		**88**	**6**	38	39	0.5							58	
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Jan-86	675	29	8.3																			
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Apr-93	557	29	8.6		37	11	1.8	96	2			29	88	0.8	1.1			610	5	< 1.0	35	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-32K01M	**026S040E32K001M**	**35.62838889**	**-117.6961944**	Mar-05	775	27	8.8	485	41.6	10.3	1.21	153	1.66			39.1	132	0.86	0.58			1120	E 5	2.9	31	
26S/40E-33A02M	**026S040E33A002M**	**35.63690026**	**-117.670619**	Jun-53	368		8.1			3.8	0.8	79	5.8	**150**	**0**	12	38								13	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Feb-45	547		7.7	346	44	36	10	58	4.2	**120**	**0**	46	68					300			130	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Feb-45	1130		7.7	735	48	100	24	100	6.4	**240**	**0**	150	140					1100			350	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Jan-51	489		8.5	303		12	4.8	100		**150**	**15**	14	78								50	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Jun-53	533	24.4	7.7	339	42	38	9.3	55	3.6	**140**	**0**	49	57	0.5				280			130	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Sep-54	591	25											68						0		140	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Nov-59	448		8.2	257		13	9.3	70		**140**	**0**	11	67						100		70	
26S/40E-33P01M	**026S040E33P001M**	**35.6232894**	**-117.6795079**	Mar-70	588		7.8	349		41	13	64	5.5	**150**	**0**	48	88	0.6					0	0	160	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Apr-46	396		7.7	259	47	21	6.3	49	4.6	**120**	**0**	27	41	0.8				320			78	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-46	396		7.8	260	50	21	6.9	49	4.6	**120**	**0**	27	36	0.8				240			81	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-53	417	25.6	7.8			16	5.6	63	3.8	**140**	**0**	25	45								63	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-54	436	25.6											48						540		80	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Apr-55	368	25.6	8			15	5.7	55	3.6	**130**	**0**	27	37	0.4				290			61	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-55	419	25.6											44								61	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-56	416	26.1	7.8			15	4.2	65	3.2	**140**	**0**	19	46	0.8				14000			55	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Mar-57	458	24.4											55								92	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-57	407	25.6	6.9			18	4.1	63	3.8	**140**	**0**	26	46					15000			62	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Apr-58	452	25.6				56							54								140	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-58	490		7.7			20	4.9	72	3.2	**140**	**0**	24	65								70	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Nov-59	481	26.1	7.4			28	4.9	73	3.7	**130**	**0**	56	62	0.7							90	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Aug-60	521	25.6	7.1	342	48	27	8.1	63	4.2	**130**	**0**	28	74	1.2				300	10		100	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Aug-61	540		7.1	375	30	28	5.4	70	4.7	**120**	**0**	15	96	0.6				500	0		92	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jul-62	575		7.8	346	39	24	6.8	88	3.4	**140**	**0**	26	92	0.7				600	0		88	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-63	536		8.3	375	41	25	7.3	59	1.7	**120**	**0**	34	58	0.4				460	40		92	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-64	490		8.2	343	42	25	8.3	50	3.7	**110**	**0**	28	58	0.7				220			96	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-65	501		8.7	328	29	24	5.9	50	4.4	**120**	**10**	24	52	0.8				250	40	0	84	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	May-66			7.9	296	43	25	7.6	58	5	**130**	**0**	35	50	0.8				300	0	0	93	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Sep-66			7.4	316	41	26	7.8	67	4.3	**120**	**0**	35	51	0.8				800	0	0	96	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-67			8	268	37	21	6.6	62	4	**130**	**0**	40	52	0.8				400	0	0	80	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-68			8.3	352	36	28	6.9	64	4.3	**140**	**0**	45	58	1.4				840	0	0	98	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Nov-68			8.2	292	40	29	5.4	63	4.2	**130**	**0**	44	56	0.7				900	0	50	94	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-69			7.9	324	44	27	9.8	60	4	**130**	**0**	46	64	0.8				110	0	80	110	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-70			7.3	360	44	32	10	64	5.1	**130**	**0**	62	68	0.8				1300	0	0	120	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-70	515		8.2		41	40	5.8	64	4.8	**140**	**0**	53	70	0.6				700	0	0	120	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-71	539		7.6	277	34	36	8.3	57	5.4	**120**	**0**	52	68	0.7				400	0	0	120	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-71	558		7.1	391	39	38	9.8	60	5.4	**120**	**0**	69	70	0.4				400	20	0	130	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-72	555		7.5	390	23	36	10	55	5	**120**	**0**	63	62	0.9				570	0	0	130	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Oct-73	570		7.9		29	38	11	76	4.6	**117**		84	88	0.9				300	210	< 10	140	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jun-74	650		7.7		25	37	12	64	5	**120**	**0**	75	92	0.7				100	280	< 10	140	

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	May-76	600				47	45	12	87	4.9	**137**		75	88	1.2				320			160	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jul-78	650		7.7		42	45	14	63	5.9	**110**		85	80	0.68				680			170	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Mar-80	700		8.3		45	45	13	73	6.4	**93**		105	104	0.72				820			170	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Jan-89	730	24	7.9		46	39	12	82	6.9			86	110	0.6	1.1			560	48	6	150	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Apr-90	690	24.5	7.9		49	44	14	75	7.3			100	82	0.4	1.1			610	340	16	170	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Mar-91	750	24.5	8.1	447	24	35	9.9	90	5.8			64	130	0.6	1.1			690	10	3	130	
26S/40E-34N01M	**026S040E34N001M**	**35.6246783**	**-117.6683965**	Apr-92					38	36	11	100	5.4			63	150	0.6	1.2			710	4	2	140	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	May-87	1240	21.5	7.8		53	67	16	130	6.2			140	160	0.7	1.1			1100	19	18	230	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Jul-88	405	24	8.6		62	13	3.6	67	11			4.7	17	1	< 0.100			430	39	36	47	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-90	1340	21	7.5		61	100	24	140	9.5			180	200	0.3	1.8			1900	850	19	350	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-90	2900	24	7.8		73	110	11	480	18			54	820	0.8	< 0.100			4200	1300	140	320	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Mar-91	1430	20	7.6	916	53	110	25	140	9			200	200	0.4	1.9			1800	4	< 1.0	380	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Mar-91	3180	24.5	8	1980	36	120	11	500	19			36	950	1.1	< 0.050			4000	20	80	350	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-92	1450	29	7.5		58	110	26	150	9			210	220	0.4	1.9			1800	170	5	380	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-92	498	29	8.3		60	14	3.3	81	11			6.3	64	1.3	< 0.050			560	140	29	49	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-93	1420	20.5	7.4		59	110	25	140	9.1			210	220	0.4	2			200	3	1	380	
26S/40E-35H01M	**026S040E35H001M**	**35.63190054**	**-117.6375624**	Apr-93	2040	24	7.8		68	77	10	300	17			40	580	0.9	< 0.050			2400	20	60	230	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	Apr-46	602		7.5	372	46	41	11	61	3.9	**130**	**0**	54	73	0.6				380			150	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	May-46	1200		7.9	732	47	98	30	100	8.6	**300**	**0**	120	170	0.6							370	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	Sep-46	605		7.7	355	40	24	7.5	91		**190**	**0**	31	71	0.8				500			91	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	Sep-46	1270		7.7	800	49	100	33	110	9.4	**310**	**0**	130	180	0.6				580			390	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	Sep-46	531		7.8	330	44	33	9.9	57	3.5	**120**	**0**	44	64	0.6				270			120	
26S/40E-35Q01M	**026S040E35Q001M**	**35.62356738**	**-117.6417291**	Jul-67	490		8.2	283	44	56	100		1.5			63									160	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	May-64	408		8.3	306		33	8.5	50		**130**	**0**	14	120	0.7					100		120	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Jul-68																						
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Mar-70	526		8.1	320		16	7.3	93	3.9	**120**	**0**	24	100	0.7					0	0	71	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Jun-72	1500	24	7.5	1050	71	70	17	200	16	**140**	**0**	49	420	0.8	0.03			2100	30		240	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Jun-75	580		8			6	3.7	120	3.6	**160**	**0**	34	82	1.5				800		< 10	30	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Mar-77	435		8.8			4	4.9	110	3.4	**112**	**13**	46	78	1.5						< 10	30	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Mar-77	435		8.8			4	4.9	114	3.4	**112**	**13**	46	78	1.5						< 10	30	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Nov-78	458		8.6			8.4	5.9	99		**88**	**18**	26	92	1.1							45	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	May-87	660	27	8.7		37	7.7	1.4	110	2.7			27	96	1.2	1.7			660	< 3	5	25	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Jan-89	580	26	8.7		37	9.6	1.8	110	3.1			29	100	1	1.9			620	13	3	31	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Jan-89	1500	21.5	7.8		65	62	16	210	15			43	420	0.7	< 0.100			1900	92	36	220	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Apr-92					39	12	2.1	130	3.7			36	140	0.9	2			650	380	3	39	
26S/40E-35Q02M	**026S040E35Q002M**	**35.6230118**	**-117.6414513**	Apr-93	735	29	8.6		40	11	1.8	130	3.6			32	160	0.8	2			680	< 3	< 1.0	35	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Mar-54	3060	22.2	7.6			90	22	480	24	**120**	**0**	62	880					3700			320	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Mar-74	754		8.2		47	16	2.6	140	4.2	**160**	**0**	36	130	1	1.1		23	810	290		51	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Mar-75	800	20	8.2		39	17	3.2	140	4.9	**158**	**0**	40	140	1	0.08		6	740	260		56	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Aug-76	956	22.5	8.4		41	22	4.5	160	4.7	**134**	**3**	56	190	0.8	0.09		20	810	170		73	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Jun-78	1210	25.5	7.8		35	61	6.1	200	5.9			79	290	0.8	0.1		24	1000	70	< 10	180	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Jun-79	1200	23	8		37	41	7.9	210	6.9			110	280	0.6	0.04		13	1200	100		140	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	May-80	1120	22.5	8.2		29	41	9.3	220	6.2			110	300	0.6	0.03		13	1300	60		140	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Jun-82	1570	22	7.9		30	71	14	250	8.8			180	360	0.6	< 0.100		34	1700	70	30	240	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	Jun-85	2000	22	7.3		50	110	17	250	8.4			260	360	0.6	1.2			2200	11	44	340	
26S/40E-36A01M	**026S040E36A001M**	**35.63356726**	**-117.6195064**	May-87	2320	21.5	7.5		57	140	24	260	8.7			350	360	0.5	1.4			2900	40	50	450	
26S/41E-06A01M	**026S041E06A001M**	**35.71467659**	**-117.5947846**	Sep-53	18300												5100					77000			29	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	Jun-78	7420	37	5.9		3.5	48	2.3	1200	20	**14**	**0**	50	2800	1.5	0.04			24000	130000		130	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	Jun-78	25900	20.5	6.1		6.5	170	7.9	5000	59			1100	8400	1.1	0.05		8	44000	460000	1900	460	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	May-79	5700	20	7		2	8.8	0.7	1200	35			220	1700	2.6	0.06		5	740	2700		25	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	May-79	24300	25.5	6.7		12	70	3.6	5300	50			1200	7900	12	0.01		1	14000	230000		190	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	May-80		22	8.1		32	2	2	1200	35			230	1400	3.2	0.06		1	15000	30		13	
26S/41E-07D01M	**026S041E07D001M**	**35.698288**	**-117.6111737**	May-80	22800	21.5	6.9		4.7	26	2	5300	78			970	8000	15	0.09		3	50000	65000		73	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Apr-46	2420		8.7	1500	15	9.2	3.6	530	39	**820**	**39**	4.8	360	2.1				9300			38	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jul-53	12400	21.1	7			310	11	2600	20	**26**	**0**	1000	3900					26000			830	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Aug-53	1030	21.1	7.1			48	9	150	7.3	**230**	**0**	61	170					2800			160	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Sep-54	2130												420						0		490	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	May-58	982	21.7	7.6	532		45	7.4	140	5.4	**230**	**0**	60	150	0.9				3200			140	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Sep-64	905		8.2	634	42	40	7.8	150	4.2	**210**	**0**	46	160	1				1900			130	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	May-66			7.3	628	43	42	8.3	180	5.8	**220**	**0**	54	170	1				2500	0	0	140	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Sep-66			7.1	836	44	35	9.3	210	4.3	**300**	**0**	48	210	1.2				4000	0	0	120	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-68			8.4	588	37	37	5.9	160	4	**220**	**14**	55	150	1.3				2800	0	0	120	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Nov-68			8.1	648	36	41	4.9	180	4.2	**250**	**0**	68	170	1				3600	0	50	120	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Oct-69			8.1	876	46	20	9.8	250	4.2	**330**	**0**	18	250	1.3				4600	0	80	64	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-70			7.8	624	44	41	6.8	160	4.9	**250**	**0**	70	170	1				3800	100		130	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Oct-70	995		7.9		32	40	5.9	160	4.2	**210**	**0**	68	170	0.9				2300	600	120	120	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-71	1020		7.8	710	52	42	5.8	160	4.1	**250**	**0**	49	170	1				2400	0	0	130	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Oct-71	1260		7.6	879	38	46	11	200	4.4	**280**	**0**	83	200	0.9				2800	50	0	160	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-72	1160		7.8	812	29	46	6.3	220	4.4	**250**	**0**	85	180	1.2				2800	0	0	140	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Oct-73	1040		8.1		41	85	5.9	180	2.7	**224**		71	180	1.3				3300	80		110	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-74	1620		7.2		33	94	11	200	5.1	**230**	**0**	87	310	0.9				2100	30	< 10	280	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	May-75	1150		7.7		30	46	9	190	4.6	**220**	**0**	82	190	1				3000		10	120	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	May-76	1120		7.9		50	48	4.9	210	4	**259**		91	190	1.3				2850			140	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jun-78	7100	21	8.6		15	2	0.3	2800	18			620	2900	11	0.41		18	40000	70		6	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Jul-78	1000		7.3		37	46	8.8	170	4	**220**		61	170	1.3				3300			150	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	May-79	11500	22	8.7		11	7.3	0.7	2800	21			630	2900	10	0.95		18	170	9200		21	
26S/41E-07G01M	**026S041E07G001M**	**35.69634366**	**-117.6011734**	Mar-80	1000		8		41	28	2	170	4	**200**		32	160	1.1				930			88	
26S/41E-07G02M	**026S041E07G002M**	**35.69467704**	**-117.5995067**	Jul-53	1410	21.7	7.7			42	6.8	250	8	**180**	**0**	180	260					1200			130	
26S/41E-07G02M	**026S041E07G002M**	**35.69467704**	**-117.5995067**	Mar-54	6580	20											1400					19000			11	
26S/41E-07G02M	**026S041E07G002M**	**35.69467704**	**-117.5995067**	Mar-54																						

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
26S/41E-07G02M	026S041E07G002M	35.69467704	-117.5995067	Feb-73	860																					
26S/41E-07G02M	026S041E07G002M	35.69467704	-117.5995067	Jun-78	7720	22	8.4		18	6.8	1.7	1700	17			490	1900	0.8	3.7		22	23000	3000	190	24	
26S/41E-07G02M	026S041E07G002M	35.69467704	-117.5995067	May-79	7700	22	8.5		18	7.6	1.8	1800	16			460	1900	7	1.6		16	24000	< 10		26	
26S/41E-07G02M	026S041E07G002M	35.69467704	-117.5995067	May-80	7370	21.5	8.4		22	13	3	1600	12			440	1700	6.9	0.38		17	24000	1100		45	
26S/41E-07G02M	026S041E07G002M	35.69467704	-117.5995067	Jun-82	7640	22	8.7		23	6.5	3.8	2100	23			460	2100	3	< 0.100		8	24000	40	< 10	32	
27S/38E-01G01M	027S038E01G001M	35.61745505	-117.8386788	Sep-85	635	24.5	8		29	45	6.3	64	2.4			70	32	0.7	1.8			180	20		140	
27S/38E-01G01M	027S038E01G001M	35.61745505	-117.8386788	Sep-85	635	24.5	8																			
27S/38E-28R01M	027S038E28R001M	35.55134495	-117.88229	Mar-46	588		7.9	380	26	51	96	55	1.6	**137**	**0**	86	43	1				120			520	
27S/38E-28R01M	027S038E28R001M	35.55134495	-117.88229	Dec-52	534	21.7											38								150	
27S/38E-28R01M	027S038E28R001M	35.55134495	-117.88229	Mar-60	432	21.7	7.5	262	23	36	10	46	1.6	**153**	**0**	47	27	1.1				50			130	
27S/38E-31D01M	027S038E31D001M	35.5474557	-117.9292355	Jun-53	305		8.8	206		6.2	0	64	0.4	**88**	**5**	25	16	8				400			15	
27S/38E-31D01M	027S038E31D001M	35.5474557	-117.9292355	Apr-62	307		8.5	205	14	4	0	61	1	**75**	**9**	21	19	3.1				260			11	
27S/38E-31D01M	027S038E31D001M	35.5474557	-117.9292355	Sep-90	331		9.4		25	1.8	0.15	75	0.3			22	11	7.8				440			5	
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223	Mar-46	459		7.9	298	40	35	7.2	52	2	**156**	**0**	54	28	1.2				200			120	
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223	Mar-55	442		7.6	275		35	6	50	2.1	**149**	**0**	53	26	1.5				180			110	
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223	Mar-60	432	21	8.2	271	31	32	6	47	2.3	**140**	**0**	48	25	1				100			100	
27S/39E-07R01M	027S039E07R001M	35.59578906	-117.8156223	Aug-88	440			259						**135**	**< 1**	57.5	25.4								110	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87	420	32	8.1	274	10	30	5.3	49	3.4	**137**	**< 1**	56	32	1.2	1.8			170	150	180	100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87				246						**135**	**< 1**	45.6	25.5								91	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87				253						**131**	**< 1**	47.3	26								100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87																						
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87				262						**133**	**< 1**	46.5	25.7								100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87																						
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jul-87				261						**130**	**< 1**	50.1	28.3								120	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-89	510	27.5	7.8																			
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	426		7.8		42.1	33	5.04	44.2	2.4			45.8	31.3		1.89			252	< 6	0.9	100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	424	27.4	7.5		42.1	32.7	4.93	43.2	2.35			46.2	31.5		1.87			252	< 6	0.3	100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	429		7.9		42.6	33.5	4.95	44.5	2.51			46.4	31.7		1.87			252	< 6	0.7	100	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	433		7.8		43	35.9	4.37	40.7	2.73			47.5	31.9		1.84			223	E 4	0.7	110	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	429		8		43.2	37.4	4.37	41.5	2.89			47.7	32		1.85			222	< 6	0.6	110	
27S/39E-08M01M	027S039E08M001M	35.60023344	-117.8114556	Jun-06	423		8.1		37.4	35.2	2.94	43.3	2.73			48	31		1.78			178	< 6	0.5	100	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	Sep-46	371		7.7	1540	62	150	17	570	18	**120**	**0**	73	1100	1.3				3700			450	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	Feb-72	400		8.8	264		5.6	1	100	1.3	**130**	**19**	15	55	0.7						0	18	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	Jun-72	950	25	8	668	52	23	3.5	200	4	**200**	**0**	48	190	1.6	2.4			2000	40		72	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	May-75	920		7.3		30	15	3.4	190	3.7	**190**		35	240	1.5				700		< 10	52	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	Jun-87	560	29.5	8.9		36	1.9	0.11	110	0.4			15	61	1.1	0.53			760	< 3	< 1.0	5	
27S/40E-01G02M	027S040E01G002M	35.61578986	-117.624784	Jun-88	1200	29.5	7.9		51	26	4	200	5			92	200	1.1	0.85			1200	99	6	81	
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619	Sep-29				983	60	68	7	280			**72**	43	450								200	
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619	Jul-50	489		8.5	303		12	4.8	100		**150**	**15**	14	78								50	
27S/40E-01K01M	027S040E01K001M	35.614401	-117.6250619	Jun-53	577	26.7	8.2			7.9	2.5	130	2.1	**170**	**0**	49	80								30	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
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RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Apr-55	551	27.2	8.3			6.9	5.1	110	2.5	**150**	**0**	29	85	0.6				640			38	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Oct-55	588	26.7											85								36	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Oct-56	586	27.2											88								40	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Sep-57	626					18							99								44	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Sep-58	732		7.4										90								44	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Nov-59	515		8.2	277		11	6.8	83		**130**	**0**	11	78						200		56	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Mar-70	541		8.2	338		6	4.4	120	2.5	**150**	**0**	17	99	0.8					0	20	33	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Oct-71	526		8.3			8	4.4	140	3	**140**	**0**	54	110	0.9						0	38	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	May-73	500																					
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Jun-75	890		7.9			18	7.3	160	3.8	**130**	**0**	48	180	1				500		< 10	76	
27S/40E-01K01M	**027S040E01K001M**	**35.614401**	**-117.6250619**	Nov-78	1020		8.1			21	10	180		**140**	**0**	31	230	0.8							94	
27S/40E-01K02M	**027S040E01K002M**	**35.61467879**	**-117.622284**	Jun-53	2120		7.2			56	23	340	11	**110**	**0**	88	560								230	
27S/40E-01K02M	**027S040E01K002M**	**35.61467879**	**-117.622284**	Jun-72	2200	25	7.7	1510	55	95	13	390	11	**110**	**0**	65	650	1.4				2600	10		290	
27S/40E-01K02M	**027S040E01K002M**	**35.61467879**	**-117.622284**	Jul-88	990	25	8.1		52	30	3.8	180	4.1			38	190	1.6	1.1			1400	< 3	2	91	
27S/40E-01M01M	**027S040E01M001M**	**35.61356766**	**-117.6314509**	May-46	910		7.9	523	41	21	4.6	160	3.5	**180**	**0**	28	180	1.5				1300			71	
27S/40E-01M01M	**027S040E01M001M**	**35.61356766**	**-117.6314509**	Sep-46	873		7.8	502	38	21	4.7	150	3.5	**180**	**0**	27	160	1.3				1100			72	
27S/40E-01M01M	**027S040E01M001M**	**35.61356766**	**-117.6314509**	Jun-53	923	24.4	7.8			20	7.2	170	3.6	**190**	**0**	42	180								80	
27S/40E-02A01M	**027S040E02A001M**	**35.61884529**	**-117.6361733**	Jun-72	1600	24	7.7	1130	59	56	13	300	9.3	**160**	**0**	58	470	1.1	0.91			2600	20		190	
27S/40E-02G01M	**027S040E02G001M**	**35.61690086**	**-117.6414512**	Jun-72	2100	23	7.3	1880	55	190	56	320	12	**340**	**0**	330	490	0.7	12			4200	30		700	
27S/40E-02G01M	**027S040E02G001M**	**35.61690086**	**-117.6414512**	Jun-72	500	24	8.1	374	60	26	5.2	82	5.8	**140**	**0**	36	79	1	0.65			700	20		86	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Sep-49	625		7.8	271		28	3.6	74		**130**	**0**	17	89						50		85	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Jul-88	2600	25	8.2		9.7	69	20	410	11			100	650	1	0.87			4100	20	30	250	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Apr-90	2440	24.5	7.9		62	79	23	360	16			73	750	0.4	1.1			3800	36	6	290	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Mar-91	2020	23	8.1	1160	63	43	12	330	13			66	520	1.2	< 0.050			3300	30	< 10	160	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Apr-92	2020	23	8.1		60	42	12	340	11			100	480	1.3	< 0.050			2900	10	< 10	150	
27S/40E-02G03M	**027S040E02G003M**	**35.6185675**	**-117.639229**	Apr-93	2040	24	8		67	43	12	330	11			94	410	1.3	< 0.050			3200	29	< 1.0	160	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Feb-68	2130		7.5		54	100	19	300	6.4	**170**	**0**	81	520	0.9				2600	0		340	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Apr-69	2030		7.1		54	100	18	280	7.2	**200**	**0**	69	480	0.9				2210	10		340	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jun-72	1750	25	7.7	1230	56	86	15	320	6.5	**250**	**0**	76	460	1	5.6			3100	20		280	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Mar-74	1980		7.5		58	87	15	290	7.4	**231**	**0**	71	470	0.9	3.6		10	3100	40		280	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Mar-75	1900	22.5	7.2		51	88	15	300	7.4	**227**	**0**	71	460	1	3.7		19	3100	30		280	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Aug-76	2040	21.5	7.3		57	90	17	300	7.2	**230**	**0**	69	480	1	3.3		20	2800	40		290	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jun-78	2150	25	7.3		54	81	14	320	7.2			67	500	1.2	2.1		26	3100	< 10	< 10	260	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jun-79	1820	23	7.4		54	79	15	310	7.3			69	480	1.3	1.7		24	3100	30		260	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	May-80	1700	19.5	7.3		57	79	14	310	7.2			130	440	1.2	2		38	4100	50		260	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jan-86	1890	21	7.4																			
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jun-87	2200	25	7.7		69	75	11	320	6.1			54	480	2.9	1.3			2800	60	30	230	
27S/40E-02J01M	**027S040E02J001M**	**35.61217878**	**-117.6358955**	Jun-88	2000	26	7.7		58	81	13	320	7			63	510	1.1	1.6			2700	20	< 10	260	
27S/40E-02N01M	**027S040E02N001M**	**35.60940099**	**-117.6492291**	Apr-46	1350		7.4	774	12	9	5.6	270	8.2	**360**	**0**	0.5	240	0.8				5200			46	
27S/40E-03J01M	**027S040E03J001M**	**35.61245646**	**-117.653396**	Mar-59	7620		7	4780		540	100	1100		**290**	**0**	310	2600						250		1800	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Sep-46	3820		7.9	2200	7.9	160	46	550	12	**170**	**0**	130	1100	1				4400			590	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Jun-53	7420		7			510	140	900	17	**320**	**0**	300	2300								1900	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Jun-53	7720		7	5300		540	120	870	14	**330**	**0**	240	2300	0				6900			1800	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Sep-54	1970	22.8											460						40		440	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Mar-74	774		8.2		47	32	9.5	110	4.7	**179**	**0**	57	110	0.8	2		16	1100	100		120	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Mar-75	1080	18	7.8		46	39	14	170	5.7	**173**	**0**	99	190	1.1	1.5		11	3300	40		160	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Aug-76	1480	24.5	7.9		50	45	17	250	5.6	**165**	**0**	160	280	1.2	6.9		16	1900	70		180	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Jun-78	1210	30	7.7		40	37	9.9	190	5.5			93	240	0.8	2.8		26	1400	40	< 10	130	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Jun-79	1290	24	7.8		47	42	15	220	5.4			170	230	1	0.85		13	2200	50		170	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	May-80	1410	23.5	7.9		49	38	4	250	6.9			160	220	1.6	8.5		25	4600	120		110	
27S/40E-03R01M	**027S040E03R001M**	**35.60828989**	**-117.6533959**	Jun-82	1420	25.5	7.6		56	50	17	260	5.4			170	210	0.9	13		12	4000	50	30	190	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	Jun-53	413	25.6	7.8			17	5.2	63	2.8	**130**	**0**	32	40								64	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	May-65			8.4	435		19	7.9	110	2.4	**130**		28	110	1.1						0	80	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	Jul-67	1020		7.9	640	53	130	160		7.5		**0**										290	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	Jul-67	700		8	404	49	62	72		4.5		**0**										140	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	Jan-86	367	25	8.3																			
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	Feb-86	1260		7.6																			
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	May-87	380	33	9		45	2	0.03	76	0.6			21	31	0.9	< 0.100			610	< 3	3	5	
27S/40E-04B01M	**027S040E04B001M**	**35.62217835**	**-117.6745078**	May-87	1400	26	8		44	57	18	160	5.3			47	320	0.7	2			1200	20	7	220	
27S/40E-04C01M	**027S040E04C001M**	**35.6224561**	**-117.6786746**	Nov-59	448		8.2	227		13	9.8	55		**100**	**0**	14	60						100		72	
27S/40E-04C01M	**027S040E04C001M**	**35.6224561**	**-117.6786746**	May-69	530	26.7	8	282		22	9	65	4	**110**	**0**	37	71	0.7				360			94	
27S/40E-04C01M	**027S040E04C001M**	**35.6224561**	**-117.6786746**	Mar-70	588		8	347		31	10	83	4.1	**130**	**0**	23	120	0.6					0	10	120	
27S/40E-04C01M	**027S040E04C001M**	**35.6224561**	**-117.6786746**	Jun-75	820		7.4			38	16	110	5.3	**95**	**0**	65	170	0.7				100		< 10	160	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Nov-59	515		8.2	282		4.8	5.9	93		**150**	**0**	11	68						100		36	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Mar-70	571		8.2			17	5.9	100	4	**120**	**0**	24	110	0.9					0	20	66	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Jun-75	840		7.9			20	7.8	150	4.9	**130**	**0**	53	170	1.1				400		< 10	82	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Mar-77	840		8.2			36	9.3	140	5.1	**116**	**0**	58	190	0.9						< 10	130	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Mar-77	840		8.2			36	9.3	141	5.1	**116**	**0**	58	192	0.9						< 10	130	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Nov-78	960		7.9			39	16	130		**110**	**0**	35	210	0.7							160	
27S/40E-04C02M	**027S040E04C002M**	**35.6205117**	**-117.6783968**	Dec-78	990		8.1			46	15	140		**100**	**0**	62	230	0.8							170	
27S/40E-05D01M	**027S040E05D001M**	**35.6219004**	**-117.7028419**	Apr-73	420																					
27S/40E-05D01M	**027S040E05D001M**	**35.6219004**	**-117.7028419**	Feb-86	590		8.3																			
27S/40E-05D01M	**027S040E05D001M**	**35.6219004**	**-117.7028419**	May-87	620	25	8.8		36	2.9	0.42	120	0.7			20	67	1.4	1			1000	59	< 1.0	9	
27S/40E-06C02M	**027S040E06C002M**	**35.6194004**	**-117.7153422**	May-73	460																					
27S/40E-06J02M	**027S040E06J002M**	**35.6132895**	**-117.706453**	May-73	480																					
27S/40E-06K01M	**027S040E06K001M**	**35.61412278**	**-117.7120087**	May-73	600																					
27S/40E-06R02M	**027S040E06R002M**	**35.60995624**	**-117.7058974**	Feb-88	1200			760						**180**	**< 1**	25.8	288				< 10				50	
27S/40E-07G01M	**027S040E07G001M**	**35.60162305**	**-117.7136753**	Aug-60	3180	30	7.4	2040	63	180	33	410	11	**150**	**0**	73	900	0.2				2400	10		580	
27S/40E-07G01M	**027S040E07G001M**	**35.60162305**	**-117.7136753**	May-73	2600																					
27S/40E-07P01M	**027S040E07P001M**	**35.59523427**	**-117.7186753**	May-73	3000																					

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bicarbonate mg/L	Carbonate mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
27S/40E-08A01M	027S040E08A001M	35.6080119	-117.6889524	Oct-49				399	48	3.4	0.4	140		**160**	**2**	32	95								10	
27S/40E-08A01M	027S040E08A001M	35.6080119	-117.6889524	Jun-53	618		8.2			3.6	0.5	130	1.6	**170**	**0**	33	90								11	
27S/40E-08A01M	027S040E08A001M	35.6080119	-117.6889524	Jul-70	385		7.9	185		30	8.3	22	4.2	**120**	**0**	19	31	0.6					0	20	110	
27S/40E-08B02M	027S040E08B002M	35.60745636	-117.6936748	May-70	526		7.6	310		30	3.9	85	2.6	**170**	**0**	9.6	88	0.2					0	20	90	
27S/40E-08F01M	027S040E08F001M	35.60106759	-117.6972859	Jan-88	790			532						**182**	**< 1**	26.7	143								57	
27S/40E-09B01M	027S040E09B001M	35.60634535	-117.6786744	Apr-46	637		7.9	388	44	24	4.6	100	2.7	**170**	**0**	31	90	1.1				970			79	
27S/40E-09B01M	027S040E09B001M	35.60634535	-117.6786744	Jun-87	720	29.5	8.7		41	9	0.84	130	0.9			24	86	1.4	0.11			1100	< 3	5	26	
27S/40E-09L02M	027S040E09L002M	35.59828997	-117.680341	Sep-64	1180		7.9	923		25	5.4	290		**260**	**0**	58	300						100		84	
27S/40E-09P01M	027S040E09P001M	35.59356784	-117.6822854	Oct-51	1250		8.3	498		4	4.9	190		**200**	**0**	20	160					750	200		30	
27S/40E-09P01M	027S040E09P001M	35.59356784	-117.6822854	Dec-52	957												160								37	
27S/40E-09P01M	027S040E09P001M	35.59356784	-117.6822854	Jun-53	931		7.9			9.4	1.6	190	2.5	**230**	**0**	33	160								30	
27S/40E-09P01M	027S040E09P001M	35.59356784	-117.6822854	Jun-72	900	30	8.2		54	44	7.7	160	3.5	**200**	**0**	45	210	1	1.2			1300	20		140	
27S/40E-09P02M	027S040E09P002M	35.5938456	-117.6811743	May-73	1900																					
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Jun-53	1340		7.7			24	22	220	5.3	**190**	**0**	60	290								150	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Apr-55	1080	23.9	7.5			38	8.5	190	5	**200**	**0**	54	240	0.6				1700			130	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Oct-55	1000												180								100	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Oct-56	948												170								110	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Mar-57	1440												220								160	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Sep-57	1150					14							240								180	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Apr-58	1250					87							250								220	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Sep-58	1240		7.5			48	14	170	6	**170**	**0**		260								180	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Nov-59	1080												210								140	
27S/40E-10A01M	027S040E10A001M	35.60773434	-117.6531181	Jun-72	1300	25	7.6	896	50	40	13	230	5.1	**170**	**0**	140	280	1.8				1500	30		150	
27S/40E-10A02M	027S040E10A002M	35.60662325	-117.6553404	Jun-53	3050		7.6			170	89	320	12	**190**	**0**	220	780								780	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Apr-46	4450		7.6	2670	23	200	59	620	13	**110**	**0**	170	1300	0.6				4700			740	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Sep-46	3060		7.7	1800	59	120	26	470	9.4	**180**	**0**	92	830	0.9				3400			410	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Jul-53	3850	25.6	7.7			180	44	580	5.4	**200**	**0**	210	1900					4700			640	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Sep-54	3840	25.8											1100						160		590	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Apr-55	3680	25.8	7.9			200	35	560	15	**190**	**0**	170	1100	0.6				3400			650	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Oct-55	4000												1100								140	
27S/40E-10A05M	027S040E10A005M	35.60440106	-117.6575626	Dec-58	771	23.3	7.2							**180**	**0**		110								80	
27S/40E-10D01M	027S040E10D001M	35.60467877	-117.6695074	Sep-46	2170		7.8	1230	54	77	16	340	7	**170**	**0**	71	550	1.3				3000			260	
27S/40E-10E01M	027S040E10E001M	35.60384546	-117.6695074	Jun-62	2340	28.9	7.8	1340	53	38	33	390	8.4	**190**	**0**	63	590	1.4				3900	100		230	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Aug-60	707	25	7.5	466	47	12	1.9	130	2.4	**190**	**0**	37	92	1.6				1100	10		38	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Oct-61	703		8.1	441	45	14	0.7	140	2.2	**190**	**0**	28	93	2				1200	10		38	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Jul-62	705		7.9	442	44	12	2.2	140	2.8	**200**	**0**	35	93	1.8				1000	0		39	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Oct-63	709		7.7		46	14	2.4	130	3.1	**190**	**0**	33	96	2.1				1000	20		45	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Sep-64	768		7.7	445	39	15	5	130	1.2	**190**	**0**	36	99	1				1000			58	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Mar-66	770	21.1	7.9	452	43	18	3.6	140	3.3	**180**	**0**	32	120	2				900	20		60	
27S/40E-10H01M	027S040E10H001M	35.6049566	-117.6533959	Mar-67	801		8.1			18	4	150	3.1	**170**	**0**	38	130								62	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	COMMENTS
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	
27S/40E-10J01M	**027S040E10J001M**	**35.5991234**	**-117.6545069**	Apr-53	1250		8.3							**180**	**0**	31	300					2650			120	
27S/40E-10J01M	**027S040E10J001M**	**35.5991234**	**-117.6545069**	Aug-53	1330	25.6	7.6			34	11	210	4.6	**160**	**0**	30	310					2000			130	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Mar-74	5320		4.7		10	200	12	800	45	**0**	**0**	7.2	1700	0.9	0.08		25	5800	69000		550	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Mar-75	5000	17.5	6.5		5.3	92	7.7	900	58	**60**	**0**	11	1600	0.8	0.02		< 1	2700	1200		260	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Aug-76	6000	25			11	230	14	830	45	**0**		< 1.0	2000	0.7	0.07		5	8500	87000		630	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Jun-78	6000	26	6		10	220	14	850	49			16	1900	0.9	0.04		3	3400	120000	4000	610	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Jun-79	4600	28	6.2		8.4	160	10	800	39			12	1500	0.9	0.09		< 1	4500	40000		440	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	May-80	4150	27.5	6.5		6.7	160	11	850	49			13	1600	0.8	0.21		1	5500	22000		440	
27S/40E-10R01M	**027S040E10R001M**	**35.5944013**	**-117.6525624**	Jun-87	1240	30	8.8		41	7.3	0.32	220	1.6			34	250	1	0.12			1400	25	11	20	
27S/40E-11A03M	**027S040E11A003M**	**35.6069011**	**-117.6378399**	May-73	1950																					
27S/40E-11C02M	**027S040E11C002M**	**35.6071788**	**-117.6470068**	Apr-46	2110		7.9	1210	50	87	20	310	5.9	**170**	**0**	74	540	1.5				2790			300	
27S/40E-11C02M	**027S040E11C002M**	**35.6071788**	**-117.6470068**	Sep-46	869		7.8	518	56	16	3.2	170	3.1	**200**	**0**	32	150	2.5				1610			53	
27S/40E-11D03M	**027S040E11D003M**	**35.6052344**	**-117.6495069**	Jun-53	837		7.8			18	3.9	160	3.6	**200**	**0**	45	140								61	
27S/40E-11H03M	**027S040E11H003M**	**35.602179**	**-117.635062**	May-73	2300																					
27S/40E-14C02M	**027S040E14C002M**	**35.5919014**	**-117.6456177**	May-73	8000																					
27S/40E-15L01M	**027S040E15L001M**	**35.58440149**	**-117.663118**	Jun-61	1810	24.4	7.8	1110	40	110	22	210	9.8	**130**	**0**	91	430	0.6				1400			370	
27S/40E-15L01M	**027S040E15L001M**	**35.58440149**	**-117.663118**	Jun-72	2000	30	7.7		43	170	40	250	12	**120**	**0**	100	670	0.6	4.4			1800	160		590	
27S/40E-15L01M	**027S040E15L001M**	**35.58440149**	**-117.663118**	Mar-74	2780		7.7		42	190	42	280	14	**109**	**0**	100	760	0.8	4.4		16	1900	360		650	
27S/40E-17G01M	**027S040E17G001M**	**35.58884567**	**-117.6928412**	Oct-69	1290		8.2		44	32	2.9	240		**210**	**0**	36	280	0.8				1470			92	
27S/40E-17G01M	**027S040E17G001M**	**35.58884567**	**-117.6928412**	Jan-70	952		7.8	660		28	3.7	230	3.4	**200**	**0**	20	280	0.6					0	10	86	
27S/40E-18D01M	**027S040E18D001M**	**35.5927343**	**-117.7200642**	May-73	2200																					
27S/40E-18D01M	**027S040E18D001M**	**35.5927343**	**-117.7200642**	Jan-86																						
27S/40E-18D02M	**027S040E18D002M**	**35.59051215**	**-117.7197864**	May-73	3500																					
27S/40E-18D04M	**027S040E18D004M**	**35.5899566**	**-117.7192308**	May-73	3300																					
28S/37E-13F01M	**028S037E13F001M**	**35.5010676**	**-117.9492352**	Jun-53	770		8	384		54	7.5	92	2	**86**	**0**	82	138	0.4				500			170	
28S/37E-13F01M	**028S037E13F001M**	**35.5010676**	**-117.9492352**	Sep-90	745		7.4		22	52	3.9	84	2.2			110	140	0.5				330			150	
Federal Drinking Water Standards[2]					--	--	**6.5 - 8.5[S]**	**500[S]**	--	--	--	--	--	--	--	**250[S]**	**250[S]**	**4[P]**	**1[P]**	**10[P]**	**10[P]**	--	**300[S]**	**50[S]**	--	
California Drinking Water Standards[2,3]					--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**45[P]**	**50[P]**	--	--	--	--	

TABLE J-2
GROUNDWATER CHEMISTRY DATABASE
FOR INDIAN WELLS VALLEY GROUNDWATER BASIN
RIDGECREST SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

WELL DATA[1]				WATER CHEMISTRY																						COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Sample Date	EC	Temperature	pH	Total Dissolved Solids (TDS)	Silica	Calcium	Magnesium	Sodium	Potassium	Alkalinity		Sulfate	Chloride	Fluoride	Nitrate and Nitrite (as N)	Nitrate (NO_3)	Arsenic	Boron	Iron	Manganese	Hardness ($CaCO_3$)	
														Bicarbonate	Carbonate											
		NAD 83	NAD 83	Mo/Yr	(micro-mohs at 25 C)	Degrees Centigrade	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	

NOTES

(blank cell)	Data not provided/No published drinking water standard
1	Data as provided in the USGS National Water Information System Database - http//:nwis/waterdata.usgs.gov/ and the Department of Water Resources Database - http://wdl.water.ca.gov/gw/
2	Drinking Water Standards from "Drinking Water Standards and Health Advisories Table", USEPA, June 2007
3	California Drinking Water Standards use the Federal Standards unless otherwise noted.
P	Primary Drinking Water Standard Maximum Contaminant Level (MCL)
S	Secondary Drining Water Standard for Odor, Taste,

DEFINITIONS

NAD-83	North American Datum 1983
mg/L	Miligram per Liter
ug/L	Microgram per Liter
feet bgs	feet below ground surface

LOCATIONS

Drillers Logs of Wells (18,33, & 34)

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

ORIGINAL
File with DWR

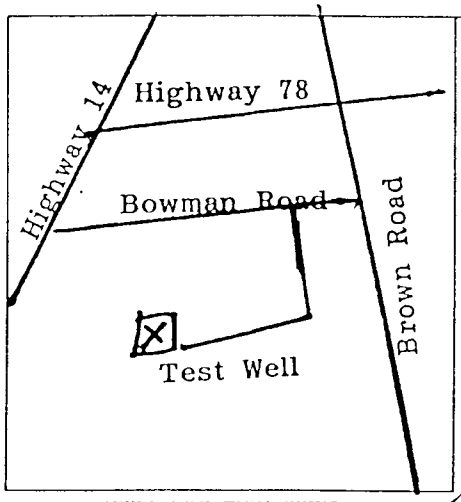
Do not fill in
No. 289378

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. _____

(1) OWNER: Name Indian Wells Valley Water Dist.
Address 500 West Ridgecrest Blvd.
City Ridgecrest, Calif. ZIP 93555

(2) LOCATION OF WELL (See instructions): Test Well
County Kern Owner's Well Number _____
Well address if different from above unknown
Township 27S Range 39E Section 8
Distance from cities, roads, railroads, fences, etc. approximately 2000 ft. from Railroad



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☒
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size 8 x 16
Diameter of bore 26"
Packed from _____ to _____ ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

(8) PERFORATIONS: Ful-flo
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	560'	16"	.250	560	1000	.050
1000	1020					

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval _____ ft.
Method of sealing _____

(10) WATER LEVELS:
Depth of first water, if known 370 ft.
Standing level after well completion 370 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? Beylik Drilling
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 370 ft. At end of test 370 ft.
Discharge 3000 gal/min after 12 hours Water temperature _____
Chemical analysis made? Yes ☒ No ☐ If yes, by whom? Babcock Labs
Was electric log made Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1050 ft. Completed depth 1020 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	80	alluvial, lt.brwn, trace gravel
80	90	fine/coarse sand
90	100	lt.brwn, fine/med.sand,some silt
100	110	brwn,fine/med.silty sand/trace c
110	120	lt.brwn fine/coarse sand/trace si
120	170	gravel up to max. dia. 1-1/2"
170	310	fine to coarse fine to very coarse sands w/gravel/minor silts
310	330	brown fine to very coarse silty s
330	340	brwn. fine/med.clayey sand,mois
340	360	brwn. fine/coarse silty sand
360	420	lt. brwn.fine/very coarse sand with trace silt
420	550	lt.graysh brwn. fine to very coarse sand with some silt
550	580	slightly increasing proportion gr
580	610	brwn. fine/coarse sand/trace silt
610	620	brwn,fine/med.silty sand
620	630	grayish brwn.fine/very coarse sand with silt
630	680	brown fine to very coarse siltysa
680	690	sandy gravel w/dark clasts of highly vesicular volcanic material
690	740	brown fine to med. silty sand
740	760	same
760	1050	fine to very coarse sand with a trace silt alternating w/fine to med. silty sand and some gravel and trace of silt

Work started Feb. 18, 19 89 Completed March 8 19 89

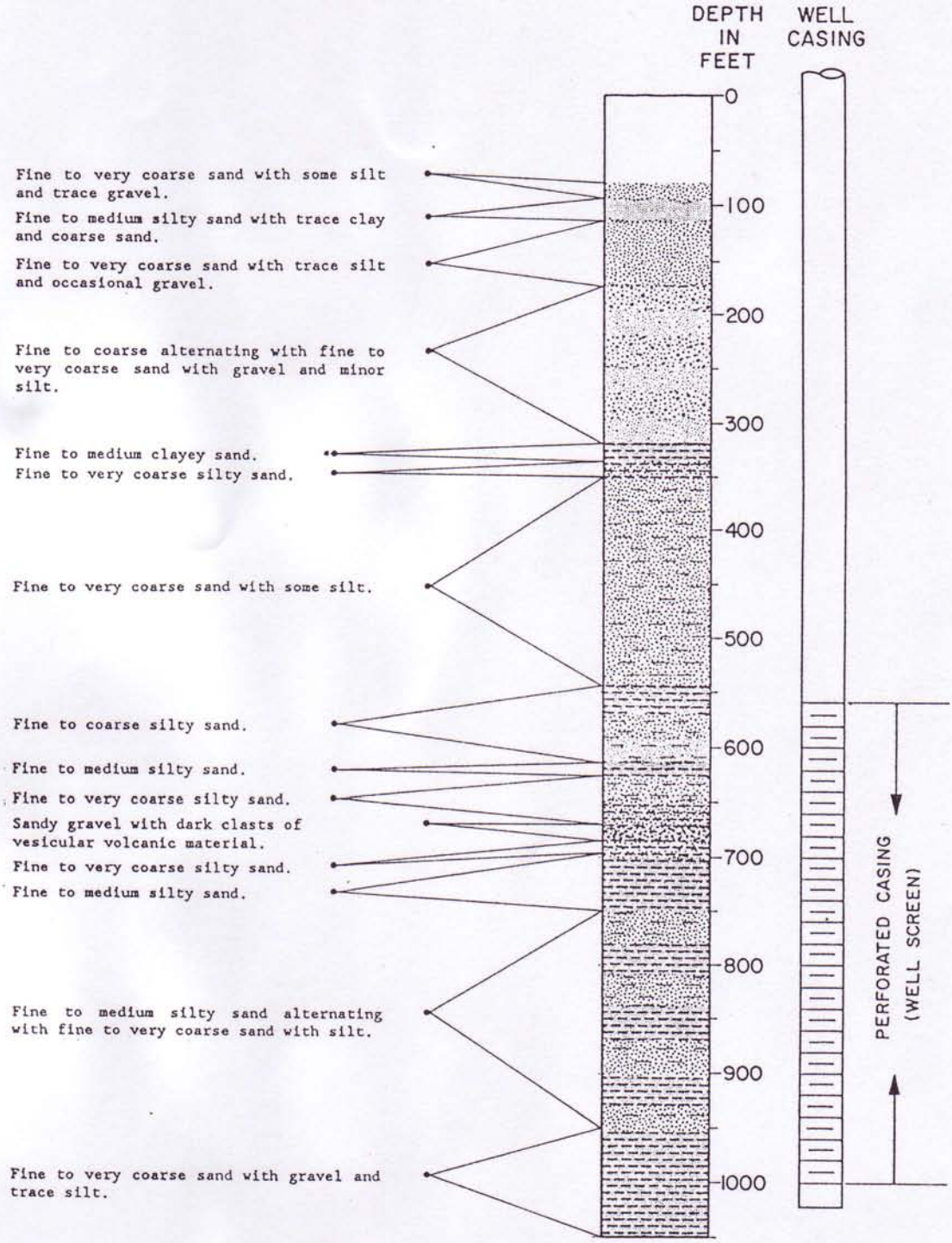
WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ (Well Driller)
NAME BEYLIK DRILLING, INC. (Person, firm, or corporation) (Typed or printed)
Address 591 S. Walnut Street
City La Habra, Calif. 90631 ZIP _____
License No. 306291C57&C61 Date of this report Sept. 13, 198

NOT FOR DRINKING WATER CONSUMPTION

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

#18



NOTE: CONTACTS ARE GRADATIONAL

INDIAN WELLS VALLEY WATER DISTRICT

SOUTHWEST WELL FIELD

TEST WELL

GENERALIZED LITHOLOGY AND STRATIGRAPHY

KRIEGER & STEWART INCORPORATED

3602 University Av • Riverside, CA 92501 • 714-684-6900

FIGURE 2

#18

APPENDIX A

INDIAN WELLS VALLEY WATER DISTRICT
SOUTHWEST WELL FIELD
FORMATION SAMPLE LOG

TEST WELL

General

(Note: Descriptions are variations on the following primary material)

Material is alluvial, buff to light brown in color. It is poorly graded and subangular to subrounded, indicating a local source area. Composition is decomposed granite and/or granodiorite.

