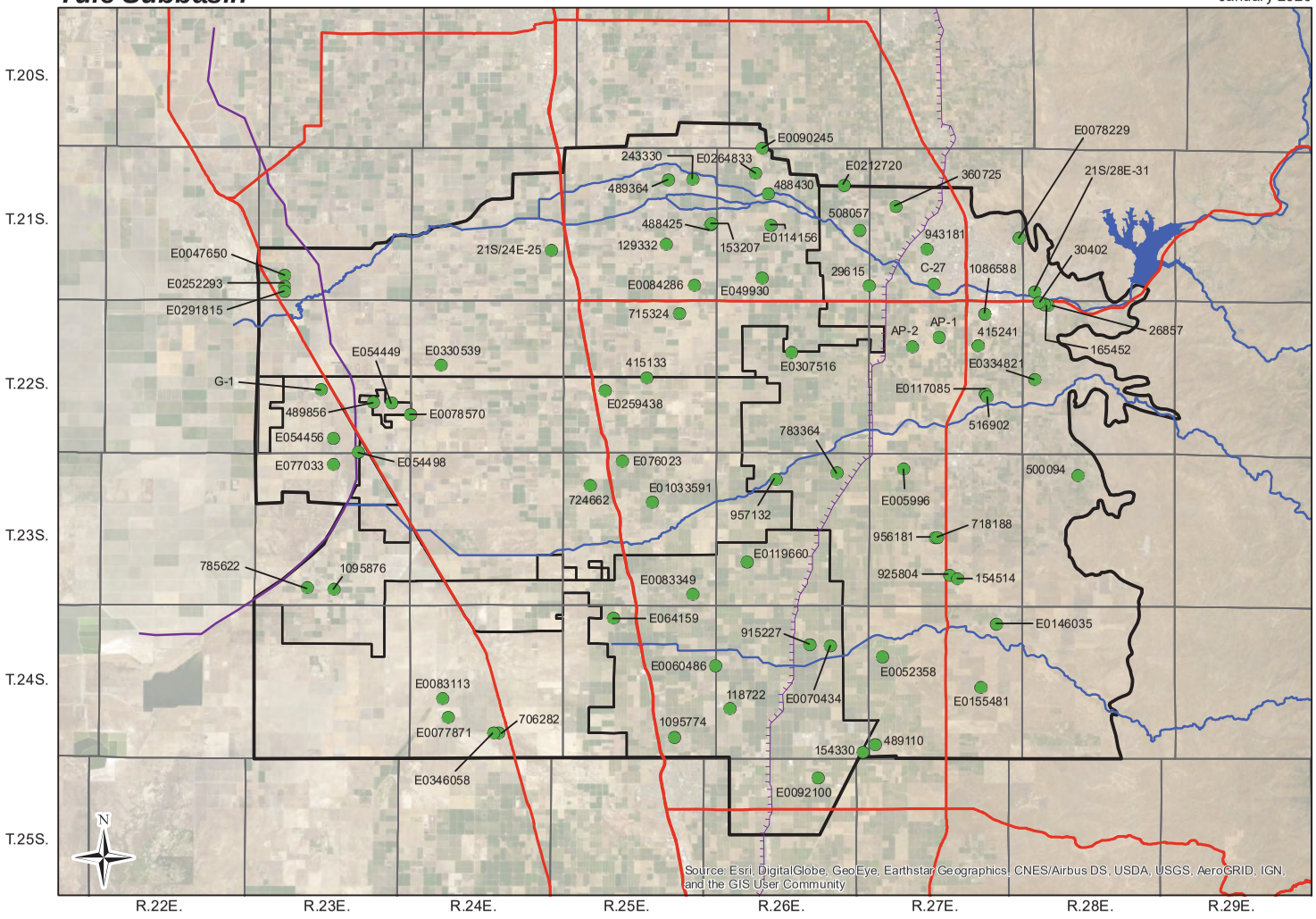
Tule Subbasin

January 2020



Thomas Harder & Co.
Groundwater Consulting

Tule Subbasin Monitoring Plan

Map Features

- Groundwater Quality Well Location
- Canal
- Friant-Kern Canal
- Basin Boundary
- GSA Boundaries
- State Highway/Major Road