Depth (Ft)	
80-90	Buff fine to coarse sand with some silt and a trace of gravel.
100	Light brown fine to medium sand with some silt and a trace of slightly coarser material.
110	Brown fine to medium silty sand with a trace of clay; micaceous.
110-160	Light brown fine to very coarse sand with a trace of silt.
170	Occasional gravel up to a maximum diameter of 1 1/2".
170-320	Light brown fine to coarse sand alternating with fine to very coarse sands with gravel and minor silt.
330	Brown fine to medium clayey sand.
330-350	Brown fine to very coarse silty sand.
350-410	Light brown fine to very coarse sand with trace silt.
410-540	Light grayish-brown fine to very coarse sand with some silt.
540-570	Light brown fine to coarse silty sand alternating with light grayish brown fine to very coarse sand with silt.
570-600	Increasing proportions of gravel.
610	Brown fine to coarse sand with a trace of silt.

#18

INDIAN WELLS VALLEY WATER DISTRICT
SOUTHWEST WELL FIELD
FORMATION SAMPLE LOG

TEST WELL (CONT'D)

Depth (Ft)	
620	Brown fine to medium silty sand; moderately graded.
630	Grayish brown fine to very coarse sand with silt.
630-670	Brown fine to very coarse silty sand.
680	Sandy gravel with dark clasts of highly vesicular volcanic material.
680-730	Light grayish-brown fine to very coarse silty sand.
730-750	Brown fine to medium silty sand.
750-1040	Fine to very coarse sand with a trace of silt alternating with fine to medium silty sand.
1050	Fine to very coarse sand with gravel and a trace of silt.

TOTAL DEPTH - 1050'

TRIPLICATE
Owner's Copy

Page 1 of 3

Owner's Well No. 33

Date Work Began 05-14-99, Ended 08-28-99

Local Permit Agency Kern County Environmental Health Dept.

Permit No. EH-114-99 Permit Date 05-14-99

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 715360

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD Reverse Circulation FLUID PolyBore

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	50	Brown top soil
50	60	Sand, gravel
60	70	little clay & sand
70	90	Sand, gravel,small clay
90	110	brown sand
110	120	Brown sandy gravel
120	130	Sandy gravel-fine gravel-red coarse
130	140	Brown sandy gravel with clay
140	150	brown sandy gravel less clay
150	160	Grayish fine to medium sand, few gravel
160	170	fine brown sand, little clay
170	180	tan brown sand, fine to course
180	190	tan brown sand, fine to coarse
190	200	Reddish brown coarse sand w/ gravel
200	210	light brown sand w/ gravel
210	220	light brown sand w/ fine/coarse w/ clay
220	230	medium sand to medium gravel w/ clay
230	240	sandy gravel, rounded
240	250	silty clay
250	260	clay chunks w/ gravel
260	270	light brown to fine silty sand w/ clay
270	280	very light brown silty sand
280	290	fine to medium silty sand
290	300	brown sandy silt w/ traces of gravel
300	310	light silty sand
310	320	silty sand w/ traces of of clay
320	330	very silty sand with clay chunks
330	340	silty sand w/ clay chunks
340	350	silty sand light brown, trace of caliche
350	360	moderately cemented silty sandstone,gravel

TOTAL DEPTH OF BORING 1020 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1020 (Feet)

WELL OWNER

Name Indian Wells Valley Water District

Mailing Address P.O. Box 1329, 500West Ridgecrest Blvd.

City Ridgecrest State CA Zip 93556

WELL LOCATION

Address 1900 Ft. west of Brown Rd. 2400'S. of Bowman

City Inyokern

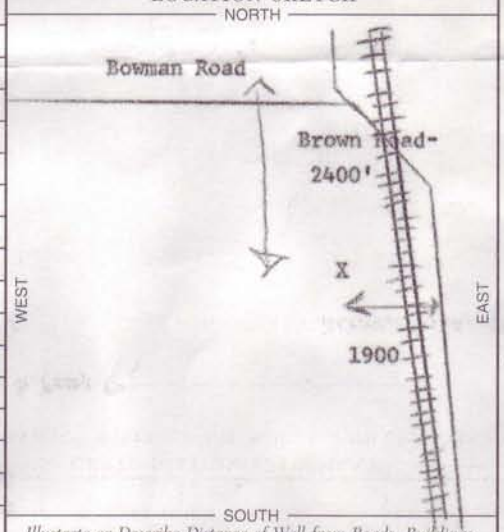
County Kern

APN Book 341 Page 082 Parcel 18

Township 25S Range 39E Section 8

Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USES (✓)

WATER SUPPLY

___ Domestic X Public

___ Irrigation ___ Industrial

MONITORING ___

TEST WELL ___

CATHODIC PROTECTION ___

HEAT EXCHANGE ___

DIRECT PUSH ___

INJECTION ___

VAPOR EXTRACTION ___

SPARGING ___

REMEDIATION ___

OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 381 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 381 (Ft.) & DATE MEASURED 07-20-99

ESTIMATED YIELD * 2,000 (GPM) & TEST TYPE constant/flowmeter

TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 94 (Ft.)

** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	40			X		A53gradeB	30	1/4	
-2	560	28	X				A139copper	16	1/4	
560	1000	28		X			Fulflow Mod	16	1/4	.050
1000	1020	28	X				A139copper	16	1/4	
-2	559	28					2"PVC	2	sch 80	
-2	559	28					2" A53grd.B	8bb	sch 40	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE: CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	XX			
50	1020				kelpac 8x16

ATTACHMENTS (✓)

___ Geologic Log

___ Well Construction Diagram

___ Geophysical Log(s)

___ Soil/Water Chemical Analyses

___ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7212 Fruitvale Ave. (ADDRESS) Bakersfield, CA. (CITY) 93308 (STATE) (ZIP)

Signed (WELL DRILLER/AUTHORIZED REPRESENTATIVE) 11-02-99 (DATE SIGNED) 440537 (C-57 LICENSE NUMBER)

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page 2 of 3

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 715361

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Owner's Well No. 33

Date Work Began 05-14-99, Ended 08-28-99

Local Permit Agency Kern County Environmental Health Dept.

Permit No. EH-114-99 Permit Date 05-14-99

GEOLOGIC LOG

ORIENTATION (✓) ___ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD _____ FLUID _____

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
360	380	sand w/ gravel
380	390	coarse gravel
390	400	Coarse gravel, compacted sand
400	420	fine to coarse sand w/ rounded gravel
420	430	fine to coarse snad w/ gravel
430	450	gravelly sand, few rocks
450	460	gravelly sand, rocks
460	470	compacted sand large focks
470	482	light silty sand, gravel
482	490	silty sand, gravel, few focks
490	500	silty sand no gravel
500	510	silty sand, gravel
510	520	silty sand, rounded gravel
520	560	fine to coarse sand cemented lumps of sand
560	570	sand w/ traces of silt, gravel
570	580	coarse sand , traces of rounded gravel
580	590	silty sand, traces of gravel cemented silt
590	600	medium to coarse sand, traces of silt
600	610	medium grain sand w/ traces of silt
610	620	med. grain silty sand w/ traces of gravel
620	630	med. to coarse grain sand w/ gravel
630	640	coarse sand to large gravel, rocks
640	650	sand w/ some gravel
650	660	silty sand fine to medium
660	670	sandy gravel rounded
670	681	sandy gravel different colors
681	690	reddish brown large sharp cuttings
690	720	light brown compacted silty sand
720	730	sharp sand , sharp fractured rock
730	740	" "

TOTAL DEPTH OF BORING _____ (Feet)

TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

WELL OWNER

Name Indian Wells Valley Water Dist.

Mailing Address _____

CITY STATE ZIP

WELL LOCATION

Address _____

City _____

County _____

APN Book _____ Page _____ Parcel _____

Township _____ Range _____ Section _____

Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USES (✓)

WATER SUPPLY

___ Domestic ___ Public

___ Irrigation ___ Industrial

MONITORING ___

TEST WELL ___

CATHODIC PROTECTION ___

HEAT EXCHANGE ___

DIRECT PUSH ___

INJECTION ___

VAPOR EXTRACTION ___

SPARGING ___

REMEDIATION ___

OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log

___ Well Construction Diagram

___ Geophysical Log(s)

___ Soil/Water Chemical Analyses

___ Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7212 Fruitvale Ave. Bakersfield, CA. 93308
ADDRESS CITY STATE ZIP

Signed _____ 11-02-99 440537
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page 3 of 3
Owner's Well No. 33
Date Work Began _____, Ended _____
Local Permit Agency _____
Permit No. _____ Permit Date _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 715362

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) ___ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD _____ FLUID _____

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
740	750	silty sand
750	760	very silty sand with gravel
760	770	silty sand w/ chunks of claystone
770	780	" "
780	830	silty sand w/ chunks of sandstone
830	840	silty sand with gravel
840	850	silty sand w/ traces of fine gravel
850	860	compacted sand chunks, sharp cuttings
860	870	sand chunks(hard), sharp cuttings
870	880	sandy gravel, partly rounded
880	900	brown sabdy silt, gravel
900	910	silty sand w/ chnks, gravel
910	920	clayeysand, no large cuttings
920	930	silty clayey sand in chunks
930	940	silty clayey chunks, some large
940	952	silty sand, w/ gravel
952	960	silty sand , w/ gravel
960	980	silty sand w/ gravel
980	990	silty sand w/ rock
990	1000	silty sand w/ rock
1000	1020	brown silty sand w/ gravel

TOTAL DEPTH OF BORING _____ (Feet)
TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

WELL OWNER

Name _____
Mailing Address _____
CITY STATE ZIP

WELL LOCATION

Address _____
City _____
County _____
APN Book _____ Page _____ Parcel _____
Township _____ Range _____ Section _____
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST EAST
SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USES (✓)
WATER SUPPLY
___ Domestic ___ Public
___ Irrigation ___ Industrial
MONITORING ___
TEST WELL ___
CATHODIC PROTECTION ___
HEAT EXCHANGE ___
DIRECT PUSH ___
INJECTION ___
VAPOR EXTRACTION ___
SPARGING ___
REMEDIATION ___
OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____
ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____
TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)
** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 7212 Fruitvale Ave. CITY Bakersfield, CA. STATE 93308 ZIP
Signed _____ (WELL OWNER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 11-02-99 C-57 LICENSE NUMBER 440537

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page 1 of 2
Owner's Well No. 34
Date Work Began 6-1-06, Ended 7-15-07
Local Permit Agency Kern Co. Health
Permit No. EH-3720 Permit Date 5-17-06

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 1086869

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) x VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Rev. Rotary FLUID Polybore

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
330	380	Sand gravel rocks
380	410	Sand gravel rock and clay
410	450	Sand Gravel
450	480	Sand GRavel Rock
480	500	Sand Gravel Clay
500	540	SAnd Gravel
540	650	Sand Gravel Rock And Clay
650	710	Sand Gravel Clay
710	740	SAnd Gravel Rock And Clay
740	770	Sand Gravel Rock
770	790	Sand GRavel
790	810	Sand Gravel Clay
810	830	Sand Gravel Rock and Clay
830	850	Sand GRavel CLay
850	870	Sand GRavel
870	880	Gravel Clay Band
880	890	Clay sand
890	900	Sand Gravel Clay
900	930	Sand GRavel Clay Rock
930	940	Sand Gravel ROck
940	950	Clay Sand GRavel Rock
950	960	Clay Sand Gravel
960	1010	CLay Graevl Rock Sand

TOTAL DEPTH OF BORING 1010 (Feet)
TOTAL DEPTH OF COMPLETED WELL 955 (Feet)

WELL OWNER

Name Indian Wells Water District
Mailing Address 500 W. Ridgecrets Blvd
CITY Ridgecrest STATE Ca ZIP 93556

WELL LOCATION

Address 380 E of Brown Rd 300 So. ofBowman
City Ridgecrest
County Kern
APN Book 341 Page 251 Parcel 02
Township 27s Range 39e Section 8
Lat 35 DEG. 36 MIN. 24.2 SEC. N Long 117 DEG. 47 MIN. 53.5 SEC. W

LOCATION SKETCH

NORTH
Bowman Rd
300
Brown Rd.
380 - *
WEST EAST
SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

x NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

USES (✓)
WATER SUPPLY
___ Domestic x Public
___ Irrigation ___ Industrial
MONITORING ___
TEST WELL ___
CATHODIC PROTECTION ___
HEAT EXCHANGE ___
DIRECT PUSH ___
INJECTION ___
VAPOR EXTRACTION ___
SPARGING ___
REMEDIATION ___
OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 377 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 377 (Ft.) & DATE MEASURED 2-12-07
ESTIMATED YIELD * 1750 (GPM) & TEST TYPE const rate
TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 71 (Ft.)
** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44			x		astm139	b 36	5/16	
-2	550	28	x				Copper	b 20	5/16	
550	865	28		x			c.b. f.f	20	5/16	.055
865	895	28	x				c.b	20	5/16	
895	935	28		x			c.b.f.f	20	5/16	.055
935	955	28	x				c.b	20	5/16	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	x			10.5 sand
0	955			x	tannagrave
					8/16

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 7212 Fruitvale Ave CITY Bakersfield STATE Ca ZIP 93308

Signed [signature] C-57 LICENSED WATER WELL CONTRACTOR DATE SIGNED 7-17-07 C-57 LICENSE NUMBER 440537

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page 2 of 2
Owner's Well No. 34
Date Work Began 6-1-06, Ended 7-15-06
Local Permit Agency Kern Co Env Health
Permit No. EH-3720 Permit Date 5-17-06

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 1086870

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Rev Rotary FLUID polybore

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*

TOTAL DEPTH OF BORING 1010 (Feet)
TOTAL DEPTH OF COMPLETED WELL 955 (Feet)

WELL OWNER

Name Indian Wells Valley Water DIstrict
Mailing Address 500 W Ridgecrest Blvd
CITY Ridgecrest Ca STATE 93556 ZIP

WELL LOCATION

Address 380 E of Brown rd 300 So. of Bowma
City Ridgecrest
County Kern
APN Book 341 Page 251 Parcel 99
Township 27s Range 39e Section 8
Lat 35 DEG. 36 MIN. 24.2 SEC. N Long 117 DEG. 47 MIN. 53.5 SEC. W

LOCATION SKETCH

NORTH
WEST EAST
SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

✓ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

USES (✓)
WATER SUPPLY
___ Domestic ✓ Public
___ Irrigation ___ Industrial
MONITORING ___
TEST WELL ___
CATHODIC PROTECTION ___
HEAT EXCHANGE ___
DIRECT PUSH ___
INJECTION ___
VAPOR EXTRACTION ___
SPARGING ___
REMEDIATION ___
OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 377 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 377 (Ft.) & DATE MEASURED 2-12-07
ESTIMATED YIELD * 1750 (GPM) & TEST TYPE Const rtae
TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 71 (Ft.)
** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
+2 545	28	z				mildsteel	2	sch40	soundtube
+2 550	28	z				mildsteel	2	sch40	soundtube

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE: CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
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ADDRESS 7210 Fruitvale Ave CITY Bakersfield STATE Ca. ZIP 93308

Signed _____ C-57 LICENSED WATER WELL CONTRACTOR DATE SIGNED 7-17-07 C-57 LICENSE NUMBER 440537

CONFIDENTIAL
NOT FOR PUBLIC RELEASE
WATER CODE 13752

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Numerical Groundwater Model Summary

APPENDIX J

NUMERICAL GROUNDWATER MODEL
EVALUTION OF PROPOSED PROJECT PUMPING
DURING CONSTRUCTION AND OPERATION
RIDGECREST SOLAR POWER PROJECT
RIDGECREST, KERN COUNTY

INTRODUCTION

A published three-dimensional (3-D) numerical groundwater model that was developed by Brown and Caldwell (2009) for the IWVWD was selected as the mechanism to provide an evaluation of Project impacts from proposed construction and operation pumping. The groundwater model was provided by IWVWD to the Applicant and was developed as part of a program to update the conceptual model for the IWV Groundwater Basin, provide a numerical flow model for the updated interpretation and establish a digital data management system from available water level and groundwater pumping data. The IWV Groundwater Flow Model Committee, comprised of representatives from the IWVWD, Searles Valley Minerals and NAWS, provided oversight during development of the model, and in review of technical deliverables. Additionally, representatives from the Indian Wells Valley Groundwater Management Group participated in the development and review of the numerical groundwater model. The electronic model files used in the simulations are provided in the CD attached to the AFC. Additionally, the original IWVWD model report from Brown and Caldwell, 2009 is also included in Appendix J.

The groundwater model is a three-dimensional numerical groundwater flow model developed using MODFLOW 2000 (Harbaugh and others). The model domain encompasses the area of the IWV Groundwater Basin to a depth of 2,000 feet below the ground surface. The model grid was established at a uniform cell size of 1,320 feet by 1,320 feet (1/4 mile on a side, 16 cells per square mile). Major features of the model include:

- Three dimensional and uniform 0.25 mile grid spacing
- Four layers (Layer 1 through Layer 4) with multiple zones in each layer
- A range of hydraulic conductivities (0.1 feet per day [ft/d] to 100 ft/d)
- A range of specific yields/storativity (0.05 to $0.15/10^{-5}$ to 10^{-4})

The model was calibrated to historical groundwater elevations from 1920 to 2006. During the calibration process, aquifer physical properties, recharge, and discharge were varied to best match available groundwater elevation data. The calibration used both qualitative and quantitative methods to match historic water levels for years 1920 (assumed steady-state condition), 1953, 1985 and 2006. Calibration targets for the transient portion of the model included measurements from seven periods beginning in 1946 and ending in 2006, with targets ranging from 22 to 225 well locations. From the calibration, Brown and Caldwell (2009) concluded that the model can be employed to for future predictive simulations and planning purposes.

The numerical groundwater model developed for the IWVWD was selected to evaluate the impacts from proposed Project pumping because:

- The model provided the most up-to-date interpretation of the groundwater basin, summarizing historical data and providing current methodology in interpreting geologic and hydrogeologic data.
- The model included a portion of the Project site along its southern boundary and was a statistically calibrated model, which is ready for simulations of predictive scenarios. .
- It had undergone review by the IWV Cooperative Groundwater Management Group, which includes the IWVWD, Naval Air Weapons Station China Lake, Searles Valley Minerals, Inyokern Community Service District, Inyokern Airport District, Kern County Water Agency, the Bureau of Land Management, Quist Farms, Eastern Kern County Resource Conservation District, and the City of Ridgecrest. As such, the model had undergone significant peer review prior to being published
- The model is based on MODFLOW 2000, a well established and commonly used computer code developed for numerical groundwater modeling.

The Project is a dry-cooled facility that will use about 150 acre-feet per year (afy) of groundwater from one onsite well for all operational activities, including mirror washing (the largest use, accounting for more than one-third of the total). The peak water usage during the summer months is about 190,080 gallons per day (gpd) or about 132 gallons per minute (gpm) under an assumption of continuous pumping. The average water use of the 30-year life of the Project is about 90 gpm. Winter usage will be less owing to the lower ambient temperature, and lesser requirements for process water and water for dust suppression. During construction, the Project will use an average of approximately 561,000 gpd over a 28-month period or an average of about 390 gpm under an assumption of continuous pumping.

Three wells, No. 18, 33 and 34 **(Figure J-1)** that are operated by the IWVWD all with the capacity to pump at about 1,200 gpm are proposed to provide water for the Project. The wells may be used in rotating fashion though the period of rotation is not known. Therefore, to assess impacts one well was selected to provide the water for both construction and operation. Well No. 18 was selected to evaluate impacts from pumping to deliver water to the Project, since as at this time, the well is operated at about 470 gpm and it has a reported capacity of 1,200 gpm. This well has more available capacity by comparison to wells No. 33 and No. 34, which according to the IWVWD are pumping at about 816 gpm and 1,200 gpm, respectively. It is also important to note that all IWVWD wells proposed for water supply are screened in Layer 2 of the model.

The calibrated model was used to provide an assessment of the changes in the cone of depression over a base line condition from pumping at IWVWD Well No. 18, and how the project pumping might impact adjacent water supply wells during the construction and operational periods.

MODEL SETUP and INPUT PARAMETERS

The 3-D groundwater flow adopts a uniform grid spacing of 0.25 miles or 1,320 feet. To better resolve the rapid change in drawdown near the pumping well, the model grid spacing was refined as follows:

- 30 feet from the pumping well for the first 300 feet
- 100 feet further out from the well for one mile or 5,280 feet

- The grid spacing gradually increases from 100 feet to 1,320 feet for the remainder of the model domain

Following licensing of the project, construction and operation activities are expected to take place over a period of approximately 28 months and 30 years, respectively. As noted above, among the available three IWVWD wells, Well No. 18 was used for the simulation, because of its high capacity and low pumping rate at the time of this report. The current pumping rate of Well No. 18 is 470 gpm. The pumping rate of the well will increase to 860 gpm (390 gpm addition for continuous construction water supply), or 165,550 cubic-feet per day (cfd) during 2.33 years (28 months) of construction period and 560 gpm (90 gpm addition for continuous operational water supply) or 107,800 cfd during 30 years operational period.

The model was used to evaluate Project impacts from proposed pumping for construction and operational water supply using calibrated hydraulic conductivities and specific yields/storage coefficients as shown in below:

Hydraulic conductivity (K)	Specific yield/storativity (S)
Layer 1: 5	Layer 1: $0.15/1.0e^{-5}$
Layer 2: 20	Layer 2: $0.15/1.0e^{-5}$
Layer 3: 0.5	Layer 3: $0.15/1.0e^{-4}$
Layer 4: 5	Layer 4: $0.15/5.0e^{-5}$

MODEL RESULTS

Two simulations were conducted: one for a baseline scenario and another predictive scenario, one each for construction and operational supply. Before using the model for a baseline scenario, the model ran with default parameters to the time before construction (assumed to be December 31, 2010). The model continues through 28 months of construction followed by 30 years of operation with default pumping for all wells shown as operational in the model including Well No. 18 (i.e., 470 gpm). The predictive scenarios only changed the pumping rate in Well No. 18, and did not change the default rate for the wells within the IWVWD model.

The predictive scenarios ran with calibrated hydraulic parameters, but with a pumping rate of 860 gpm during the 28 month construction period and 560 gpm during the 30 year operation period. The predictive results of the drawdown at the pumping well and of the drawdown distance (of 10 feet and 5 feet) are provided on the **Table J-1**. The drawdown contours showing the cone of depression for baseline scenario and predictive scenario are shown on **Figures J-2 through J-4**. The following is a summary of the results from the predictive scenarios:

- The drawdown and radius of influence at well pumping well (Well No. 18 during the construction period at a pumping rate of 860 gpm with calibrated K and S is about 21 and 9,600 feet, respectively.
- The drawdown and radius of influence at the pumping well (Well No. 18) during the operational period at a pumping rate of 560 gpm with calibrated K and S is about 51 and 21,800 feet, respectively.

Compared to the baseline scenario, there is only an additional 2 feet drawdown at the well during the construction period and no discernable increase of drawdown during the operational period due to a very low pumping rate for the Project and a very small change in the baseline condition at Well No. 18. Similarly, there was not a significant change in the diameter of the cone of depression over the baseline condition by comparison to operational supply. By comparison to the distance to the 5 foot contour, the proposed construction water supply expanded the cone of depression about 15 percent over the baseline condition during the proposed 28 month period of pumping.

A sensitivity analysis was also conducted to evaluate the response in the model prediction when varying key model variables. Two simulations were conducted for this purpose. Sensitivity Analysis 1 was based on the model calibrated K and low specific yield (25% calibrated value) and storativity (10% calibrated value) **(Table J-1).** Sensitivity Analysis 2 was based on the low K (10% calibrated value) and low S (specific yield/storativity coefficient) **(Table J-1)**. The summary of the model parameters used in the sensitivity analysis are summarized below:

	Hydraulic conductivity (K)	Specific yield/storativity (S)
Sensitivity Analysis 1 (calibrated K and low S)	Layer 1: 5 Layer 2: 20 Layer 3: 0.5 Layer 4: 5	Layer 1: $0.15/1.0e^{-6}$ Layer 2: $0.15/1.0e^{-6}$ Layer 3: $0.15/1.0e^{-5}$ Layer 4: $0.15/5.0e^{-5}$
Sensitivity Analysis 2 (low K and low S)	Layer 1: 0.5 Layer 2: 2 Layer 3: 0.05 Layer 4: 5	Layer 1: $0.15/1.0e^{-6}$ Layer 2: $0.15/1.0e^{-6}$ Layer 3: $0.15/1.0e^{-5}$ Layer 4: $0.15/5.0e^{-5}$

As noted above, all IWVWD wells proposed for water supply are screened in Layer 2. For the sensitivity analysis, hydraulic parameters for all layers were adjusted except for Layer 4.

As shown in **Table J-1**, Sensitivity Analysis I with a low specific yield and storage coefficient and calibrated hydraulic conductivity will result in minimal drawdown increases at the well with only an additional 3 feet drawdown at the end of the construction period and an additional 7 feet at the end of the operational period. Sensitivity Analysis 2 produces large drawdown increases at both the end of the construction period and the operational period. This is understandable because one order of magnitude lower K was used in this simulation.

Model Limitation

As described previously, the model used for the simulations is a statistically calibrated model and is therefore ready for predictive scenarios. The impact analysis conducted based on a calibrated K and S would provide the most reliable prediction of Project impacts from proposed pumping. As with any model, the IWVWD model is not without limitations. As stated in the model report (Brown and Caldwell, 2009), some uncertainties remain in the specific magnitude of each inflow

and outflow component over various time periods. In addition, the spatial distribution of hydrogeologic properties also remains somewhat uncertain. As the IWVWD is updated, the impact of additional pumping may be revisited in the future.

Table J-1 Results of Numerical Groundwater Modeling

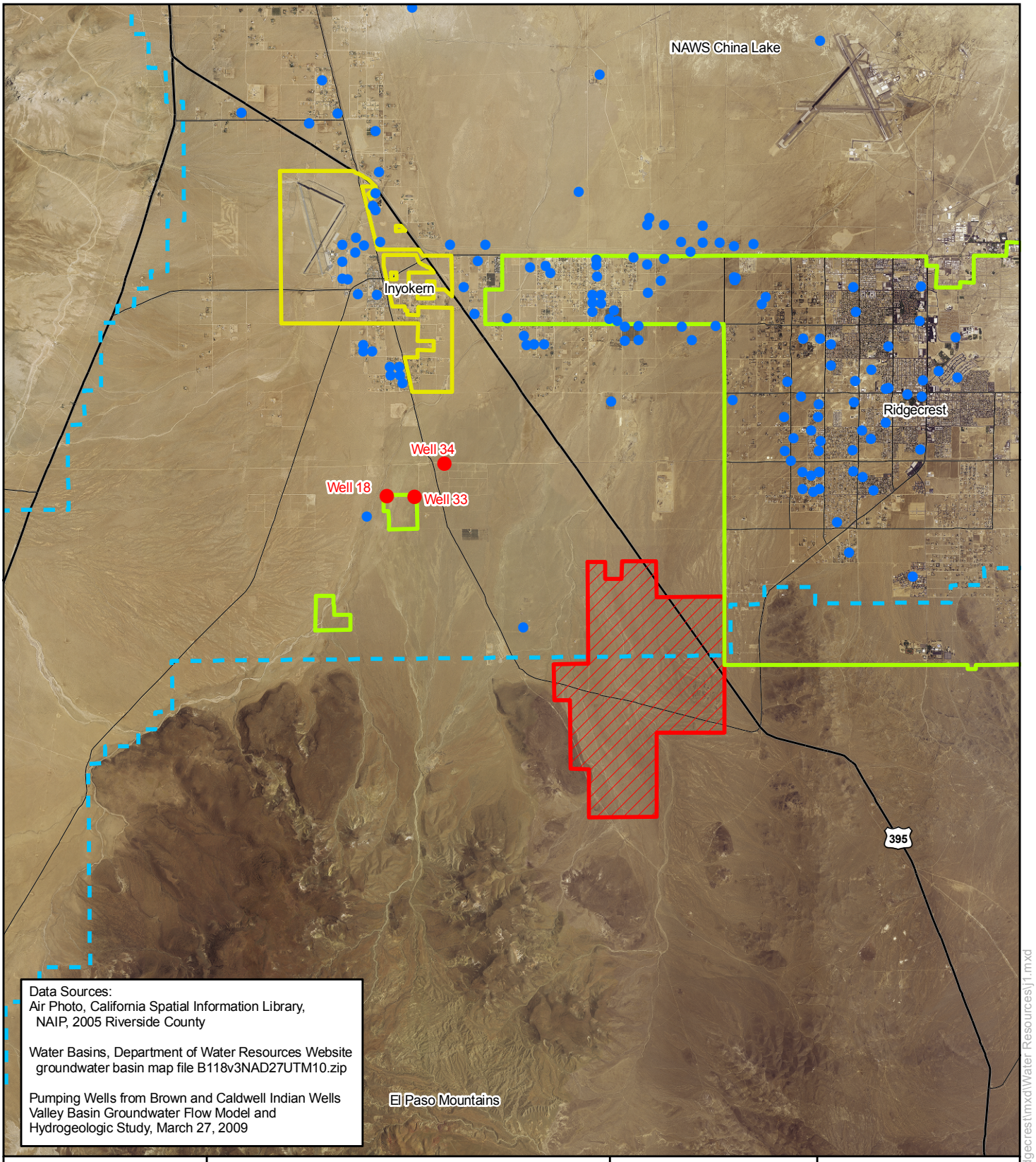
TABLE J-1
Results of Numerical Groundwater Flow Modeling
Proposed Construction and Operational Water Supply
Ridgecrest Solar Power Project
Kern County, California

SCENARIO	Pumping Rate Construction/Operation[1]	Period Construction/Operation	Hydraulic Conductivity	Specific Yield and Storativity	CONSTRUCTION (see FIGURE J-4)			OPERATION (see FIGURE J-5)		
					MAXIMUM drawdown in the Pumping Well	DISTANCE to a Drawdown of 10 Feet	DISTANCE to a Drawdown of 5 foot	MAXIMUM drawdown in the Pumping Well	DISTANCE to a Drawdown of 10 Feet	DISTANCE to a Drawdown of 5 foot
	(gpm)	(year)	(ft/day)	--	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
BASELINE CONDITION	470	2.33/30	Layer 1: 5 Layer 2: 20 Layer 3: 0.5 Layer 4: 5	Layer 1: 0.15 - 1.0e-5 Layer 2: 0.12 -1.0e-5 Layer 3: 0.1 - 1.0e-4 Layer 4: 0.1 - 5.0e-5	19	1520	8320	51	21800	23400
CALIBRATED MODEL (No change in K and S)	390/90 (860/560)	2.33/30	Layer 1: 5 Layer 2: 20 Layer 3: 0.5 Layer 4: 5	Layer 1: 0.15 - 1.0e-5 Layer 2: 0.12 -1.0e-5 Layer 3: 0.1 - 1.0e-4 Layer 4: 0.1 - 5.0e-5	21	3160	9600	51	21800	23400
SENSITIVITY ANALYSIS 1 Calibrated K and low S	390/90 (860/560)	2.33/30	Layer 1: 5 Layer 2: 20 Layer 3: 0.5 Layer 4: 5	Layer 1: 0.0375 - 1.0e-6 Layer 2: 0.03 - 1.0e-6 Layer 3: 0.025 - 1.0e-5 Layer 4: 0.1 - 5.0e-5	24	5600	13300	59	22300	23900
SENSITIVITY ANALYSIS 2 Low K and Calibrated S	390/90 (860/560)	2.33/30	Layer 1: 0.5 Layer 2: 2.0 Layer 3: 0.05 Layer 4: 5	Layer 1: 0.0375 - 1.0e-6 Layer 2: 0.03 - 1.0e-6 Layer 3: 0.025 - 1.0e-5 Layer 4: 0.1 - 5.0e-5	245	4535	14500	241	15400	16600

NOTES

1 Pumping rate reported for Indian Wells Valley Water District Well No. 18. Values in parentheses are the proposed rates including construction and operational water requirements 390/90 gpm respectively.
2 Calibrated groundwater model values for hydraulic conductivity, specific yield and storativity.
3 Sensitivity analysis - varied specific yield in layers 1, 2 and 3 by 25% (lower)
4 Sensitivity analysis - varied hdyraulic conductivity in layers 1, 2 and 3 by 10% (lower)

Figures



Data Sources:
Air Photo, California Spatial Information Library, NAIP, 2005 Riverside County

Water Basins, Department of Water Resources Website groundwater basin map file B118v3NAD27UTM10.zip

Pumping Wells from Brown and Caldwell Indian Wells Valley Basin Groundwater Flow Model and Hydrogeologic Study, March 27, 2009

Map Location

Legend

- Project Right-of-Way
- Inyokern C.S.D.
- Indian Wells Valley Water District
- Model Boundary
- Pumping Well Locations based on Brown and Caldwell Pumping Well Database
- IWVWD Pumping Wells Proposed for Water Supply

0 2 4 Miles

N W E S

Ridgecrest Solar Power Plant

Figure J-1
Indian Wells Valley Water District Wells Proposed for Project Water Supply

Solar Millennium

AECOM

Project: 12944-003
Date: September 2009

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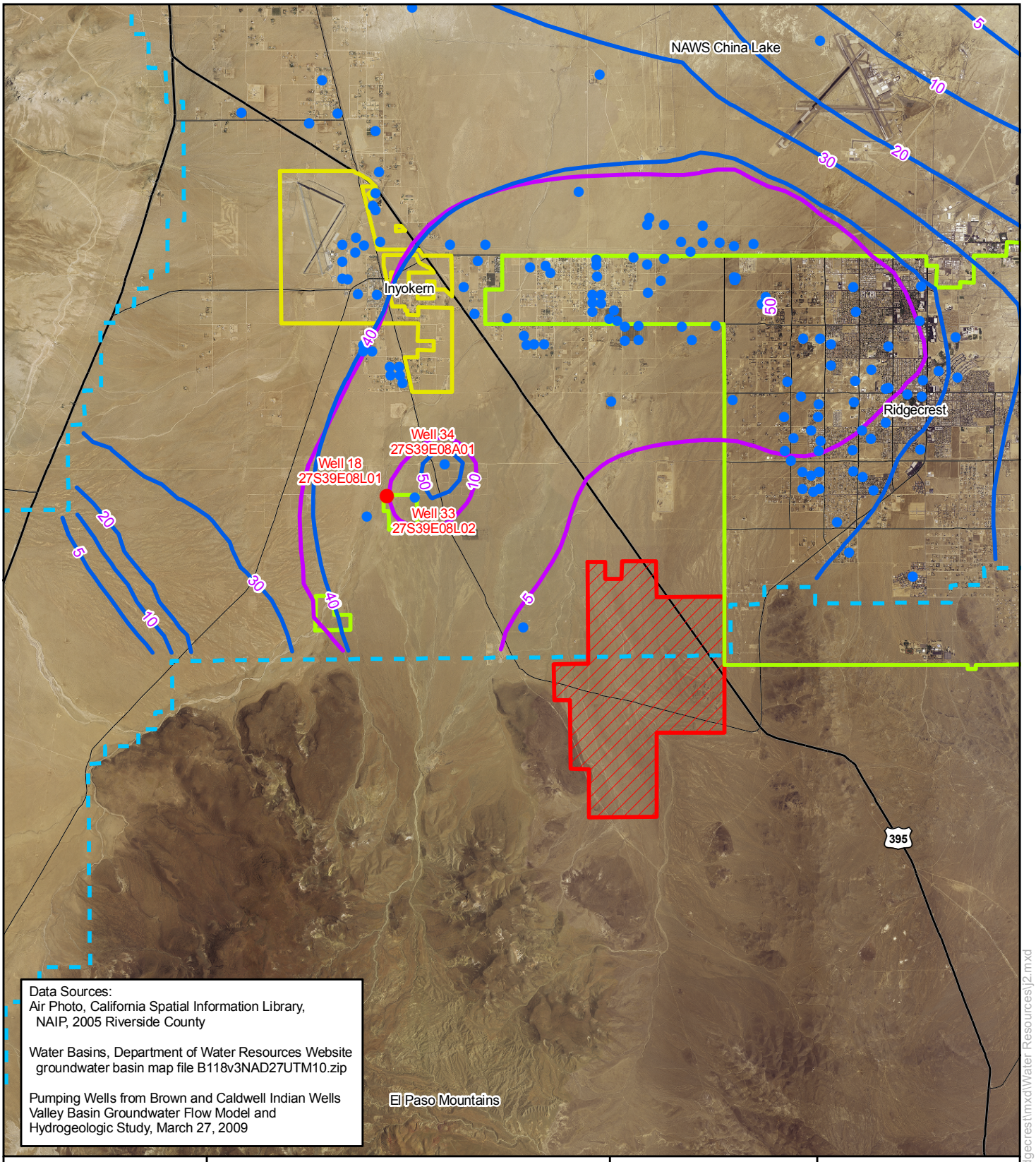

Data Sources:
Air Photo, California Spatial Information Library, NAIP, 2005 Riverside County

Water Basins, Department of Water Resources Website groundwater basin map file B118v3NAD27UTM10.zip

Pumping Wells from Brown and Caldwell Indian Wells Valley Basin Groundwater Flow Model and Hydrogeologic Study, March 27, 2009

Map Location

Legend

- Project Right-of-Way
- Inyokern C.S.D.
- Indian Wells Valley Water District
- Model Boundary
- Model Predicted Drawdown - 28 Months
- Pumping Well Locations based on Brown and Caldwell Pumping Well Database
- Pumping Well used in the Simulation (Well No. 18)
- Model Predicted Drawdown - 30 Years

0 2 4 Miles

N W E S

Ridgecrest Solar Power Plant

Figure J-2
Baseline Model Prediction

Solar Millennium

AECOM

Project: 12944-003
Date: September 2009

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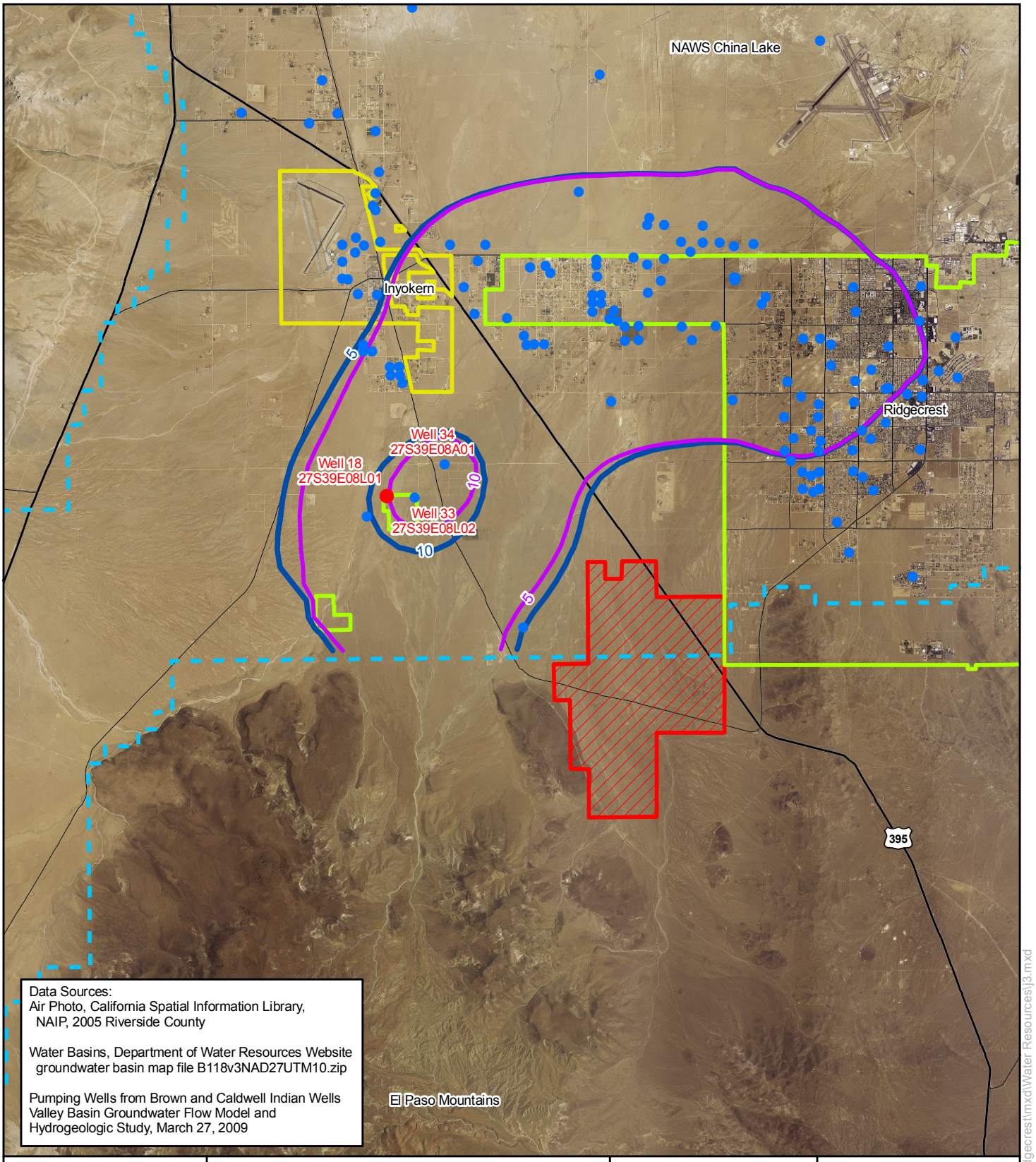

Data Sources:
Air Photo, California Spatial Information Library, NAIP, 2005 Riverside County

Water Basins, Department of Water Resources Website groundwater basin map file B118v3NAD27UTM10.zip

Pumping Wells from Brown and Caldwell Indian Wells Valley Basin Groundwater Flow Model and Hydrogeologic Study, March 27, 2009

Map Location

Legend

- Project Right-of-Way
- Inyokern C.S.D.
- Indian Wells Valley Water District
- Model Boundary
- Model Predicted Drawdown - Baseline
- Pumping Well Locations based on Brown and Caldwell Pumping Well Database
- Pumping Well used in the Simulation (Well No. 18)
- Model Predicted Drawdown - With Project

0 2 4 Miles

N W E S

Ridgecrest Solar Power Plant

Figure J-3
Radius of Influence from Proposed Construction Pumping (28 Months)

Solar Millennium

AECOM

Project: 12944-003
Date: September 2009

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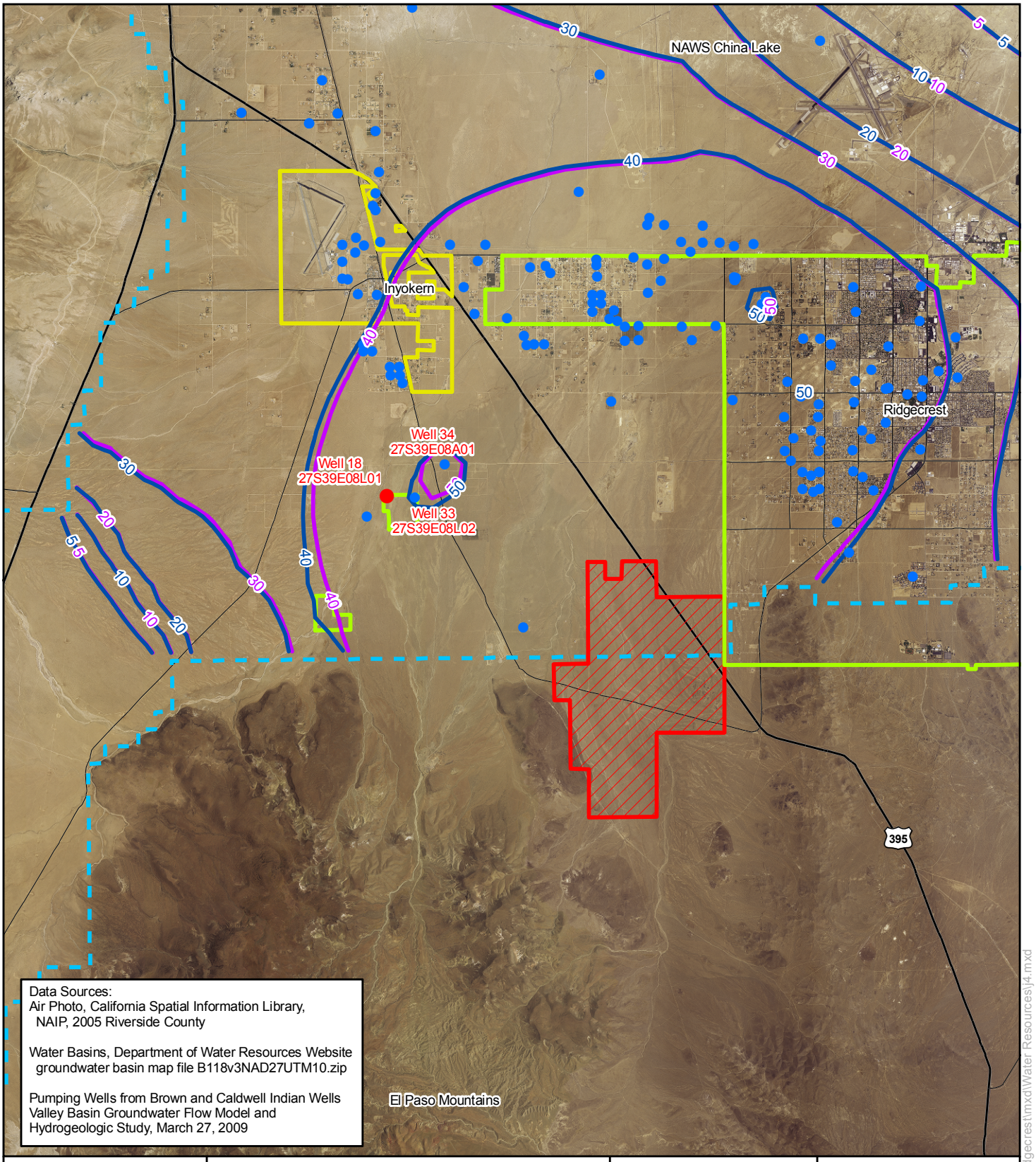

Map Location

Legend

- Project Right-of-Way
- Inyokern C.S.D.
- Indian Wells Valley Water District
- Model Boundary
- Model Predicted Drawdown - Baseline
- Pumping Well Locations based on Brown and Caldwell Pumping Well Database
- Pumping Well used in the Simulation (Well No. 18)
- Model Predicted Drawdown - With Project

0 2 4 Miles

N W E S

Ridgecrest Solar Power Plant

Figure J-4
Radius of Influence from Proposed Operational Pumping (30 Years)

Solar Millennium

AECOM

Project: 12944-003
Date: September 2009

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Groundwater Model Data Files (CD-ROM)

Brown & Caldwell Groundwater Flow Model & Hydrogeologic Study

FINAL REPORT

Indian Wells Valley Basin Groundwater Flow Model and Hydrogeologic Study

Prepared for:

Indian Wells Valley Water District
Ridgecrest, California

March 27, 2009

Prepared by:

BROWN AND CALDWELL

333 East Wetmore Road, Suite 165
Tucson, Arizona 85705

Final Report
Indian Wells Valley Basin
Groundwater Flow Model and Hydrogeologic Study

Prepared for

Indian Wells Valley Water District
500 West Ridgecrest Blvd.
Ridgecrest, CA 93556-1329

March 27, 2009

Project No.133908

R. Brent Cain
Project Manager

Stephen J. Brooks, R.G.
Schlumberger Water Services
Technical Reviewer

Martin Steinpress, P.G., CHG
Technical Reviewer
Expires: 11/30/2010

Kathleen McHugh
Staff Hydrologist

BROWN AND CALDWELL

333 East Wetmore Road, Suite 165
Tucson, Arizona 85705

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LIST OF ACRONYMS

2-D	2-dimensional
3-D	3-dimensional
AFY	acre-feet per year
amsl	above mean sea level
ARM	Absolute Residual Mean
ASTM	American Society of Testing Materials
BC	Brown and Caldwell
BLM	Bureau of Land Management
bls	below land surface
°F	degrees Fahrenheit
DEM	digital elevation model
DWR	Department of Water Resources
EKCRCD	Eastern Kern County Resource Conservation District
ET	evapotranspiration
EVS	Environmental Visualization System
ft^2	square feet
ft^3	cubic feet
GIS	geographic information system
GFMC	Groundwater Flow Model Committee
GV	Groundwater Vistas
in/yr	inches per year
IWV	Indian Wells Valley
IWVWD	Indian Wells Valley Water District
IWVCGWMG	IWV Cooperative Groundwater Management Group
K values	Hydraulic conductivity values
NAWS	Naval Air Weapons Station
NR	Neal Ranch
NAD	North American Datum
PCG2	Preconditioned Conjugate Gradient version 2
PCG4	Preconditioned Conjugate Gradient version 4
QA/QC	quality assurance/quality control
RM	Residual Mean
RSD	Residual Standard Deviation
SOR	Slice-Successive Overrelaxation
SIP	Strongly Implicit Procedure
SNORT	Supersonic Naval Ordnance Research Track
SVM	Searles Valley Minerals
TtEMI	Tetra Tech EM Inc.
TDS	Total Disolved Solids
USBR	U.S. Bureau of Reclamation
USGS	U.S Geological Survey
UTM	Universal Transverse Mercator

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1. INTRODUCTION

Brown and Caldwell (BC) was retained by the Indian Wells Valley Water District (IWVWD) to develop: 1) an updated conceptual groundwater model of the Indian Wells Valley (IWV) Basin, 2) a numerical computer-based flow model of the groundwater basin, and 3) a digital data management and analysis system of the available water level and groundwater pumping data. The IWV Groundwater Flow Model Committee (GFMC) provides oversight and technical review of the development and deliverables of this project, and is defined as the IWVWD, Searles Valley Minerals (SVM), and the United States Naval Air Weapons Station China Lake (NAWS).