Well Location data from:
Tule Basin Water Quality Coalition, 2017

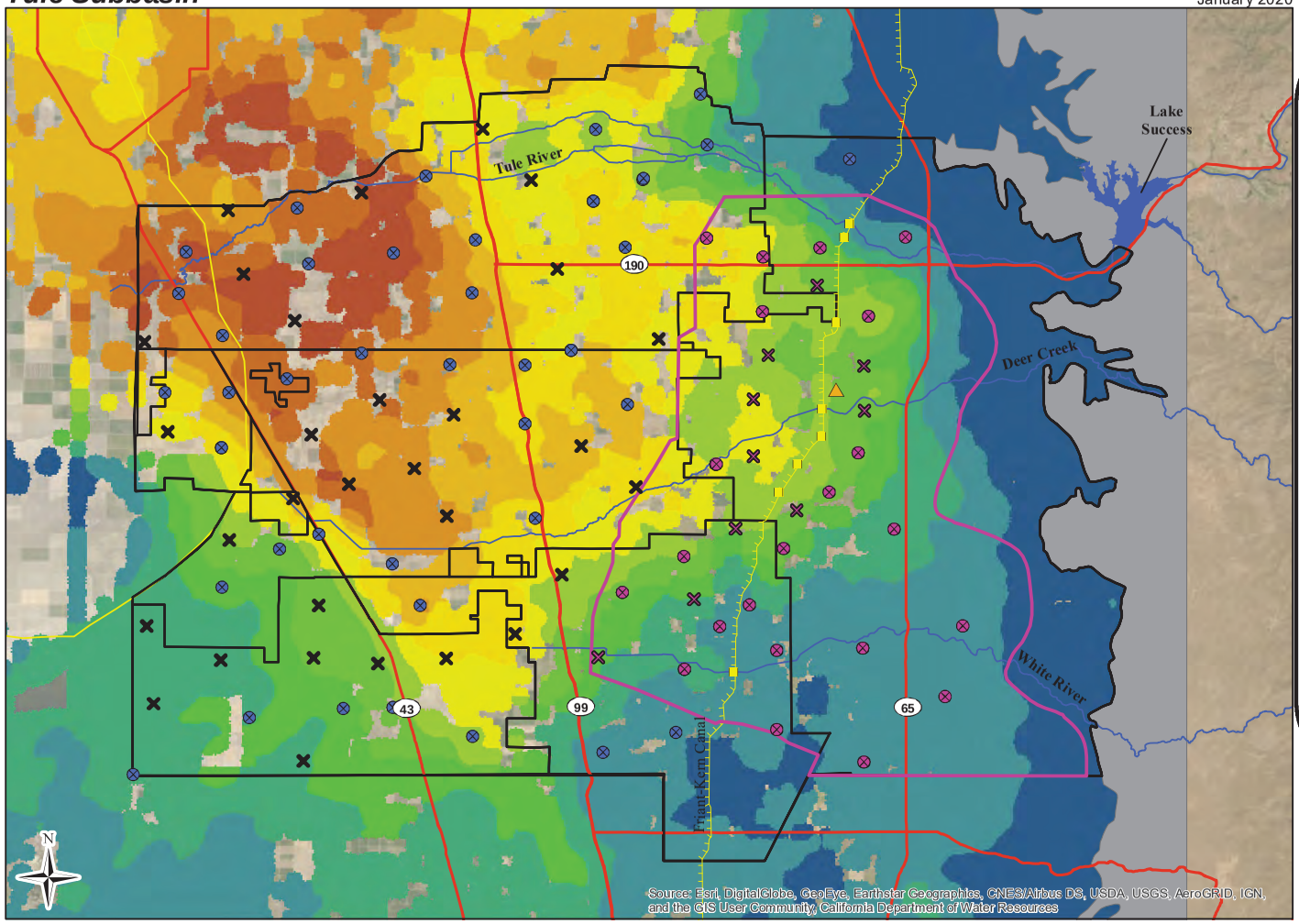
Groundwater Quality Monitoring Network

Figure A1-7

Tule Subbasin

January 2020

Tule Subbasin Monitoring Plan



Map Features

InSAR Subsidence from 2015 to 2018 (ft)

- -2.75 to -2.50
- -2.50 to -2.25
- -2.25 to -2.00
- -2.00 to -1.75
- -1.75 to -1.50
- -1.50 to -1.25
- -1.25 to -1.00
- -1.00 to -0.75
- -0.75 to -0.50
- -0.50 to -0.25
- -0.25 to 0
- 0 to 0.25
- 0.25 to 0.50