The IWV Cooperative Groundwater Management Group (IWVCGWMG) provides a forum for discussion and includes the following entities: the IWVWD, NAWS China Lake, Searles Valley Minerals, Inyokern Community Service District, Inyokern Airport District, Kern County Water Agency, the U.S. Bureau of Land Management (BLM), Quist Farms, Eastern Kern County Resource Conservation District, and the City of Ridgecrest. A summary of the groundwater extractions by these agencies and others is provided later in this report.

Based on reviews of previous studies and compilations of available geologic, geophysical and hydrologic data, a conceptual model of the IWV Basin was developed. This conceptual model includes:

- physical basin boundaries (both lateral and vertical);
- estimated spatial distributions of the alluvial aquifer material properties, including hydraulic conductivity and storage parameters;
- estimated water flow into the basin ("inflows") from precipitation along the western and northern margins of the IWV Basin and subflow from the Rose Valley and Coso Basins,
- estimated water flow out of the basin ("outflows") from evapotranspiration (ET), groundwater withdrawals, and subflow out of the basin; and
- a basin-scale groundwater budget.

Upon the completion of the conceptual model, a three-dimensional, MODFLOW-based numerical groundwater flow model for the IWV was developed using the common project databases and a fully integrated combination of 3 software packages, which included:

- ESRI® ArcGIS™ geographic information system (GIS),
- Environmental Visualization System (EVS™) by Ctech® for 3-dimensional (3-D) geologic modeling and visualizations, and
- Groundwater Vistas® (GV) by ESI®for pre-processing, execution, and post processing of the numerical groundwater flow model.

The IWV Basin numerical groundwater flow model (the model) was developed using MODFLOW-2000 (Harbaugh et al., 2000) first used to simulate historic groundwater conditions from approximately 1920 to 2006. During this process, the aquifer material properties, boundary conditions, recharge, and ET were varied in an effort to best match available measured data. In the future, this calibrated model may be

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employed to assess the potential impacts of projected future groundwater withdrawals on the IWV subsurface flow system.

No new field data was collected as part of this work. The analysis, conclusions and recommendations presented herein have been developed through a review and re-analysis of existing data and many of the in-depth and insightful geologic and hydrogeologic works previously completed by others. Therefore, although this work product advances the conceptualization and interpretation of basin hydrogeology, some uncertainties that existed prior to this work still remain. The key benefit of this project is the incorporation of key hydrogeologic data into a geodatabase system that is fully integrated with 3-D geologic modeling, groundwater flow modeling, and visualization software tools. This integrated modeling system can be used to evaluate the future impacts of pumping on water levels and potential water quality changes, test various hypotheses addressing uncertainties in the basin-scale water budget, and can be readily updated in the future as new data becomes available.

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2. SITE SETTING

2.1 Physiography

The IWV Basin is located in the Southern Lahontan Hydrologic Region and has a surface area of approximately 460 square miles, which defines the areal extent of the basin used in the groundwater model. Figure 1 presents the regional extent of the IWV Basin and associated watersheds. The hydrologic watershed for the IWV Basin, as defined by the topographic divides for the surface water drainages that empty into the basin, covers a total area of approximately 940 square miles (Department of Water Resources [DWR], 2003). The basin includes parts of Inyo, Kern, and San Bernardino counties and is a closed, internally drained basin bounded by igneous and metamorphic basement rock complexes (DWR, 2003). The IWV Basin is bounded by the Sierra Nevada on the west, the Coso Range on the north, the Argus Range on the east, and the El Paso Mountains and Spangler Hills on the south.

Broad alluvial fans extend into the basin primarily from the Sierra Nevada canyons and to a lesser degree from the Argus Range and the El Paso Mountains. Land surface elevations, in the area of the basin, range from approximately 8,300 feet above mean sea level (amsl) within the Sierra Nevada to a low of approximately 2,136 feet amsl at the China Lake Playa. Surface topography of the basin floor slopes primarily from west to east to the playa. The El Paso Sub-Basin, located to the southwest, is hydrologically connected to the principle IWV Basin and can be considered a tributary sub-basin. The topographic low in the IWV Basin is the China Lake Playa located along the northeast-central boundary of the basin. Prior to the start of large-scale groundwater pumping in the 1950s, ET from the playa was the primary outflow of groundwater from the basin.

2.2 Climate

Located in the rain-shadow of the Sierra Nevada, the climate in the basin is arid to semi-arid with long-term average precipitation amounts reportedly ranging from approximately 4 to 6 inches per year on the basin floor to greater than 10 inches per year along the peaks of the Sierra Nevada. Precipitation amounts in the Coso, Argus, and El Paso Mountains are likely less than precipitation at comparable elevations in the Sierra Nevada due to the rain shadow effect. During dry years precipitation amounts may be almost nothing on the basin floor. Likewise during wet years, precipitation amounts in portions of the Sierra Nevada approach or exceed 20 inches per year.

The most complete precipitation records that were available to Brown and Caldwell during the course of this project are from monitoring stations at the Inyokern Airport and Armitage Field. Figures 2a and 2b present the raw precipitation data and locations where the data was collected. It should be noted that additional precipitation monitoring stations exist in the vicinity of the study area; however the they are either not located within the IWV Basin and/or do not have available, consistent, and long-term periods of record. Most precipitation occurs between the months of October to March with January being the wettest month. Monthly precipitation totals for these two locations were grouped by "dry" and "wet" seasons and graphs of the annual totals for the period of record are included on Figures 2a and 2b, respectively. Based on this data an average annual precipitation of 4 inches per year was determined to be appropriate for the IWV Basin floor, which has an average elevation of approximately 2,400 feet amsl. Only limited precipitation gauges are

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located in the mountains surrounding the basin and therefore estimates of precipitation for the surrounding mountains were estimated based on more regional data.

Temperatures often exceed 100 degrees Fahrenheit (°F) in the basin during summer months and can fall below freezing during the winter. During the winter months, precipitation can fall as snow in the Sierra Nevada, which can remain in the higher elevation for many weeks.

2.3 Demographics

Demographics are presented in this report primarily in support of historical estimates of groundwater pumping. Based on information presented in the AB 303 Grant report prepared by Tetra Tech EM Inc. (TtEMI), titled Groundwater Management in the IWV Basin, Ridgecrest, California (TtEMI, 2003b), the total population in Ridgecrest was 24,927 with an additional 984 people in Inyokern in the year 2000 (see Figure 1 for locations). These two areas account for the two largest concentrations of people and domestic water use in the basin. The other two areas are referred to as the Southwest Area, located southwest of Ridgecrest and south of Inyokern, and the Northwest Area, located northwest of Ridgecrest and north of Inyokern. The actual number of additional residents in these other two unincorporated parts of the basin is unknown at this time. An accurate accounting of the number of residents in the basin outside of Ridgecrest is important from a water resources point of view because they own and use a sizeable number of private domestic wells. Based on the large amount of irrigated landscape vegetation, in particular bushes and trees, observed in residential properties outside of Ridgecrest, the non-metered residential wells may constitute a sizeable volume of annual groundwater pumping. Estimates of water use in these areas are discussed in Section 3.3.3.

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3. HYDROGEOLOGY AND CONCEPTUAL FLOW MODEL

The IWV Groundwater Basin is considered the westernmost basin in the Basin and Range Physiographic Province. It is bounded to the south by the Mohave Desert region, to the west by the Sierra Nevada, to the north by the Rose Valley Basin (Basin No. 6-56, DWR) and the Coso volcanic field (DWR, 2003) (Figure 1). The Rose Valley Basin, along with the Owens Valley Basin, the IWV Basin, the Salt Wells, and Searles Valley to the east are part of a series of formerly interconnected basins originating along the east side of the Sierra Nevada. During much of the wetter, Pleistocene epoch (>10,000 years to approximately 1.8 million years ago) these basins were all interconnected by the ancestral Owens River. The combination of the re-working of basin sediments by the Owens River with the active shedding of sediments via the alluvial fans coming off the Sierra Nevada is believed to have resulted in a complex distribution of well-sorted (fine-grained vs. coarse-grained sediments) and poorly sorted (mixed grain size) deposits. Additional geologic controls that further increased the complex distribution of sediment grain sizes and degree of sorting resulted from the continued tectonic activity in the basin, and, in fact, the IWV Basin remains one of the most tectonically active regions in the United States (TtEMI, 2003b). The impact of the volcanism in the Coso Basin and in Rose Valley on sediment distribution and groundwater inflow into the IWV Basin is not well understood; however, it likely restricted greatly the potential flow of groundwater into the IWV Basin from the north. Of more importance are the volcanic flows, present in the Little Lake Gap and approximately 5 to 7 miles east of Little Lake Gap, which affects subflow from the Rose Valley. The overall complex geologic history of the basin deposits was identified in a review of available lithologic data and is discussed in greater detail later in this report.

The IWV Basin is described by Monastero et al. (2002) as a half-graben that is the result of both extensional and transtensional Late Cenozoic tectonic activity. As a part of the Basin and Range Physiographic Province, the present-day basin-scale structure and depositional history of the IWV Basin, at least down to depths of between 2,000 and 3,000 feet below land surface (bls), is controlled by the mountain-front faulting and down-dropped valley characteristic of the half-graben model. Data obtained from the drilling and installation of the Supersonic Naval Ordnance Research Track (SNORT) wells, completed by NAWS and reported in the IWV Groundwater Project (USBR, 1993), indicate a total thickness of basin sediments or sedimentary rocks in excess of 7,000 feet. However, below a depth of approximately 2,000 feet the sediments are generally consolidated Pliocene and Miocene continental deposits that are not considered capable of producing water of a quantity satisfactory for groundwater development (Berenbrock and Martin, 1991). Therefore, these consolidated Pliocene and Miocene deposits are not included in the active groundwater flow domain for the purposes of this study and are assumed to be a lower, or basal, no-flow boundary for the flow model. It should be noted that the depth to what are considered to be productive water-bearing sediments does vary depending on location in the basin, and productive but undetected aquifer units may be present at greater depths. Because significant portions of the basin do not have sufficient information to deterministically specify hydrostratigraphic units throughout the entire IWV Basin (TtEMI, 2003a), the depths of viable aquifer units are based on extrapolation from limited geologic data.

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3.1 Previous Studies

The entire or portions of the IWV Basin have been the subject of numerous geologic and hydrogeologic studies by the U.S Geological Survey (USGS), U.S. Navy, U.S. Bureau of Reclamation (USBR), EKCRCD, IWVWD, and university researchers for over 60 years. Four of the most comprehensive studies used extensively for this project are listed below in chronological order:

- 1991 – "The Groundwater Flow System in the Indian Wells Valley" by C. Berenbrock and P. Martin. USGS Water Resources Investigation Report 89-4191 (Berenbrock and Martin, 1991).
- 1993 – "The Indian Wells Valley Groundwater Project" by the U.S. Bureau of Reclamation, Lower Colorado Region. Volumes I and II (USBR, 1993).
- 2003 – "Groundwater Management in the Indian Wells Valley Basin, Ridgecrest. California" by Tetra Tech EM Inc. and prepared for the Eastern Kern County Resource Conservation District (EKCRCD) (TtEMI, 2003a).
- 2003 – "Basewide Hydrogeologic Characterization Summary Report" by Tetra Tech EM Inc., prepared for the U.S. Navy (TtEMI, 2003b).

The usefulness of each report and its impact on the completion of this work are described below.

Berenbrock and Martin (1991) - Although only a limited amount of new data was generated for this report, Berenbrock and Martin (1991) was the most comprehensive effort (up to that time) to catalog all available aquifer property and aquifer stress (pumping, recharge, and ET) information and to subsequently use that data to develop a numerical flow model. Most of the data used in the development of the Berenbrock and Martin flow model was previously compiled as part of USGS studies. An above-average level of data collection and previous studies have been conducted within the IWV Basin when compared to its size of population. This is most likely due to the importance of NAWS to the federal government. Limitations identified by BC with the conceptual and numerical flow models developed by Berenbrock and Martin are as follows:

- The IWV Basin was modeled as a quasi-three-dimensional system, i.e., the playa groundwater discharge zone was simulated as a single hydrologic system and the underlying basin sediments as another hydrologic system with the two connected via the bottom of the playa zone. Rather than simulate the underlying basin sediments as a 3-D groundwater flow system, it was simulated as a two-dimensional (2-D) system, likely due to a lack of data.
- The area of high hydraulic gradient in the southwest area was not explicitly simulated, but rather a discrete, linear flow barrier was assumed.
- Although relatively extensive computations of the spatial extent and discharge potential of the playa region were performed, it was based on a pre-determined estimation of total basin recharge and an assumption that playa discharge equaled total basin inflow. No empirical work on actual measured playa discharge was conducted.
- It assumed that the 1920 time period could be simulated as a pre-development time period, i.e., that the IWV Basin was in steady-state condition, and that recharge and subflow into the basin was entirely balanced by ET out of the playa region. Although there is very little documented groundwater pumping in the 1920s, supporting the assumption of steady-state conditions, the large number of water level measurements available for the 1920s suggest that groundwater use may have been greater and distributed over a more extensive region than what was assumed.

A subsequent updated groundwater flow model was developed in 1999 by Alexandra Clark as part of a Masters thesis at the University of Arizona (Clark, 1999). Although the model domain was extended to

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include a large portion of the El Paso Basin, her approach was generally similar to that used by Berenbrock and Martin and had the same limitations.

USBR (1993) - The USBR (1993) report was key in that a series of ten deep boreholes (ranging from 1,910 to 2,024 feet deep) were drilled, had wells installed, and were tested throughout the western one-third of the basin. One additional deep geothermal test hole (SNORT-1) was drilled to a depth of 7,394 feet by NAWS with wells completed to depths of 880 and 1,470 feet bls in the boring. This work combined with additional deep wells installed later as part of an AB 303 Grant in the southwestern portion of the IWV Basin provide virtually all of the known, good quality, hydrogeologic information for depths greater than 700 to 800 feet in the basin.

TtEMI (2003a) - The TtEMI (2003a) report provided an excellent summary of the data collected in the previous two reports in addition to conducting a series of water quality sampling and analysis work, including isotopic age-dating. The water quality analysis work was completed to better understand source waters.

TtEMI (2003b) – The Draft Basewide Hydrogeologic Characterization Summary Report provided an excellent overview of the Navy's investigations of groundwater in the IWV. This report included an analysis of the effects of faults on groundwater flow as well as water level measurements, aquifer parameters, and water quality data.

Other previous studies have also been conducted by the U.S. Navy at NAWS China Lake, include the Phase I Remedial Investigation Report (PRC EMI and Montgomery Watson, 1993). More recent geochemical analysis and age-dating activities were completed in the southwestern portion of the IWV Basin by Dr. Randy Bassett on behalf of the IWVCGWMG (IWV Cooperative Groundwater Technical Advisory Committee, IWVCGWMG, and Geochemical Technologies Corporation, 2008). The analysis performed by Dr. Bassett as well as a number of graduate level research projects were conducted in an effort to resolve the hypothesis that a large flux of groundwater was entering the basin from the west side of the Sierra Nevada via deep fracture flow (Thyne et al., 1999). This theory was based on an anomalously steep groundwater gradient located in the southwestern portion of the basin.

All of this work plus numerous other reports summarizing data collection or re-analysis of existing data were reviewed as part of the development of an updated conceptual for this project. However, the hydrogeologic complexity of the IWV Basin combined with time and budgetary constraints, only permitted water chemistry data to be utilized in a cursory manner.

3.2 Regional Geology and Hydrostratigraphy

As stated in Section 3.0, only the upper 2,000 feet of sediments are being considered in this analysis of groundwater flow in the IWV Basin. Total depths of the SNORT wells exceed 7,000 feet bls; however, the sediments observed at these well locations at depths greater than 2,000 feet have been identified as consolidated Pliocene and Miocene Continental deposits and are not considered to be water-producing (USBR, 1993; Berenbrock and Martin, 1991). The sediments in the upper 2,000 feet include clays, silt, sand, and gravel deposited in alluvial fan, fluvial (stream/river) and lacustrine (lake) environments, and as surficial lava (basalt) flows (and possibly aerial deposition of volcanic ash). The primary source of the upper 2,000 feet of sediments is believed to be the Sierra Nevada, with secondary sources of sediments coming from the Argus Range, the El Paso Mountains, and carried in by the ancestral Owens River from upstream areas. The lithologic dataset used to develop the basin-wide geologic and hydrostratigraphic models came from selected, high quality well logs developed as part of the IWV Groundwater Study (USBR, 1993), work by the U. S. Navy at NAWS, and driller or geologic logs compiled from water wells drilled over the years in the basin. The locations of these data points are shown on Figure 3.

The current understanding of the hydrogeology of the IWV Basin is the result of various geologic and geophysical investigations (gravity and seismic reflection) combined with observations on water level changes

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versus pumping made over the past 60 years. The empirical data has been combined with geologic and hydrogeologic analyses to develop hypotheses on the basin-scale water budget and groundwater movement. Much of the available empirical data is within focused regions, collected either as part of water well drilling or environmental concerns. Shallow (< 200 feet in depth) data is focused on the NAWS, in particular near the active base and was developed as part of environmental investigations (PRC and Montgomery Watson, 1993; TtEMI, 2003a). Deeper data was focused in a narrow north-south region extending southwest of the intersection of Highways 395 and 14 and extending east into the City of Ridgecrest (Figure 3). Additional, high quality but more sparse data were collected along Highway 395 north of Inyokern and southwest of Inyokern where the El Paso Sub-Basin joins the IWV Basin. Large areas with little to no deep data include the El Paso Sub-Basin southwest of well USBR-1 (1-D), the northwestern boundary region of the IWV Basin from Little Lake Gap extending east across the basalt flows from the north, and the entire north-central and northeastern portion of the IWV Basin north of China Lake and including the entire Coso Basin (Figure 3). Model layering within these areas all required extensive extrapolation from distal data points located up to approximately 15 miles away.

Using this spatial coverage and density of data, four key hydrostratigraphic[1] features were identified as important in understanding the basin-wide water budget and in developing the hydrogeologic conceptual model. These areas are located on Figure 4 and discussed individually below. These features include:

1. Fine-Grained Sediments "Plug"
2. Gravel Zone
3. High Gradient
4. Playa

Feature #1 – Fine-grained Sediment Plug

Feature #1 is a thick and regionally extensive deposit, or "plug", of primarily fine-grained sediments located approximately 3 to 4 miles east of the Sierra Nevada mountain-front and trending north-south. Starting at a depth of approximately 340 feet bls or an elevation of approximately 1,936 feet amsl, the deposit is as much as 1,340 feet thick. The actual areal extent of this massive fine-grained deposit is not well defined, particularly in the east-west direction, but based on available data the deposit may extend north to south from approximately T24S R38E Section 35 to T26S R39E Section 18. An approximate areal extent of the fine-grained deposit based on the limited borehole data available is presented on Figure 4. The conceptual geologic model of a topographic basin low that developed parallel to the mountain front in response to the uplifting of the Sierra Nevada to the west and the dropping of the valley floor in response to extensional faulting was used to constrain the spatial extent of this unit. This valley low is theorized to have been the site of a lake during much of the Pleistocene epoch in which fine-grained sediments were deposited. The large thickness of this fine-grained zone is surprising because it suggests that it was deposited in a low-energy environment; whereas, the coarse-grained sediments to the west of it are likely derived from a significantly higher energy environment associated with the steep topography of the Sierra Nevada. This is supported by data from test hole and monitoring well USBR-5 (Figure 3). Although there is approximately 300 to 400 feet of sand and gravel overlying the fine-grained deposit, as recorded at boreholes Neal Ranch (NR) -1, NR-2 and USBR-6, the large vertical thickness of the fine-grain deposit would suggest that a great deal of recharge from the Sierra Nevada canyons to the west, essentially from Five-Mile Canyon south to at least Grapevine Canyon, is "dammed up" behind the fine-grained "plug" (see Figure 3 for borehole locations). Mechanisms Sierra Nevada recharge to migrate within the groundwater system from west to east across the fine-grained

[1] A hydrostratigraphic unit is defined as a largely continuous volume of subsurface sediments that have similar hydrogeologic properties such that they respond to aquifer stresses (pumping or recharge) in a similar manner.

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"plug" include: 1) flowing through the coarse-grained deposits lying above and beneath the "plug", 2) flowing around (to the south) of the "plug", 3) flowing through interbedded, sand-rich layers that were deposited as part of major depositional events and that succeeded in being deposited across the low energy lake depositional system, or 4) some combination of the three previous mechanisms. Although mechanisms 1) and 3) are supported by the slightly higher water levels at the NR wells relative to USBR-5 and by an upward vertical gradient in multi-level wells completed within the "plug", it is unknown if this could account for the full volume of mountain-front recharge that is conceptualized to occur along this portion of the Sierra Nevada. Attempts to better answer this question have been included as part of the flow modeling tasks.

Feature #2 – Gravel Zone

Based on available lithologic logs and well pumping records, a west-east trending region of coarse-grained, high permeability sediments is present from the mouth of Indian Wells Canyon to approximately the northwest portion of Ridgecrest (Figure 4 - Feature #2). Extending approximately two miles north-south and fining to the east, conceptually this region is viewed as an area of high energy deposition historically emanating from Indian Wells Canyon. This region contains most of the high volume production wells located in what is referred to as the Inyokern and Intermediate Areas. The production wells located within the Ridgecrest city limits are also believed to be associated with this region. However, due to their greater distance from the Sierra Nevada they have a higher percentage of fine-grained sediment and, therefore, their groundwater production potential is not as great as wells further west. Additionally, due to the cation exchange processes that occur as groundwater flows through clay-rich sediments, the higher percentage of fine-grained sediment present in the eastern half of the IWV Basin is also likely the main contributor to the degraded water quality, primarily increased total dissolved solids (TDS).

Although the Indian Wells Canyon is one of the larger canyons entering the basin, an answer as to why an extended region of high energy deposits (i.e., very little fine-grained material) originates from this canyon and extends east to a much greater degree than observed from other canyons emanating from the Sierra Nevada is uncertain. The high permeability of this region may also be contributing to the high hydraulic gradient observed in the southwestern region by providing a rapid increase in aquifer transmissivity across a short distance. The structural/tectonic history of the IWV Basin and the development of the fine-grained "plug" described above may provide some insight, but the actual depositional history, interrelationship, and mechanics of this region relative to the Southwestern area, fine-grained "plug", and playa remain unclear.

Feature #3 – High Gradient

The large groundwater gradient observed across the narrows extending from the El Paso Sub-Basin into the main IWV Basin near the Southwestern Area has been recognized since the 1950s when properly located water level information became available (Figure 4 – Feature #3). The groundwater gradient of approximately 100 feet per mile (or approximately 400 feet over 4 miles) measured in this region was originally theorized to represent the presence of a groundwater flow barrier, possibly in the form of a geologic fault or a concentration of fine-grained material. A later theory proposed the high gradient to be caused by a combination of the reduction in vertical, cross-sectional flow area present at the location and a much greater flux of recharge or subflow coming from the El Paso Sub-Basin than previously believed. Because it is not possible to support a substantially larger flux of recharge from precipitation within the IWV watershed, the source of the larger groundwater flux was theorized to be coming from deep fracture flow from the much wetter, western side of the Sierra Nevada (Thyne et al., 1999). Subsequent drillholes have largely discounted the geologic fault theory and more recent water quality sampling and analysis, including tritium age-dating, has largely discounted a source of water from the west side of the Sierra Nevada. Under the current conceptual and numerical flow model, this feature is theorized to be caused primarily by a combination of a narrowing of the area available for flow, possibly by currently unknown shallow bedrock from the Sierra Nevada, and the influx of recharge from Freeman Canyon. An additional cause of the steep hydraulic gradient could be related to a large contrast in aquifer transmissivity from the narrows into the high

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permeability zone to the north. The narrows area may have reduced transmissivity due to a complex transition in depositional energy resulting in the emplacement of poorly sorted alluvium.

Feature #4 - Playa

Prior to the onset of increased groundwater pumping the primary outflow of groundwater from the IWV Basin was ET from the playa (Figure 4 – Feature #4). Although detailed studies of ET losses from playas have been completed at other closed desert basins in the Mohave Desert and Great Basin physiographic regions, such studies have never been completed in the IWV Basin. As a result, estimates of discharge via ET for the IWV Basin have normally been estimated for when the basin was under steady-state conditions, where it is assumed that ET equals total flow into the basin via recharge and subflow. This approach is considered reasonable under conditions of little or no groundwater pumping in the basin. However, how ET rates may have changed as groundwater pumping has increased, in particular since the early 1960s when groundwater pumping is estimated to have exceeded total estimated inflows into the basin, is uncertain and is a large source of uncertainty in current basin water balance estimates. The most detailed information on the near-surface (primarily the upper 100 feet) geology in or around the playa has been completed by the NAWS as part of the basewide hydrogeologic characterization report (TtEMI, 2003a). Information collected as part of that work, in addition to data analysis and modeling work may aid in better understanding the ET losses across the playa area and how ET rates vary in response to water level declines due to groundwater pumping to the west. This issue was investigated as part of the numerical modeling work.

Based on current basin water budget estimates, which are presented and discussed in Section 3.0, pumping from the Intermediate and Southwestern well fields greatly exceed the annual recharge into the area and have for more than 40 years, capturing water that would have normally discharged to the playa. As a result, recharge and subflow from the northern portions of the IWV Basin may be supplying much of the continued discharge via ET from the playa.

Hydrostratigraphic cross-sections along some key transects have been developed from the 3-D geologic data management, modeling, and visualization software, EVS® (CTech, 2008). The cross-sections along with a cross-section location map are presented on Figures 5 through 9. The lithologic logs from which the cross-sections were developed are generally much more geologically complex than is reflected by the cross sections. The data presented on the cross-sections are designed to reflect how the complex geologic data can be simplified or lumped into a layered system capable of being modeled at a scale that provides useful answers to water resource related questions. This approach also prevents an overly complex geologic conceptualization that would result in a mathematically, computationally and financially burdensome simulation. The actual geologist logs used in the 3-D geologic modeling are maintained as hardcopy files by the IWVWD.

3.2.1 Structural Geology

The tectonic history or structural geology of the IWV Basin has impacted the hydrogeology of the basin largely through its effect on controlling the direction and energy domain of the depositional systems responsible for the primary water bearing materials in the basin. Based on the available data, with the exception of the basin-bounding faults along the Sierra Nevada (west) and the Argus Range (east), faulting does not appear to have significantly impacted the portion of groundwater flow that affects water supply wells (TtEMI, 2003a). This statement is based on the apparent noticeable absence of any offset in the geologic units in the upper 1,500 to 2,000 plus feet of the basin. This observation is particularly relevant in the southwestern portion of the IWV Basin in the area of high hydraulic gradient. Based on an analysis of the data from wells USBR-1, USBR-2 and the other AB 303 Grant wells completed across this region, no explicit evidence of a faulting-induced barrier to groundwater flow has been observed.

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Another important fault zone discussed in previous reports is the Little Lake Fault (Figure 4). Although a case can be made for it possibly controlling the transition zone between the deep sediments in the west-central portion of the IWV Basin and the playa, its presence is not necessary to explain the distribution of water levels across the basin from west to east (TtEMI, 2003a). Data to identify any fault control on groundwater flow in the remainder of the upper portions of the basin were not available for review during this project; however, additional localized well drilling data or borehole logs may be obtained and incorporated in future updates to this model.

3.3 Regional Hydrogeologic System

The current conceptual model is one in which recharge, primarily from the Sierra Nevada, and subflow from the north and north-central portions of the basin comprise the bulk of groundwater inflows. Groundwater either migrates towards pumping wells or towards the playa where it is removed via ET. Under this conceptual model the primary inputs into a basin-scale water budget are:

Inflows

- Mountain front recharge
- Subflow into the IWV from the Rose Valley Basin and the Coso Valley Basin (flow in from the El Paso Sub-Basin is covered through its separate mountain front recharge component)
- Infiltration of surface flows through the Little Lake Gap

Outflows

- Groundwater pumping
- ET from the playa areas

Of these five parameters, only groundwater pumping is currently measured or estimated with much accuracy. The other parameters have been either derived from studies in analogous basins, developed from sound hydrologic principles, or deduced based on assumptions of appropriate values for the other water budget components. Each input of the IWV Basin water budget is described below.

3.3.1 Mountain Front Recharge

The only significant types of recharge occurring in the IWV Basin are mountain front recharge and anthropogenic recharge, i.e., that which occurs from excess water applied for domestic or agricultural irrigation, or from wastewater treatment system percolation ponds. However, precipitation-based recharge from the Sierra Nevada is the dominant source of groundwater in the IWV Basin.

The precipitation pattern in the IWV watershed is strongly influenced by altitude. As discussed in Section 2.2, annual precipitation rate varies from about 4 inches per year on the valley floor to between 10 and 20 inches at the crest of the Sierra Nevada on the west side of the valley. East of the Sierra Nevada annual precipitation rates in the Argus Range and the El Paso Mountains is considered to be lower and likely more comparable to the valley floor due to the rain shadow effect. Rainfall on the valley floor and the El Paso Mountains is considered insufficient to contribute any groundwater recharge. Because of the high potential ET rates associated with the climate of the basin, it was assumed that only precipitation that occurs above an elevation of 4,500 feet contributes to groundwater recharge.

Annual precipitation rates vary with elevation; however, few readily obtainable measurements are available outside of the basin floor. Precipitation gage records exist for regions just outside of the IWV Basin boundaries, but they were either not available or included limited data and were not incorporated into this study. Given the above constraints, the precipitation rate corresponding to the two elevation intervals was estimated for this study and compared to the sparse historical data available. A previous study conducted for

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the Owens Valley (Danskin, 1998) established an empirical relationship between precipitation rate and altitude based on precipitation and snow records collected routinely for more than 50-years at 20 survey stations. Using this empirical relationship, the average precipitation rate in the Owens Valley for the elevation ranging from 4,500 to 6,500 feet was estimated to be 10 inches per year and the precipitation rate was estimated to increase to 15 inches per year when the elevation is above 6,500 feet. Due to a variety of climatic and topographic effects, precipitation decreases moving south along the Sierra Nevada. To account for this, a reduced value of 8 inches per year was assumed for an elevation range of 4,500 to 6,000 feet amsl and 10 inches per year for elevations greater than 6,000 feet amsl. These values generally agree well with information obtained from the Western Region Climate Center and the California Climate Data Archive. The use of these values appears reasonable based on the 4-inches of annual precipitation observed at weather stations located at the Inyokern and Armitage Field airports, which both have an elevation of approximately 2,400 feet amsl (Section 2.2).

The drainage areas corresponding to the elevations between 4,500 and 6,000 feet and above 6,000 feet were estimated using spatial calculations in GIS. The location of the areas encompassed by the elevation bands are presented on Figure 10. The areas of the specific canyons from which the recharge would be expected to emanate from are presented on Figure 11. Table 3-1 summarizes the total precipitation volume estimated for the areas of the Sierra Nevada and Argus Range that meet these elevation criteria. The total precipitation volume available to potentially recharge groundwater was estimated to be 62,701 acre-feet per year (AFY).

Table 3-1. Estimated Precipitation Volume in the Indian Wells Valley Watershed

Elevation (feet)	Area (ft^2)	Area (acres)	Precipitation Rate (in/yr)	Precipitation Volume (ft^3)	Annual Precipitation Volume (AFY)
4,500-6,000	3,180,664,080	73,018	8	2,120,442,720	48,678
>6,000	733,027,680	16,828	10	610,856,400	14,023
Total	3,913,691,760	89,846	N/A	2,731,299,120	62,701

Notes:
ft^2 = square feet
in/yr = inches per year
ft^3 = cubic feet
AFY = acre feet per year

Methodologies to estimate mountain front recharge from total potential available recharge from precipitation are not well defined and mountain front recharge is frequently estimated as a percentage of the total precipitation volume. The primary phenomenon that reduces actual recharge from the total volume of precipitation estimated is ET. For the steep and rocky mountain slopes of the Sierra Nevada and Argus Range it could be argued that the percentage of precipitation lost to ET is small. Assuming that previous estimates of total basin inflow by the USGS and others, which range from 9,000 to 11,000 AFY, are reasonable; an assumption that 15 percent (0.15) of the total volume of potential recharge results in an initial estimate of 9,400 AFY of mountain front recharge into the basin. Although this estimate is reasonable based on the percentages used in other basin-scale studies throughout the western US, it is arbitrary and underscores the need for actual measurement of elevation-based precipitation and recharge out of the canyons and into the basin.

The mountain front recharge can also be estimated through an alternative approach. Anderson et al. (1992) conducted a study on an alluvial basin in South-Central Arizona where a regression equation was established between the average mountain-front recharge (Q rech) and the total annual volume of precipitation on areas of the watershed where the precipitation rate (P) is in excess of 8 inches per year.

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$$\text{Log } Q \text{ (rech)} = -1.40 + 0.98 \log P \text{ where } P > 8 \qquad (1)$$

Using only the areas of the IWV watershed with an elevation in excess of 6,000 feet amsl, an average total annual volume of precipitation of 14,023 AFY is obtained from Table 3-1. Substituting this estimated precipitation volume into this regression equation yields an estimate of the maximum average mountain front recharge of only 420 AFY. Due to the difference in latitude, precipitation patterns and seasonal temperatures between the two regions, the Anderson approach may not be appropriate for the portion of the Sierra Nevada adjacent to the IWV Basin.

Because neither of these methods can be easily verified through field measurements, mountain front recharge is inherently an estimated component of the IWV Basin's water budget. Values are commonly modified and refined during the calibration of a flow model, especially when other components of the water budget are deemed to be better understood. For the purposes of model development a conceptual mountain front recharge value of approximately 9,500 AFY was initially applied to reflect groundwater inflows from all mountainous regions surrounding the basin.

3.3.2 Surface Flow and Groundwater Subflow

Although there are often minor flows from some washes, there are no perennial surface water bodies or streams along the IWV watershed divide; therefore, surface flows are not a component of the basin water budget. During wet years, some surface flow enters the IWV Basin through the Little Lake Gap, and previous studies have recorded as much as 5,000 acre-feet exiting Rose Valley and entering the IWV Basin at this location (Bauer, 2002). However, this flow is anomalous and intermittent and is not explicitly included in the long-term water balance calculations.

Groundwater flow (subflow) is believed to only enter the IWV Basin from the Rose Valley and the Coso Basins (the El Paso Sub-Basin is not considered to be a separate basin). Subflow from the Rose Valley Basin occurs through the Little Lake Gap and possibly from underneath/through the basalt flow located approximately 5 miles east of Little Lake Gap. Estimates of potential subflow out of the Rose Valley Basin based on available information ranges from a few hundred to a few thousand AFY. The fairly wide variability in the magnitude of this value reflects the uncertainty also present in the Rose Valley Basin water budget. Based on available information, conservative estimates of potential subflow out of Rose Valley Basin range from a few hundred to between 2,000 and 3,000 AFY.

There are no reliable estimates of subflow coming from the Coso Valley Basin, but based on the dry nature of the region combined with the absence of alluvial fill to capture and retain recharge the value is believed to be very low. Additionally, although eastward subsurface groundwater flow out of the basin through the Argus Range or Salt Wells Valley Basin towards the Searles Valley has been hypothesized, but such subflow has not been formally documented and is considered insignificant.

3.3.3 Groundwater Pumping

Groundwater pumping within the IWV Basin includes a variety of entities and is currently estimated to total approximately 30,000 AFY (2006 through 2007). The principle entities pumping groundwater are the IWVWD, NAWS, SVM, as well as commercial agricultural operations. Less well-documented groundwater pumping is conducted by smaller water providers and domestic wells used both for potable use and domestic irrigation. A table of reported and estimated groundwater pumping by year and by entity is presented in tabular format in Appendix A. Reliability in pumping estimates generally increased as more domestic water supply was provided by the IWVWD through the acquisition of some small water companies in the basin.

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Although groundwater pumping in the basin is generally assumed to be relatively minor prior to the beginning of NAWS operation in the late 1940s, the number of wells present in the 1920s documented by USGS studies suggests that pre-NAWS groundwater pumping may have been significant. Based on data obtained from Berenbrock and Martin (1991), the annual pumping throughout the basin increased from approximately 1,000 acre-feet in 1920 to slightly less than 2,000 acre-feet in 1937 to 6,000 acre-feet by 1950. Prior to NAWS the primary documentable use of groundwater from the IWV Basin was for mining operations in the adjacent Searles Valley. Groundwater use for irrigated agriculture was also occurring but information on the irrigated acreage and the volume of water pumped is not available. Based on the data presented in Appendix A and using the previously cited estimate for total inflow into the basin of between 9,000 to 11,000 AFY, groundwater pumping equaled or exceeded the sum of natural recharge and subflow by sometime in the late 1950s to early 1960s. This suggests that some magnitude of groundwater mining has occurred for a significant period of time in the basin. Based on a pre-development conceptual model of natural recharge plus subflow equaling ET from the playa areas, groundwater mining should result in a decrease in ET as groundwater that formerly moved east to the playa is now intercepted by pumping wells. Maps presenting the distribution of pumping wells for 1953, 1975 and 2006 are presented on Figures 12, 13, and 14, respectively. The figures clearly show that although the number of wells has increased, pumping has remained concentrated in similar regions over the past 60 years with the exception of an expansion of production wells in the southwest area.

Although groundwater pumping is the best understood and most documented of the water balance components, issues surrounding the accuracy of some assumed values over time do exist. As stated previously, in 1920 quasi-steady-state conditions are assumed by Berenbrock and Martin with only an estimated 1,000 AFY of pumping. The accuracy of this number as well as the total volume of groundwater extracted from the basin up to that time is unknown. Based on the number of locations (i.e., potential pumping wells) where water levels were apparently recorded during the 1920 time period, this annual pumping rate may be low. Additionally, reliable estimates of domestic pumping within the basin are highly speculative from 1920 to the present. Based on the density of residences outside of the incorporated area of Ridgecrest, annual pumping volumes provided to BC by IWVCGWMG may be high. On the other hand, domestic pumping volumes may be high based on the density and size of irrigated vegetation at many residences. In 1993, the USBR estimated 3,000 private wells in the IWV Basin with approximately 550 of those operational and producing approximately 2,099 AFY of groundwater (USBR, 1993). In 1996, the EKCRCD conducted a field survey and estimated residential groundwater pumping at 1,728 AFY. This latter residential demand value was used as an initial estimate in the development of pumping stresses for the numerical groundwater model.

3.3.4 Evapotranspiration

As described earlier, ET from the playa areas was the primary outflow from the IWV Basin until sometime in the 1950s or 1960s when the magnitude of groundwater pumping likely began to exceed it. Empirical estimates of ET are difficult and costly to obtain. These challenges, along with the location of the playa within the NAWS administrative boundary, likely restricted the interest or ability to conduct such studies. The quantification of ET requires the following information over the entire area within which ET could take place:

- soil type and physical properties such as grain size and moisture retention;
- vegetation type;
- depth to water and the magnitude of the vertical hydraulic gradient;
- air temperature, humidity, wind speed; and
- water quality (in particular total dissolved solids).

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The depth to water and the magnitude of the vertical hydraulic gradient is important because it determines where ET can realistically occur and how sustainable it is. If an upward vertical hydraulic gradient is sustained that continues to carry groundwater towards the land surface, then ET will continue indefinitely. If groundwater declines adjacent to a playa area are sufficient, the upward vertical gradient is reversed, and ET will cease once the water table drops below a depth ("extinction depth") from which surface atmospheric conditions or plant roots cannot remove water from the soil. In the absence of deep rooted vegetation, a maximum depth of 10 to 15 feet is commonly assumed in the high desert. Berenbrock and Martin (1991) attempted to define the spatial extent of potential ET zones as well as vegetation types and locations. From this information they assumed a maximum depth of 10 feet from which ET could occur (i.e., no ET could occur within an area or timeframe when the water table was greater than 10 feet) and assumed a variable rate depending on the type of surface cover present (e.g., free-standing water vs. salt grass vs. moist soil). Their maximum ET rate was 1.5 feet per year. Due to a lack of documentation or local field measurements, it is unclear how valid these estimates were and how accurately their numerical flow model represented actual ET. However, it should be noted that their model ET inputs were modified until the total annual ET matched the assumed 1920 basin inflows. Thus, their approach and estimate for ET were predicated on their estimation of basin recharge and subflow inflows. Their initial estimate assumed 9,850 AFY of ET in 1920. It is unclear how this value was varied over the 68-year (1920 to 1988) simulation period.

Because no new data on ET rates or surface cover was developed for this work, BC used an approach similar to Berenbrock and Martin (1991), and assumed the volume of ET per year in 1920 was equal to the 1920 total estimated flow into the basin. Similar to Berenbrock and Martin (1991), a maximum depth to water at which ET could occur was adjusted during model calibration to a depth of 15 feet; however, the maximum rate of ET was set at 1.0 feet per year, less than the value used in the previous modeling study. These final values were based partly upon the range of values discussed above and partly upon the calibration process for the steady-state and transient flow model simulations.

3.4 Groundwater Levels and Flow Directions

As stated previously, groundwater flow directions throughout the IWV Basin have historically been radially directed toward the playa with locally occurring vertical gradients due to specific hydrogeologic conditions (e.g., upwards flow beneath the playa or semi-confined conditions due to an overlying fine-grained unit). The primarily horizontal flow gradients west, north and south of the playa area transition to largely vertical flow gradients beneath the playa in response to 1) the eastern IWV Basin boundary restricting flow out of the basin, and 2) the transition of the basin alluvium from coarse-grained deposits derived from the high energy depositional alluvial fan features of the Sierra Nevada to fine-grained deposits from the low energy depositional domain on the eastern side of the basin. This same conceptual model has been presented in virtually every basin-scale hydrogeologic cross-section developed for the basin.

With the onset of more extensive groundwater withdrawals in the IWV Basin (estimated to occur in the 1950s), groundwater levels changed in the vicinity of the wells or well fields and flow directions would shift, at least locally, towards the developing cones of depression. However, as the playa region behaved as a regionally extensive, high capacity well field, extracting an estimated 9,000 to 11,000 acre-feet of groundwater per year, it remained the single largest influence on groundwater levels and flow directions. This conceptual model of groundwater flow remains valid until the 1960s when groundwater pumping exceeded natural inflows into the IWV Basin at a magnitude that generated more regional cones of depression. At this time, it is theorized that both flow towards the playa and the volume of water discharged by ET began to decrease.

Groundwater level and flow direction maps developed by the USGS and others starting from the 1950s often presented water level data as being from two connected but hydrogeologically distinct hydraulic systems: a deep, basin-wide aquifer, and a shallow, regional aquifer specific to the playa ET discharge area. Although these maps are convenient for the purposes of presenting the 3-D hydraulic gradients caused by the playa discharge zone on 2-D maps, the two groundwater systems are hydraulically connected and the magnitude of

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any local water level variances or lags in water level response due to pumping or recharge stresses is due to differences in physical properties of the aquifer material.

For the purpose of showing changes in the groundwater flow system through time in response to groundwater withdrawals, BC has developed groundwater elevation contour maps for 1920, 1985, and 2006. These contours are shown on Figures 15, 16 and 17, respectively. In each case, the groundwater data has been contoured to represent bulk flow directions, i.e., only more regional scale impacts to water levels have been incorporated (not local impacts). *Regional* refers to evaluating the aquifer behavior at the scale of approximately 1,000 feet or more. By using this approach the localized hydraulic head differences caused by smaller scale geologic features (such as small scale layering of clay versus sand) or from pumping wells is mitigated as much as possible and the bulk flow direction represented more effectively. This bulk flow direction is the same scale or level of detail at which the basin would be simulated with a numerical flow model and are used qualitatively in the model calibration process.

The 1920s groundwater elevation contours, shown on Figure 15, reflect the relatively simple radial flow model described above. Due to the location and density of measured data from which the groundwater contours are produced, much of the map is interpolated or extrapolated and developed with the assumption of a smoothly increasing or decreasing hydraulic gradient. The accuracy of all of the maps can be refined at a local spatial scale, but this methodology was used to match the scale of the numerical flow model generated as part of this project. As seen on Figure 15, only one pumping well location is recorded for the 1920 time period; however, there are monitoring well locations scattered throughout the central portions of the basin, indicating that other sources of groundwater pumping may have been active. Additional discussion of this topic is provided in Section 3.3.3.

The 1985 groundwater elevation contours, shown on Figure 16, reflect the relatively extensive pumping that took place within the City of Ridgecrest and west in the direction of Inyokern. Although the net groundwater flow remains towards the playa, perturbations in water levels reflective of pumping are apparent.

The 2006 groundwater elevation contours, shown on Figure 17, largely demonstrate a continuation and increase in the effects observed in 1985. The well fields in the vicinity of Ridgecrest and between Ridgecrest and Inyokern appear to be capturing water from a greater distance, as indicated by the deflection of groundwater elevation contours further to the north-northwest than was reflected in 1985. This effect is expected as pumping continues to exceed natural inflows into the basin and as groundwater from deeper sediments with less porosity is extracted by pumping wells.

The effect of ignoring localized perturbations in water levels is evident on both the 1985 and 2006 water level elevation maps, as some of water levels posted on the maps were not explicitly honored. Much of the shallow water level data on the NAWS (particularly around the playa area) were not utilized in the development of the regional groundwater elevation contours for a variety of reasons. These include water levels that were:

- affected by localized, smaller sources of recharge (such as wastewater treatment impoundments);
- obviously reflecting a vertical gradient effect and deep well construction data and water levels were not available to guide interpretation; and
- anomalous when considering the hydrogeologic system to be simulated (such as those representative of local perched conditions).

3.5 Basin Water Budget

The groundwater system in the IWV was assumed to be in steady-state conditions in or around 1920. This assumption can be questioned or further refined, but using 1920 as a baseline for assuming that the total groundwater inflow is balanced with the total groundwater outflow is acceptable for numerical modeling

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purposes as it is based on the earliest, reliable data. The conceptual groundwater budget for 1920 is presented below in Table 3-2.

Table 3-2. Conceptual Steady State Water Budget (1920)

Inflow (AFY)		Outflow (AFY)	
Mountain Front Recharge	9,500	Evapotranspiration	10,000
Groundwater Subflow from the North Boundary (includes flow from Little Lake)	1,500	Pumping Wells	1,000
Total Inflow	11,000	Total Outflow	11,000

Note:
AFY = acre-feet per year

Developing reliable basin water budget changes over time is not feasible without the use of the numerical model because the impacts of increased groundwater pumping on ET cannot be adequately determined analytically. As a result, basin water budgets beyond 1920 are presented with the model results in Section 5 of this report.

3.6 Process of Conceptual Groundwater Flow System to Numerical Flow Model

The final step in the conceptual model development process is converting the conceptual flow model into a format that can be efficiently modeled using numerical modeling software. This process involved appropriately simplifying the groundwater flow system and converting it into a discretized system of aquifer physical properties, aquifer stresses per unit time, and model domain boundary conditions. The 3-D geologic model that was generated for the IWV Basin was used to assign lithology-specific, spatially varying hydraulic parameters for the individually specified hydrostratigraphic layers comprising the groundwater flow model. All digital data sets developed in database and GIS formats were used to interpolate and import all flow model inputs. Additional information regarding the translation of the conceptual groundwater flow system into the numerical flow model is provided in the following sections.

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4. MODEL DEVELOPMENT

4.1 Model Process

The numerical model was simulated using MODFLOW-2000, and was based upon the conceptualization of the aquifer system presented in Section 3.0. Hydraulic parameters and estimated water budget components were adapted into the numerical structure of the model at the specified locations. Initial estimates of hydraulic parameters were made based on lithologic and grain size information from geologic logs. Final water budget components and hydraulic parameters were developed during model calibration. The model is currently complete, statistically calibrated, and ready to simulate predictive scenarios.

During model development, hydraulic parameters and groundwater recharge were adjusted to improve the simulation of flow over the entire simulation timeline. This improvement was quantified by mathematical comparison of simulated water levels with field measured water levels at the appropriate monitoring well locations. Variations to model inputs and parameters were constrained by ranges of both observed and literature-derived estimates, as well as conceptual water budget components. The model-calculated water budget was monitored to verify that unrealistically high or low amounts of groundwater were not being generated or lost through storage, ET, wells or recharge. In this manner, model development proceeded from an initial conceptualization of the system to a final, calibrated model that simulated historic groundwater conditions using input values that were consistent with conceptual, reported, and observed ranges.

This section summarizes model specifications, model development, and the methods and assumptions used for estimating initial numerical model inputs. An overview of the numerical model specifications are presented in Table 4-1.

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Table 4-1. Specifications of the IWV Basin Numerical Flow Model

Model Characteristics	Specifications
Active Model Domain	~450 square miles, ~288,000 acres
Units	Time: Days Length: Feet
Coordinate System	UTM 11N, NAD 1983 GIS: lateral units in meters, vertical units in feet
Model Grid	144 rows by 129 columns, 74,304 total cells, 24,327 active cells
Cell Size	1,320 feet by 1,320 feet ¼ mile by ¼ mile
Layering – 4 Layers	Layer 1: Playa, lacustrine and eolian, alluvial silt and clay deposits; Type 1 Unconfined Aquifer Layer 2: Unconsolidated young alluvium, playa/lacustrine, and alluvial fan deposits; Type 3 Unconfined/Confined Aquifer (Transmissivity varies) Layer 3: Older alluvium, more consolidated alluvial fan and basin fill deposits, Type 3 Unconfined/Confined Aquifer (Transmissivity varies) Layer 4: Older continental basin fill, heavily cemented, low permeability deposits (Goler and Ricardo Formations; Type 3 Unconfined/Confined Aquifer (Transmissivity varies)
Hydraulic Parameters	Distribution of hydraulic conductivity values for Layer 1 are based on available borehole geology data and areal extent of the playa deposits. Areas with little geologic data are inferred. Layer 2 through 4 hydraulic conductivity values are estimated from available borehole geology data and transmissivity values from the 1993 USBR IWV Groundwater Report, specific capacity tests and available aquifer tests.
MODFLOW Packages	Basic, Layer-Property Flow, Discretization, Output Control, Solver, Well, Evapotranspiration, Recharge
Base Simulation Stress Periods	1920 through 2007, 89 years 88 Transient Stress Periods (SPs), 1 Steady State Stress Period (1920)
Recharge	Recharge is simulated using the recharge package at known mountain front recharge areas. Values were calculated using the aerial extent of contributing watersheds and available precipitation data.
Evapotranspiration (ET)	Presently ET is simulated in the playa vicinity using a 1 foot per year rate and a 15 foot extinction depth
Wells	Simulated as 173 grid independent analytical features. Pumping rates in ft^3/day.
Initial Conditions	Results from the Steady state/ Stress Period 1, representing pre-development conditions in 1920, was used as the initial water level conditions for the transient simulation time period.
Solution Method	Preconditioned Conjugate-Gradient 2 Package

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4.2 Computer Code Description

The computer code used to simulate the IWV aquifer system was MODFLOW-2000, a modular, finite-difference, 3-D groundwater modeling program designed and maintained by the USGS (Harbaugh et al., 2000). This version of the program is an enhancement of the previous versions of MODFLOW, as documented by McDonald and Harbaugh (1988). Groundwater Vistas™, Version 5.25 (ESI, 2008) was utilized as the pre- and post-processor and was coupled with ArcView™ (ESRI, 2006) to facilitate the development of input files and analyses of model output. For efficiency and improved quality assurance/quality control (QA/QC), many model data sets were generated and maintained solely within a GIS environment. These files can also be readily accessed using common spreadsheet and/or database applications. The generation of 2-D gridded and contour data by kriging interpolation techniques was performed using the Surfer™ software package (Golden Software, Inc., 2008), which produces output readily imported into the numerical model or GIS.

4.2.1 Assumptions

MODFLOW uses a finite-difference numerical method for solving a form of the 3-D groundwater flow equation. This technique essentially solves for hydraulic head by discretizing the flow domain into a computational grid composed of blocks, with nodes at the center of the blocks. For the system of nodes, it is possible to write a series of finite-difference equations derived from the original groundwater flow equation. In general, the finite-difference approximation assumes that all hydraulic parameters, stresses, and inputs are constant over the area of a single cell and over the time elapsed during a stress period. Likewise, calculated hydraulic head and groundwater fluxes are also averaged over the areal extent of a single cell. Implementing the model for a specific problem requires the definition of boundary and initial conditions, as well as estimates of key hydraulic parameters and pumping rates as a function of time.

4.2.2 Limitations

Numerical solutions using MODFLOW-2000 are dependent upon the scale of the model grid, the time frame of interest, and the behavior of the various model inputs and boundary conditions. For large-scale applications such as the IWVWD project, model results may have limited usefulness in investigating groundwater issues with; 1) spatial scales smaller than a single cell or small grouping of cells, and 2) substantially varying groundwater stresses or inputs at a time scale less than a single stress period. Furthermore, large water level changes that are basin-wide, or intersect model boundary conditions have the potential to introduce some error into the model results along basin boundaries due to large numbers of dry cells and losses of groundwater stresses, such as pumpage or recharge. However, such larger water level changes within the IWV Basin are more likely to occur during predictive scenario time periods rather than the historical, transient time period.

The finite-difference solution technique also assumes that the majority of groundwater flow occurs orthogonal to the cell faces, and error can be introduced into the simulation if significant vertical or oblique-angle flow components are evident within a single layer at a local scale. Extrapolation or interpolation of the model results over large time frames are subject to uncertainties inherent in long-term, transient, predictive model stresses.

4.2.3 Solution Techniques

MODFLOW-2000 supports three solution packages, including: Strongly Implicit Procedure (SIP), Slice-Successive Overrelaxation (SOR), and Preconditioned Conjugate Gradient version 2 (PCG2) and version 4 (PCG4). All model simulations presented in this report utilize the PCG2 package (Hill, 1990).

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4.2.4 Effects on the Model

The use of a finite-difference modeling scheme applies stresses and inputs to the model evenly across a model cell. Likewise, hydraulic parameters are uniform within a model cell, limiting the resolution of the model to the size of the grid. The grid cell spacing for the IWVWD model is 1,320 feet by 1,320 feet (0.25 mile by 0.25 mile), equal to sixteen cells per square mile. Model results, such as groundwater elevations or drawdown are also averaged across the model cell and may not be appropriate for assessing conditions at a small local scale near major pumping stresses.

4.3 Model Domain, Layering and Discretization

The active numerical model domain is presented on Figure 18 and includes the entire regional aquifer system for the IWV Basin. The model domain extends from the Sierra Nevada on the west to the Argus Range on the east and from the El Paso Mountains and Spangler Hills on the south to the Coso Range on the north. Within this domain, mountains and mountain front regions are considered to be "no-flow" model areas and are represented numerically as inactive cells. Areal extent of the entire active model domain is approximately 450 square miles, or approximately 288,000 acres; however, the deepest two layers have reduced extents due to the presence of consolidated deposits at depth along the eastern portion of the model domain.

4.3.1 Boundary Conditions

No-flow boundaries were maintained along all mountain front areas and extended for the entire perimeter of the model. Recharge and ET cells, along with pumping wells, provide all the model inflows and outflows in lieu of prescribed head or general head boundary conditions.

4.3.2 Grid

The model domain was discretized into 144 rows and 129 columns with a uniform cell size of 0.25 mile by 0.25 mile, or sixteen cells per square mile. Since groundwater flow is radial and flowing towards the playa, the model was oriented north to south and was georeferenced within the Universal Transverse Mercator (UTM) coordinate system, North American Datum (NAD) 1983, zone 11N with horizontal and vertical units of feet. Output and input files, developed and maintained within GIS, were kept in the same coordinate system with spatial units in meters (meters can be converted automatically to feet during the import step in Groundwater Vistas™). For Layers 3 and 4, the active grid was contracted to reflect the presence of low conductivity, consolidated deposits at depth, which are discussed in Section 3.0.

4.3.3 Layers

The MODFLOW model includes four layers, representing the playa and lacustrine deposits (Layer 1), the unconsolidated, young alluvium (Layer 2), older alluvium (Layer 3) and the older continental basin fill (Layer 4).

The top of Layer 1 represents ground surface elevation. These elevations were imported from a seamless digital elevation model (DEM) provided by Kern County. Layer thickness was based on the available borehole geology of wells within the study area, and on the 3-D geologic model and associated cross sections generated during development of the conceptual model, as presented in Figures 6 through 9 and discussed in Section 3.2. Depths for lithologic contacts were subtracted from the DEM elevations. Contact elevations were then interpolated (via kriging) using Surfer (Golden Software, 2008) and were modified by hand in regions of sparse data using the modeling software and GIS to maintain geologic consistency with the conceptual model. Model layering was designed to fall along all the major geologic unit contacts associated with the IWV Basin's major hydrostratigraphic features, as shown on Figure 4.

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4.4 Stress Periods

Stress periods were defined such that the steady state and transient model solutions were calculated sequentially in a single model run. This functionality, provided by MODFLOW-2000, allowed the model refinement of model stresses, inflows, and hydraulic parameters simultaneously for both the steady state (defined as 1920) and transient (1921 through 2007) timeline. Forty-three stress periods were defined for the full model time period. The first stress period comprises the steady state simulation, with the remaining 42 stress periods, which sequentially follow the first stress period, comprise the transient simulation. Stress periods prior to 1975 were broken into 10 stress periods of varying lengths based upon similar pumping regimes and magnitudes. From 1975 through 2007, all stress periods are one year in length.

Table 4-2. Stress Period Timelines and Parameters: Transient Simulation

Stress Periods	Time Frame	Stress Period Length (Days)	Number of Time Steps	Time Step Multiplier
1	1920	Steady State: 365	1	1
2	1921 through 1930	3,650	10	1
3 through 4	1931 through 1944	2,555	7	1
5	1945 through 1950	2,190	6	1
6	1951 through 1952	730	2	1
7 through 9	1953 through 1967	1,825	5	1
10	1968 through 1974	2,555	7	1
11 through 43	1975 through 2007	365	6	1.2

4.5 Initial Conditions

The initial condition for the steady state simulation (Stress Period 1) was based on the generalized 1920 water elevation contour map developed by Brown and Caldwell (Figure 15). Initial water levels for the transient model, beginning in Stress Period 2, were taken directly from the output of steady state simulation (end of stress period 1).

4.6 Hydraulic Parameters

Hydraulic parameters for the numerical model were based on:

- geologic logs from the IWV Groundwater Study (USBR, 1993);
- work performed by NAWS, driller or geologist logs compiled from water wells drilled over the years in the basin;
- specific capacity tests;
- available aquifer tests; and
- literature values for Basin and Range lithologies (Anderson and Freethey, 1995; Schwartz and Zhang, 2003).

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The ranges of hydraulic conductivities, conductivity ratios, and storage parameters are presented by layer in Table 4-3. Hydraulic conductivity is a parameter that describes the ability of porous media (basin fill sediments in this model) to transmit water. The specific storage is the amount of water per unit volume of saturated formation that is stored or expelled from storage owing to the compressibility of the mineral skeleton and pore water. The specific yield is the amount of water per unit volume of saturated formation that is stored or expelled from storage owing to drainage of pore spaces. Note that all groundwater pumping, recharge, and ET in the model occur in Layers 1 and 2.

Table 4-3. Summary of Model Parameter Values

Layer	Hydraulic Conductivity Value (K) Range (ft/day)	K_x: K_z (ratio)	Specific Storage Range (ft^{-1})	Specific Yield Range
1	0.1 to 100	10:1	N/A	0.05 to 0.15
2	0.1 to 75	10:1	0.00001 - 0.0001	0.05 to 0.12
3	0.1 to 75	10:1	0.00001 - 0.0001	0.05 to 0.15
4	0.1 to 50	10:1	0.00001 - 0.0001	N/A

Note:
ft/day = feet per day
ft^{-1} = one divided by feet
N/A = Not Applicable

Hydraulic conductivity values (K values) assigned to parameter zones were based on:

- geologic logs,
- pre-existing groundwater modeling studies in the model study area, and
- interpretations made during model calibration based upon local geology, depositional environment, and groundwater flow regime.

The horizontal to vertical hydraulic conductivity ratio (K_x:K_y) was assumed to be 10 to 1. Generally, the lower hydraulic conductivity values presented above correspond to finer grained units, whereas the higher conductivity values are representative of coarse-grained units. Figures 19 and 20 show the final spatial distribution of hydraulic conductivities for each of the four model layers. Figure 20 also shows the reduced spatial extent of the layers in Layers 3 and 4. The highest conductivity values are generally located immediately east of the Sierra Nevada. Zones of lower hydraulic conductivity are localized and distributed throughout the basin when considering all layers. However, the fine-grained "plug" feature is apparent in Layer 2 in the western portion of the basin adjacent to a higher conductivity zone by the Sierra Nevada. These hydraulic conductivity distributions were predicated upon the results of the 3-D geologic modeling of the basin and the magnitudes of the values were adjusted during model calibration.

Specific storage and specific yield values were based upon the same data set and spatial distribution as hydraulic conductivity as well as literature cited ranges for the various lithologies encountered. Figures 21 and 22 show the final spatial distributions of estimated storage parameters for each of the four model layers. Similar to the methodology used to define hydraulic conductivity values, parameter zones that were spatially correlated with lithology were used in assigning storage values. Thus, the distributions of storage parameters mimic those for hydraulic conductivity, although the range of typical storage values are more constrained.

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4.7 Sources and Sinks

Groundwater sources and sinks in the model domain include recharge, subflow, evapotranspiration, and pumping. Inputs to the model are based on the conceptual model water budget, presented in Section 3.5. Final values for all components of the basin water budget are presented in Section 5.3.

The spatial distribution of recharge (as recharge cells) is presented on Figure 18. This distribution reflects both the mountain front recharge and subflow from Rose Valley and Coso Valley to the north, as conceptualized in Section 3.0. Mountain front recharge cells were located adjacent to the mountainous regions, and the magnitude of recharge corresponds to the volume of annual precipitation occurring within the adjacent subwatersheds and their associated canyons. Recharge cells representing subflow were located adjacent to the vicinity of subflow occurrence as well as being merged with the mountain front recharge areas, as appropriate. The final, cell-specific recharge values assigned for each recharge area were established during model calibration. Generally, the calibrated recharge rates for all recharge areas were consistent with the conceptual model with the exception of recharge occurring within the El Paso Sub-Basin, which was reduced by 75 percent, and recharge located along the northeastern boundary of the model domain, which was doubled.

The spatial distribution of ET (as ET cells) is also presented in Figure 18. A one foot per day ET rate was applied uniformly to all appropriate cells with an extinction depth of 15 feet bls. The ET zone was made sufficiently large to account for all historical and present day ET occurring in the area. The magnitude of the extinction depth in the model essentially limits the spatial extent where ET can occur. In the IWV Basin model ET will not occur in any area within the prescribed zone where the water table drops to more than 15 feet bls. This depth to water limitation means that ET does not actively occur throughout the potential ET zone over any given simulation time frame. Figures 23 through 26 show the actual model simulated areal extents of active ET cells in the model at various simulation times. These active ET distributions are rough estimates, and the uncertainty associated with them could be substantially reduced with the collection and incorporation of additional data regarding ET in and adjacent to the playa.

All locations where model simulated pumping occurred at any time between 1920 and 2007 are also presented on Figure 18 and further discussed in section 3.0. To approximate the typical screen elevations of production wells within the basin, simulated pumping wells were assigned to Layers 1 and 2 (or only to Layer 2 when simulated water levels fell below the bottom of Layer 1). Since the stress periods representing 1920 to 1975 were broken into 10 stress periods, which were temporally delineated based on pumping magnitudes, pumping rates for the years representing each stress period were averaged and imported into the model. From 1975 through 2007 the reported or estimated annual rates were used. Appendix A presents the reported and estimated groundwater pumping by year and entity in tabular format. Appendix Z, which includes all digital materials for the project, also contains pumping estimates over time for individual wells in a digital and GIS-compatible format (shapefile and database).

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5. MODEL RESULTS AND CALIBRATION

The following sections present the qualitative and quantitative steady state and transient flow calibration of the IWV Basin model over the full model time frame, extending from 1920 through 2006. It also provides comparisons of the conceptual IWV Basin water budgets with the model-calculated water budgets from the calibrated IWV Basin model.

5.1 Approach

Calibration is the process of adjusting model parameters to achieve a good match between the simulated and observed hydraulic heads or other relevant hydrologic data such as water budget components. These observed data are called calibration "targets". Initial estimates for hydrogeologic parameters are varied within an observed or estimated range of values to improve the model's ability to simulate these targets.

The calibration exercise provides confidence that the model is capable of simulating the historical, observed groundwater conditions, and it is completed prior to performing predictive simulations. To facilitate calibration, the stress period design incorporates an initial steady state run (stress period 1) that is coupled directly to the transient stress periods (2 through 43). This functionality ensures that parameter changes made during the transient calibration exercise are automatically included in the steady state trials, allowing for the simultaneous calibration of both steady state and transient portions of the model.

The range of plausible estimates for hydrogeologic parameters provides constraints on the calibration exercise to ensure that inputs remain defensible and to limit the non-unique nature of the model results to a set of realistic input conditions. The adjustable model variables include hydrogeologic parameters such as hydraulic conductivity, as well as water budget components. The volumetric budget was tracked carefully during calibration to ensure that flow into or out of the model domain was constrained to realistic values supported by the conceptual estimates.

The IWV Basin model was calibrated over the full model time frame, extending from 1920 through 2006. The strategy in a transient calibration is to match calibration targets, which represent snapshots of the hydrogeologic system through time. Recorded water level and pumping data were sparse until the 1940s, concurrent with the onset of NAWS operations. From the 1950s through present day, water levels and well pumping data were more rigorously documented.

The calibration process was accomplished by moving from qualitative to quantitative assessments of the model-simulated heads. Initially, hydraulic parameters were adjusted to produce the general flow directions and gradients for steady state and transient periods. This step relied on the conceptualization of the system, understanding of the geology and hydrogeology, experience, and assumptions. Particular attention was paid to the balance between natural recharge and hydraulic conductivity. Once the flow directions and gradients approximated the generalized flow regime (Figure 15), the calibration process moved to a quantitative evaluation based on calibration targets. Quantitative comparisons of simulated heads to individual calibration targets were performed, and statistics were calculated to quantify the fit.

Model parameters and stresses that were varied and tested during calibration included: horizontal and vertical hydraulic conductivity, recharge, specific storage, and specific yield values. Although all model parameters

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and stresses were evaluated during the calibration step, the IWV Basin model was primarily calibrated to recharge, hydraulic conductivity, and storage. The ability to reliably simulate these varying hydrologic conditions was an important goal in the calibration exercise.

5.2 Qualitative Calibration

Prior to the calculation of calibrations statistics, a qualitative review of the model-calculated flow regime was performed to assess the general, groundwater flow system and to provide a subjective indication of the difference between model-calculated and field-measured heads.

5.2.1 Steady State Flow Regime

Figure 23 presents the model-calculated water level contours (representative of the water table) for steady state flow conditions, which were assumed to be present around 1920. Model-calculated steady state water levels range from a high of more than 2,800 feet amsl in the El Paso Sub-Basin to a low of less than 2,150 feet amsl in the eastern portions of the playa. A comparison of the simulated contours on Figure 23 with the interpreted water level contours presented on Figure 15 generally shows good agreement between regional groundwater elevations and flow directions. Flow proceeds from southwest, west, and northern edges of the model towards the playa to the east. This flow regime is consistent with the conceptual model, which assumes that all model inflows are located around the periphery of the basin, and the dominant outflow component is ET at the playa. The model consistently produced a steeper, yet more spatially limited, water level gradient where the El Paso Sub-Basin joins the main IWV Basin. However, given the uncertainty regarding the geologic cause for this steep drop in water levels, a linear obstruction perpendicular to flow in this area was not included (i.e., fault or structural offset). Alternatively, as observed in Figures 19 and 20, lower magnitudes of hydraulic conductivity were used in the Layers 2 through 4 of the model to aid in the simulation of this steep drop in water levels.

It is significant to note that in the vicinity of Ridgecrest, steady state groundwater gradients are relatively low and directed toward the playa to the northeast. Both groundwater elevations and flow gradients change significantly with increased pumping over the next 86 years of simulated conditions, and these changes are discussed below.

5.2.2 Transient Flow Regime

Model-calculated, or simulated, water level contours were exported from the transient portion of the model simulation and reviewed for qualitative and quantitative calibration purposes for the years 1953, 1985, and 2006. The simulated contours are presented on Figures 24 through 26, along with simulated active ET area extent and weighted, model calibration target residual values. The significance of the model residuals is discussed in Section 5.4.2. For the entire simulated time period the total range in head values did not significantly change; however, the simulated magnitude of groundwater elevations and flow gradients within the southern and central portions of the basin did change and evolve significantly over time. These model-calculated, transient changes in regional groundwater conditions mimic those observed from water level data collected throughout the basin over the same time period and were deemed suitable for the purposes of qualitative calibration, given the resolution and quality of available field data.

Figure 24 presents the model-calculated water level contours for 1953. The distribution of water levels and gradients is similar to that simulated for steady state conditions, as would be expected because groundwater pumping in the IWV Basin was not estimated to have exceeded average annual groundwater inflows until the 1950s.

Figure 25 presents the model-calculated water level contours for 1985. A comparison of these simulated contours with the interpreted water level contours presented on Figure 16 generally illustrates good

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agreement between regional groundwater elevations and flow directions. Although the model does not show the same magnitude of water level decline in the vicinity of the western portion of Ridgecrest, it does adequately show a cone of depression forming in that location. Additionally, water level declines are observed throughout the interior of the basin as estimated groundwater pumping within the model was more than 20,000 AFY by 1985 and had been more than 10,000 AFY for almost 30 years (Figure 27 and Appendix A).

Figure 25 presents the model-calculated water level contours for 2006. A comparison of these simulated contours with the interpreted water level contours presented on Figure 17, again demonstrates a good agreement between regional groundwater elevations and flow directions. Both simulated and observed water levels indicate a clearly defined cone of depression encompassing Ridgecrest and extending to the northwest along the eastern front of the Sierra Nevada. This more regional groundwater decline is in response to the sustained level of approximately 20,000 AFY of pumping in the basin since 1980. A comparison of regional groundwater flow conditions in 2006 versus 1920 (or steady state), shows that groundwater now migrates primarily from the southwestern, western, and northern portions of the basin towards multiple groundwater outflow areas, which include: a pumping center located along the central and western margin of the basin, a pumping center within and immediately west of Ridgecrest, and the playa. Inflows to the playa now appear to be primarily from the northern portions of the basin, as theorized in the conceptual model. Recharge from the Sierra Nevada provides the bulk of the groundwater supply for the western pumping center immediately adjacent to it. Pumping in the vicinity of Ridgecrest is simulated to now be supplied primarily by recharge occurring in the El Paso Sub-Basin along with a limited amount of mountain-front recharge from the southern portions of the Sierra Nevada. The influence of groundwater outflow via ET from the playa produces a saddle-shaped water table topography northeast of Ridgecrest, which is also apparent from interpretations of observed water levels on Figure 17. Additional information is needed to better match the steep groundwater gradient where the El Paso Sub-Basin joins the main IWV Basin. However, the transient model does simulate a significant steepening of this gradient over time, indicating that the quantity of flow from the El Paso Sub-Basin is very limited with respect to the magnitude of pumping occurring in the southern and western portions of the model domain. Furthermore, both observed and simulated groundwater elevations within the El Paso Sub-Basin do not exhibit any significant declines over time in response to pumping within the IWV Basin.

5.3 Model-Calculated and Conceptual Water Budgets

The following sections present comparisons of the conceptual IWV Basin water budgets with the model-calculated water budgets from the calibrated IWV Basin model. The principal water budget component that was adjusted during model calibration was mountain front recharge. The conceptual estimate of natural recharge for the basin was primarily based upon estimates of annual precipitation volumes within the surrounding mountainous regions and previously documented water budget estimates for the IWV Basin (Figure 10). Simulated amounts of evapotranspiration are dependent upon basin inflows and are automatically calculated by the model. Water budget components were calibrated simultaneously for both the steady state and transient time periods.

5.3.1 Steady State Water Budget

The conceptual and calibrated, model-calculated steady state water budgets for 1920 are presented below in Table 5-1. The steady state inflows were developed during the concurrent calibration of the transient model and were held constant for the entire transient time period of 1920 through 2006.

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Table 5-1. Model Simulated 1920 (Steady State) Water Budget

Inflow / Outflow Source	1920 Conceptual Water Budget (AFY)	1920 Simulated Steady State Water Budget (AFY)
INFLOWS (AFY)		
Mountain Front Recharge	9,500	7,521
Groundwater Subflow	1,500	1,300
TOTAL INFLOWS	11,000	8,521
OUTFLOWS (AFY)		
Evapotranspiration (ET)	10,000	7,822
Pumping Wells	1,000	1,000
TOTAL OUTFLOWS	11,000	8,822

Note:
AFY = acre feet per year

Mountain front recharge was spatially distributed according to the areal extent and annual precipitation totals for the various drainage subwatersheds that feed into the active model domain (Figures 11 and 18). This distribution of mountain front recharge can be broken down into three generalized regions: the El Paso Sub-Basin, the Sierra Nevada adjacent to the central portion of the model domain, and the northeastern edge of the IWV Basin. During calibration, recharge amounts were varied within each of these regions to better match observed groundwater conditions.

Overall, it was necessary to reduce recharge by approximately 2,000 AFY from the conceptual estimate to successfully calibrate the model. All of this reduction occurred within the El Paso Sub-Basin. Locally, recharge within this area of the model (south of Freeman Canyon as seen on Figure 4) was set at approximately 750 AFY, representing a reduction of 75 percent from the conceptual estimate for the El Paso Sub-Basin. This adjustment has the effect of also reducing the amount of subflow emerging from this region into the main IWV Basin by the same amount. This lower estimate of subflow from the El Paso Sub-Basin is significant because it was simulated to be a primary source of groundwater recharge in the Ridgecrest area by the end of the transient model simulation.

Mountain front recharge along the northeastern edges of the model domain was increased from a conceptual estimate of approximately 800 AFY to a calibrated value of approximately 1,600 AFY. This adjustment was made in order to match observed water level conditions in the northern portions of the basin and in the vicinity of the playa. Calibrated mountain front recharge along the central and northern portions of the Sierra Nevada in the model remained at the conceptual estimate of approximately 5,140 AFY. An additional 50 AFY of recharge was also applied along the southern edge of the model domain, directly south of Inyokern (Figure 18).

Subflow from the Little Lake area of the model was kept at the conceptual estimate of 1,000 AFY, and subflow from the Coso Basin was reduced from the initial estimate of 500 AFY to approximately 300 AFY.

Overall, recharge was reduced approximately 21 percent (2,000 AFY), which is considered reasonable given the level of uncertainty in the recharge estimates. Without such adjustments, the model was unable to simulate the observed water levels effectively. It should be noted that uncertainties regarding the subsurface geology and origin of the steep groundwater gradient between the El Paso Sub-Basin and southwest area of the main IWV Basin have challenged investigators for decades.

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5.3.2 Transient Water Budget

Calibrated, model-calculated transient water budgets for selected model years are compared with the conceptual, present day transient water budget in Table 5-2. The simulated, transient water budgets for the various years correlate with the water level contours presented in Figures 23 through 26.

Table 5-2. Comparison of Model-Calculated Transient Water Budget with Conceptual Water Budget

Inflow / Outflow Source	Conceptual Present Day Water Budget (AFY)	2006 Simulated Water Budget (AFY)	1985 Simulated Water Budget (AFY)	1953 Simulated Water Budget (AFY)
INFLOWS (AFY)				
Mountain Front Recharge	9,500	7,521	7,521	7,521
Groundwater Subflow	1,500	1,300	1,300	1,300
Storage	17,346 to 21,346	20,236	22,114	7,737
TOTAL INFLOWS	28,346 – 32,346	29,057	30,935	16,558
OUTFLOWS (AFY)				
Evapotranspiration (ET)	4,000 to 8,000	4,715	6,186	7,687
Pumping Wells	24,336	24,336	24,739	8,725
TOTAL OUTFLOWS	28,336 to 32,336	29,051	30,925	16,412

Note:
AFY = acre feet per year

Mountain front recharge and groundwater subflow were both held constant over the entire transient model time period, and the significance of the differences observed between the simulated values and conceptual estimates is discussed above in Section 5.3.1. All other components of the calibrated 2006 model budget were within the range of conceptual estimates. The conceptual, annual ET rate for present day conditions was based only upon interpreted declines in water levels and the associated changes in depth to water beneath the playa. Additional information on actual water levels and local water budget features in the vicinity of the playa would be required to improve the certainty in model-calculated ET values.

Total simulated groundwater inflows appear to have increased over time due to the increase observed in simulated storage inflow. In modeling terms, storage inflow refers to groundwater dewatering (or depletion) over time, or the degree to which the groundwater pumping and other groundwater demands were "overdrafting" natural basin inflows. Total simulated outflows increase dramatically from both the 1920 (steady state) and 1953 time periods due to large increases in total estimated groundwater pumping. However, simulated ET continued to decline over the simulation time period. This is due to the lowering of water levels within the model's potential ET zone (Figure 18), thereby reducing the overall flux of ET within the model. The reduction in the active ET area in response to increased pumping can also be viewed on Figures 23 through 26. The simulated decline in ET flux over the simulated time frame does offset some of the increase in pumping; however, a comparison of storage versus basin groundwater pumping suggests that over 80 percent of present day pumping, or more than 20,000 AFY, is derived from aquifer dewatering. The bulk of this dewatering is apparent when viewing the groundwater cone of depression discussed previously in Section 5.2.2 and viewed on Figure 26.

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Figure 27 shows the transient, model-calculated water budget components over the simulated time frame. At early simulation times, model inflows are dominated by recharge, which represents both mountain front recharge and groundwater subflow in this figure. However, a comparison of both the model inflows and outflows shows that by the late 1950s groundwater pumping is the dominant outflow component in the basin and is in excess of natural basin inflows. This is also reflected in the fact that groundwater storage (or aquifer dewatering) begins to exceed all basin inflows by the early 1960s. The closely correlated inverse relationship between pumping and groundwater storage depletion strongly suggests that the IWV Basin groundwater demands are largely being satisfied by aquifer dewatering. The gradual decline of ET over time is also shown on Figure 27. Although the reduction in ET is almost 3,000 AFY, it is approximately 20,000 AFY less than the estimated increase in basin pumping. As described above, this 20,000 AFY difference is accounted for by the removal of groundwater from storage as seen on the Figure 27 on the groundwater inflows graph. The cumulative total groundwater storage depletion in the basin since 1920 using the annual model flux (Figure 27) was estimated to be approximately 900,000 acre-feet, the bulk of which has occurred since the 1950s.

To provide a check on the above cumulative estimate of storage depletion, the interpreted water level contours for 1920 and 2006 were interpolated by mathematical kriging techniques and a volumetric difference between the two water level surfaces was estimated in GIS to determine the bulk volume of aquifer that had been dewatered (approximately 7,560,000 acre-feet of bulk aquifer material and water). Assuming a model derived, total volume of groundwater depletions within the IWV Basin of 900,000 acre-feet, an overall effective porosity value of approximately 12 percent was calculated for the dewatered portions of the regional aquifer. This 12 percent value compares favorably with the range of calibrated specific yield estimates presented in Table 4-3. This agreement in both model calibrated and observed storage estimates provides greater confidence for the total aquifer depletion estimates presented in this report.

5.4 Quantitative Calibration

The quantitative analysis of the model calibration utilized both statistical measures of model residuals, as described in Section 5.1.2, and direct comparisons of simulated and observed water levels. Variations between the simulated and observed water levels were analyzed as functions of space and time.

5.4.1 Selection of Calibration Targets and Goals

Water level data to support model calibration were available for 1920; however, the majority of the data were located in the central portion of the model with little to no data in the northern, far eastern and southwestern portions of the model. Due to this spatial bias, the steady state calibration of 1920 relied upon a generalized flow regime derived in part from more recent interpretations of groundwater conditions and water budget estimates.

The goal of the steady state simulation was to approximate the generalized, predevelopment flow regime as well as to match the observed water levels (or "calibration targets") as closely as possible in order to provide initial conditions for transient runs. Over 100 water level measurements were identified as calibration targets representative of the steady state system, as shown in Table 5-1. Calibration targets for the transient portion of the model included: 1) measurements for the seven transient calibration periods shown in Table 5-1, and 2) interpreted groundwater elevation contours for the years 1920, 1953, 1985 and 2006. Water level measurements that were used as calibration targets spanned the period from the 1920s through 2006. All water level data were provided by Kern County or extracted from the reports by Berenbrock and Martin (1991) and Clark (1999). This information is provided digitally in Appendix Z.

Sources of water level data include Kern County for the majority of data post-1950, Berenbrock and Martin (1991) for 1920 and 1985 water levels, and Clark (1999) for water levels recorded between 1920 and 1998. A total of eight calibration periods were identified, based upon the calibration years used in the Clark model and

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2006. These calibration years were also confirmed by an assessment of the number and spatial distribution of water levels at the selected time periods. A total of 821 targets were identified for these calibration periods. All calibration targets were applied to Layer 2 of the model to insure that saturated conditions existed at all target locations. In support of this placement of calibration targets, simulated Layer 2 water levels were observed to be equivalent to Layer 1 water levels throughout the basin.

Calibration targets were weighted according to the reliability of the water level measurements and the level of uncertainty regarding hydrogeologic parameters in a given region. In areas with high uncertainty, lower weighting (< 1.0) can be applied to direct the model calibration process towards honoring water levels in areas with more certainty and data. Targets within approximately 4 miles of the outlet of Freeman Canyon and within the El Paso Sub-Basin were scarce and have a relatively large spatial distribution. Due to the large uncertainty regarding hydraulic parameters and geologic conditions within this area, these targets were assigned a weight of 0.25. Targets within Township 24, Range 39 and 40; the northeast portion of Township 25, Range 40; and the northern portion of Township 25, Range 41 were also deemed to have a low resolution in water level data both temporally and spatially as well as a poor understanding of hydrogeologic conditions. These targets were assigned a weight of 0.5. All other targets were assigned a weight of 1.0.

Table 5-3. Summary of Calibration Targets For The Major Calibration Periods In The IWV Basin Model

Year	Simulation	Stress Period	Time Step	Number of Targets
1920	Steady State	1	1	103
1946	Transient	5	2	22
1953	Transient	7	1	39
1965	Transient	9	3	54
1975	Transient	11	6	49
1985	Transient	21	6	120
1995	Transient	31	6	209
2006	Transient	42	6	225

5.4.2 Calibration Metrics

During calibration, residuals are calculated to assess the "fit" of the model-calculated (or simulated) heads to those actually observed. A residual is defined as the observed (or field-measured) water level minus the simulated water level at the same location. Positive residuals represent a model-calculated head value that is lower than the observed head value, and negative residuals represent a model-calculated head value that is higher than the observed value. A residual value of 0 represents a perfect fit between the model-calculated and observed values. During calibration, the goal is to minimize the residual statistics while remaining within the acceptable range for water budget components, hydraulic parameters, and flow regime requirements.

Plotting the residuals on a map with simulated water level contours provides an indication of the spatial distribution of model error and helps guide the calibration process. Trends in the distribution of error, such as clusters of values that are all too high or too low, indicate spatial bias.

Calibration statistics based on the residual are used as a quantitative measure of the overall ability of the model to match calibration targets. Calibration statistics that were calculated to quantify the average error included:

- Absolute Residual Mean (ARM), the average of the absolute value of the residuals;

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- Residual Mean (RM), the average of the residuals; and
- Residual Standard Deviation (RSD), the standard deviation of the residuals.

When the ratio of the ARM to the range of observed head values in the system is small, discrepancies between simulated and observed values comprise only a small part of the overall model response (Anderson and Woessner, 1992). One of the goals of the quantitative calibration process was for the ratio of the ARM to the range in observed heads to be less than 5 percent for any given calibration period. Total interpreted head change across the model domain is approximately 700 feet; therefore, the ARM should be less than 35 feet to meet this goal. Generally, American Society of Testing Materials (ASTM) standards were followed whenever possible during the quantitative calibration of the model (ASTM, 2008).

5.4.3 Model Calibration Statistics

Table 5-4 presents a summary of the calibration statistics for steady state and transient residuals for the IWV Basin model. Weighted residuals were calculated for all target calibration periods. As discussed in Section 5.4.2, one goal for calibration was to minimize the ARM value to be less than 35 feet, or less than 5 percent of the interpreted range in water level across the model domain (approximately 700 feet). The ARM for all eight calibration target years was well below the 35 foot criteria with the highest ARM occurring in 1995 at 19.43 feet. Over the transient model simulation time period the ARM steadily increased; however, the range in observed target water levels also increased.

A more rigorous goal for model calibration was to keep the ARM less than 5 percent of the actual range of observed water levels for a given time period. The model successfully met this more stringent calibration criteria with the exception of the year 1985. As illustrated on Figure 25, locations of all target water levels for 1985 were located in the central portion of the IWV Basin and had a significantly smaller range in observed target values than other calibration years. Given that the magnitude of the ARM for model year 1985 was less than that for the statistically calibrated 1995 and 2006 time periods, this year was also deemed to be successfully calibrated.

Table 5-4. Transient Model Calibration Statistics

Year	Residual Mean	Residual Standard Deviation	Absolute Residual Mean	Range in Target Values	Standard Deviation / Range	Absolute Residual Mean / Range in Target Values	Absolute Residual Mean / 700 feet
1920	4.20	9.96	7.45	182.90	0.05	4.07	1.06
1946	3.00	9.80	6.81	172.90	0.06	3.94	0.97
1953	3.89	8.53	6.80	196.40	0.04	3.46	0.97
1965	4.31	7.50	5.86	195.70	0.04	2.99	0.84
1975	3.05	11.75	8.79	208.50	0.06	4.21	1.26
1985	4.07	19.28	15.11	101.27	0.19	14.92	2.16
1995	4.00	26.81	19.43	557.24	0.05	3.49	2.78
2006	6.41	26.93	18.76	709.55	0.04	2.64	2.68

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5.4.4 Observed Water Levels versus Model Residuals

Figures 23 through 26 also display the locations and magnitudes of the weighted model residuals for the model calibration targets. The spatial distribution of the targets changed with each model year depending upon the availability and quality of water level data. Figure 23 shows the model residuals for the steady state simulation. Generally, the residuals in the northern portion of the model domain are very low and only slightly above observed conditions (negative residuals), whereas water levels in the vicinity of Ridgecrest and the NAWS are generally higher than observed values. However, the majority of residuals fall within 10 feet of observed values. The evolution of these model residuals over the simulated time frame can be observed by reviewing Figures 24 through 26.

A review of the 2006 model residuals, displayed on Figure 26, shows that the majority of residuals fall within 27 feet of the observed 2006 water level values. Simulated model water levels are locally underestimated immediately south of the playa. However, as discussed in the conceptual model (Section 3.0), many shallow wells located close to the playa are not reflective of the regional groundwater system but rather are more indicative of perched or shallow groundwater conditions fed by surface water runoff towards the playa or discharge from the local wastewater treatment facility. The bias in this area of the model domain was, therefore, judged to be acceptable for the simulation of regional aquifer conditions.

The model was unable to completely simulate the depth of the groundwater decline that has occurred in the western portion of Ridgecrest, although it was able to closely match observed water levels immediately surrounding all of the major pumping centers. The localized cone of depression observed west of Ridgecrest is not reproducible in the groundwater model without significantly altering localized hydraulic parameters, assuming highly confined conditions for observed water levels, or introducing sharp heterogeneity and/or structural controls. Such alterations would violate the current conceptual model, not be defensible at this time, likely cause additional problems in the flow model, and be against the current professional judgment of the project hydrogeologists. Additional field data collection efforts and aquifer testing would aid in refining the hydrogeologic conceptualization of the aquifer near the major pumping centers. However, the distribution and magnitude of model residuals Basin-wide was deemed appropriate to use the model for future predictive simulations of water level and water quality changes for planning purposes.

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6. MODEL LIMITATIONS AND UNCERTAINTY

As described in Section 3.0, which describes the geologic and hydrogeologic conceptual model, the groundwater flow system in the IWV Basin is complex. On the regional or basin-wide scale, the water budget for the basin can be considered to be relatively straightforward, with inflows primarily from mountain front recharge and a smaller amount from inter-basin subflow. Water exits the basin from either groundwater pumping or ET. Based on the research and analyses associated with model development, the general magnitudes of the total inflows and total outflows are now believed to be estimated with greater confidence; however, as discussed in the model results section, there is some uncertainty in the specific magnitude of each inflow and outflow component over various time periods. The spatial distribution of hydrogeologic properties also remains somewhat uncertain. The following paragraphs have been provided to assist in understanding the uncertainties that remain in the model and the limitations that should be considered when interpreting or using the results.

Based on an analysis of available data, prior to approximately the mid- to late-1970s the primary inflow into the basin was mountain front recharge and the primary outflow was ET from the playa. The primary basin inflow continues to be mountain front recharge, but basin outflow is now dominated by groundwater pumping with a secondary, poorly defined amount of outflow from ET. The uncertainty regarding how much outflow occurs via ET is not overly important to determining long-term available water resources in the basin, although it does have relevance to the accuracy of predictions that can be made using the model. The importance of knowing how much groundwater leaves the basin via ET within the playa is derived from its impact on how the model simulates source areas of water that supply groundwater extraction wells. Knowing how the model is simulating the movement of groundwater within the basin has relevance when using the model to evaluate three important objectives in the basin: the long-term impact on water levels from new wells, the impacts of artificial recharge projects, and the potential migration of poor quality groundwater towards pumping wells. These issues are discussed further below.

In general, questions regarding groundwater flow model results fall into several categories, including:

1) Basin-scale water budget
2) Water level changes associated with wells, well fields, or artificial recharge over a period of time
3) How future groundwater quality might change under different groundwater pumping regimes

Models of complex basins or with poorly constrained estimates for key model inputs are generally still useful to address category 1 questions (basin-scale water budgets). To confidently answer category 2 questions a model with a high level of confidence on the spatial distribution and magnitude of aquifer properties such as hydraulic conductivity and storage (porosity) in addition to suitably constrained estimates of basin water balance components. Category 3 questions are often best answered by coupling a chemical fate and transport model to the flow model, although the coupling of a particle tracking model with the flow model can also be useful.

The following series of semi-quantitative descriptors and associated definitions have been developed to assist with understanding uncertainties associated with various model parameters of the IWV Basin model:

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Well-constrained – The parameter is considered well-defined with magnitudes constrained within a reasonably small range of possible values derived from either direct measurement or estimated from an associated attribute.

Model inputs/parameters that are considered to be well-constrained include subsurface outflow from the basin, basin thicknesses, and groundwater pumping. Subsurface outflow is considered well-constrained because based on a combination of alluvial thickness and depth to water data, it is widely accepted that groundwater cannot leave the basin via horizontal flow into adjacent basins except via deep bedrock flow. Pumping is considered well-constrained because most of the large pumpers in the basin record and report their annual pumping. Reasonably reliable estimates can be made for entities that do not report annual pumping. Although limiting the modeled portion of the basin to the upper 2,000 feet was not based on rigorous data collection or measurement, the available data and analogs from similar basins are sufficient to make the conclusion that sediments below a depth of 2,000 feet play a negligible part in the current and past circulation of groundwater through the basin.

Moderately-constrained – Although limited direct measurement data may be available or feasible to collect, sufficient data or defensible analogs exist and allow for the parameter value(s) to be estimated within a moderate range of published values.

Model inputs or parameters that are considered moderately-constrained are mountain front recharge, storage parameters (specific storage and specific yield) for the saturated alluvium, and hydraulic conductivity (in select areas of the basin that have data from borings and well installations). Mountain front recharge is considered moderately-constrained because the primary inputs of surface area, elevation, and precipitation are known or can be estimated with suitable precision, and because quality analogs exist for comparison. Even though they are not easily measured, aquifer storage properties are considered moderately-constrained because they have a relatively small and well understood range of values for the types of lithologies found within the basin. Where quality lithologic or geophysical logs exist or where quality aquifer testing has occurred, bulk aquifer hydraulic conductivity values are believed to be estimated with reasonable confidence. However, much of the basin has very limited or no high quality lithologic or aquifer testing data. Therefore, significant portions of the basin, typically in areas that have not been developed, are also considered to be poorly constrained with regards to hydraulic conductivity.

Poorly-constrained – Defined as parameters with little or no direct measurement and no commonly defensible methods to develop a reliable estimate.

Model inputs or parameters that are considered poorly-constrained include hydraulic conductivity where no lithologic or geophysical logs exist, subflow into the IWV Basin from the Rose Valley and Coso Basins, and the magnitude of ET that exits the basin over time. Where no lithologic or geophysical logs exist, hydraulic conductivity estimates can only be based on geologic principles such as distance from mountains (generally coarser and more permeable alluvium predominates closer to the mountains), or the magnitude of the hydraulic gradient (if suitable water level data exists). However in much of the northern, southwestern and deep portion of the basin these sorts of estimates were not possible because of the hydrogeologic setting and lack of field data. As a result, Brown and Caldwell used 3-D kriging which utilized both real data and theoretical data points, which were located based on an assumed geologic model. Due to the absence of suitable water level and lithologic data along the northern and northeastern portions of the basin, no reliable method for estimating subflow into the basin was feasible. The values used were minimal and based on the calibration process and the total estimated basin water budget inflows minus estimated mountain front recharge. Quantifying ET is a complex function of depth to water, soil properties, and weather parameters such as temperature, humidity, and wind. Although many of these parameters can be estimated based on analogs from other desert basins, the total magnitude of ET developed in the model is estimated to be ± 50 percent. How the model estimated value for ET changes with time is also uncertain as it depends on many of the other parameters already discussed; each of which has their own degree of uncertainty.

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Given the above parameter uncertainties, the IWV Basin groundwater model is useful for answering category 1 questions on basin-scale water budget. As indicated in Section 5.4.4, further exploratory borings and/or aquifer testing is merited in certain areas were data is limited or lacking or where high pumping stresses are present (such as in the vicinity of Ridgecrest). However, the relative changes in water levels simulated in response to various pumping or recharge scenarios should still be useful for planning purposes. Uncertainty at the local scale (such as a single well site) as well as the model grid cell spacing of ¼ mile should also be considered when evaluating the relevance of model results for a given application. Lastly, general water quality changes and migration potential of various chemical species may also be predicted by particle tracking, although the full coupling of a chemical fate and transport model would be preferable with the collection of additional, supporting field data.

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7. PROJECT SUMMARY AND CONCLUSIONS

Brown and Caldwell has updated the conceptual hydrogeologic model for the IWV Basin and developed both a numerical computer-based groundwater flow model of the basin and a digital data management and analysis system of the available water level and groundwater pumping data for the basin.

The IWV Basin conceptual model relied upon existing data and previous studies by the USGS, USBR and those conducted for NAWS China Lake. Four key hydrostratigraphic features were identified that were critical in understanding the basin-wide water budget and in developing the hydrogeologic conceptual model. These features include:

- North-south fine-grained sediment plug in the west –central basin,
- East-west high permeability gravel zone in the Ridgecrest-Inyokern area,
- High groundwater gradient between the El Paso Sub-Basin and the Southwest Area of the main IWV Basin, and
- Playa evapotranspiration (ET) losses and changes over time.

A conceptual basin-scale groundwater budget was developed that included inflows from mountain front recharge, subflow, and infiltration from surface flows thru Little Lake Gap; and outflows from groundwater pumping and ET from the playa. Prior to the onset of extensive pumping in the 1950s, groundwater flow was generally radial directed toward the playa, where it flowed upwards vertically through semiconfining layers and evaporated. The conceptual basin water budget for assumed steady state conditions in 1920 was approximately 11,000 AFY of total inflow and outflow (including 1,000 AFY of groundwater pumping).

Brown and Caldwell has developed a three-dimensional, MODFLOW-2000-based, finite difference, numerical groundwater flow model for the IWV using common format project databases and a fully integrated combination of 3 software packages, including GIS, EVS, and a MODFLOW modeling interface. The IWV Basin numerical groundwater flow model has four layers and a uniform cell spacing of one-quarter mile. The active groundwater flow domain covers approximately 450 square miles and extends to a maximum depth of 2,000 feet bls. The model was used to simulate historical groundwater elevations, natural water budget components, and pumping from 1920 to 2006.

During the model calibration process, the aquifer material properties, recharge, subflow and ET were varied in an effort to best match available measured historical water level data. In general, the model results simulate the historical water levels very well for the early years (including 1920 and 1953), with greater deviations from observed conditions in later years (including 1985 and 2006). A review of the 2006 model residuals shows that simulated model water levels are locally overestimated in the vicinity of Ridgecrest (most likely due to intense local pumping depressions), and underestimated immediately south of the playa (due to local shallow perched conditions). Based upon a thorough set of quantitative calibration criteria, the basin-wide distribution of model water levels was deemed appropriate to use the model for future predictive simulations and planning purposes. If greater resolution is desired in the vicinity of the Ridgecrest or south of the playa, additional investigations of aquifer properties and refinement of the model will be necessary for improved model resolution.

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One of the most significant results of the IWV Basin Groundwater Flow Model and Hydrogeologic Study has been the estimation and refinement of the basin water budget. Additionally, the amount of groundwater pumping in excess of natural basin inflows, or overdrafting of the regional groundwater system, was estimated. Total simulated outflows increase dramatically from both the 1920 (steady state) and 1953 time periods due to large increases in total estimated groundwater pumping. This has occurred in spite of the continued decline of simulated ET as groundwater pumping in the southern and western portions of the basin captured an increasing amount of groundwater flow before it reaches and evaporates at the playa. The simulated decline in ET flux over the modeled time frame does offset some of the increase in pumping, however, a comparison of storage versus basin groundwater pumping suggests that over 80 percent of present day pumping is derived from aquifer dewatering. The model calibration process also indicated that much less recharge was occurring from the El Paso Sub-Basin than previously postulated, which in part explains the steep drop in water levels between the El Paso Sub-Basin and the southwest area of the main IWV Basin. Since approximately 1980, the annual change in groundwater storage (overdraft) has averaged approximately 20,000 AFY and is estimated to total approximately 900,000 acre-feet since 1920, the bulk of which has occurred since the 1950s. The IWV Basin groundwater flow model will be a useful tool in upcoming efforts to manage existing groundwater resources, as well as evaluate future groundwater management alternative and approaches, including: artificial recharge, well field management, future well field placement, pumping variations, and the storage of surplus aqueduct water. However, the ongoing incorporation of additional and new hydrogeologic and water budget information in future IWV Basin model updates will improve the certainty and confidence in simulations of both current and future groundwater conditions.