- GPS Monitoring Location at Well Site - Annual Monitoring
- Stand Alone GPS Station - Annual Monitoring
- GPS Monitoring Location at Well Site - Quarterly Monitoring
- Stand Alone GPS Station - Quarterly Monitoring
- Representative Monitoring Site
- Existing USGS Extensometer
- Friant-Kern Canal Land Subsidence Monitoring Zone
- GSA Boundaries
- Friant-Kern Canal
- Canals
- Major Hydrologic Feature
- Freeway/State Highway

0 0.5 1 2 3 4 5 6 7 8 9 10 Miles

NAD 83 State Plane Zone 4

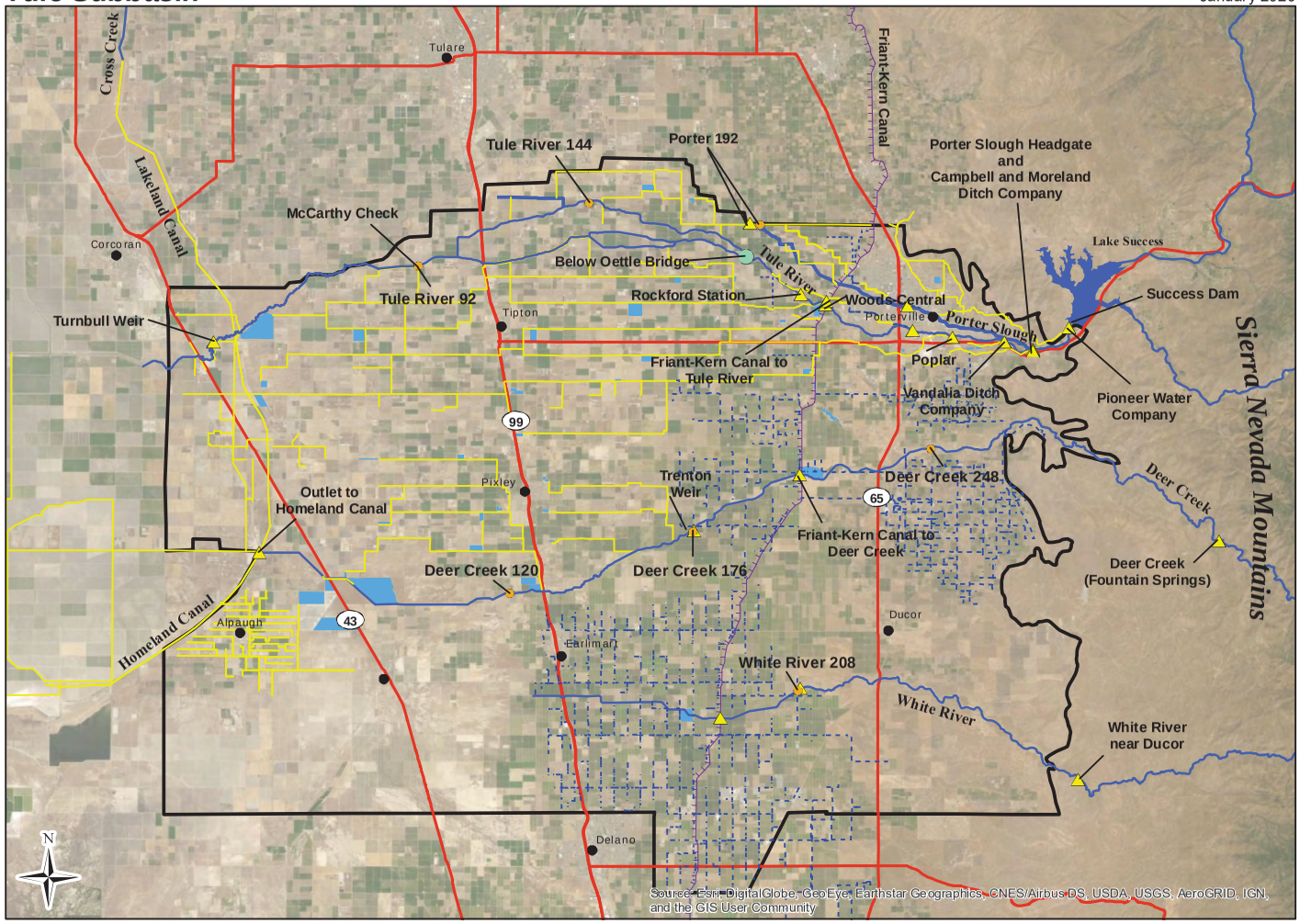
Thomas Harder & Co.
Groundwater Consulting

Land Subsidence Monitoring Features

Figure A1-8

Tule Subbasin

January 2020



Tule Subbasin Monitoring Plan

Map Features

- Surface Water Sampling Site
- Surface Water Measurement Location
- Surface Water Diversion Location
- Friant-Kern Canal and California Aqueduct
- Canals
- Pipe
- State Highway
- Major Hydrologic Feature
- Basin Boundary
- Artificial Recharge Basin
- City or Community

Thomas Harder & Co.
Groundwater Consulting

Surface Water Monitoring Features

Figure A1-9

Tables

Summary of Existing Upper Aquifer Monitoring Wells

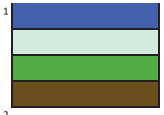
CASGEM State Well Number	Short State Well Number	Well Name/ Well Log[1]	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer[2]	Groundwater Level Record	X-Coordinate[3] (ft)	Y-Coordinate[4] (ft)
21S23E32K001M	21S/23E-32K01	32K01	N/A[5]	406	104	402	U	1973 - 2016	6412095.50	1903994.20
21S23E36R001M	21S/23E-36R01	36R01	1,000	1,000	400	1,000	C	1970 - 2006	6434801.70	1902051.70
21S24E35A001M	21S/24E-35A01	35A01	328	328	245	302	U	1954 - 2018	6461000.50	1906317.80
21S24E36A001M	21S/24E-36A01	36A01	N/A	N/A	N/A	N/A	N/A	1957 - 2011	6465847.00	1906554.60
21S25E03R001M	21S/25E-03R01	03R01	328	274	145	238	U	1961 - 2016	6487723.90	1929460.30
21S25E30D002M	21S/25E-30D02	30D02	492	475	190	475	U	1963 - 2013	6466835.20	1912299.00
21S26E32A001M	21S/26E-32A01	32A01	267	267	153	261	U	1932 - 2016	6508783.60	1906873.40
N/A	21S/26E-34	Poplar CSD	400	400	120	400	U	N/A	6519268.00	1903301.00
22S23E30J001M	22S/23E-30J01	30J01	460	450	240	450	U	1998 - 2014	6408171.22	1878179.10
22S26E13R001M	22S/26E-13R01	13R01	385	380	240	380	U	1960 - 2017	6529368.50	1886156.20
22S27E13A001M	22S/27E-13A01	13A01	400	400	120	380	U	1945 - 2017	6561150.80	1890682.60
23S24E28J002M	23S/24E-28J02	28J02	500	500	200	500	U	1953 - 2017	6450365.70	1846351.30
23S25E16N004M	23S/25E-16N04	16N04	250	240	200	240	U	1959 - 1982	6476961.27	1854787.88
23S26E34Q001M	23S/26E-34Q01	34Q01	372	372	20	372	U	1957 - 2010	6516682.30	1838677.90
23S26E12J001M	23S/26E-12J01	12J01	280	280	233	278	U	1952 - 2008	6529147.00	1861684.10
23S26E09C001M	23S/26E-09C01	09C01	440	N/A	200	390	U	1957 - 2016	6510577.90	1864848.50
24S24E25J001M	24S/24E-25J01	25J01	210	210	159	210	U	1970 - 2017	6465264.59	1814220.76
24S26E04P001M	24S/26E-04P01	04P01	402	393	216	393	U	1979 - 2014	6511203.86	1834634.23
N/A	N/A	E20	500	490	240	480	U	2008 - 2017	6430745.43	1880707.24
N/A	N/A	G23	438	430	210	420	U	2017	6416155.20	1882056.88
N/A	N/A	W14	490	490	240	480	U	2008 - 2017	6418660.35	1873382.93
N/A	N/A	C-1	330	240	120	240	U	1982 - 2017	6557098.52	1909023.64
N/A	N/A	EP-5	154	154	60	144	U	1976 - 2016	6569711.00	1901858.00
N/A	N/A	R-6	144	144	55	144	U	1984 - 2016	6545757.48	1907098.41
N/A	N/A	R-11	216	216	0	216	U	1984 - 2016	6531833.43	1909116.17
N/A	N/A	M-19	810	N/A	200	350	U	2017	6504600.71	1826705.78
21S24E14N001M	21S/24E-14N01	14N01	124	N/A	N/A	N/A	U	1964 - 2011	6456635.30	1918367.10
21S24E33J001M	21S/24E-33J01	33J01	269	269	N/A	N/A	U	1973 - 2017	6450610.90	1904124.00
22S24E20A001M	22S/24E-20A01	20A01	170	N/A	N/A	N/A	U	1944 - 2014	6444622.00	1885479.90
22S24E23J001M	22S/24E-23J01	23J01	400	N/A	N/A	N/A	U	1947 - 2013	6461033.80	1883354.70
22S25E15A001M	22S/25E-15A01	15A01	440	N/A	N/A	N/A	U	1937 - 2011	6487438.80	1891185.30
22S25E25N001M	22S/25E-25N01	25N01	437	N/A	N/A	N/A	U	1959 - 2018	6494108.30	1875965.20
22S26E25J001M	22S/26E-25J01	25J01	500	500	N/A	N/A	U	1945 - 2017	6529609.00	1876737.90
22S26E04J001M	22S/26E-04J01	04J01	300	N/A	N/A	N/A	U	1950 - 2016	6513911.80	1898306.80
22S26E10J001M	22S/26E-10J01	10J01	351	351	N/A	N/A	U	1949 - 2014	6519177.10	1893212.50
23S23E25N001M	23S/23E-25N01	25N01	N/A	N/A	N/A	N/A	U	1990 - 2017	6429319.99	1845090.46
N/A	24S/23E-22E01	22E01	N/A	N/A	N/A	N/A	U	1980 - 2007	6419301.68	1820863.07
24S26E32G001M	24S/26E-32G01	32G01	470	N/A	N/A	N/A	U	1932 - 2009	6507271.70	1810869.60
N/A	N/A	E0047650	N/A	400	200	400	U	N/A	6408486.38	1907192.00
N/A	N/A	E0252293	N/A	440	200	440	U	N/A	6408438.17	1904886.78
N/A	N/A	E0291815	N/A	440	300	440	U	N/A	6408445.46	1903828.47
N/A	N/A	129332	N/A	507	262	506	U	N/A	6487711.08	1913720.62
N/A	N/A	415133	N/A	510	270	510	U	N/A	6483612.74	1885945.30
N/A	N/A	E0264833	N/A	500	160	500	U	N/A	6506192.28	1928386.26