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8. REPORT LIMITATIONS

This document was prepared solely for the Indian Wells Valley Water District in accordance with professional standards at the time the services were performed and in accordance with the contract between the Indian Wells Valley Water District and Brown and Caldwell. This document is governed by the scope of work authorized by the Indian Wells Valley Water District. We have relied on information or instructions provided by the client and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such provided information.

Further, Brown and Caldwell makes no warranties, express or implied, with respect to this document, except for those, if any, contained in the agreement pursuant to which the document was prepared. All data, drawings, documents, or information contained this report have been prepared exclusively for the person or entity to whom it was addressed and may not be relied upon by any other person or entity without the prior written consent of Brown and Caldwell unless otherwise provided by the Agreement pursuant to which these services were provided.

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FIGURES

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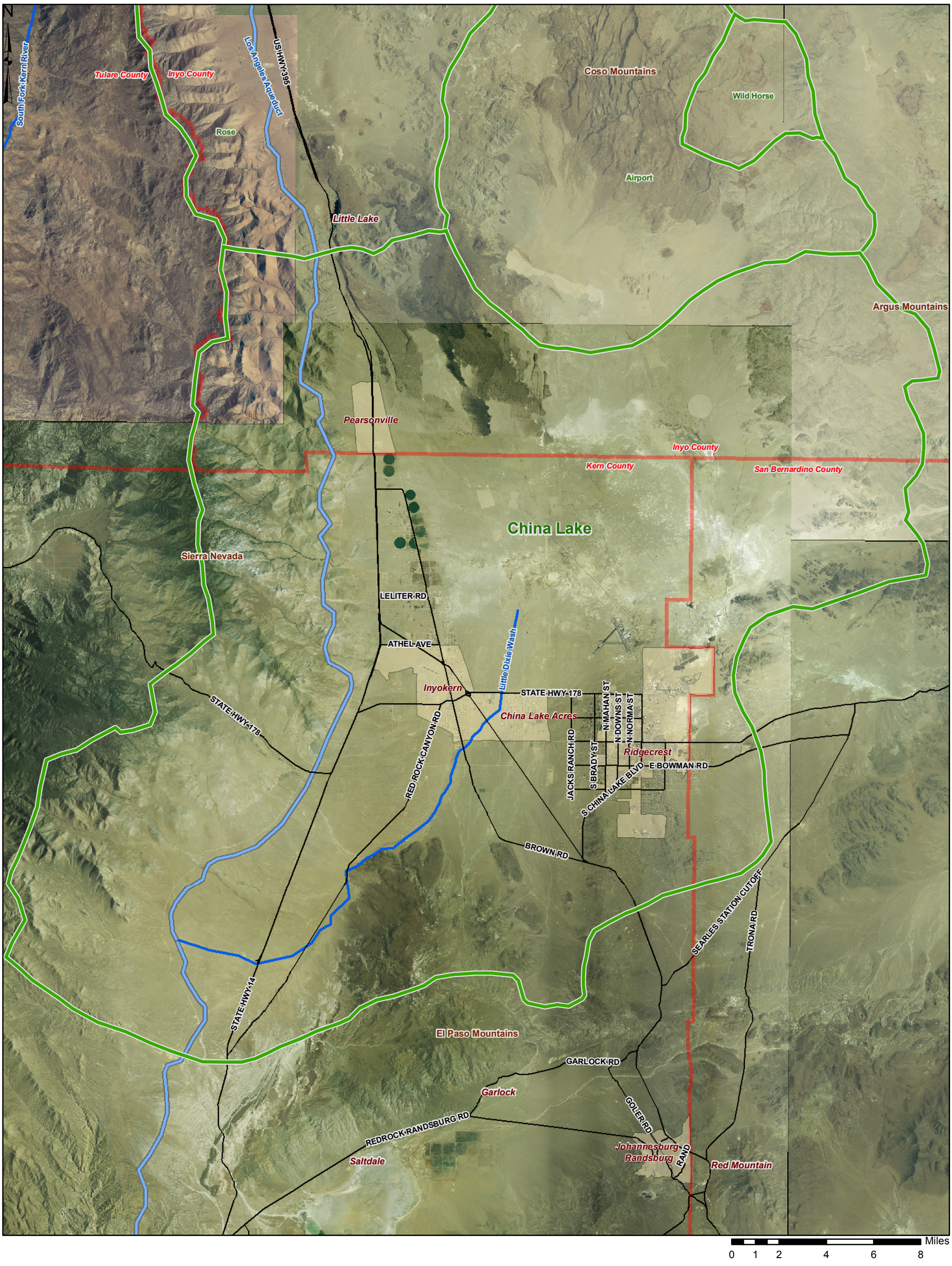

NOTE: Watershed boundary coverage file, hbasa2.shp, obtained from the State of California.

EXPLANATION

WATERSHED BOUNDARY

COUNTY BOUNDARY

WASH

AQUEDUCT

BROWN AND CALDWELL

Figure 1
REGIONAL MAP OF INDIAN WELLS VALLEY
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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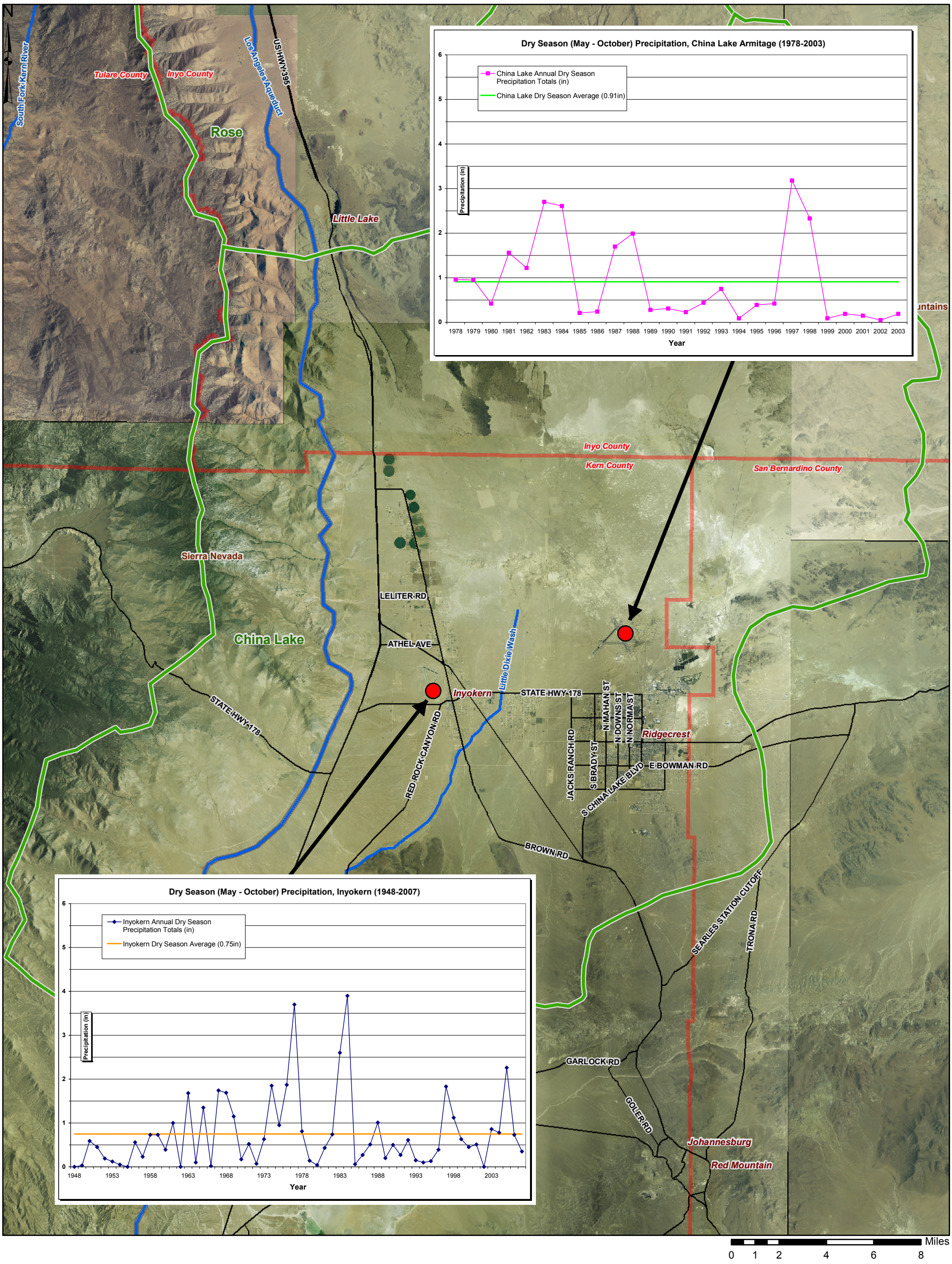

NOTE:
Dry Season precipitation is the sum of the monthly precipitation data in that time period for that year.

Seasonal average is over the period of record.

EXPLANATION

COOPERATIVE OBSERVER PROGRAM STATION LOCATIONS

WATERSHED BOUNDARY

BROWN AND CALDWELL

Figure 2a
RECORDED DRY SEASON PRECIPITATION: INYOKERN AND CHINA LAKE ARMITAGE FIELD STATIONS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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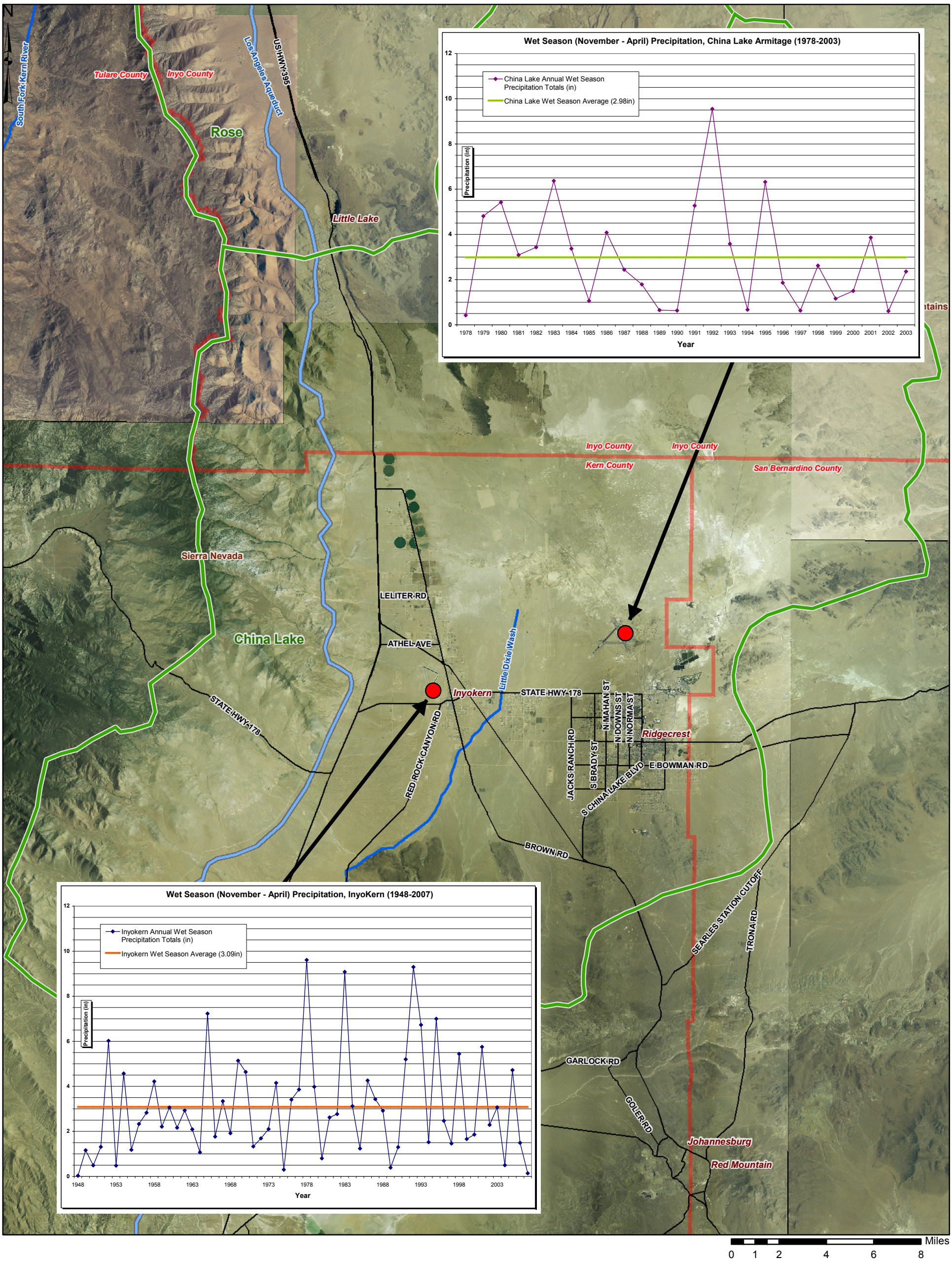


EXPLANATION

NOTE:
Wet Season precipitation is the sum of the monthly precipitation data in that time period for that year.

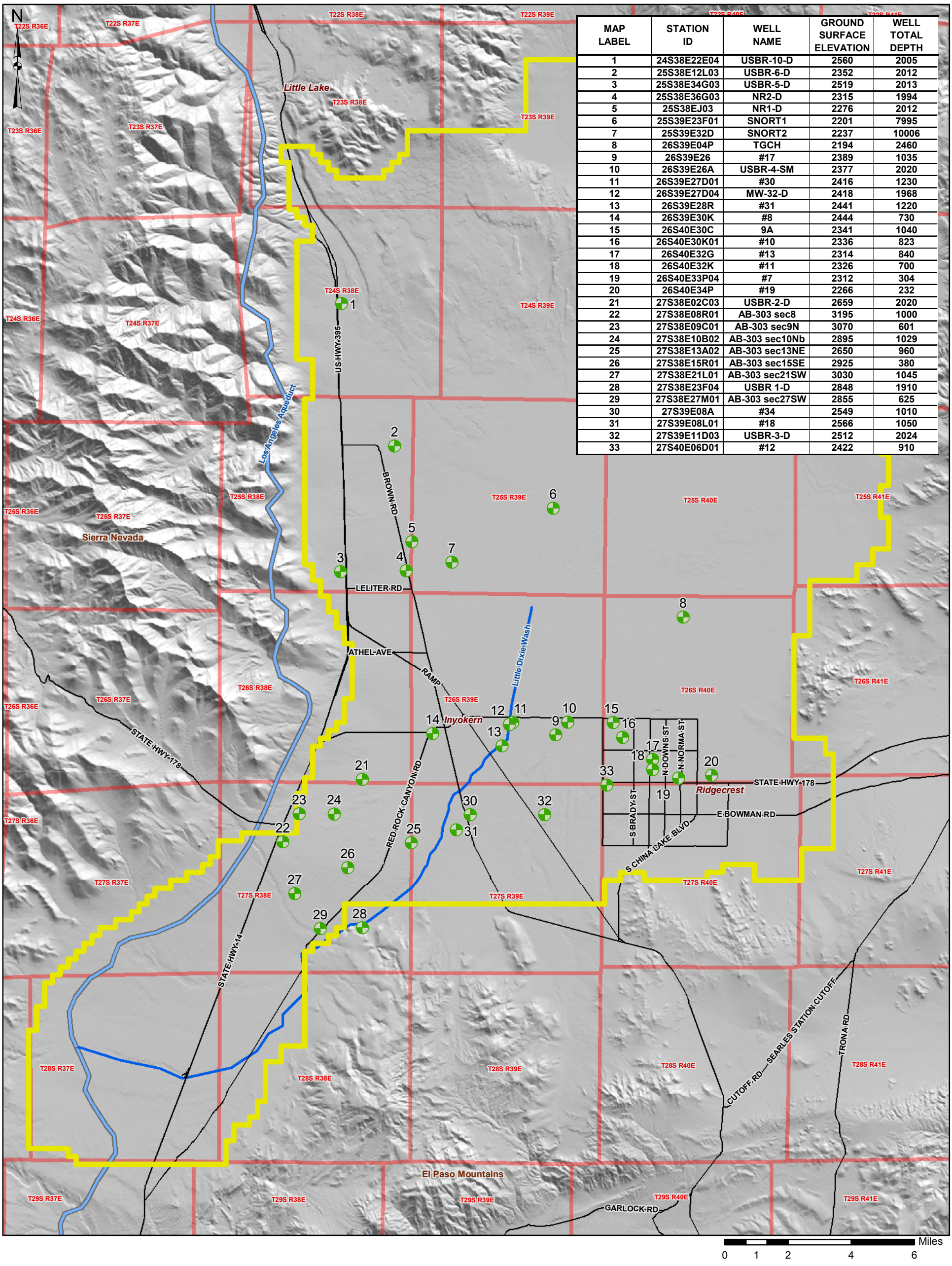
Seasonal average is over the period of record.

COOPERATIVE OBSERVER PROGRAM STATION LOCATIONS

WATERSHED BOUNDARY

BROWN AND CALDWELL

Figure 2b
RECORDED WET SEASON PRECIPITATION: INYOKERN AND CHINA LAKE ARMITAGE FIELD STATIONS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



MAP LABEL	STATION ID	WELL NAME	GROUND SURFACE ELEVATION	WELL TOTAL DEPTH
1	24S38E22E04	USBR-10-D	2560	2005
2	25S38E12L03	USBR-6-D	2352	2012
3	25S38E34G03	USBR-5-D	2519	2013
4	25S38E36G03	NR2-D	2315	1994
5	25S38EJ03	NR1-D	2276	2012
6	25S39E23F01	SNORT1	2201	7995
7	25S39E32D	SNORT2	2237	10006
8	26S39E04P	TGCH	2194	2460
9	26S39E26	#17	2389	1035
10	26S39E26A	USBR-4-SM	2377	2020
11	26S39E27D01	#30	2416	1230
12	26S39E27D04	MW-32-D	2418	1968
13	26S39E28R	#31	2441	1220
14	26S39E30K	#8	2444	730
15	26S40E30C	9A	2341	1040
16	26S40E30K01	#10	2336	823
17	26S40E32G	#13	2314	840
18	26S40E32K	#11	2326	700
19	26S40E33P04	#7	2312	304
20	26S40E34P	#19	2266	232
21	27S38E02C03	USBR-2-D	2659	2020
22	27S38E08R01	AB-303 sec8	3195	1000
23	27S38E09C01	AB-303 sec9N	3070	601
24	27S38E10B02	AB-303 sec10Nb	2895	1029
25	27S38E13A02	AB-303 sec13NE	2650	960
26	27S38E15R01	AB-303 sec15SE	2925	380
27	27S38E21L01	AB-303 sec21SW	3030	1045
28	27S38E23F04	USBR 1-D	2848	1910
29	27S38E27M01	AB-303 sec27SW	2855	625
30	27S39E08A	#34	2549	1010
31	27S39E08L01	#18	2566	1050
32	27S39E11D03	USBR-3-D	2512	2024
33	27S40E06D01	#12	2422	910

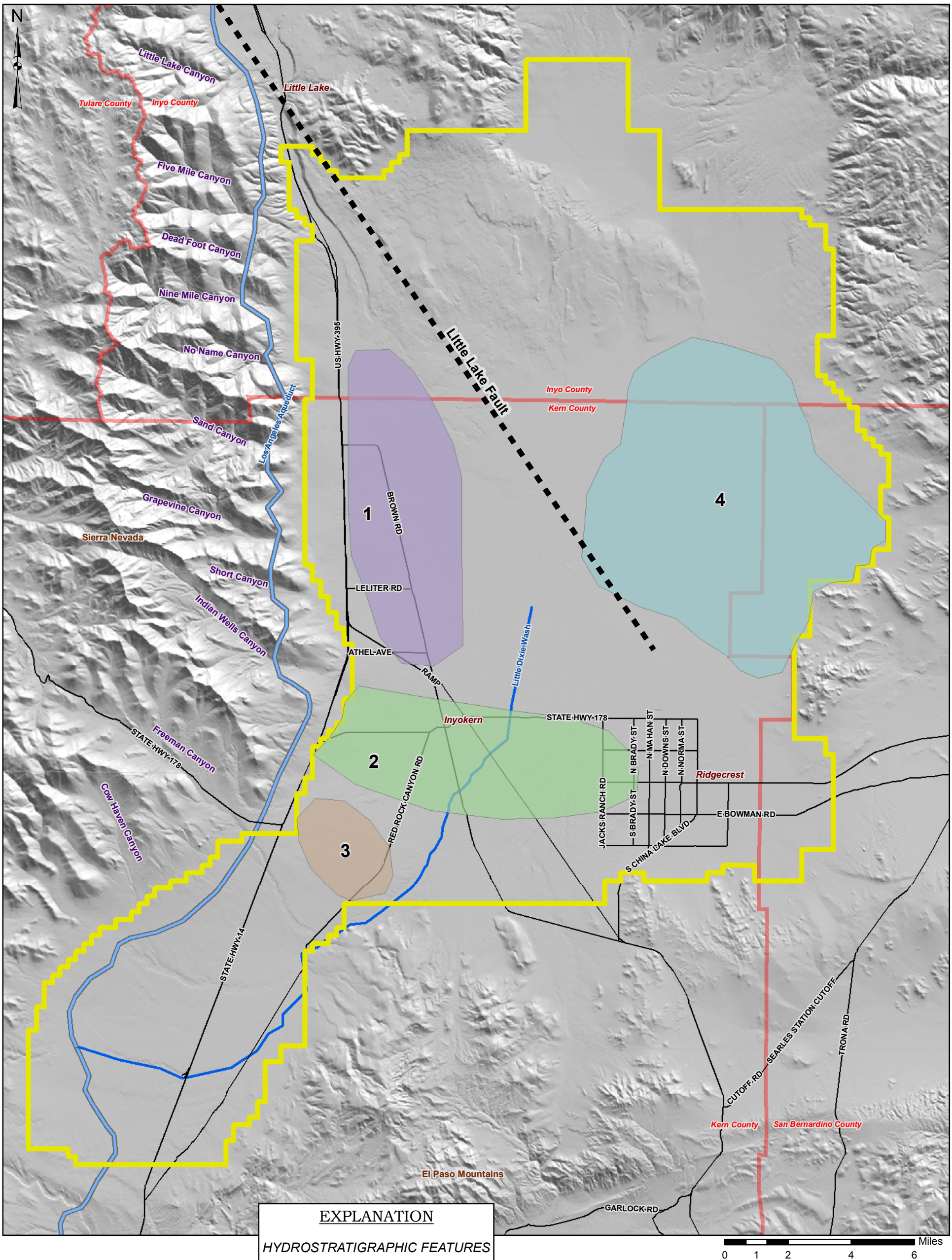
EXPLANATION

BOREHOLE LOCATION

ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

Figure 3
BOREHOLE - GEOLOGY LOCATIONS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



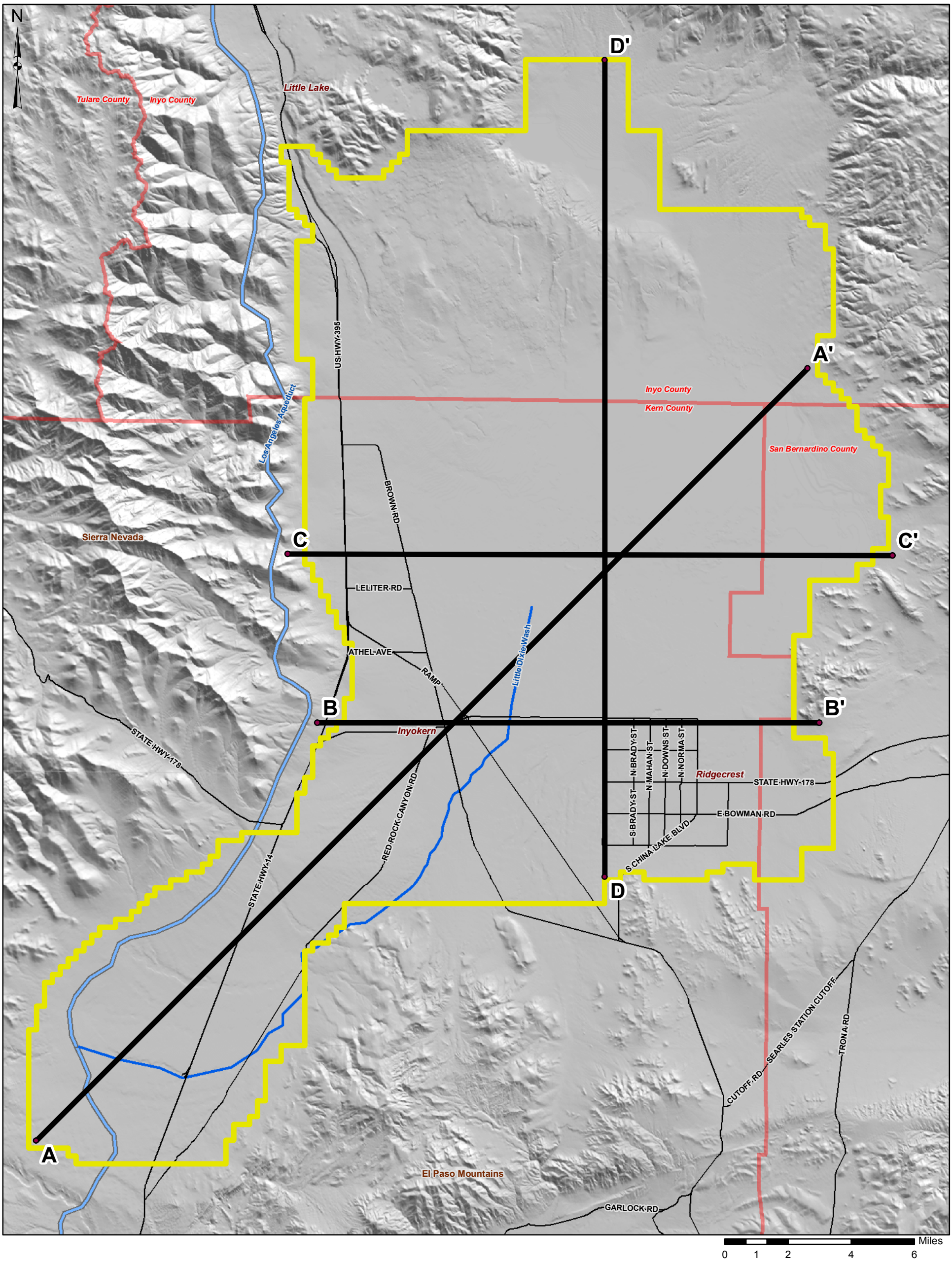
EXPLANATION

HYDROSTRATIGRAPHIC FEATURES

- 1 - FINES PLUG
- 2 - GRAVEL ZONE
- 3 - HIGH GRADIENT
- 4 - PLAYA
- LITTLE LAKE FAULT
- ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

Figure 4
CONCEPTUAL HYDROSTRATIGRAPHIC FEATURES
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



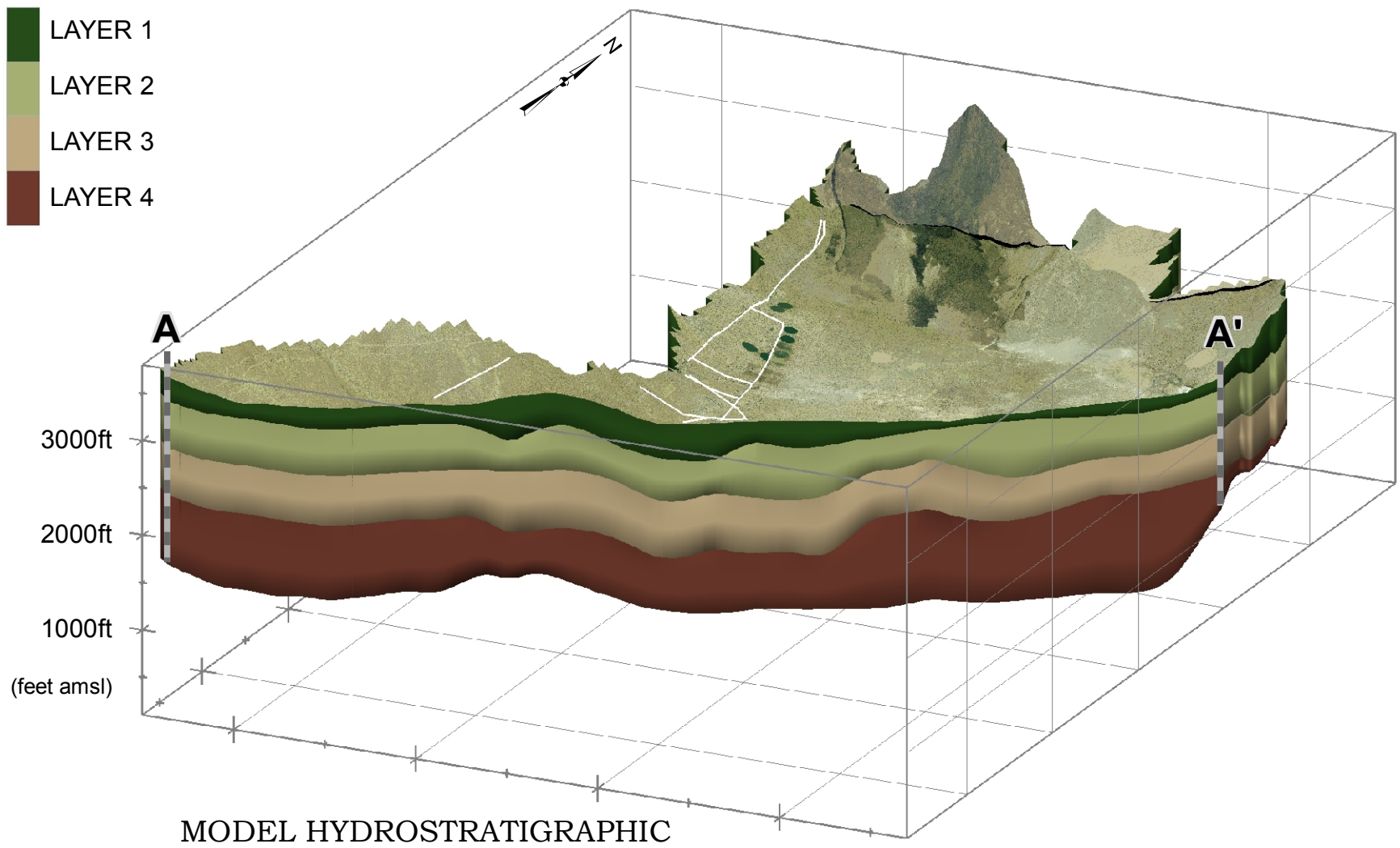
EXPLANATION

GEOLOGIC AND MODEL HYDROSTRATIGRAPHIC CROSS-SECTION LINES

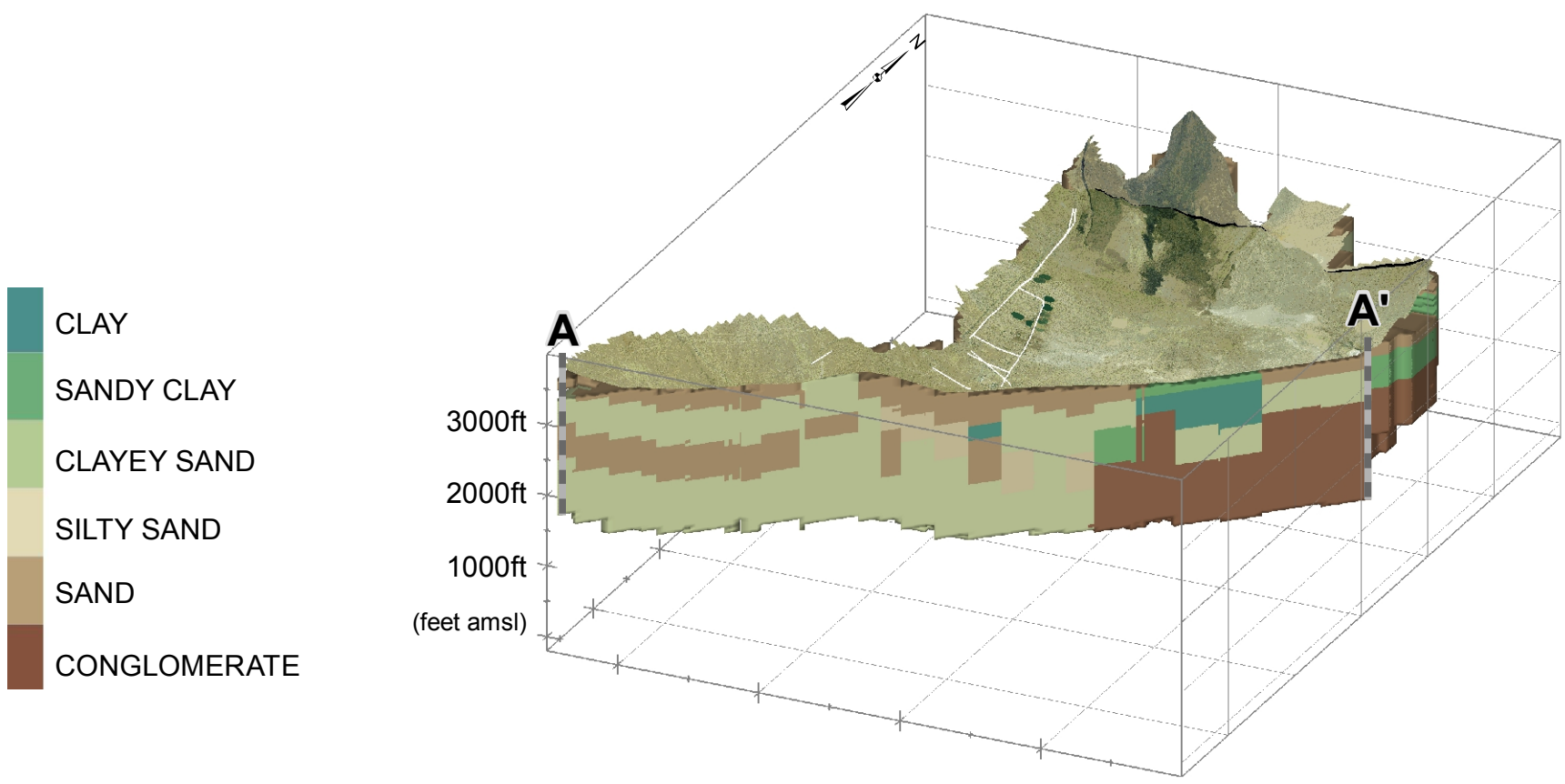
ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

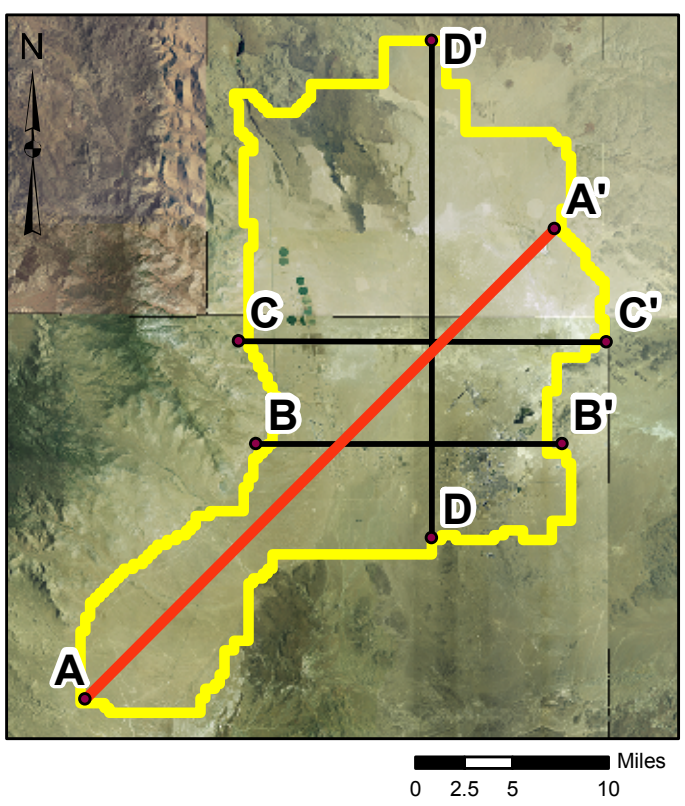
Figure 5
CROSS SECTION LOCATIONS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



MODEL HYDROSTRATIGRAPHIC
CROSS SECTION A-A'

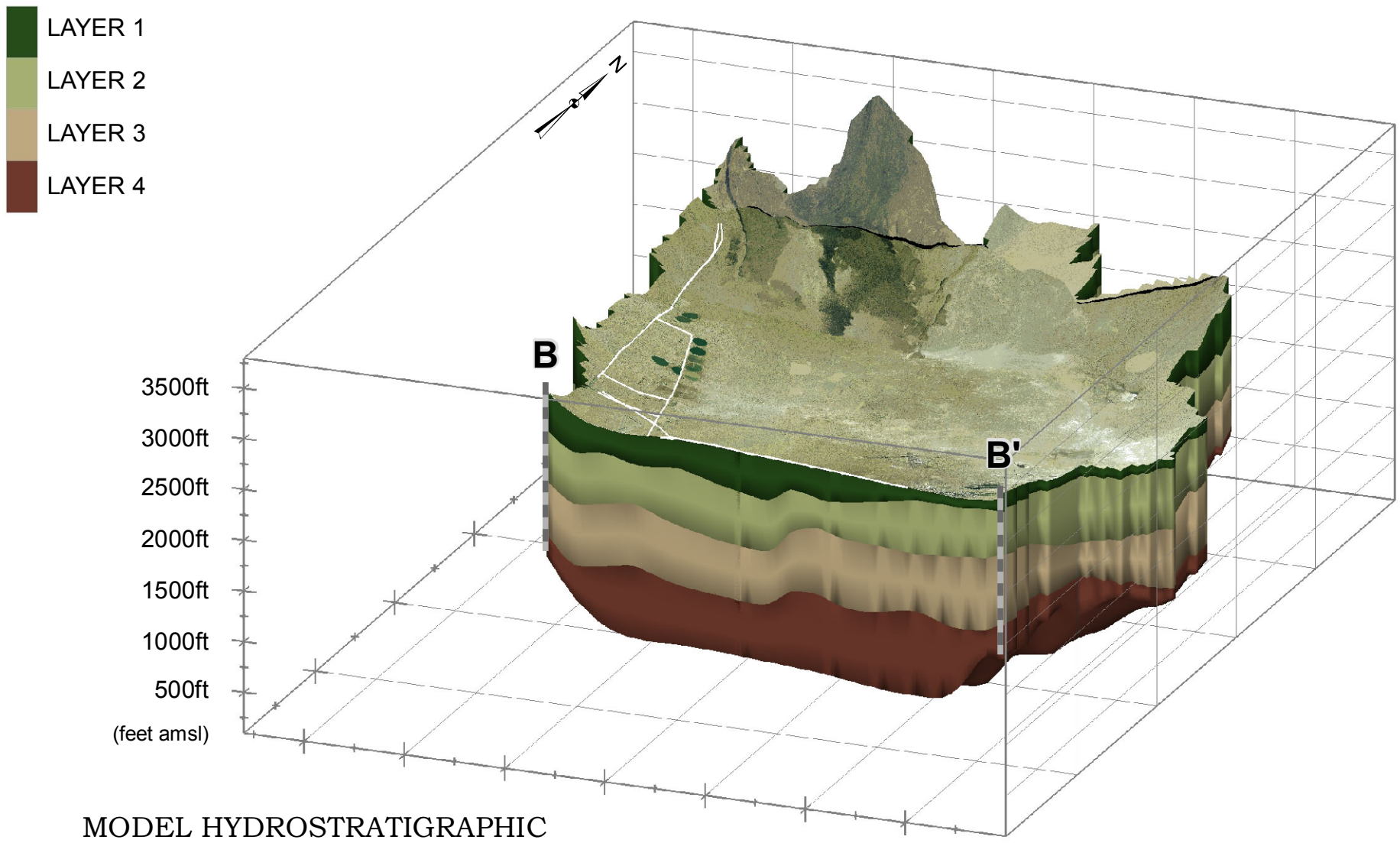


GEOLOGIC MODEL
CROSS SECTION A-A'

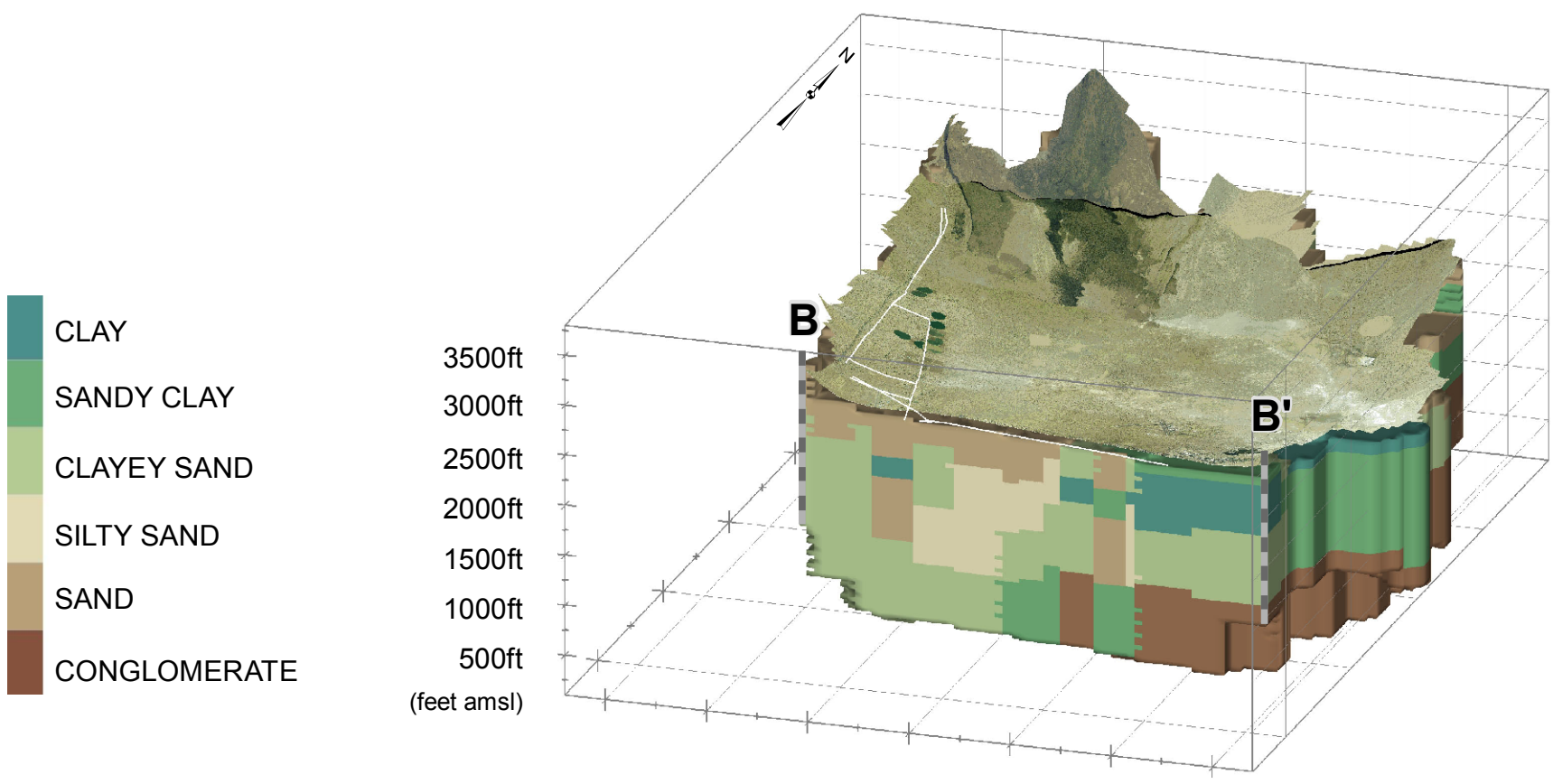


BROWN AND CALDWELL

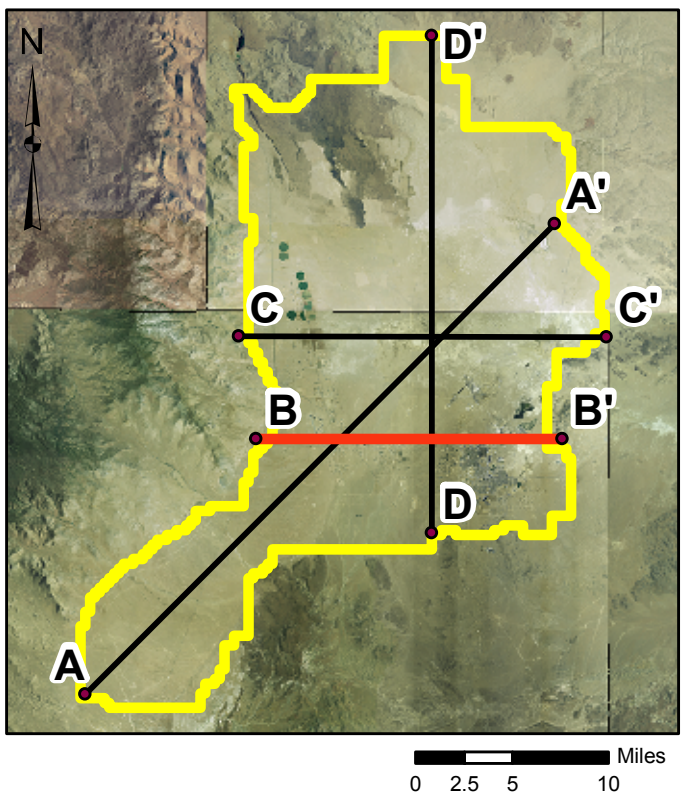
Figure 6
CROSS SECTION A-A'
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



MODEL HYDROSTRATIGRAPHIC
CROSS SECTION B-B'

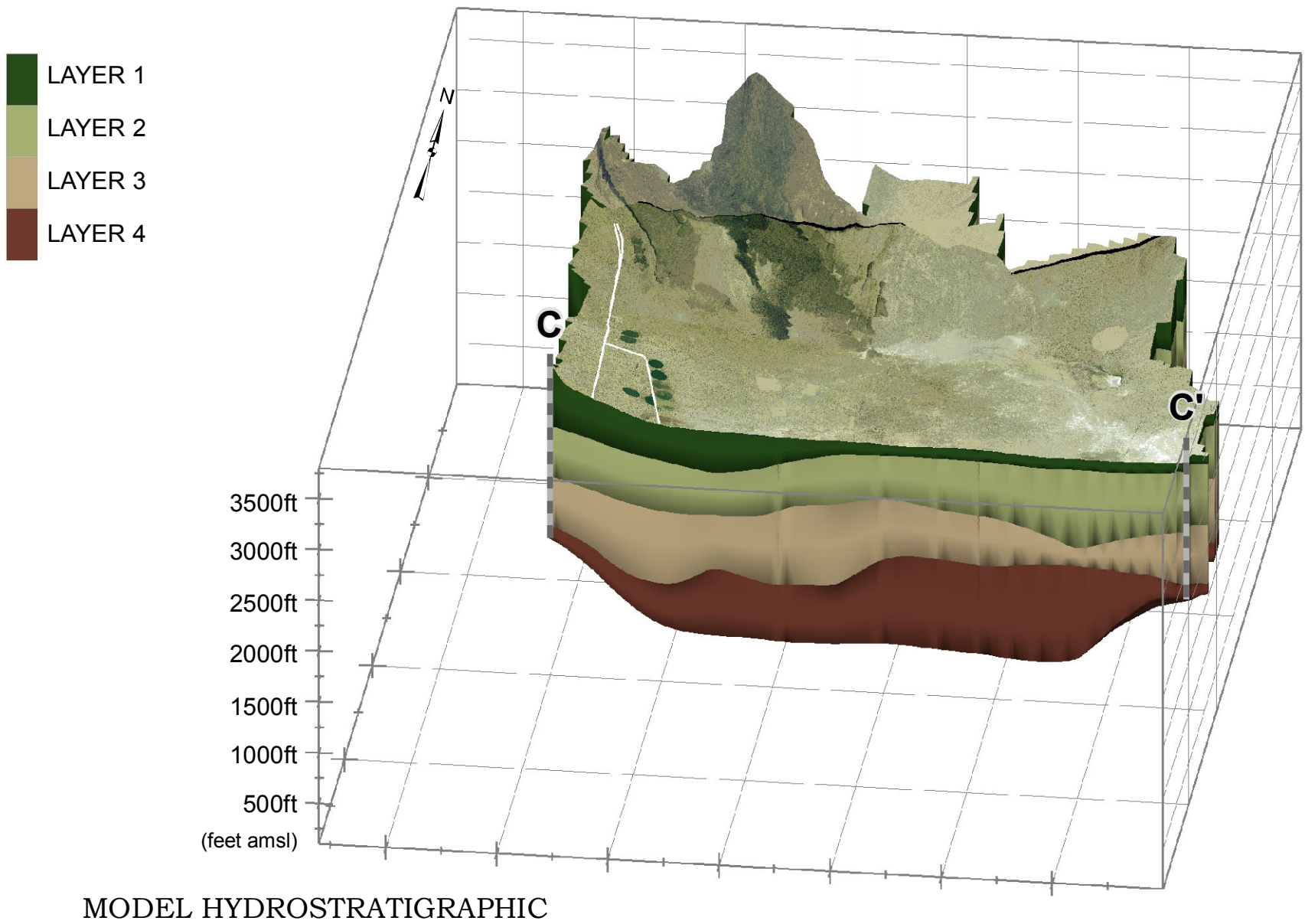


GEOLOGIC MODEL
CROSS SECTION B-B'