TABLE A1-1

Summary of Existing Upper Aquifer Monitoring Wells

CASGEM State Well Number	Short State Well Number	Well Name/ Well Log[1]	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer[2]	Groundwater Level Record	X-Coordinate[3] (ft)	Y-Coordinate[4] (ft)
N/A	N/A	942425	N/A	460	180	450	U	N/A	6566053.70	1901361.79
N/A	N/A	C-27	N/A	625	110	315	U	N/A	6553924.61	1899159.35
N/A	N/A	489364	N/A	366	192	366	U	N/A	6488123.19	1927041.36
N/A	N/A	243330	N/A	425	210	420	U	N/A	6493181.82	1927186.32
N/A	N/A	488425	N/A	257	175	225	U	N/A	6496913.37	1917715.71
N/A	N/A	488430	N/A	325	150	210	U	N/A	6508861.64	1924193.53
N/A	N/A	E0114156	N/A	262	184	262	U	N/A	6509494.64	1917599.62
N/A	N/A	E049930	N/A	280	200	260	U	N/A	6507607.41	1906657.61
N/A	N/A	E076023	N/A	495	415	495	U	N/A	6478648.96	1868669.39
N/A	N/A	724662	N/A	420	340	420	U	N/A	6471973.75	1863599.29
N/A	N/A	E0083349	N/A	305	265	305	U	N/A	6493166.76	1841069.22
N/A	N/A	E0060486	N/A	300	120	220	U	N/A	6497958.53	1826199.39
N/A	N/A	118722	N/A	350	250	350	U	N/A	6500884.75	1817362.43
N/A	N/A	1095774	N/A	340	160	320	U	N/A	6489467.92	1811332.15
N/A	N/A	915227	N/A	300	200	300	U	N/A	6517509.14	1830582.90
N/A	N/A	E0119660	N/A	300	160	300	U	N/A	6504557.55	1847672.52
N/A	N/A	E0212720	N/A	250	190	250	U	N/A	6524618.52	1925900.30
N/A	N/A	508057	N/A	300	140	300	U	N/A	6527912.85	1916543.69
N/A	N/A	29615	N/A	152	N/A	N/A	U	N/A	6529864.22	1905052.04
N/A	N/A	360725	N/A	300	150	300	U	N/A	6535325.75	1921533.07
N/A	N/A	E0078229	N/A	200	140	200	U	N/A	6561010.70	1914934.24
N/A	N/A	N/A	N/A	154	60	144	U	N/A	6564298.96	1903785.70
N/A	N/A	E0117085	N/A	300	140	300	U	N/A	6553981.62	1882593.06
N/A	N/A	516902	N/A	512	113	493	U	N/A	6554300.05	1881957.00
N/A	N/A	E0334821	N/A	510	190	510	U	N/A	6564216.34	1885626.39
N/A	N/A	153207	N/A	124	N/A	N/A	U	N/A	6497078.07	1917958.02
N/A	N/A	481234	N/A	150	26.5	76.5	U	N/A	6571352.62	1866958.59