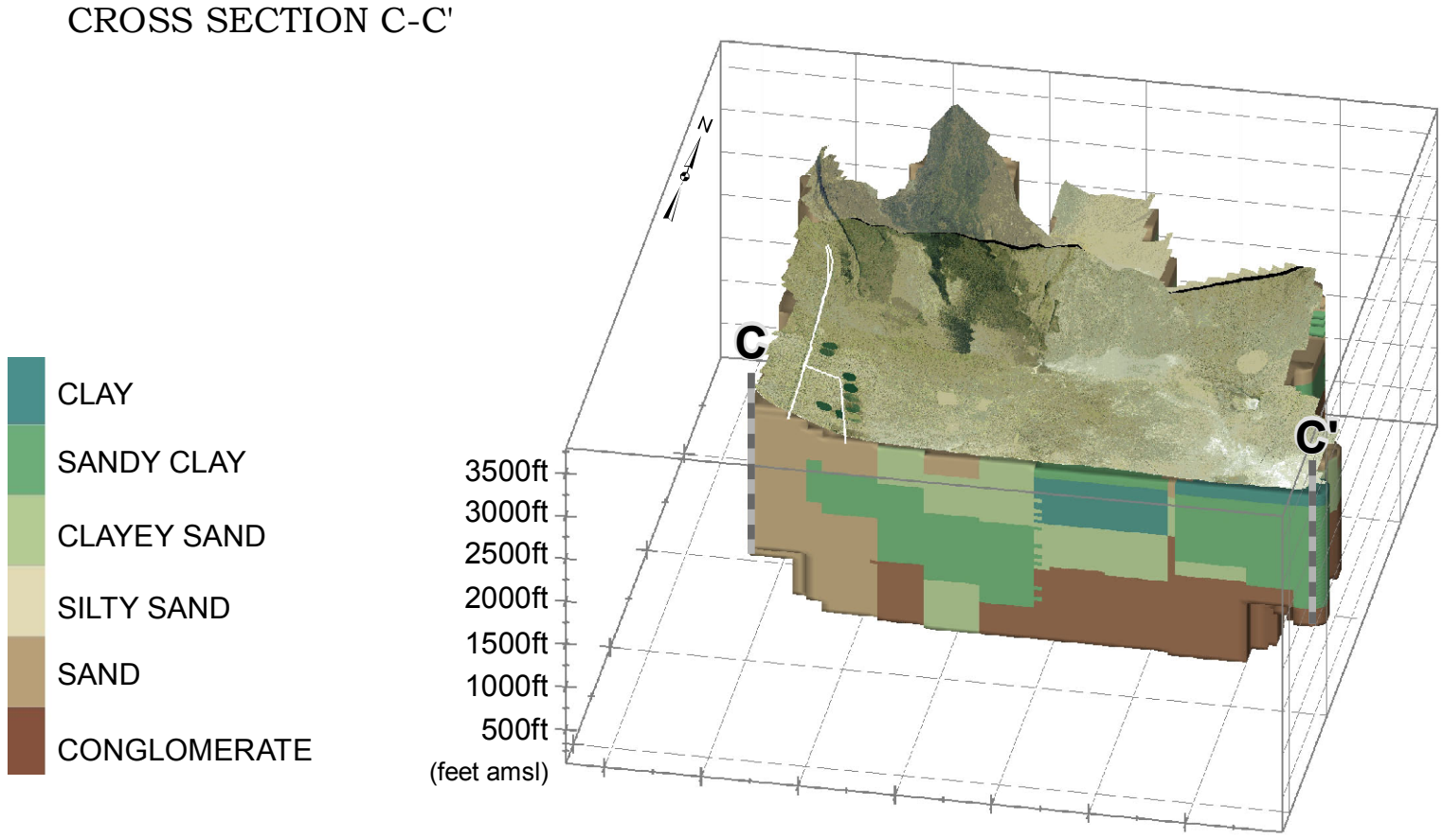


BROWN AND CALDWELL

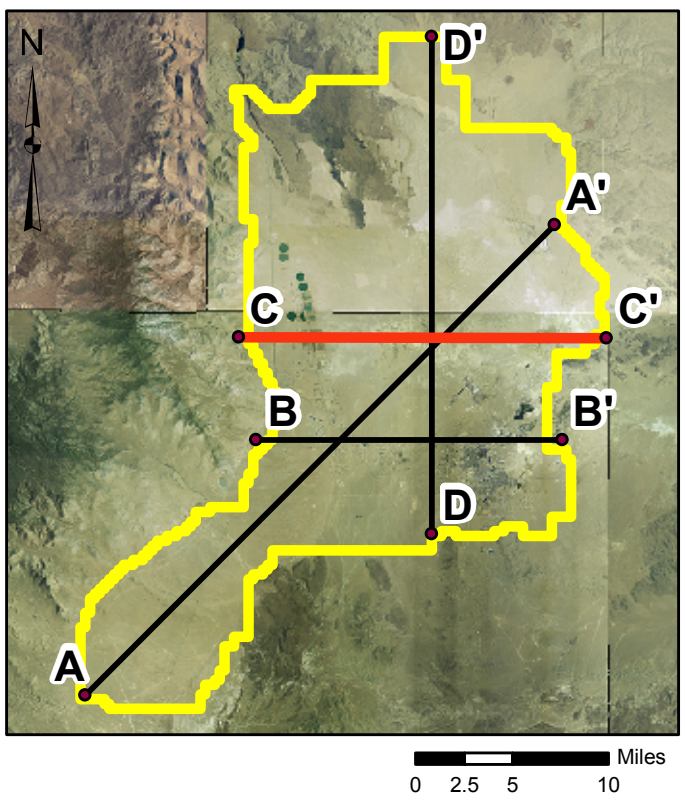
Figure 7
CROSS SECTION B-B'
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



MODEL HYDROSTRATIGRAPHIC
CROSS SECTION C-C'

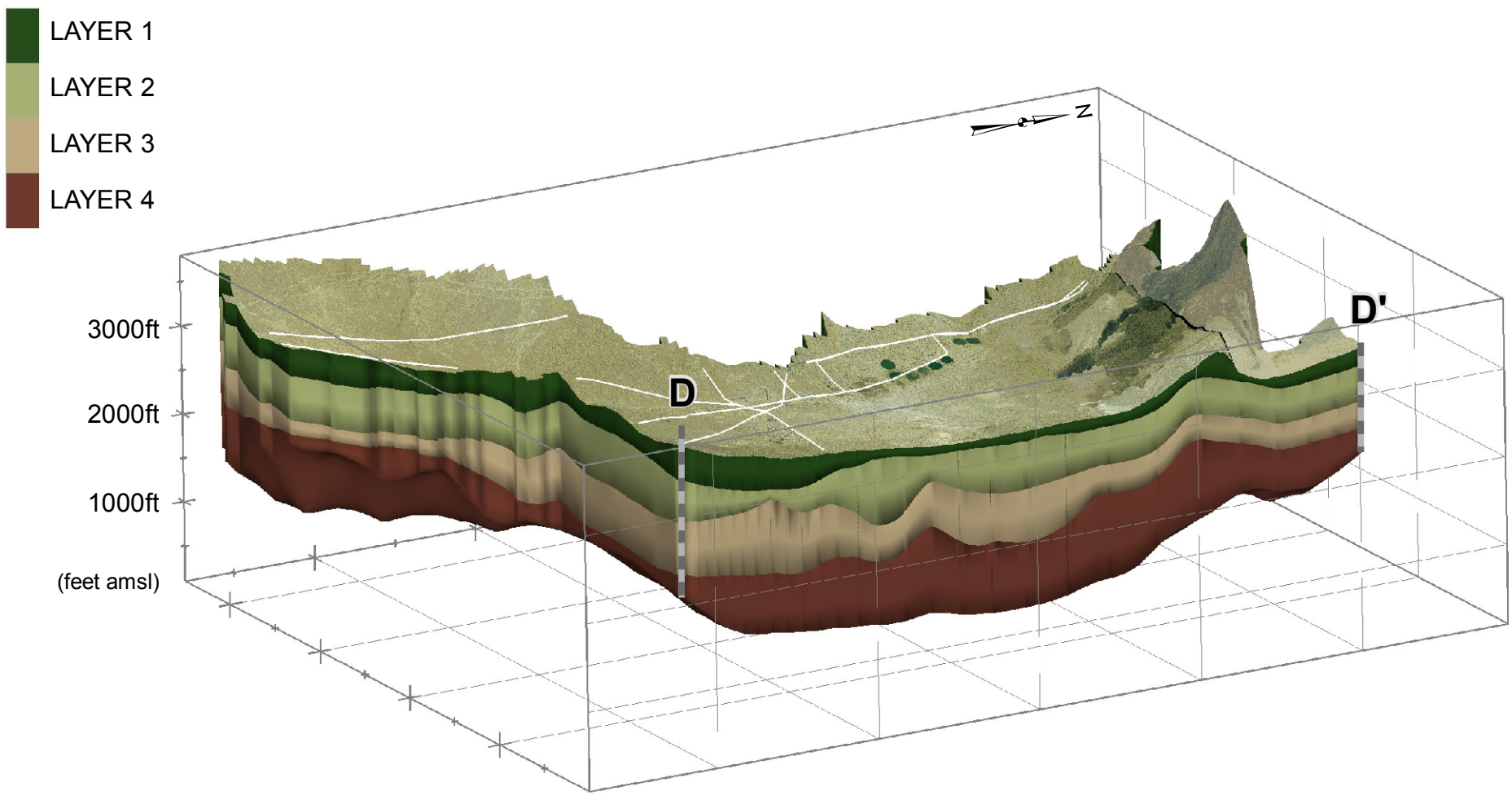


GEOLOGIC MODEL
CROSS SECTION C-C'

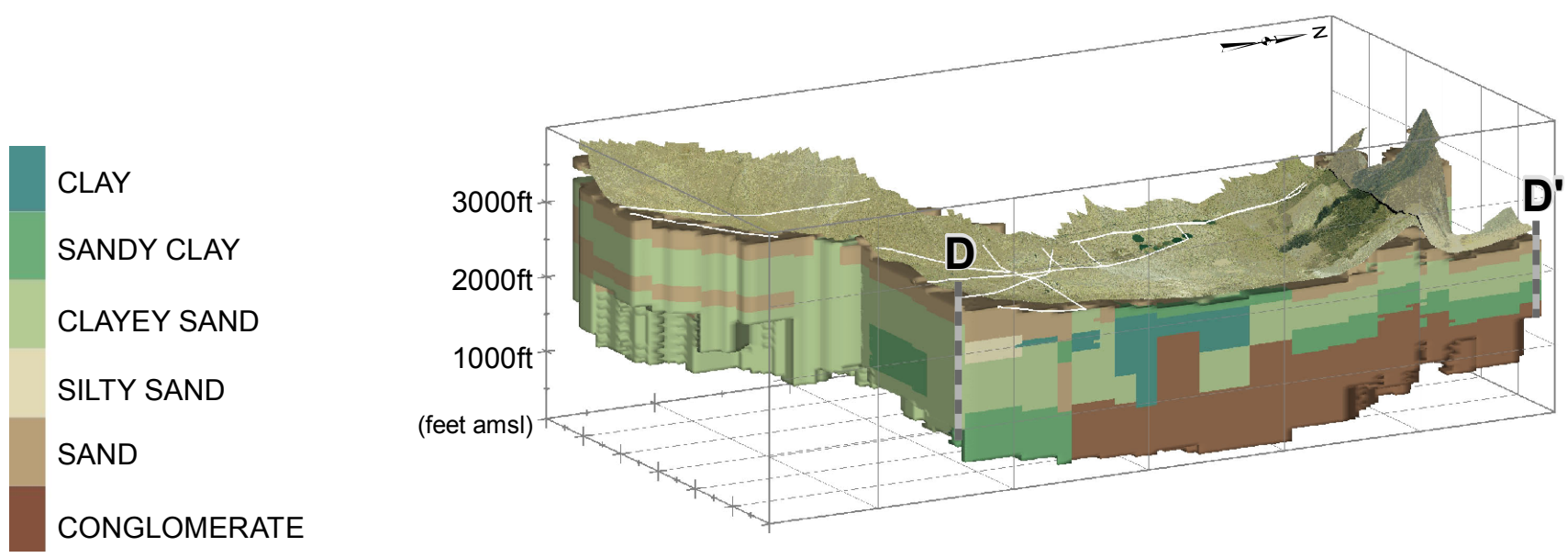


BROWN AND CALDWELL

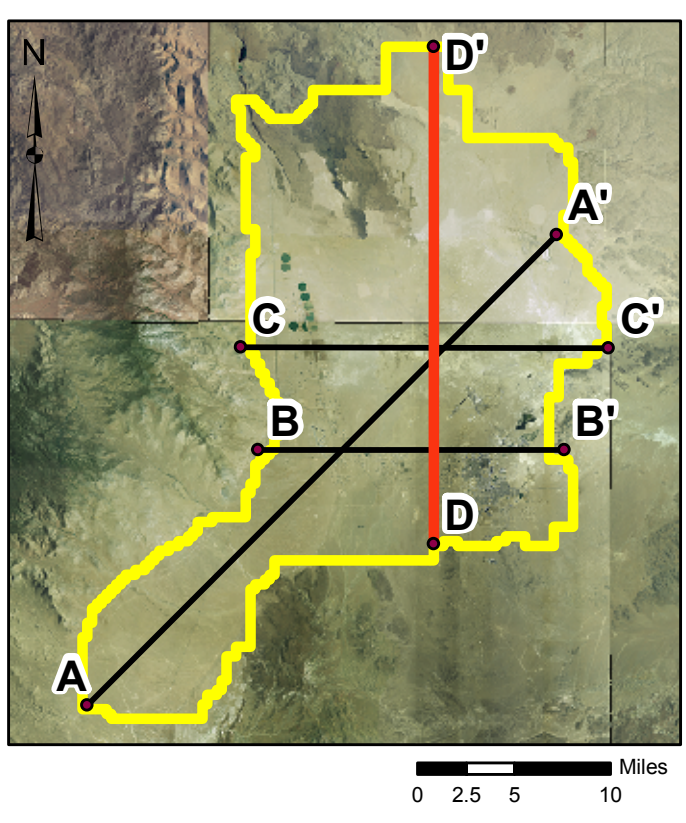
Figure 8
CROSS SECTION C-C'
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



MODEL HYDROSTRATIGRAPHIC
CROSS SECTION D-D'

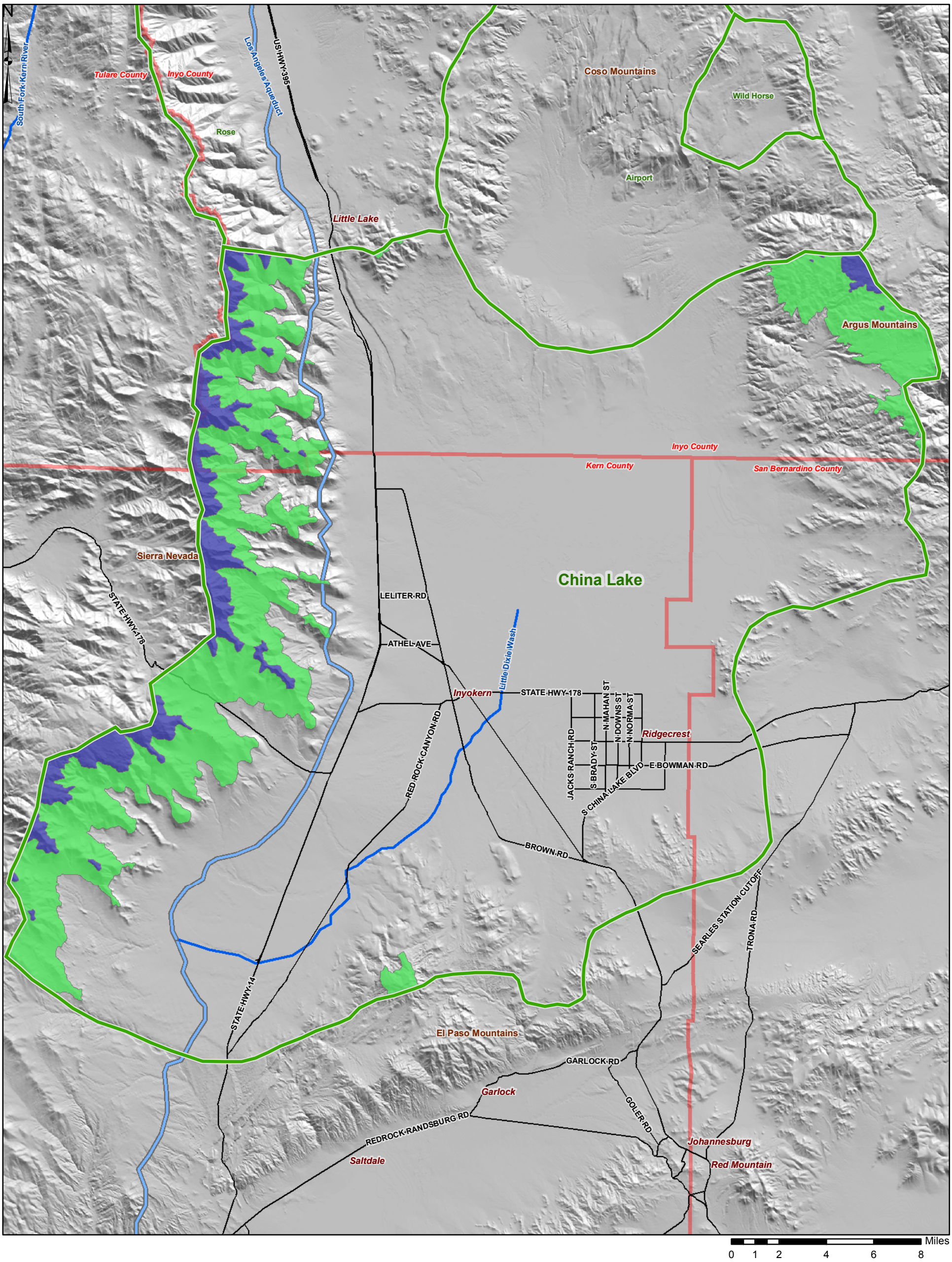


GEOLOGIC MODEL
CROSS SECTION D-D'



BROWN AND CALDWELL

Figure 9
CROSS SECTION D-D'
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



EXPLANATION

BASIN BOUNDARY

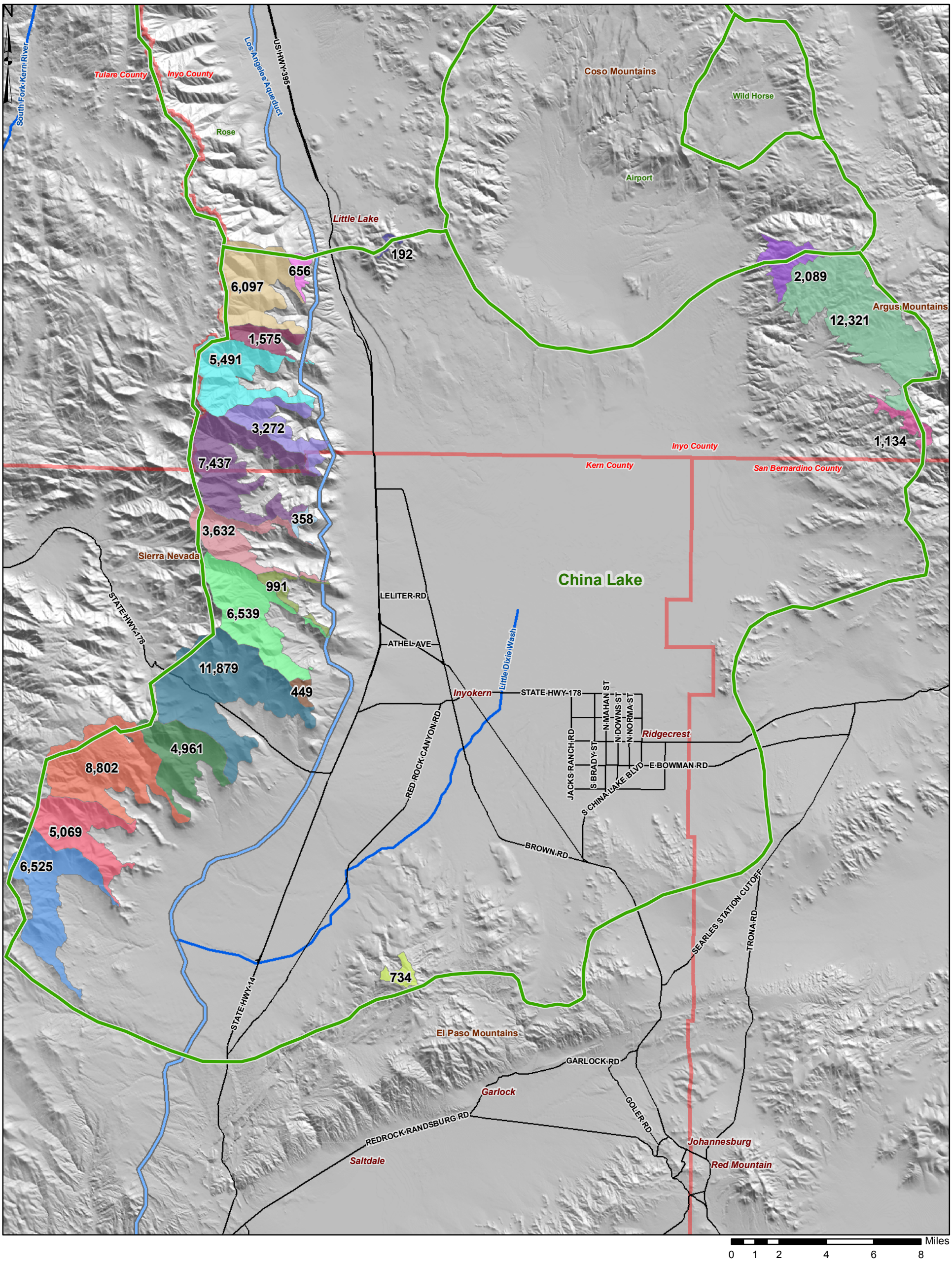
ELEVATION BANDS (feet amsl)

4500 to 6000

6000 to 8000

BROWN AND CALDWELL

Figure 10
WATERSHED ELEVATION BANDS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



EXPLANATION

WATERSHED BOUNDARY

6,525 SUB-WATERSHED AREAS GREATER THAN 4500 FEET IN ELEVATION (labeled with area in acres)

BROWN AND CALDWELL

Figure 11
SUB-WATERSHED DELINEATION
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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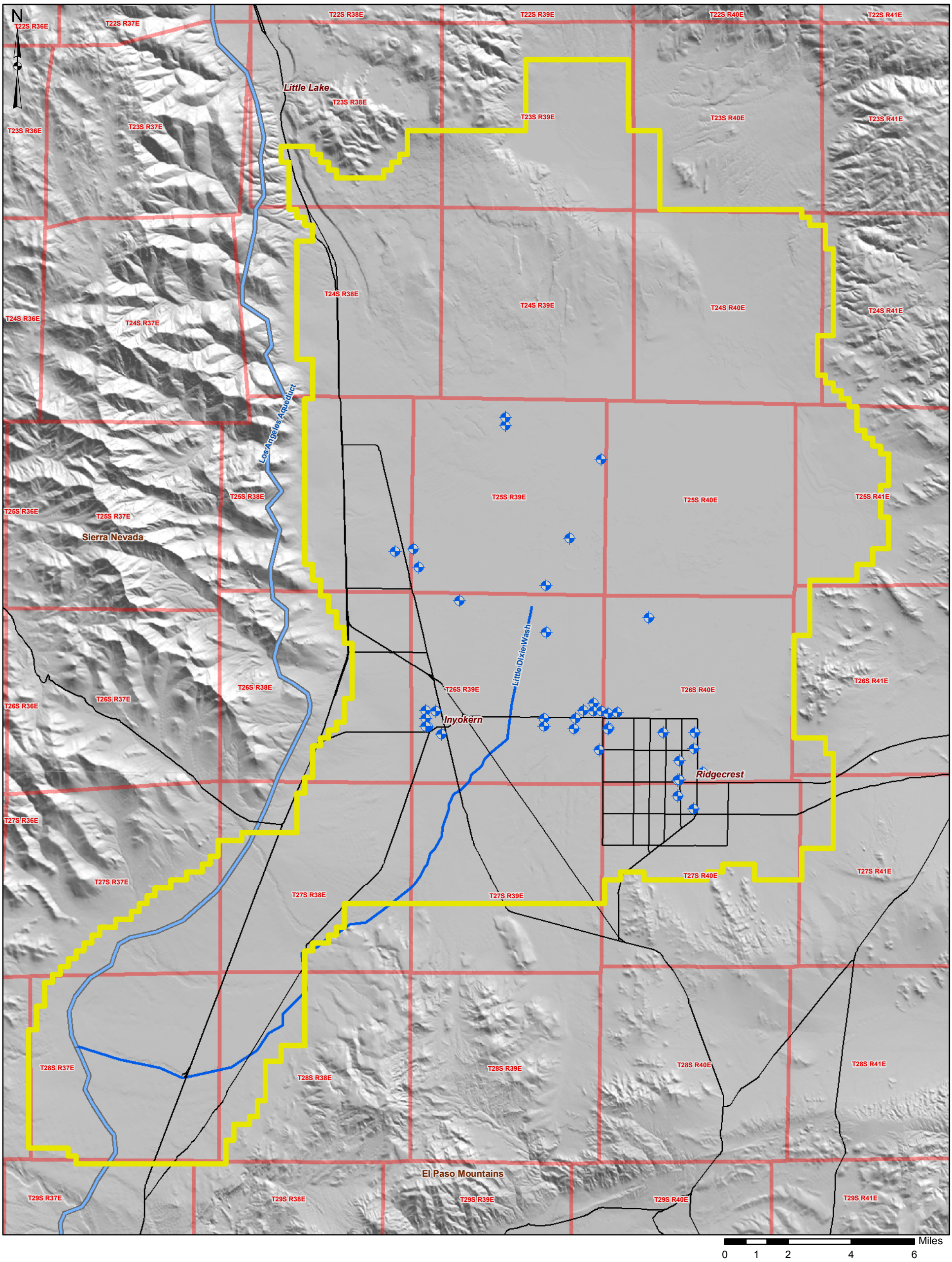


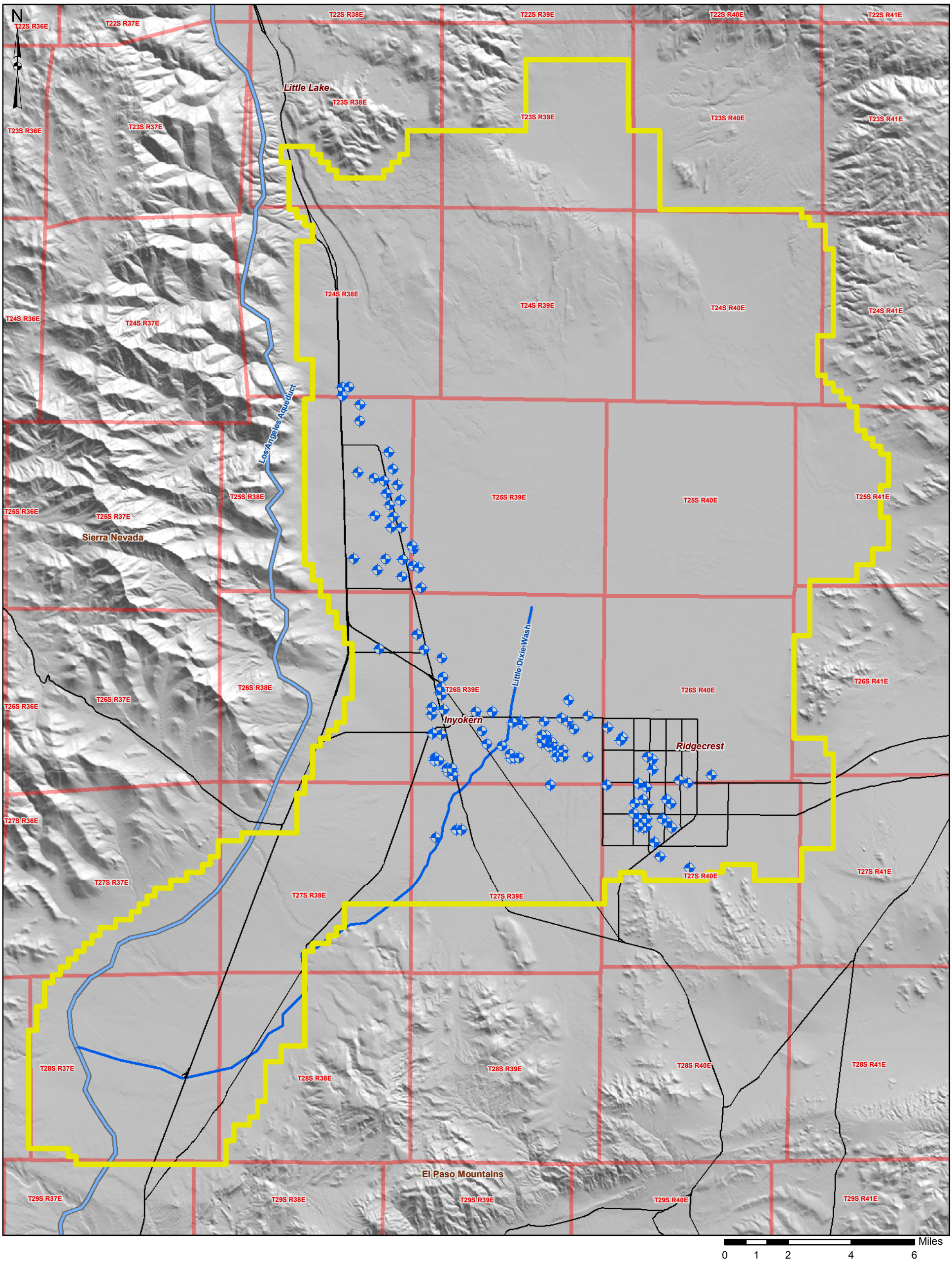
EXPLANATION

1953 MODEL PUMPING LOCATIONS

ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

Figure 12
MODEL PUMPING WELL LOCATIONS - 1953
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



EXPLANATION

1975 MODEL PUMPING LOCATIONS

ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

Figure 13
MODEL PUMPING WELL LOCATIONS - 1975
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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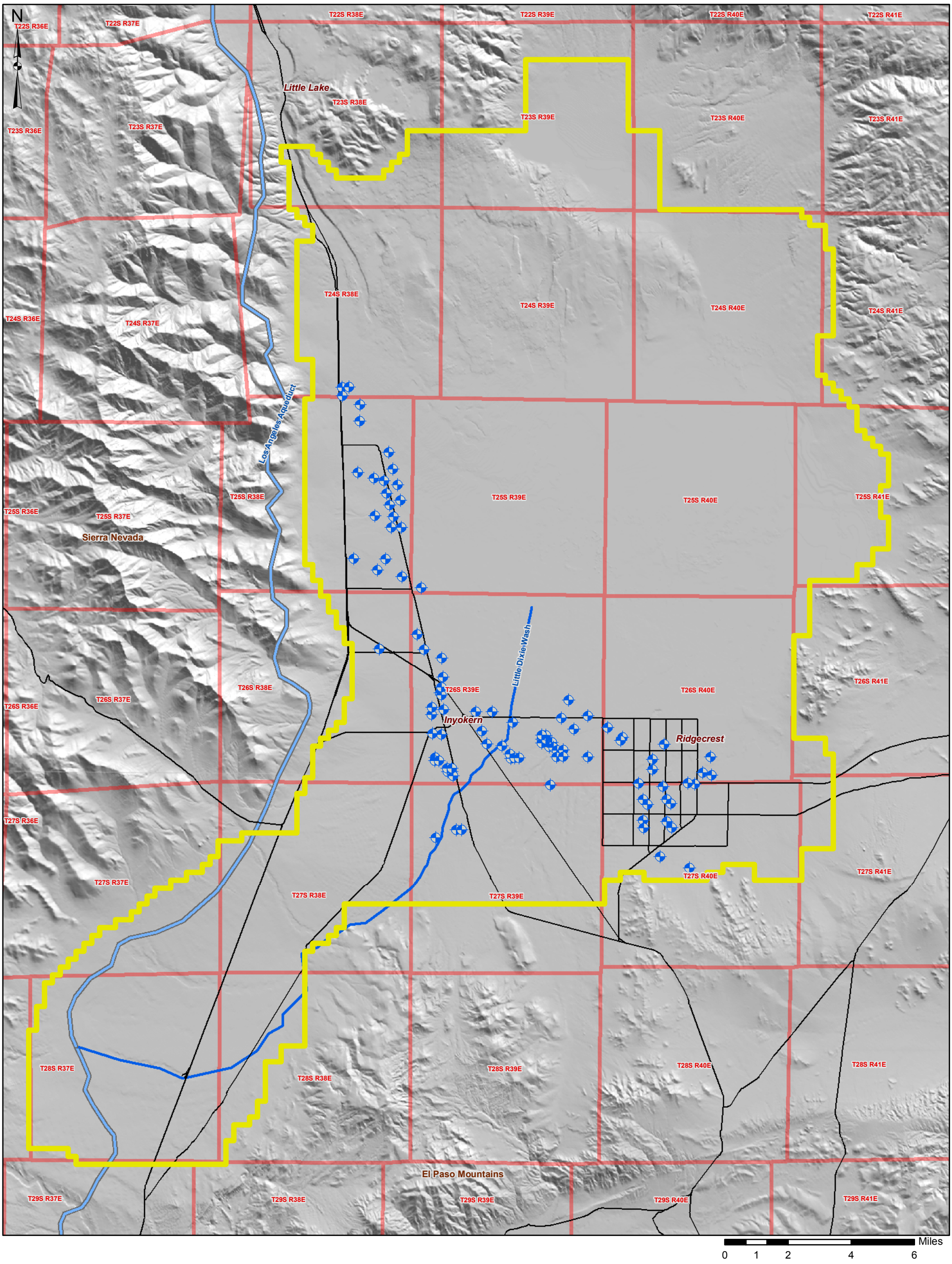


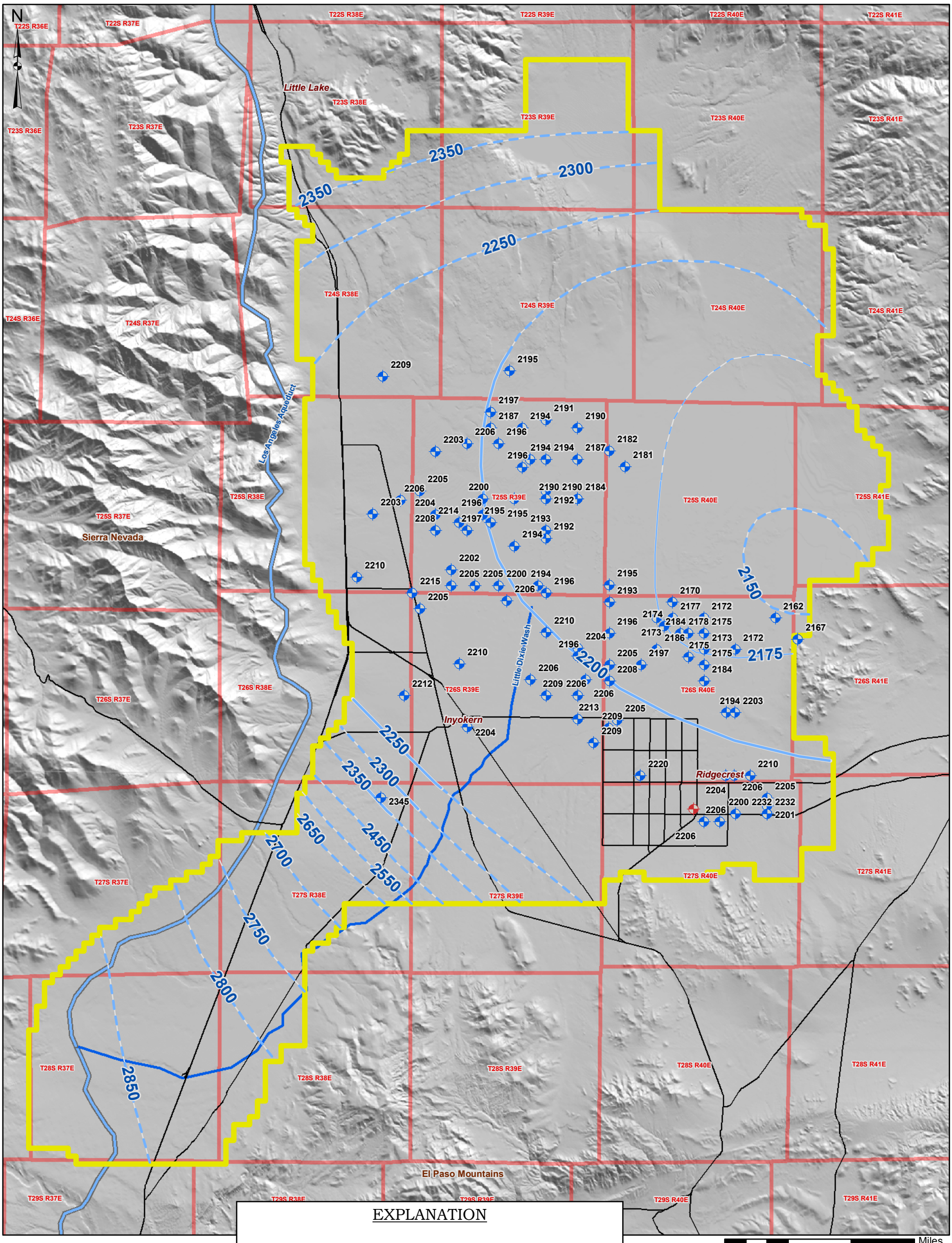
EXPLANATION

2006 MODEL PUMPING LOCATIONS

ACTIVE MODEL DOMAIN

BROWN AND CALDWELL

Figure 14
MODEL PUMPING WELL LOCATIONS - 2006
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



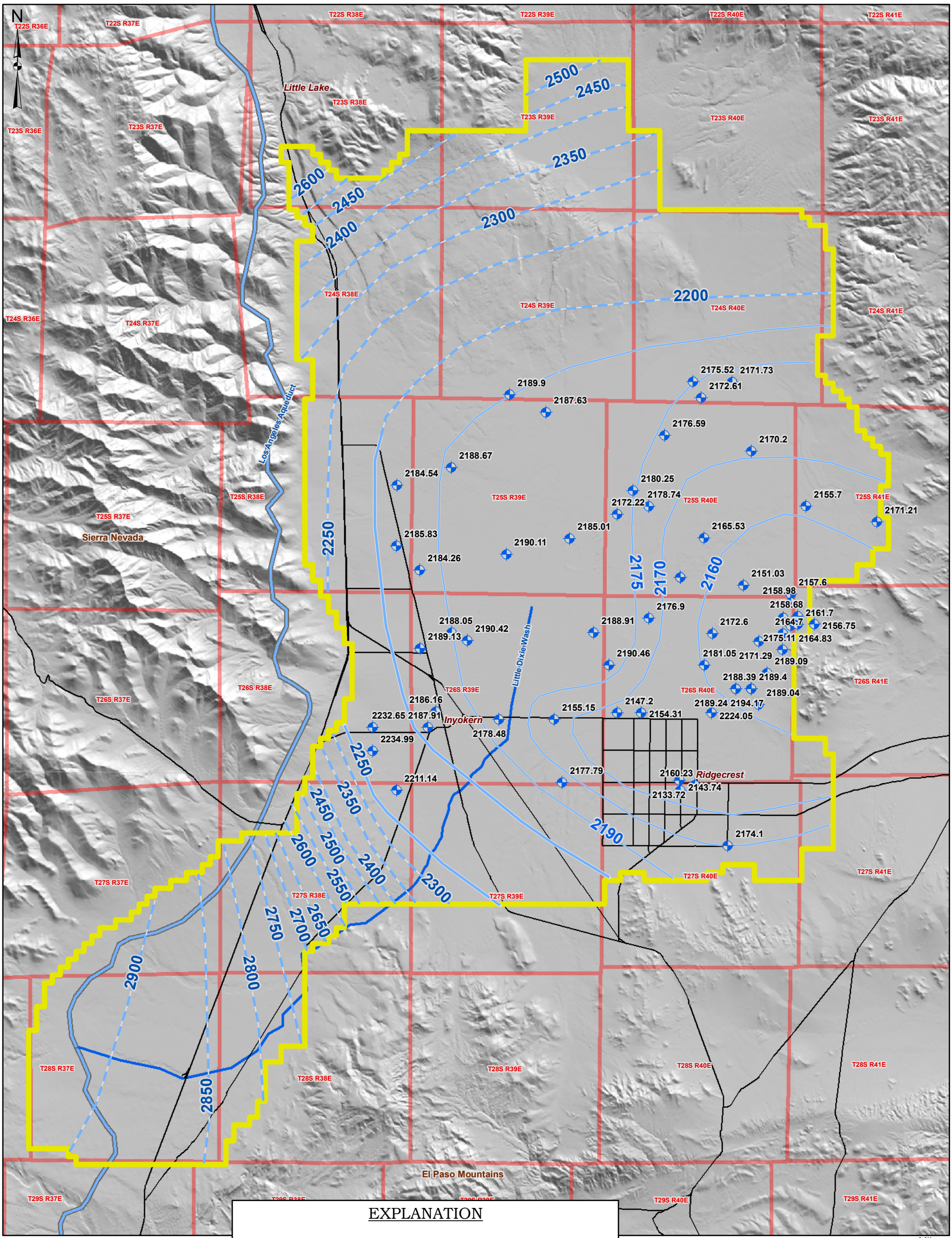
NOTE: Contours are dashed where inferred. Contour interval is 50ft with additional minor contours drawn to enhance detail.

EXPLANATION

- 1920 KNOWN PUMPING WELL LOCATION
- 1920 MEASURED WATER LEVEL LOCATIONS
- ACTIVE MODEL DOMAIN
- 1920 WATER LEVEL MAJOR CONTOURS (feet amsl)
- 1920 WATER LEVEL MINOR CONTOURS (feet amsl)

BROWN AND CALDWELL

Figure 15
INTERPRETED 1920
WATER LEVEL CONTOURS WITH
LOCATIONS OF MEASURED WATER LEVELS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



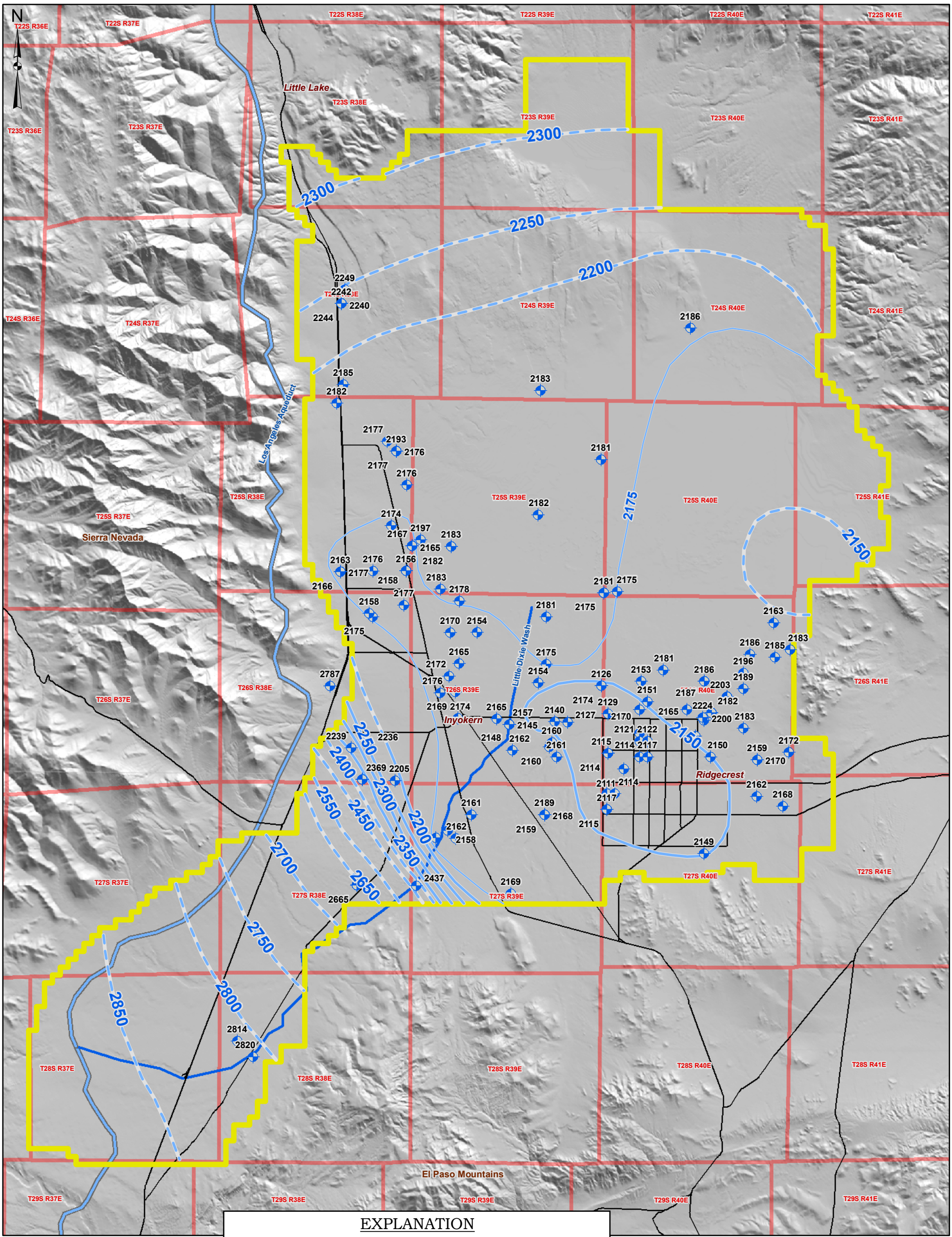
NOTE: Contours are dashed where inferred

EXPLANATION

- 1985 MEASURED WATER LEVEL LOCATIONS
- ACTIVE MODEL DOMAIN
- 1985 WATER LEVEL MAJOR CONTOURS (feet amsl)
- 1985 WATER LEVEL MINOR CONTOURS

BROWN AND CALDWELL

Figure 16
INTERPRETED 1985
WATER LEVEL CONTOURS WITH LOCATIONS OF
MEASURED WATER LEVELS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



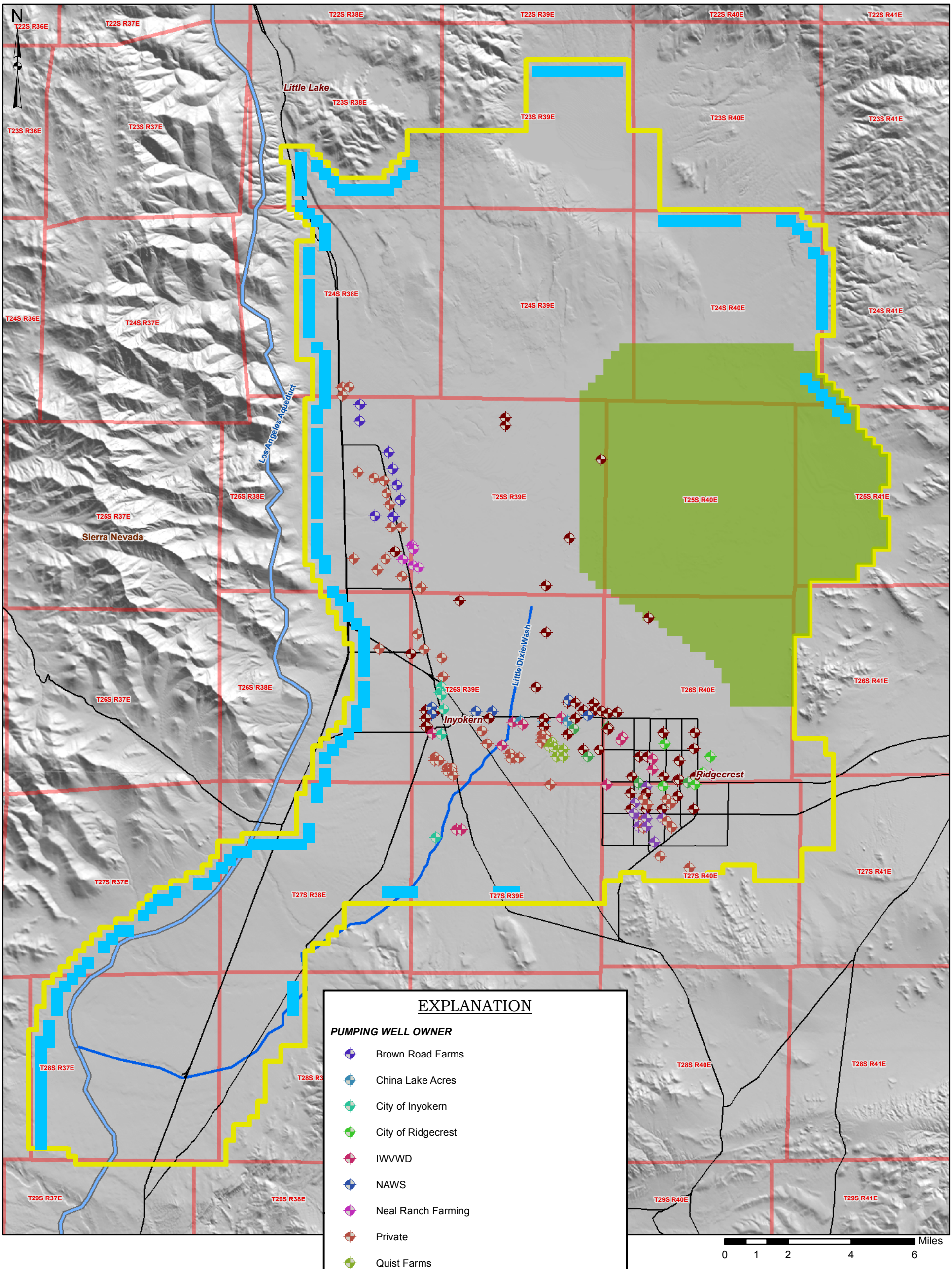
EXPLANATION

- 2006 MEASURED WATER LEVEL LOCATIONS
- 2006 WATER LEVEL MAJOR CONTOURS (feet amsl)
- 2006 WATER LEVEL MINOR CONTOURS
- ACTIVE MODEL DOMAIN

NOTE: Contours are dashed where inferred. Contour interval is 50ft with additional minor contours drawn to enhance detail.

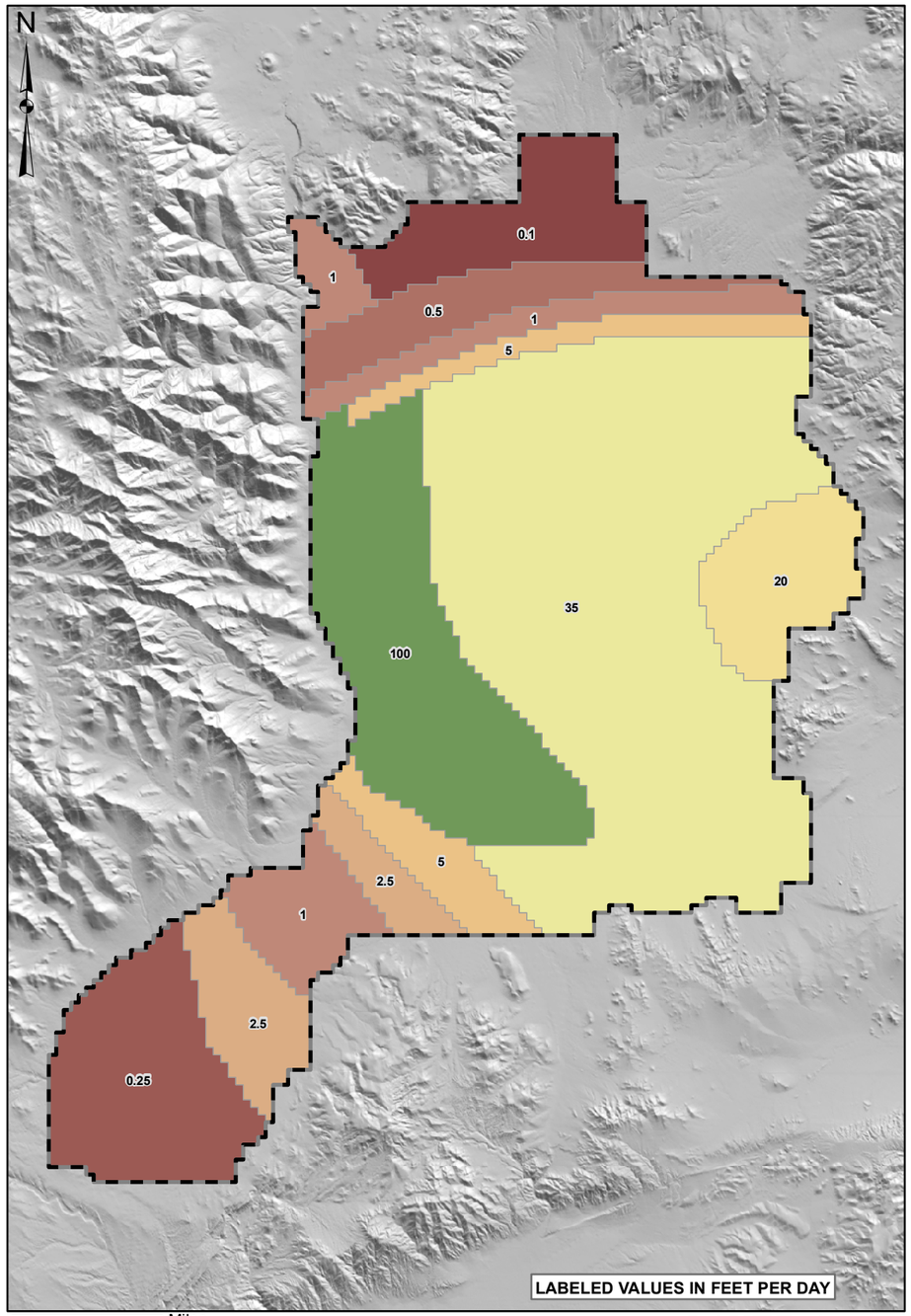
BROWN AND CALDWELL

Figure 17
INTERPRETED 2006
WATER LEVEL CONTOURS WITH LOCATIONS OF MEASURED WATER LEVELS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



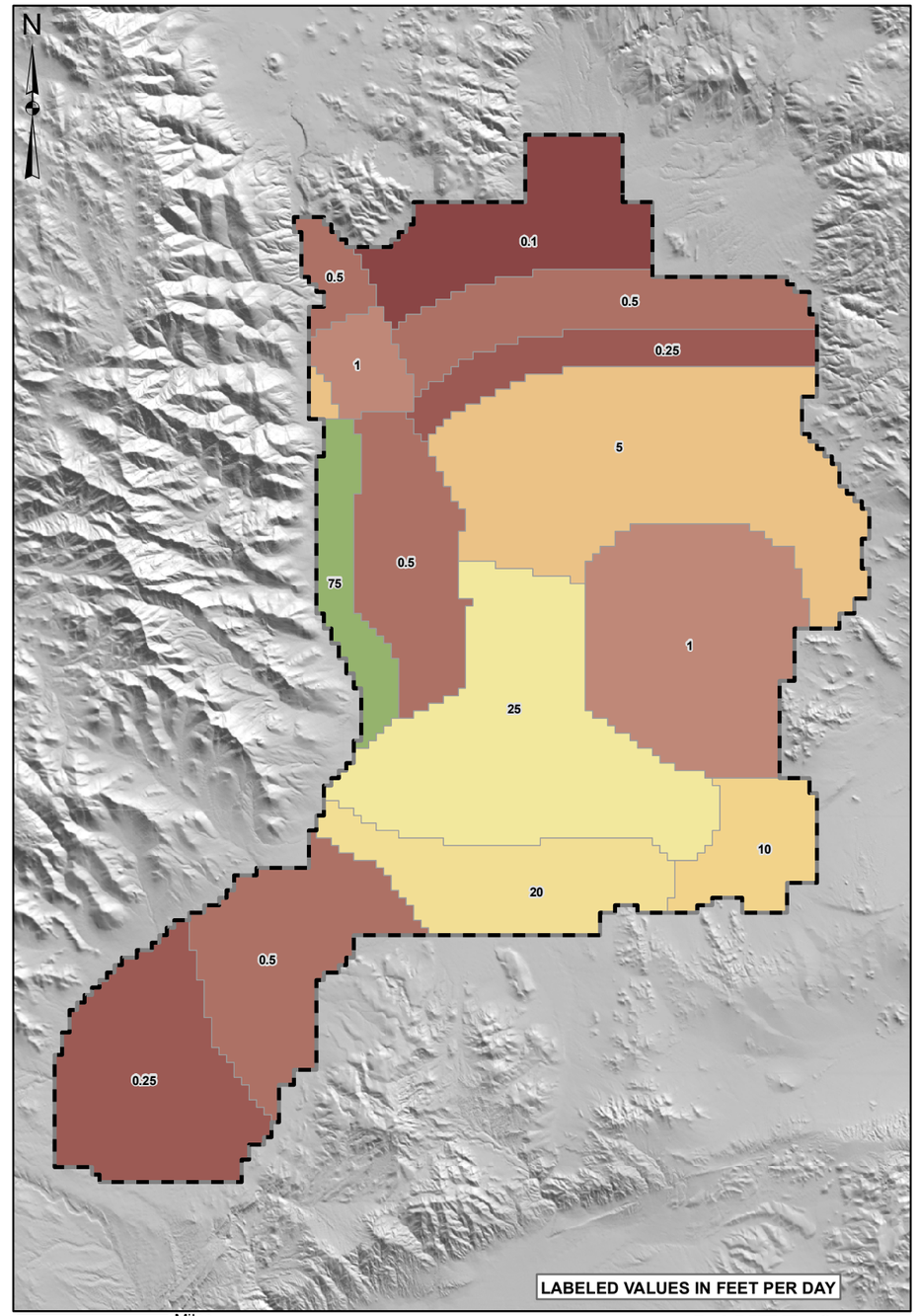
BROWN AND CALDWELL

Figure 18
LOCATIONS OF MODEL RECHARGE, EVAPOTRANSPIRATION, AND PUMPING WELLS
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



Miles
0 2.5 5

LAYER 1



Miles
0 2.5 5

LAYER 2

EXPLANATION

MODEL DOMAIN OF ACTIVE LAYER

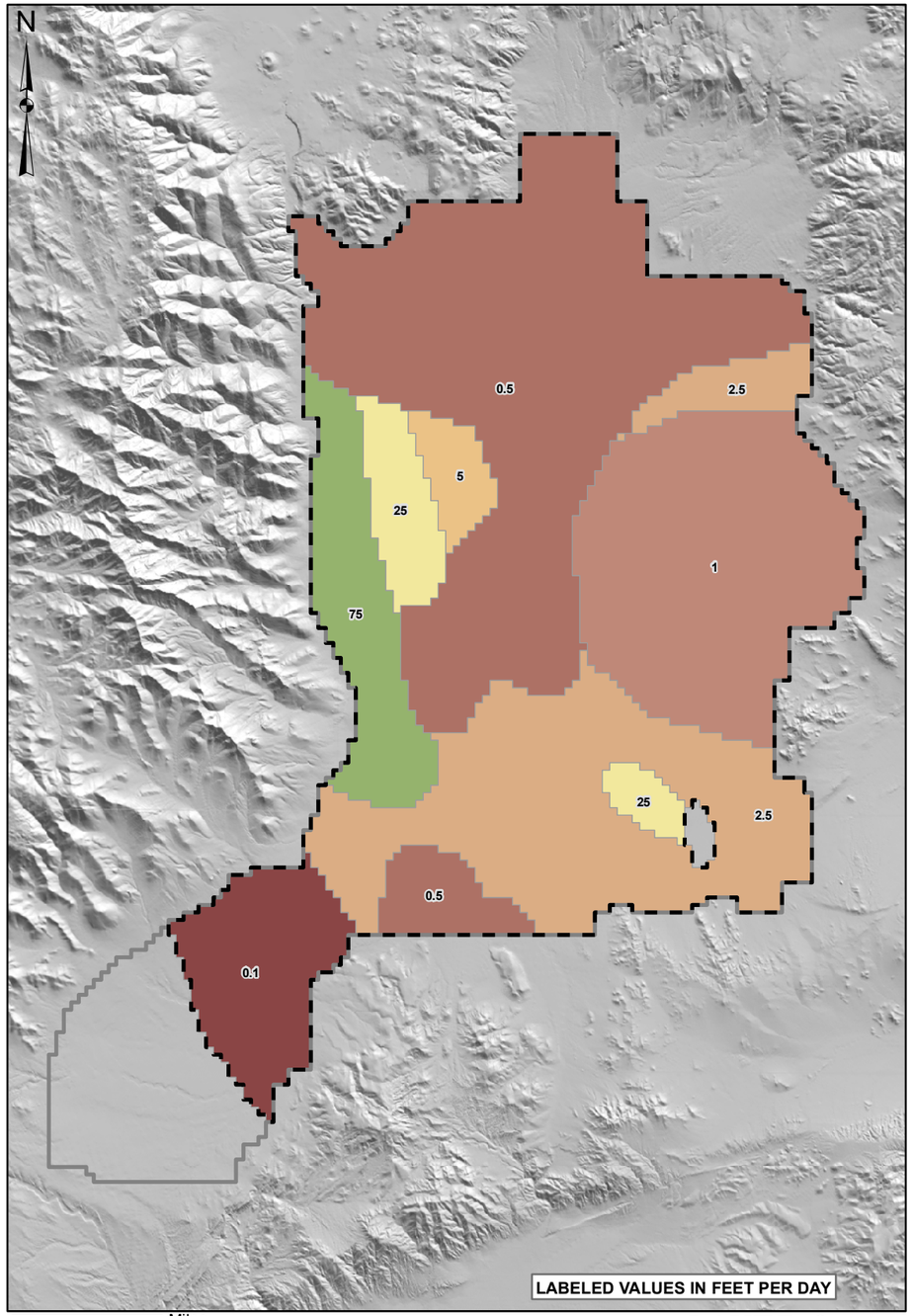
ACTIVE MODEL DOMAIN

HYDRAULIC CONDUCTIVITY (ft per day)

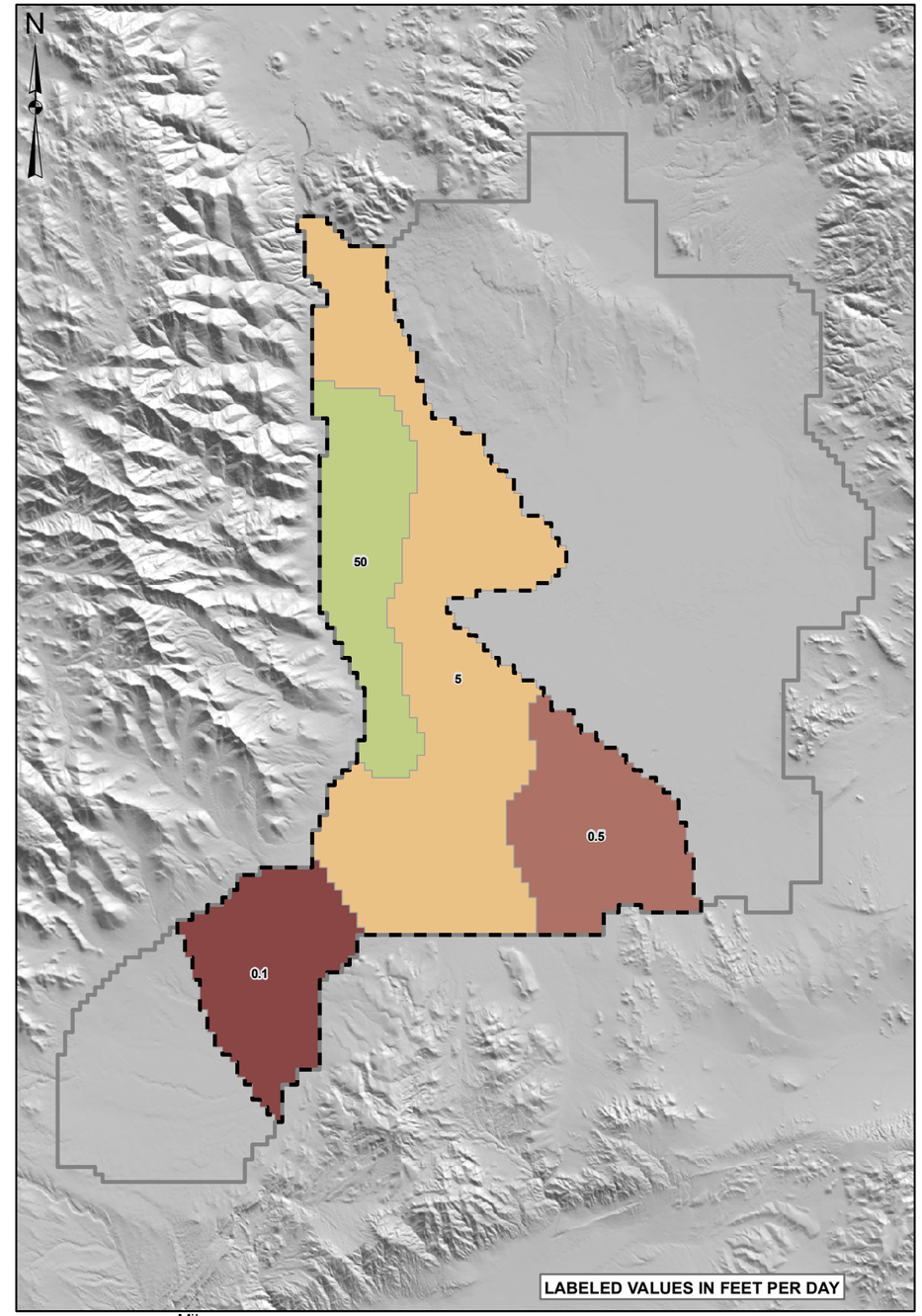
- 0.1
- 0.25
- 0.5
- 1
- 2
- 2.5
- 5
- 10
- 20
- 25
- 35
- 50
- 75
- 100

BROWN AND CALDWELL

Figure 19
MODEL LAYER 1 AND 2
HYDRAULIC CONDUCTIVITY
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



LAYER 3



LAYER 4

EXPLANATION

MODEL DOMAIN OF ACTIVE LAYER

ACTIVE MODEL DOMAIN

HYDRAULIC CONDUCTIVITY (ft per day)

- 0.1
- 0.25
- 0.5
- 1
- 2
- 2.5
- 5
- 10
- 20
- 25
- 35
- 50
- 75
- 100

BROWN AND CALDWELL

Figure 20
MODEL LAYER 3 AND 4
HYDRAULIC CONDUCTIVITY
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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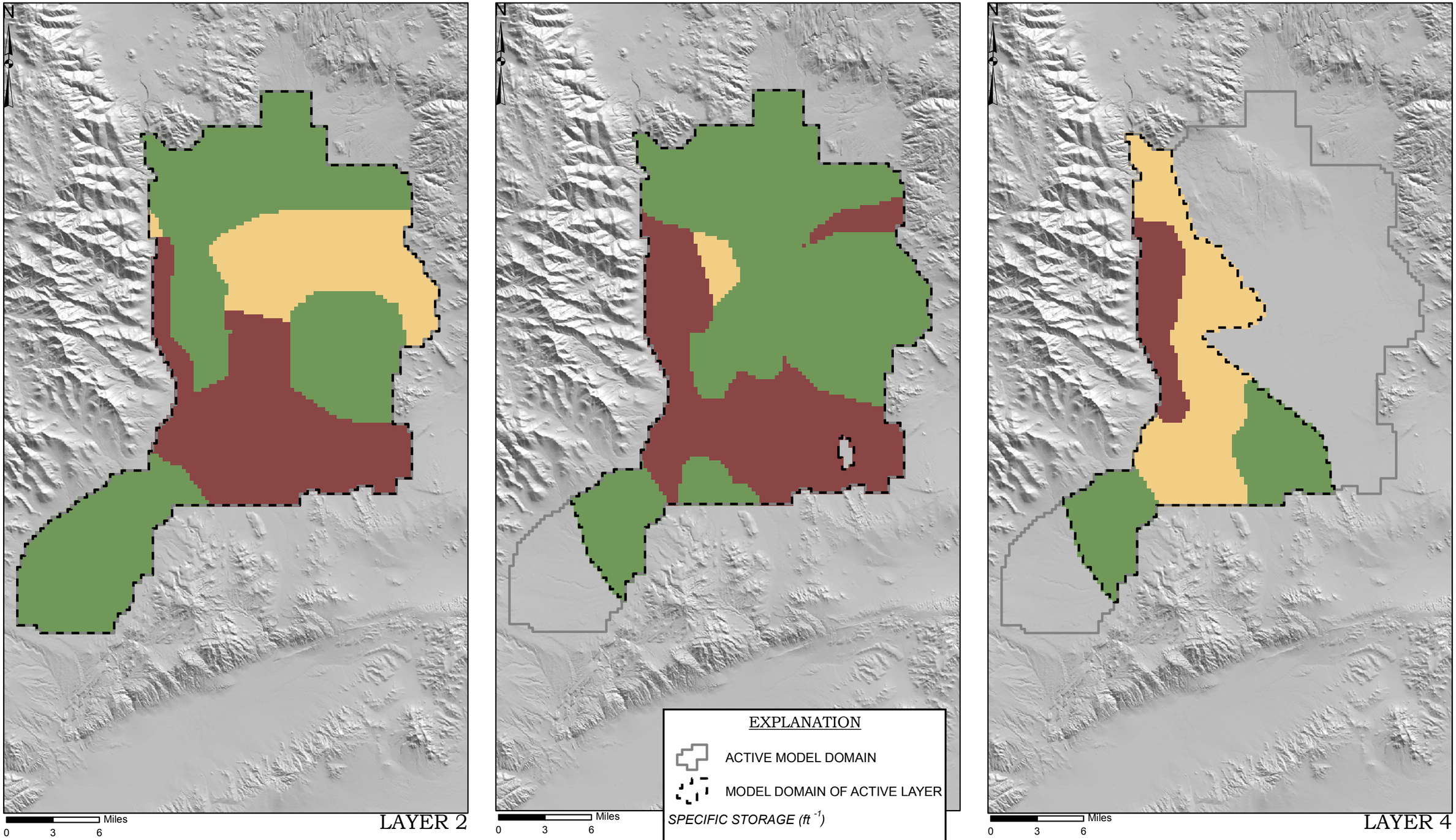

BROWN AND CALDWELL

NOTE:
SPECIFIC STORAGE APPLIES ONLY TO LAYERS 2, 3 AND 4

Figure 21
MODEL LAYER 2, 3 AND 4
SPECIFIC STORAGE
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

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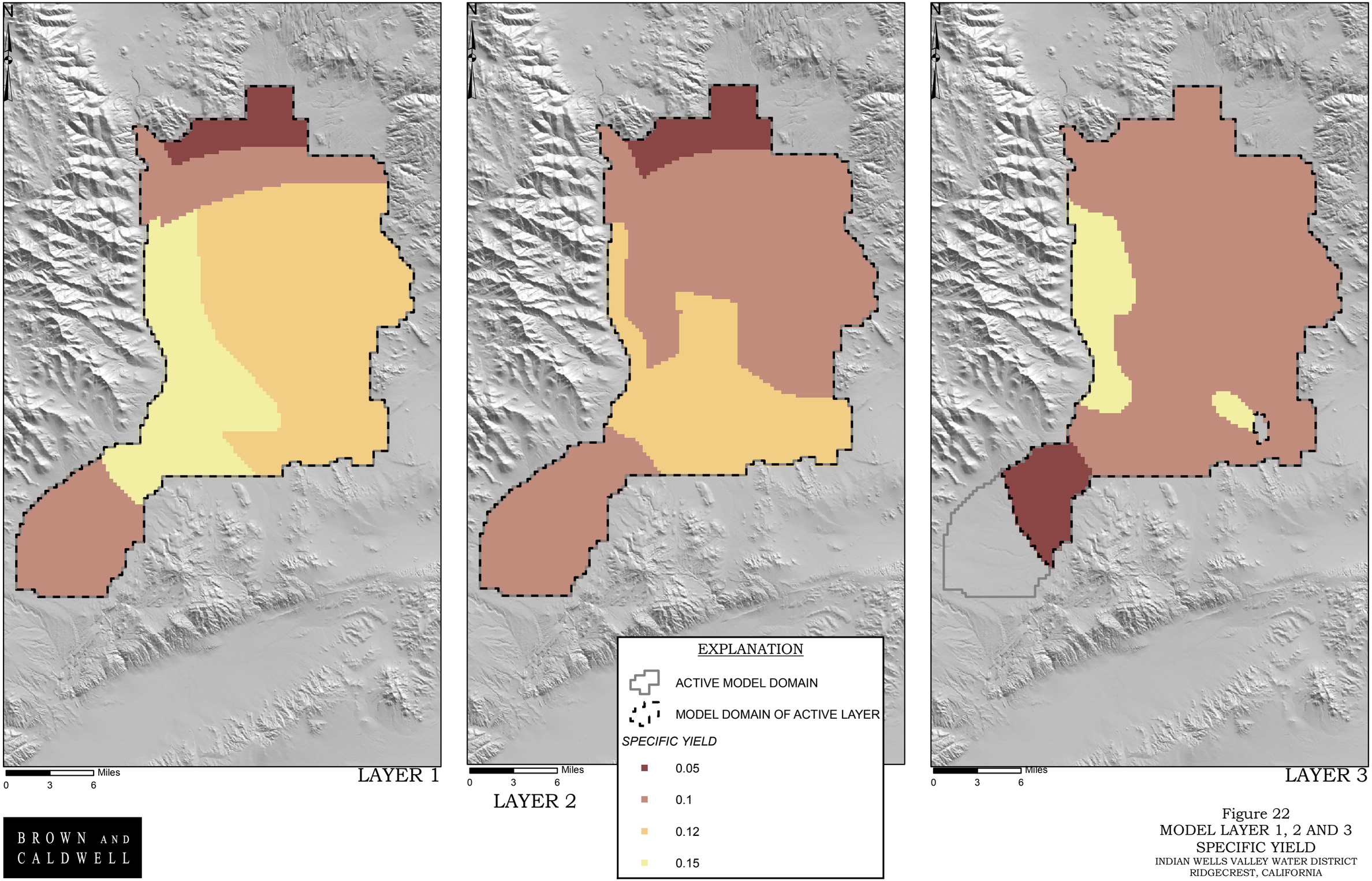
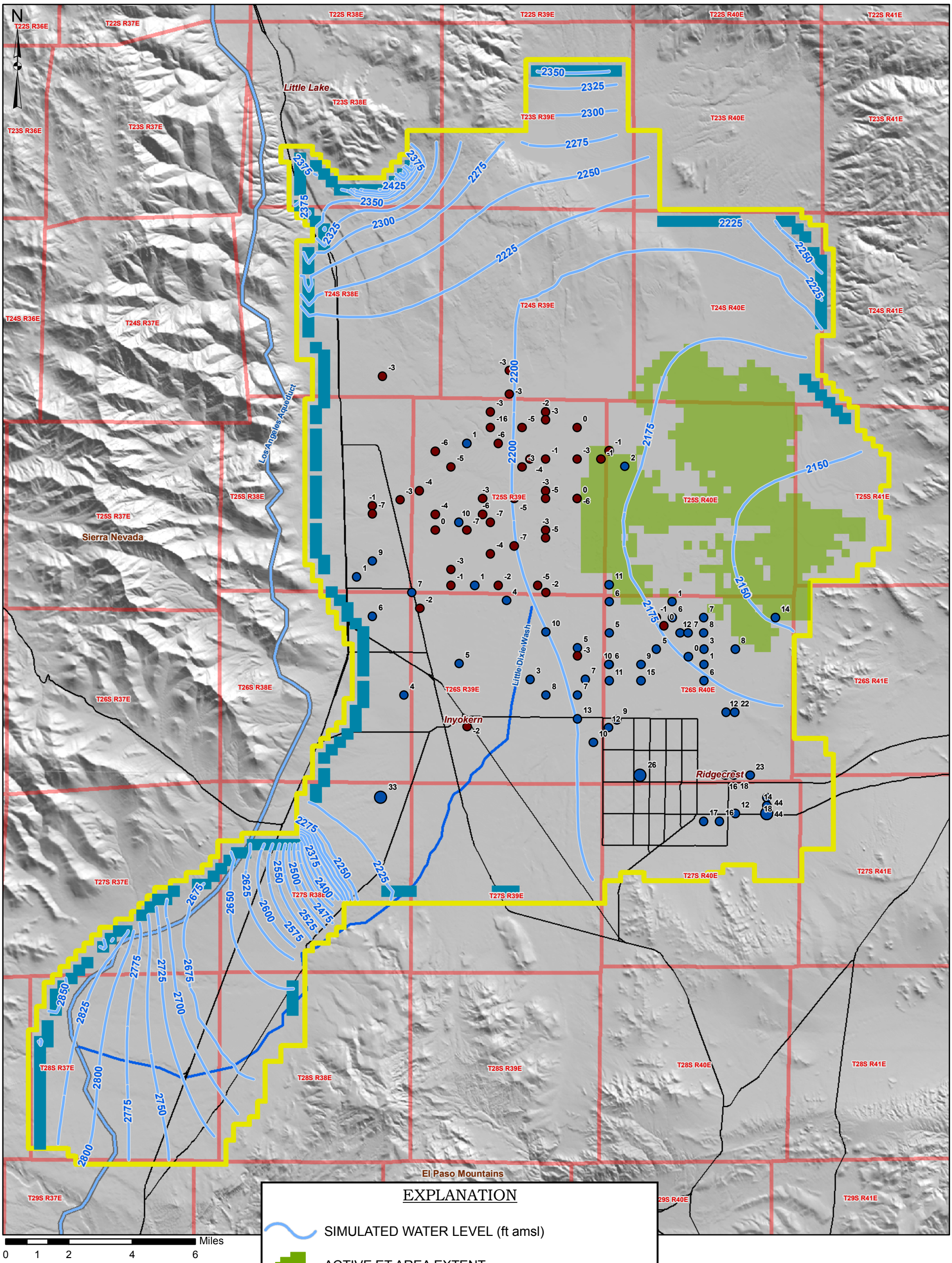


BROWN AND CALDWELL

Figure 22
MODEL LAYER 1, 2 AND 3
SPECIFIC YIELD
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

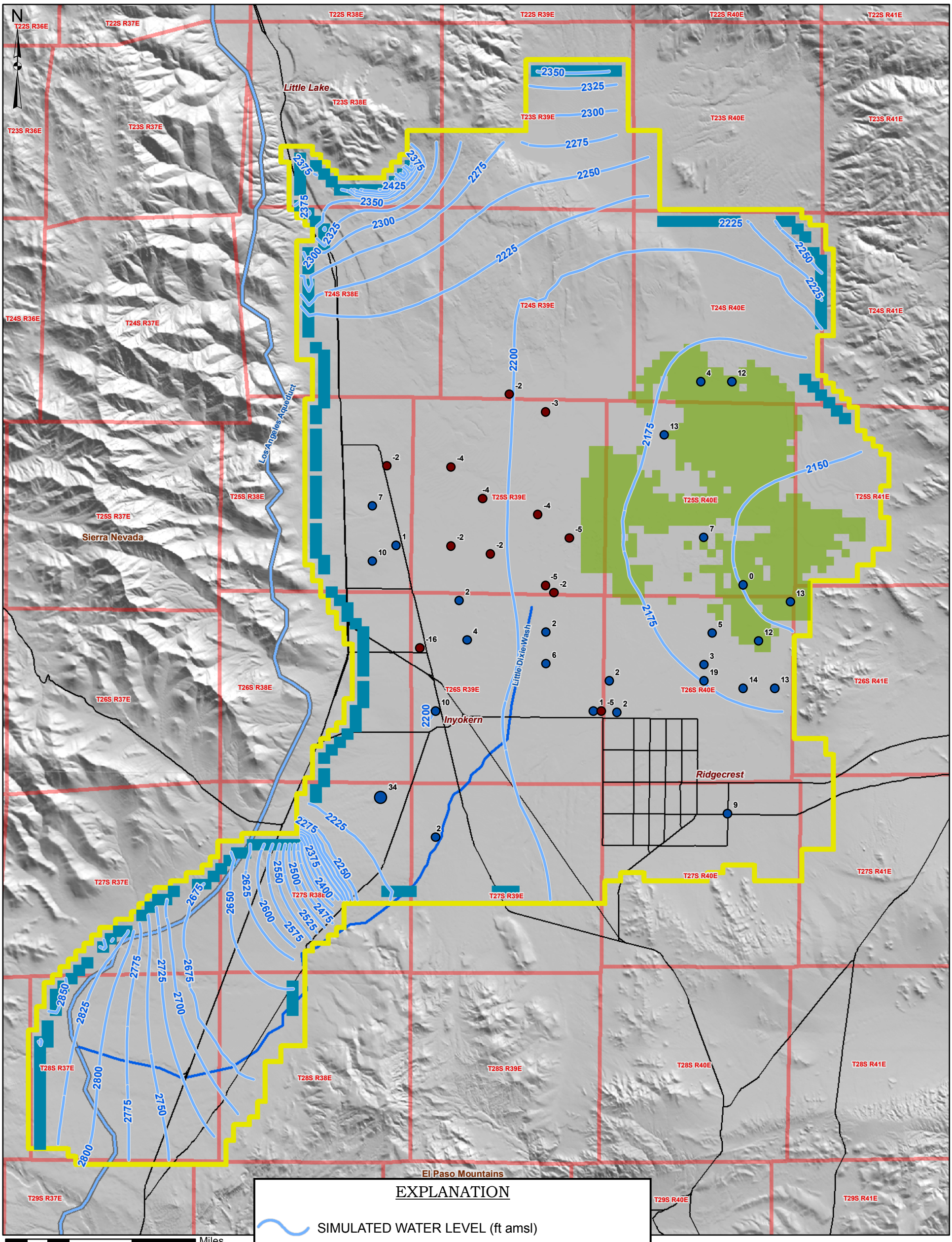
(BCTUC02)T:\IWVWD\133908 - IWVWD Groundwater Flow Model\GIS\



NOTES:
Model residual calculated by subtracting simulated water levels from observed water levels.

BROWN AND CALDWELL

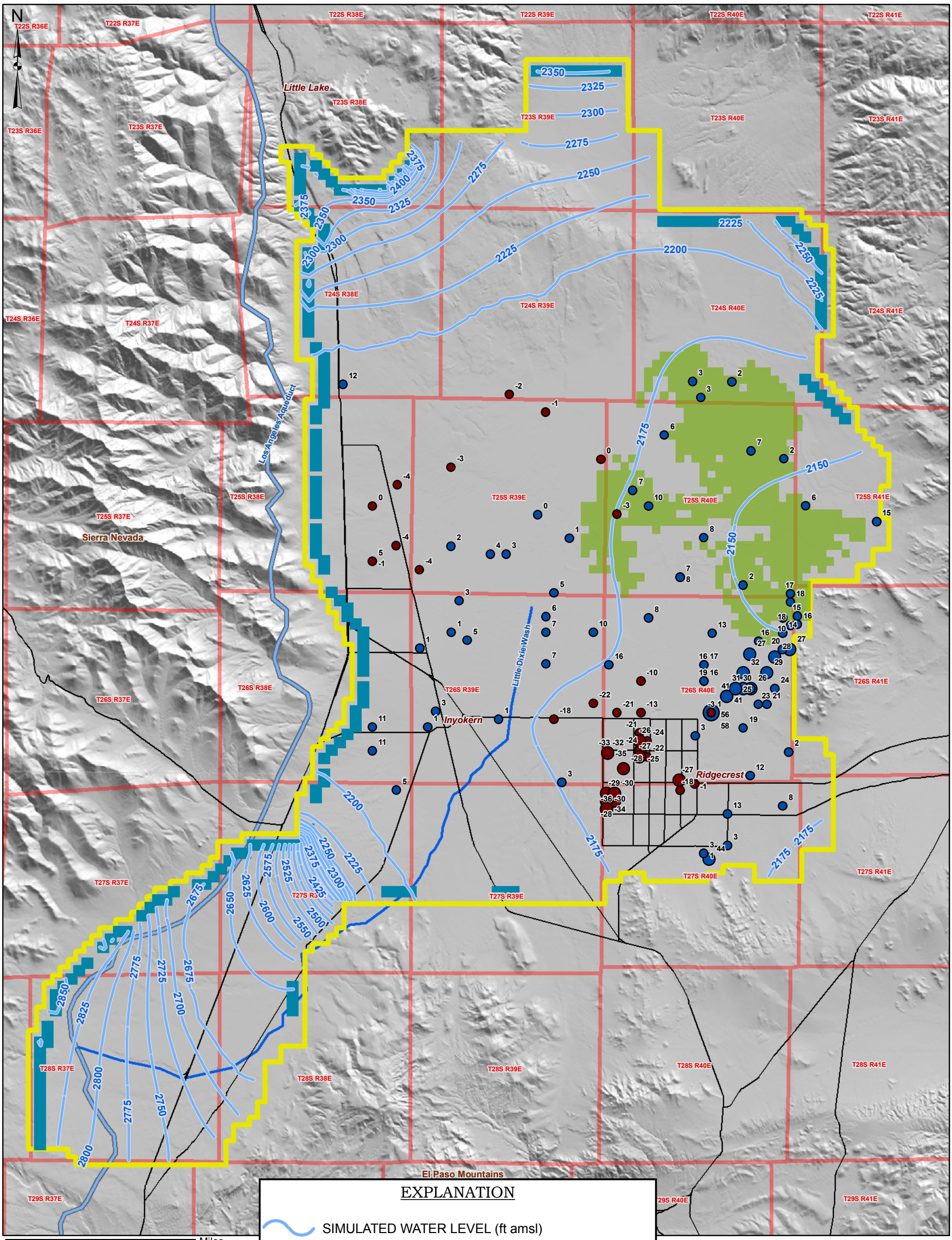
Figure 23
1920 SIMULATED WATER LEVEL
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



NOTES:
Model residual calculated by subtracting simulated water levels from observed water levels.

BROWN AND CALDWELL

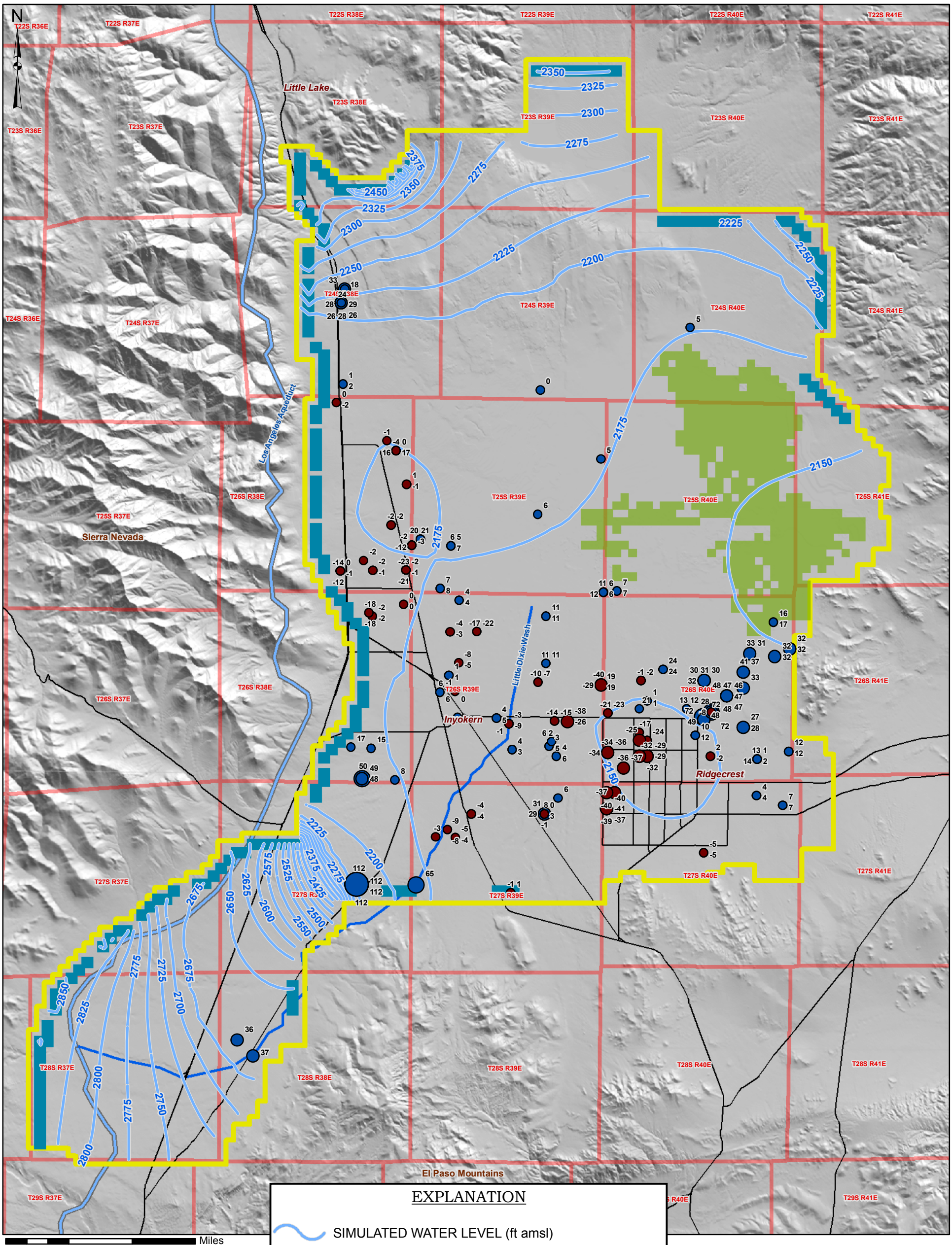
Figure 24
1953 SIMULATED WATER LEVEL
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



NOTES:
Model residual calculated by subtracting simulated water levels from observed water levels.

BROWN AND CALDWELL

Figure 25
1985 SIMULATED WATER LEVEL
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA



EXPLANATION

- SIMULATED WATER LEVEL (ft amsl)
- ACTIVE ET AREA EXTENT
- MODEL RECHARGE LOCATIONS
- ACTIVE MODEL DOMAIN

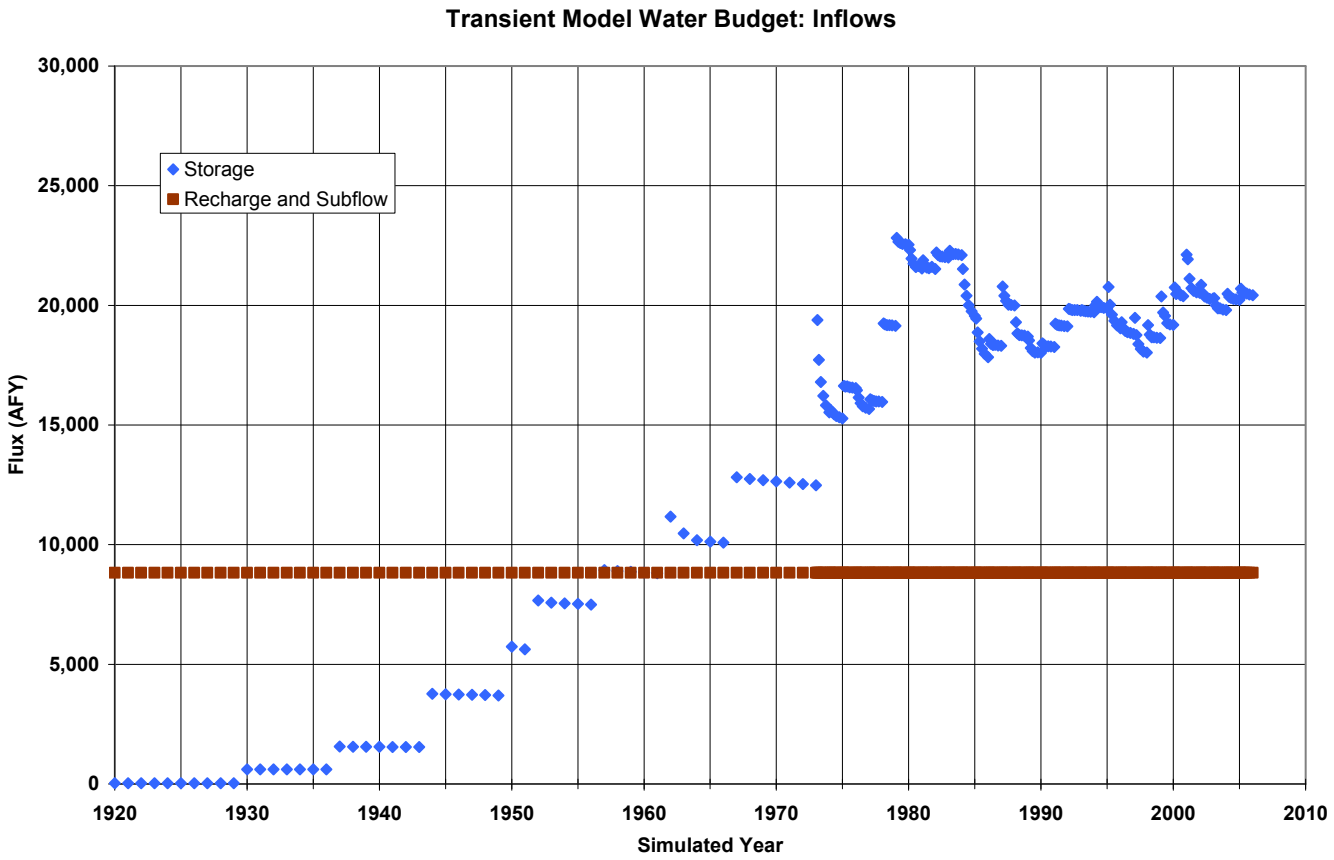
WEIGHTED MODEL RESIDUALS (ft)

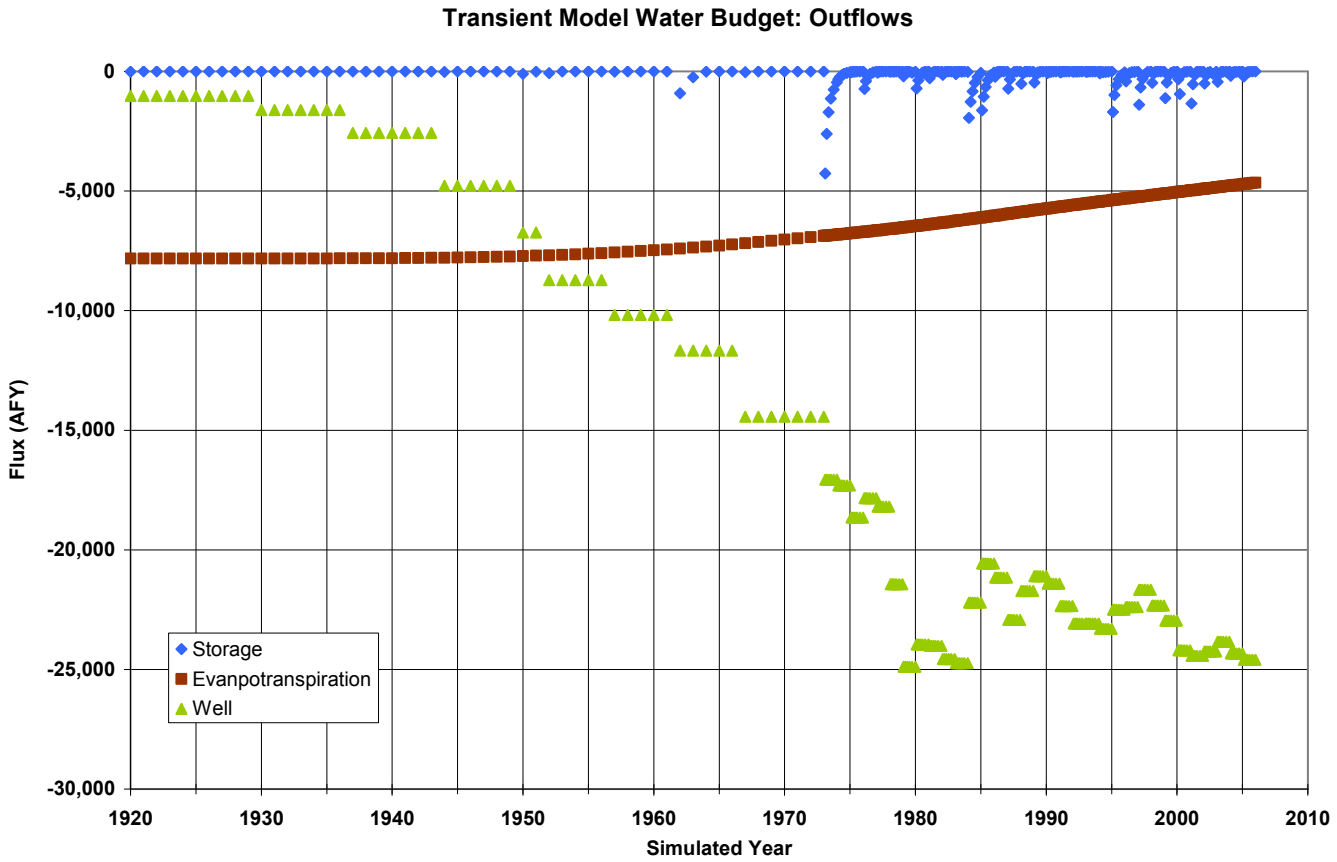
- -5 OBSERVED WATER LEVEL IS LOWER THAN MODEL
- 17 OBSERVED WATER LEVEL IS HIGHER THAN MODEL

NOTES:
Model residual calculated by subtracting simulated water levels from observed water levels.

BROWN AND CALDWELL

Figure 26
2006 SIMULATED WATER LEVEL
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA





BROWN AND CALDWELL

Figure 27
TRANSIENT MODEL WATER BUDGET
IWV GROUNDWATER FLOW MODEL
INDIAN WELLS VALLEY WATER DISTRICT
RIDGECREST, CALIFORNIA

APPENDIX A: GROUNDWATER PUMPAGE

Use of contents on this sheet is subject to the limitations specified at the end of this document.
P:\IWVWD\133908 - IWVWD Groundwater Flow Model\Deliverables\Reports\Final\Final IWV Model Rpt.doc

Groundwater Pumpage per Year by Entity in Acre Feet per Year													
Year	Berenbrock & Martin[1]	IWVWD	China Lake Acres	Ridgecrest Heights	Neal Ranch	City of Ridgecrest	Inyokern CSD	Brown Road Farming	Quist Farms	Private Wells	NAWS	Searles Valley Minerals	Total
1920	1,000	---	---	---	---	---	---	---	---	---	---	---	1,000
1921	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1922	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1923	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1924	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1925	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1926	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1927	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1928	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1929	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1930	1,019	4	---	---	---	---	4	---	---	---	---	---	1,027
1931	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1932	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1933	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1934	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1935	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1936	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1937	1,556	51	---	---	---	---	7	---	---	---	---	---	1,614
1938	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1939	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1940	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1941	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1942	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1943	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1944	2,458	101	---	---	---	---	8	---	---	---	---	---	2,567
1945	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1946	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1947	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1948	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1949	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1950	4,289	220	---	---	---	267	10	---	---	---	---	---	4,786
1951	6,004	237	---	---	---	104	295	---	---	---	---	100	6,740
1952	6,004	237	---	---	---	104	295	---	---	---	---	100	6,740
1953	7,715	300	---	---	21	122	468	---	---	---	---	100	8,726
1954	7,715	300	---	---	21	122	468	---	---	---	---	100	8,726
1955	7,715	300	---	---	21	122	468	---	---	---	---	100	8,726
1956	7,715	300	---	---	21	122	468	---	---	---	---	100	8,726
1957	7,715	300	---	---	21	122	468	---	---	---	---	100	8,726
1958	8,792	481	---	---	46	245	503	---	---	---	---	112	10,179
1959	8,792	481	---	---	46	245	503	---	---	---	---	112	10,179
1960	8,792	481	---	---	46	245	503	---	---	---	---	112	10,179
1961	8,792	481	---	---	46	245	503	---	---	---	---	112	10,179
1962	8,792	481	---	---	46	245	503	---	---	---	---	112	10,179
1963	9,582	833	---	---	32	---	145	---	---	---	895	184	11,671
1964	9,582	833	---	---	32	---	145	---	---	---	895	184	11,671
1965	9,582	833	---	---	32	---	145	---	---	---	895	184	11,671
1966	9,582	833	---	---	32	---	145	---	---	---	895	184	11,671
1967	9,582	833	---	---	32	---	145	---	---	---	895	184	11,671
1968	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1969	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433

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Groundwater Pumpage per Year by Entity in Acre Feet per Year													
Year	Berenbrock & Martin[1]	IWVWD	China Lake Acres	Ridgecrest Heights	Neal Ranch	City of Ridgecrest	Inyokern CSD	Brown Road Farming	Quist Farms	Private Wells	NAWS	Searles Valley Minerals	Total
1970	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1971	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1972	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1973	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1974	11,417	1,527	---	---	121	---	320	---	---	---	595	453	14,433
1975	---	2,983	400	1,000	1,600	---	300	1,213	40	1,750	5,000	2,781	17,067
1976	---	3,099	400	1,000	1,600	---	300	1,195	53	1,750	5,000	2,911	17,309
1977	---	3,063	400	1,000	1,600	---	300	2,162	67	1,750	5,000	3,315	18,656
1978	---	3,357	400	1,000	1,600	---	300	2,573	80	1,750	5,000	1,783	17,843
1979	---	3,402	400	1,000	1,600	---	300	2,606	93	1,750	5,154	1,893	18,198
1980	---	3,319	400	1,000	1,633	---	300	6,012	107	1,750	4,995	1,925	21,441
1981	---	4,223	400	1,000	1,602	---	300	8,029	120	1,750	4,804	2,667	24,894
1982	---	3,963	400	1,000	1,182	---	300	8,259	133	1,750	4,450	2,519	23,957
1983	---	4,316	400	1,000	1,402	---	300	8,070	147	1,750	4,402	2,227	24,013
1984	---	4,940	400	1,000	1,254	---	300	8,250	160	1,750	4,694	1,821	24,569
1985	---	4,981	400	1,000	1,960	---	300	8,080	160	1,750	4,002	2,106	24,739
1986	---	5,901	400	1,000	1,882	---	300	4,311	186	1,750	4,430	2,051	22,212
1987	---	7,426	IWVWD[1]	IWVWD[1]	1,158	---	300	3,313	212	1,750	4,422	1,992	20,573
1988	---	7,889	---	---	956	---	173	4,204	238	1,750	3,980	1,967	21,157
1989	---	8,725	---	---	IWVWD[1]	---	175	5,651	264	1,750	4,205	2,156	22,926
1990	---	8,600	---	---	---	---	170	4,950	289	1,750	3,667	2,290	21,716
1991	---	7,700	---	---	---	---	150	5,390	315	1,750	3,364	2,427	21,096
1992	---	7,650	---	---	---	---	141	5,683	341	1,750	3,351	2,502	21,418
1993	---	7,800	---	---	---	---	150	6,161	367	1,750	3,411	2,712	22,351
1994	---	8,300	---	---	---	---	146	6,003	393	1,750	3,684	2,802	23,078
1995	---	8,100	---	---	---	---	125	5,942	419	1,750	3,848	2,896	23,079
1996	---	8,504	---	---	---	---	134	6,246	445	1,750	3,367	2,860	23,305
1997	---	8,336	---	---	---	---	139	6,240	471	1,750	2,983	2,580	22,499
1998	---	8,699	---	---	---	---	102	6,240	496	1,750	2,593	2,507	22,388
1999	---	8,154	---	---	---	---	104	6,240	522	1,750	2,441	2,456	21,668
2000	---	8,330	---	---	---	---	111	6,240	548	1,750	2,587	2,766	22,333
2001	---	8,447	---	---	---	---	97	6,520	574	1,750	2,834	2,732	22,955
2002	---	8,865	---	---	---	445	115.6	6,768	600	1,750	3,091	2,564	24,198
2003	---	8,605	---	---	---	616	126	7,536	600	1,750	2,633	2,562	24,428
2004	---	8,992	---	---	---	413	118.4	7,496	600	1,750	2,413	2,470	24,253
2005	---	8,543	---	---	---	366	135	7,664	600	1,750	2,280	2,507	23,846
2006	---	8,864	---	---	---	385	135	7,568	600	1,750	2,442	2,591	24,336
2007	---	9,205	---	---	---	420	91	7,416	600	1,750	2,581	2,530	24,593

Notes:

--- = no data

Pumpage from agricultural entities (Brown Road Farms, Neal Ranch and Quist Farms) was reduced by 20 percent to account for irrigation recharge to the aquifer.
Magnitude and distribution of all historical pumpage from 1920 through 1974 is from Berenbrock and Martin, 1991 (USGS WRI 89-4191).
[1] = Subsequent pumping included in IWVWD total

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APPENDIX B: ADDITIONAL MODEL CALIBRATION DATA

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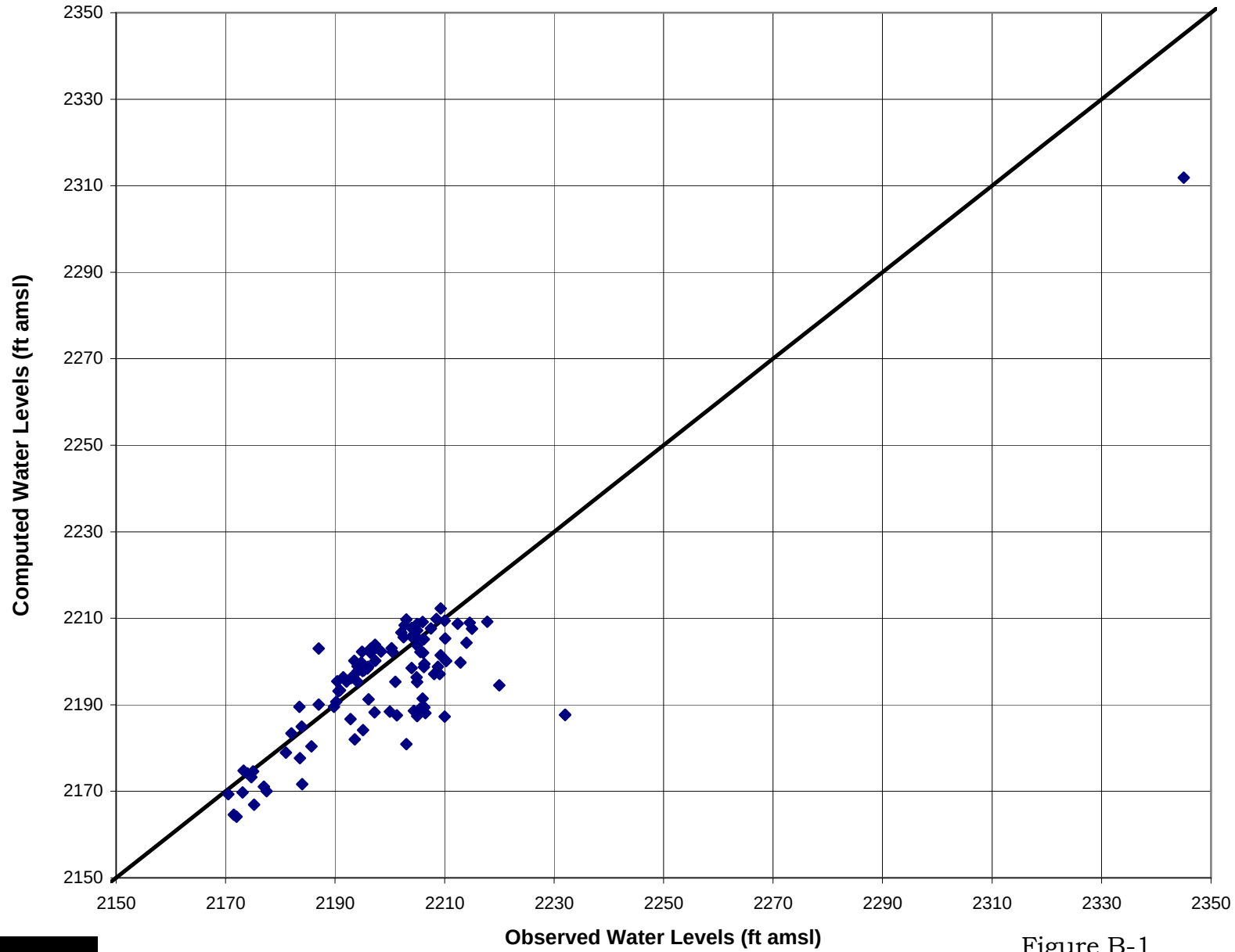

BROWN AND CALDWELL

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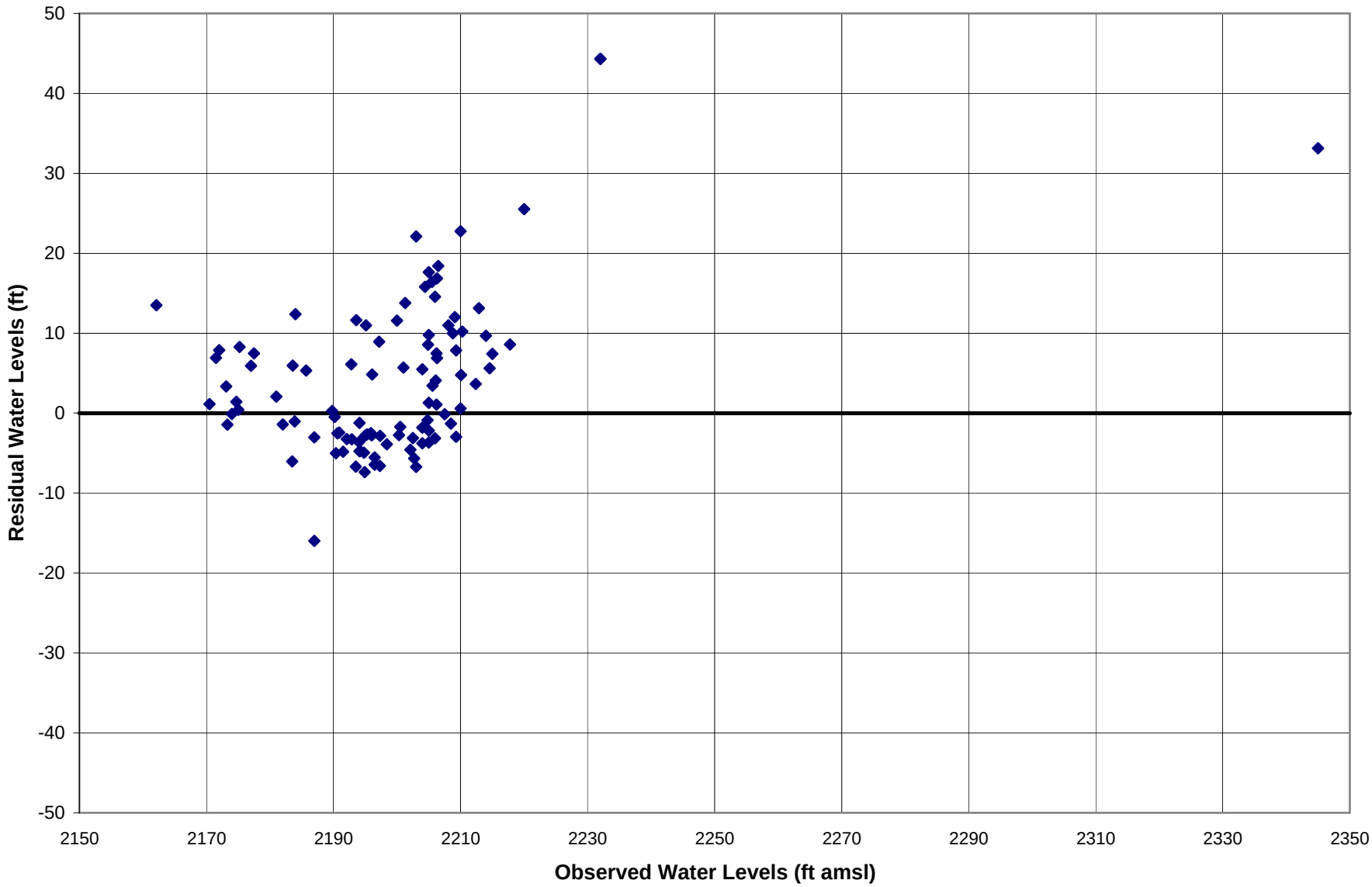
Figure B-1
1920 Observed vs. Computed Water Levels
Model Calibration



BROWN AND CALDWELL

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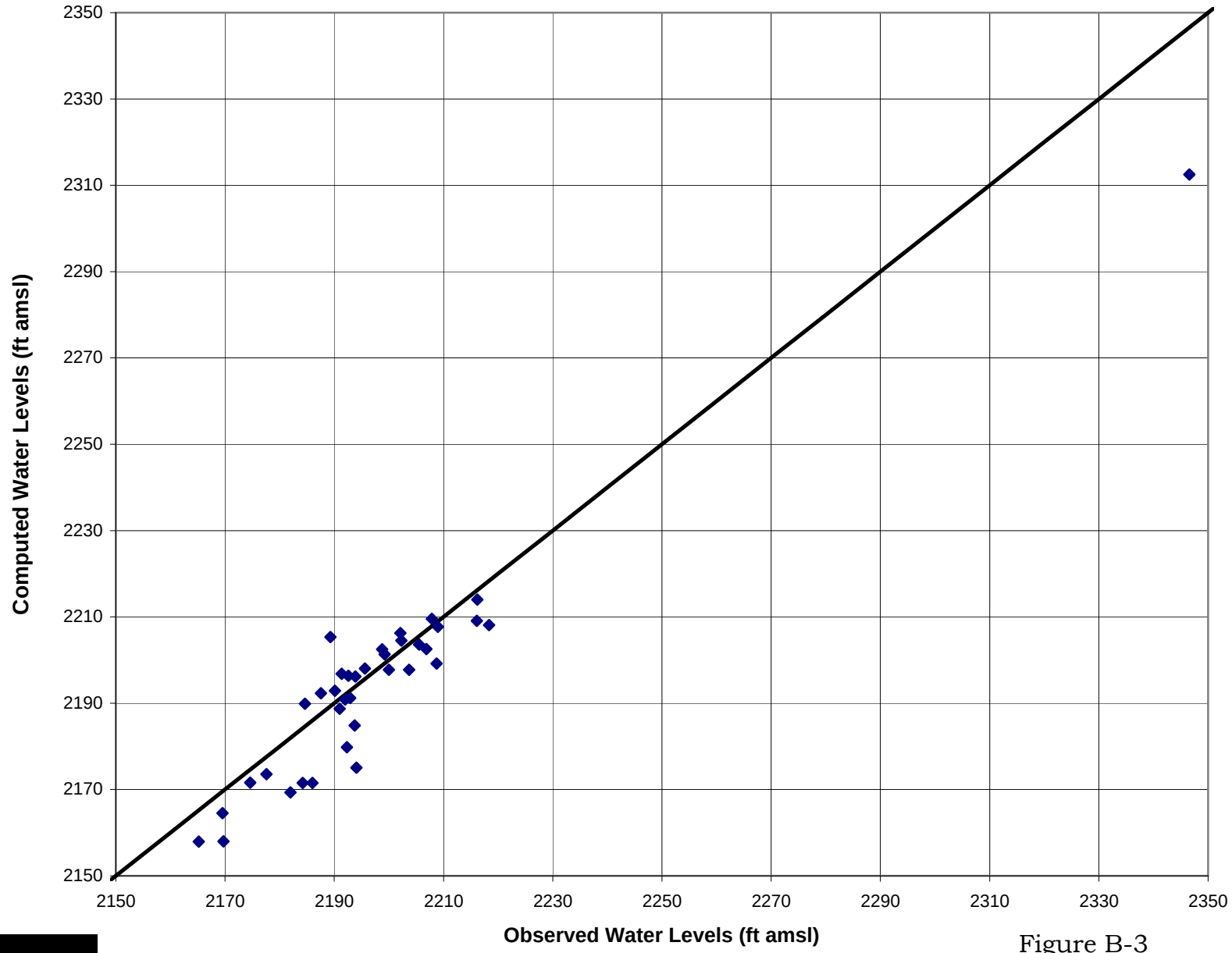
Figure B-2
1920 Observed vs. Model Residual Water Levels
Model Calibration



BROWN AND CALDWELL

Figure B-3
1953 Observed vs. Computed Water Levels
Model Calibration

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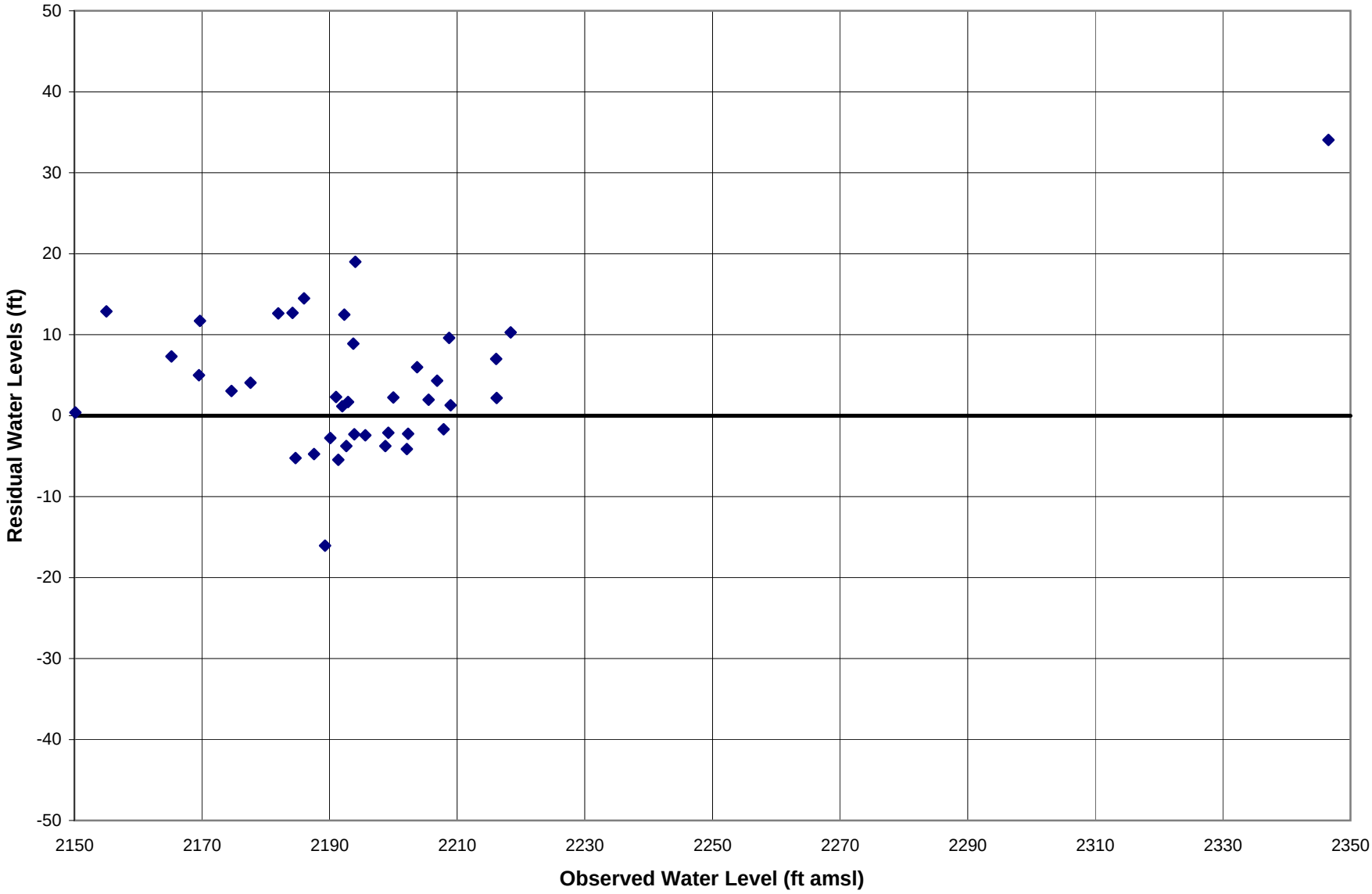

BROWN AND CALDWELL

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Figure B-4
1953 Observed vs. Model Residual Water Levels
Model Calibration

APPENDIX Z: DIGITAL DATA SETS

Included PDF of entire Final Report

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Water/Wastewater Report

AECOM

SOLAR MILLENNIUM
RIDGECREST SOLAR POWER PROJECT

Water / Wastewater Report

July 2009

AECOM Water

AECOM

SOLAR MILLENNIUM
RIDGECREST SOLAR POWER PROJECT

Water / Wastewater Report

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DRAFT

Solar Millennium
Ridgecrest Solar Power Project
Water / Wastewater Report

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DRAFT

Section 1 Water

1.1 Introduction

The Ridgecrest Solar Power Project (RSPP) Plan of Development has been prepared to support applications for development of a 242 MW commercial solar parabolic trough power generating station. This Report presents water demands for the project and describes sources, uses, and treatment requirements for that water.

1.2 Water Requirements

The Ridgecrest Solar Power Project requires water for a number of uses:

- Domestic potable uses include drinking water, showering, toilets, hand washing, etc.
- Power cycle makeup water to supply the steam driving the steam turbine generators (This water is recycled and does not constitute consumptive use).
- Mirror wash water to maintain solar collector efficiency.
- Ancillary equipment heat rejection for cooling generators, pumps, and other equipment.
- Dust suppression.
- Construction water, which will be required only during the construction period.

Note that water will not be used for condensing steam in the power generation cycle. This will be a “dry” plant, using air-cooled condensers rather than water cooled condensers.

Table 1 presents anticipated water requirements associated with various uses for each month of the year. **Table 1** shows both the total water use and the consumptive use (power cycle makeup water is non-consumptive because it is recycled).

Power Cycle Makeup Water and Ancillary Heat Rejection were determined based upon anticipated power production rates for each month as provided by Solar Millennium’s power cycle engineers.

Mirror Wash Water use was estimated based upon experience at other locations with similar climatic conditions.

Domestic Potable Use was estimated based upon the number of employees and the number of hours expected to be worked during the year. An average consumption of approximately 37 gallons per person per day was assumed for each employee.

Dust suppression is required to maintain power production. It is proposed that unpaved roadways will be wetted on a regular basis for dust control. In order to conserve water supplies, concentrate from the water treatment process will be used for this purpose.

It can be seen from **Table 1** that of the 47 million gallons (MG) of water needed annually (35 MG consumptive use) the maximum monthly demand is anticipated to be about 5.7 MG (4.1 MG consumptive use) of water. Minimum monthly demand is anticipated to be about 1.26 MG (1.0 MG consumptive use).

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Table 1
Anticipated Monthly Water Use
Ridgecrest Solar Power Project

Month	Power Cycle Makeup Water[1] (gallons)	Mirror Wash Water (gallons)	Domestic Potable Water (gallons)	Dust Suppression Water (gallons)	Ancillary Equip. Heat Rejection (gallons)	Total (gallons)	Consumptive Use (gallons)
January	288,000	493,000	94,000	81,000	305,000	1,261,000	973,000
February	698,000	987,000	94,000	182,000	739,000	2,700,000	2,002,000
March	1,148,000	987,000	94,000	251,000	1,216,000	3,696,000	2,548,000
April	1,292,000	1,973,000	94,000	348,000	1,369,000	5,076,000	3,784,000
May	1,564,000	1,973,000	94,000	390,000	1,657,000	5,678,000	4,114,000
June	**1,582,000**	**1,973,000**	**94,000**	**392,000**	**1,676,000**	**5,717,000**	**4,135,000**
July	1,390,000	1,973,000	94,000	363,000	1,472,000	5,292,000	3,902,000
August	1,389,000	1,973,000	94,000	362,000	1,471,000	5,289,000	3,900,000
September	1,111,000	1,973,000	94,000	320,000	1,177,000	4,675,000	3,564,000
October	986,000	987,000	94,000	226,000	1,044,000	3,337,000	2,351,000
November	647,000	987,000	94,000	174,000	685,000	2,587,000	1,940,000
December	460,000	987,000	94,000	145,000	487,000	2,173,000	1,713,000
TOTAL	**12,555,000**	**17,266,000**	**1,128,000**	**3,234,000**	**13,298,000**	**47,481,000**	**34,926,000**
AVERAGE	**34,000**	**47,000**	**3,100**	**9,000**	**36,000**	**130,000**	**96,000**
MAX DAILY	**53,000**	**66,000**	**3,100**	**13,000**	**56,000**	**191,000**	**138,000**

[1.] Power cycle makeup is recycled and not included in the consumptive use total.

1.3 Water Quality Requirements

The RSPP will be classified by the California Department of Public Health (CDPH) as a “non-community, non-transient” water system. Under this classification, the potable water system must meet the requirements of the Federal Safe Drinking Water Act and State Title 22 for mineral and microbial water quality.

Power cycle makeup water must meet and exceed the requirements for boiler feed water for boilers operating at up to 100 bar (1500 psi) pressure. **Table 2** presents quality requirements for boiler feed water. Achieving water of the quality required for power cycle makeup will entail use of desalination (reverse osmosis [RO] or electrodialysis reversal [EDR]) followed by ion exchange (IX) demineralization.

In order to minimize scaling on the mirrors, mirror wash water must have low dissolved solids. However, demineralized water as needed for power cycle makeup will not be required. Therefore, water from the primary desalination process (RO or EDR) will be used for this purpose.

While ancillary equipment heat rejection water quality does not need to be as good as power cycle makeup water, it will benefit from low dissolved solids and especially from the low scaling tendency of desalinated water.

There is no specific quality requirement for dust suppression water. It is presently anticipated that concentrate from the desalination processes (RO or EDR) will be used for dust suppression. This water is expected to have total dissolved solids (TDS) of less than 7000 mg/L. If necessary, water for dust suppression may be augmented by water from the well developed to provide construction water.

1.4 Water Source

The preferred water source for the RSPP is the potable water provided by the Indian Wells Valley Water District (IWVWD). While the proposed project location lies outside the IWVWD service area, it is within about 4 miles of the District boundary. The RSPP would be required to provide new piping to bring IWVWD water to the proposed site. It is also possible that RSPP would be responsible for modifying pumping equipment at the IWVWD Ridgecrest Heights Booster Station to be able to make deliveries to the project site (modifications could include the construction of a new pump station). RSPP demands will amount to about 1.2 percent of the existing IWVWD demand. Quality of water from IWVWD (taken from the 2007 Annual Water Quality Report) is given in **Table 3**. No data is available for silica.

If it is not possible to bring in IWVWD water, it will be necessary to provide new wells to supply the RSPP. Existing well water quality information in the project is limited, but quality is expected to be similar to water from IWVWD.

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Table 2
Boiler Water Quality Requirements

		Working Pressure (Bar)						
		0 - 15	15 - 25	25 - 35	35 - 45	40 - 60	60 - 75	75 - 100
Boiler water								
M **alkalinity**	French degrees	100	80	60	40	15	10	5
P alkalinity		0.07 M	0.07 M	0.07 M	0.07 M	> 0.5 M	> 0.5 M	> 0.5 M
SiO2	mg/l	200	150	90	40	15	10	5
TDS		4000	3000	2000	1500	500	300	100
Phosphates		30 to 100	31 to 100	20 to 80	21 to 80	10 to 60	10 to 40	5 to 20
pH		10.5 to 12				10 to 11		
Make up water		Softened or softened and carbonate free				Demineralized		

References
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'*Industrial water conditioning*', BeltsDearborn, 1991
http://www.thermidaire.on.ca/boiler-feed.html

Table 3
Water Quality (IWVWD Supply)

Constituent	Concentration
Total Dissolved Solids, mg/L	200-700
Specific Conductance, µS/cm	150-590
Alkalinity, mg/L as CaCO3	84-140
Hardness, mg/L as CaCO3	10-190
Chloride, mg/L	24-280
Sodium, mg/L	42-190
Boron, µg/L	150-1,400
pH	7.9-8.8

1.5 Water Treatment

Water received from IWVWD will meet the requirements of the California Department of Health Services (CDPH) for potable water supplies, and will not require further treatment for this purpose.

As noted above, water used for power cycle makeup, mirror washing, and ancillary equipment heat rejection will require treatment for reduction of dissolved solids. This type of treatment process is known as desalination, and can be accomplished by either thermal processes (evaporation/condensation) or membrane processes such as reverse osmosis (RO) or electrodialysis reversal (EDR). Considering the relatively good quality of the source water, it is unlikely that thermal processes would be cost effective. Accordingly, only membrane processes are considered here. The proposed treatment process for the various water uses is presented schematically in **Figure 1**. Since RO and EDR produce similar product water quality and waste streams, further discussion will reference only RO for simplicity. Selection of the process to be used at RSPP will be made during the final design process.

Membrane desalination processes split the feed stream into two streams: 1) a product water stream (permeate) with reduced salinity and 2) a concentrate stream containing the majority of the salts that were in the feed stream. Desalination processes are usually designed to operate with the highest safe recovery (recovery is the fraction of feedwater recovered as permeate) in order to minimize water loss, since the concentrate would normally be considered a waste stream. In this case, it appears that the highest safe recovery is about 93%.

RO treatment can be expected to provide product water with TDS of 20 mg/L or less and silica concentration of 3 mg/L or less, which is substantially better than the requirements for “Boiler Water” given in **Table 2**. However, in order to provide the demineralized water quality needed for power cycle makeup it will be necessary to provide ion exchange demineralization as a final treatment step after RO. Ion exchange demineralization can be done using either permanently installed equipment or portable demineralizers. Permanently installed equipment requires regeneration onsite, which can require storage and disposal of significant quantities of sulfuric acid and sodium hydroxide (caustic). Alternatively, portable demineralizers are taken offsite for regeneration at the supplier’s warehouse, so no onsite storage of chemicals is required. Offsite regeneration is recommended for the RSPP. This will eliminate the need to store the regeneration chemicals on site and minimize on site production of hazardous wastes. These demineralizers will be provided as forklift-moveable fiberglass “bottles” that will be traded out when exhausted and returned to the supplier for regeneration.

It is anticipated that all of the power cycle makeup water will be recycled and reused as feed to the RO system. This will reduce the salinity of the RO feed and improve the RO recovery. Because of the very low TDS of the makeup to the ancillary equipment heat rejection cooling tower, it is expected that blowdown will not be required. Rather, drift (windblown mist) will provide the necessary salt removal. If blowdown is required, it will be recycled to the RO system.

It may be more advantageous to recycle the power cycle makeup water to the IX demineralizer rather than to the RO. This modification will be evaluated during final design.

1.6 Conceptual Facilities Sizing

Figure 2 presents a conceptual layout of the water treatment plant. From **Table 1** it can be seen that the maximum anticipated monthly water demand is approximately 5.7 million gallons, which is equivalent to about 191,000 gallons per day. Sufficient storage will be provided to allow hourly and daily peak demands to be taken from storage, so that maximum water treatment capacity will be 191,000 gallons per day. However, considering that the RSPP will only be producing power during daylight hours, it is recommended that the water treatment facilities be capable of providing the total 191,000 gallons in 12 hours of operation. This will allow the treatment process to be operated using self-generated power, which is expected to be substantially less expensive than power taken from the grid.

In order to provide redundancy it is recommended that the treatment process be provided using two identical trains, each capable of providing 191,000 gallons over 24 hours of operation. By operating both trains during normal operation, the maximum daily demand can be provided in 12 hours as discussed in the previous paragraph. In the event that one train is not available, the other can be operated for 24 hours to meet the plant demand.

1.7 Treatment Criteria

Table 4 summarizes the types of treatment (i.e., RO and IX) required for each of the various water demands at the RSPP during the maximum demand month (June). The quantity of water to be treated on a daily basis has been included so that tentative sizing of each treatment process can be identified.

Table 4
Treatment Capacities

Use	Domestic	Power Cycle Makeup	Mirror Washing	Anc. Equipment Heat Reject.	Dust Control
RO		X	X	X	X[1]
IX		X			
Daily Capacity, gallons	3,100	53,000	66,000	56,000	13,000

Total RO permeate capacity will be the sum of the Power Cycle Makeup, Mirror Washing, and Ancillary Equipment Heat Rejection capacities, or 175,000 gallons per day (122 gallons per minute). Total ion exchange demineralizer capacity will be 53,000 gallons per day (37 gallons per minute).

1.8 Fire Flow Requirements

The location of the RSPP is such that it will fall under the jurisdiction of the Kern County Fire Department. It is expected that the RSPP will be classified as an industrial facility under the Kern County Development Standards and as such the minimum required fire flow would be 1500 gpm for 4 hours. This calls for a minimum fire water storage volume of 360,000 gallons. Fire pumps as well as ten inch minimum piping will be needed to convey the required flows. Maximum hydrant spacing will be 330 feet throughout the Power Block area.

1.9 Storage

Water storage will be provided both for influent potable water from IWVWD and for desalinated water for process use.

Potable water storage will consist of a 1.5 million gallon (MG) tank (or alternatively two 750,000 gallon tanks). This tank will meet the requirements of the CDPH for potable water storage (e.g., NSF 61 approved lining, screened vents, etc.). It will provide water for fire protection, domestic potable uses, and supply to the water treatment system for the other uses.

Excluding fire protection storage, the potable water tank will provide over five days' supply for the RSPP when full. This should be sufficient to allow continued operation during routine maintenance activities on the supply pipeline.

Permeate water storage will be provided. This will consist of a 600,000 gallon tank (or alternatively two 300,000 gallon tanks) providing storage for power cycle makeup, mirror wash, and ancillary equipment heat rejection water. This tank will provide over three days' storage for these uses, which will extend the amount of time available for operation during potable water supply outages.

Concentrate from the reverse osmosis process will be stored in a concentrate storage tank until used for dust control. This tank is recommended to be a 100,000 gallon tank, providing one weeks' storage volume.

[1] Dust control will use the concentrate from the RO process.

1.10 Construction Water

Construction water requirements for the site will consist of providing water for all construction related activities. These activities include:

- dust control for areas experiencing construction work as well as mobilization and demobilization,
- dust control for roadways,
- water for grading activities associated with both cut and fill work,
- water for soil compaction in the utility and infrastructure trenches,
- water for soil compaction of the site grading activities,
- water for stockpile sites,
- water for the various building pads, and
- water for concrete uses on site.

The predominate use of water will be for grading activities which will have a steady rate of work each month. The grading schedule for the site has been spread to cover the total construction period and therefore there should be no definable peak but rather a steady state condition of water use. The average water use for this site is estimated to be about 561,000 gallons per working day. Total construction water use for the duration of the project is estimated to be about 478,000,000 gallons. Construction water is expected to be provided by an onsite well that will be drilled for that purpose or alternatively by way of a potable water line connection to IWVWD. Potable water during construction will be brought onsite in trucks and held in day tanks.

Section 2 Wastewater

2.1 Introduction

The Ridgecrest Solar Power Project Plan of Development has been prepared to support applications for design and development of a 242 MW commercial solar parabolic trough power generating station. This Report presents anticipated wastewater sources and amounts and proposed methods for disposal of wastewater.

2.2 Wastewater Sources and Quantities

The Ridgecrest Solar Power Project will produce one primary wastewater stream and one temporary stream:

- Sanitary wastewater produced from the administrative center and operator stations.
- Construction related waste.

Note that the power generation cycle will not produce cooling tower blowdown. This will be a “dry” plant, using air-cooled condensers rather than water cooled condensers.

Sanitary wastewater production will not exceed domestic water use. As described in the Water Report, maximum domestic water use will be about 94,000 gallons per month (3,100 gallons per day). It is anticipated that the

wastewater would be consistent with domestic sanitary wastewater and would have Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) in the range of 150 to 250 mg/L.

The construction phase will produce an additional temporary wastewater stream due to onsite employees.

2.3 Wastewater Treatment

The proposed project intends to utilize a septic system and leach field design for disposal of on site wastewater. The on site wastewater consists of domestic wastewater only. There are no process or operational wastewaters that will be connected to the septic system and leach field. The use of a septic system and associated leach field is a well established process and acceptable method of treatment and disposal when 1) there is no local sewer system available, 2) when the local soil and groundwater conditions are acceptable to this method, and 3) when the chemical makeup of the wastewater is not of a hazard to the local environment.

There is no sewer system near this site and extension of a line to this site is not feasible. The local soils are very permeable and the depth to groundwater in this area is generally 450 feet below ground surface. According to the Metcalf & Eddy *Wastewater Engineering* handbook, studies have shown that at a depth of 3 feet below the bottom of a leach field the majority of constituents expected to be present in domestic wastewater typical for this project site (i.e., BOD, SS, viruses, etc.) are typically at a level of non-detect. This is because the majority of treatment in the system occurs as the septic tank effluent flows through the porous media in the leach field and as it passes through the biomat that forms on the interface between the leach field and the soil below the leach field. The biomat serves the function of filtering the effluent (both physically and biologically) and also acts as a biological treatment unit. The use of a leach field on this site presents no problem to either the local environment or to the groundwater system. As previously stated, there are no industrial flows contributing to the septic system. The proposed flows are of the domestic type; thus the use of a septic system and leach field is applicable.

For this project location a septic system with a leach field is the preferred environmental system for wastewater treatment. The 3 on site facilities requiring wastewater treatment (administration building, warehouse, power block) are separated by anywhere from 3000 feet to as much as 8000 feet. The distinct buildings each have from 20 to 40 people in each location and 3 package treatment plants for these small uses is not feasible, nor is construction of one treatment plant with miles of sewer lines and lift stations feasible. The volume of wastewater that is generated for this site is relatively negligible and consists of wastewater from approximately 70 on-site personnel. For a project site in excess of 4960 acres, this is a negligible impact and the use of a package treatment plant is neither warranted nor desired. A package treatment plant would require a certified operator along with Waste Discharge Requirements, reporting, disposal, etc. In fact, very small flows (as are expected at each of the sites requiring treatment) combined with high variations in flow (as are typical in very small installations) can adversely affect the performance of a package treatment plant. A package treatment plant for this application is not economically justified and the resultant wastewater stream would have to be passed to a leach field or percolation pond, no different than the proposed system of disposal. In addition, the solid waste from the treatment process would have to be collected from the site and taken to the local treatment plant for processing, which is relatively no different that what would be required for the proposed system. The only other option for the solid waste would be to spread it out in sludge drying beds on site, which is not a preferred environmental solution for this site.

A variety of options were considered for the wastewater disposal from this project site. The options of connecting to local wastewater systems, treatment on-site with a package treatment plant, and septic systems with leach fields were all considered and evaluated. The decision to use the septic system approach was based on engineering judgment that considered the type and volume of wastewater as well as the soil conditions, groundwater location, and environmental impacts of the other systems. The septic system and leach field were found to be the best system for this application.

Therefore, it is proposed that sanitary wastes be collected for treatment in septic tanks and disposed of via leach fields located at the power block as well as at the admin area and warehouse area. If other restrooms are located remotely it is likely that smaller individual septic tank systems will be constructed to receive sanitary wastes at those locations. Based on the current estimate of 3,100 gallons of sanitary wastewater production per day a total

leach field area of approximately 6,200 square feet will be required. It is recommended that an additional 6,200 square feet of land be kept undeveloped for purposes of constructing a replacement leach field should that be necessary.

Liquid effluent from the septic tank, which is disposed by percolation via the leach field, will have biological oxygen demand (BOD) of about 175 mg/l and suspended solids (SS) concentration of about 75 mg/L. Heavy solids that settle to the bottom of the septic tank will undergo anaerobic decomposition and slight compaction, and will be removed every three to five years.

The leach field will be constructed of open tile drains laid in trenches filled with gravel or crushed stone. The trenches permit downward percolation or upward evaporation and transpiration.

2.4 Construction Wastewater

Sanitary wastes produced during construction will be held in chemical toilets and transported offsite for disposal by a commercial chemical toilet service.

Any other wastewater produced during construction will be collected by the contractor in Baker tanks and transported offsite for disposal in a DPH approved manner.

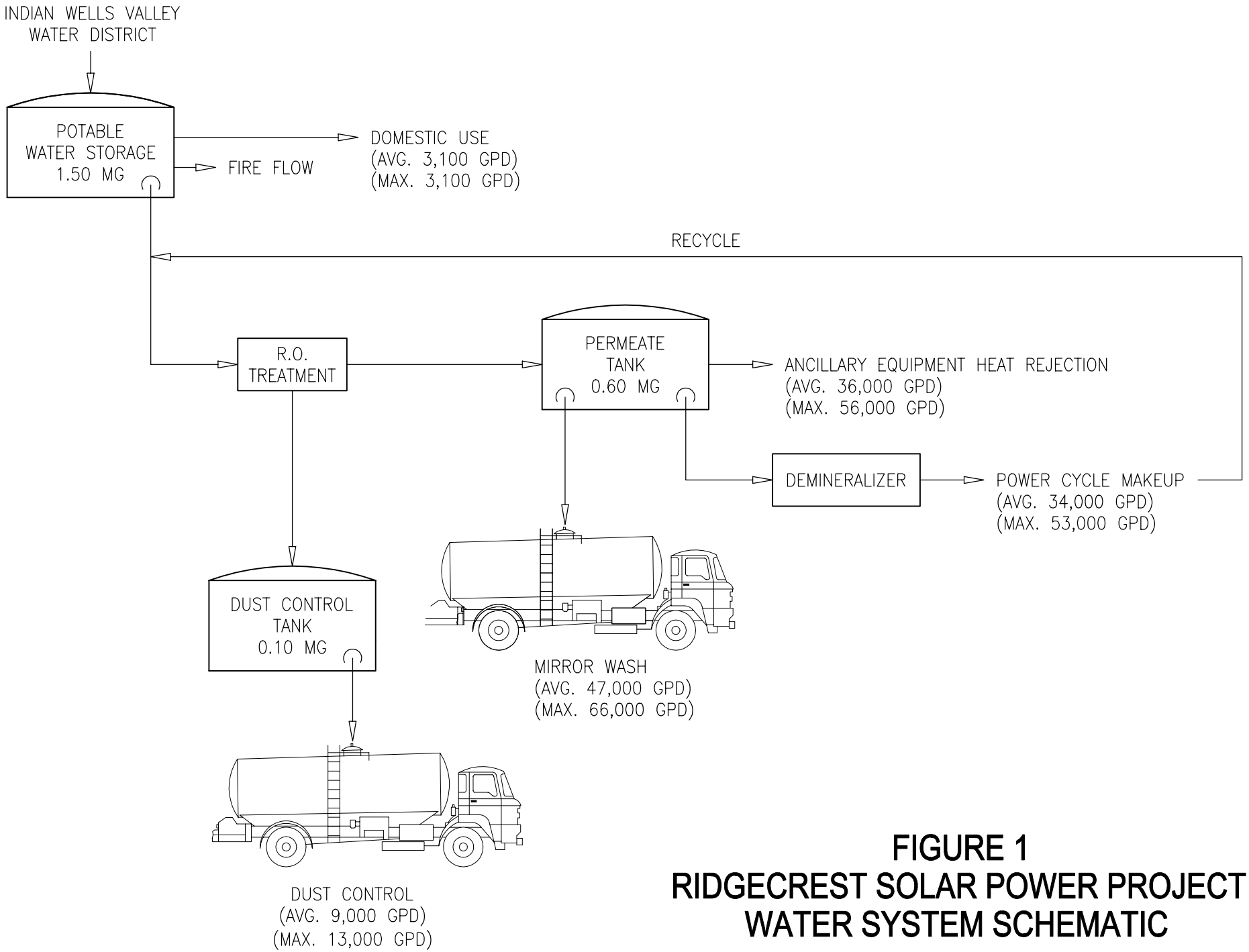

FIGURE 1
RIDGECREST SOLAR POWER PROJECT
WATER SYSTEM SCHEMATIC

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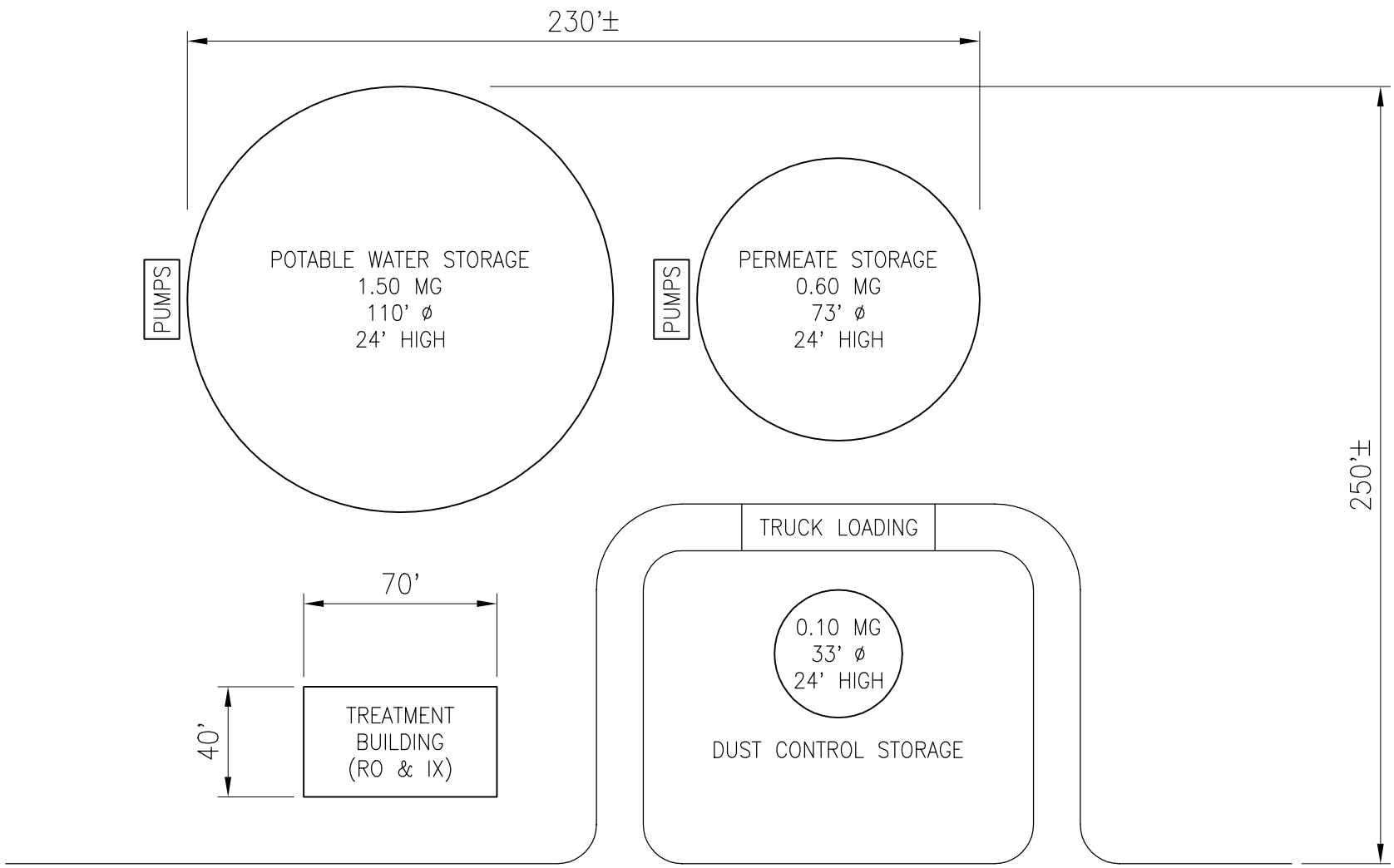

FIGURE 2
RIDGECREST SOLAR POWER PROJECT
WATER SYSTEM LAYOUT

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