Note:

[1] 

[2] U = Well Perforated in Upper Aquifer

[3] X-Coordinates in State Plane Zone 4 (feet)

[4] Y-Coordinates in State Plane Zone 4 (feet)

[5] N/A = Not Available

Table A1-2

Summary of Proposed New Upper Aquifer Monitoring Wells

GSA	Name	X-Coordinate (ft)	Y-Coordinate (ft)
LTRID	4U[1]	6470559	1929673
Eastern Tule	6U	6546470	1818649
Eastern Tule	8	6549619	1835101
Eastern Tule	9	6522816	1850583
Eastern Tule	11	6544409	1853404
Eastern Tule	14U	6557843	1861531
Pixley	2U	6451539	1869024
Pixley	3U	6495374	1856980
Delano-Earlimart	7U	6478589	1828230
Delano-Earlimart	10	6523033	1819116
Delano-Earlimart	15U	6516121	1799091
Tri-County	5U	6408771	1817667

Notes:

[1] U = Nested Monitoring Well in Upper Aquifer

TABLE A1-3

Summary of Existing Lower Aquifer Monitoring Wells

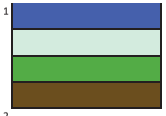
CASGEM State Well Number	Short State Well Number	Well Name/ Well Log[1]	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer[2]	Groundwater Level Record	X-Coordinate[3] (ft)	Y-Coordinate[4] (ft)
21S23E36R001M	21S/23E-36R01	36R01	1,000	1,000	400	1,000	C	1970 - 2016	6434801.70	1902051.70
22S24E01Q001M	22S/24E-01Q01	01Q01	720	700	480	700	C	1963 - 2016	6465167.90	1896726.90
24S24E03A001M	24S/24E-03A01	03A01	1,602	1,602	804	1,602	L	1961 - 2014	6455569.94	1838609.71
24S25E36J001M	24S/25E-36J01	36J01	1,415	1,398	437	1,398	C	1953 - 2008	6497983.50	1808316.10
24S24E04R001M	24S/24E-04R01	04R01	N/A	N/A	800	1,600	L	1974 - 2017	6450364.19	1833278.17
N/A[5]	N/A	G13	N/A	1,604	782	1,604	L	1962 - 2017	6420049.12	1878148.78
24S27E08L001M	24S/27E-08L01	08L01	1,747	1,747	522	1,747	L	1982 - 2016	6537756.15	1830621.30
24S27E32K001M	24S/27E-32K01	32K01	1,800	1,800	1,002	1,800	L	1987 - 2016	6537999.71	1809516.91
N/A	E0117919	M-19	810	N/A	705	805	L	2017	6504600.71	1826705.78
N/A	21S/23E-25	Well #1	1,280	1,270	640	1,260	L	N/A	6432651.62	1912487.53
N/A	22S/23E-07	E0094101	1,020	1,000	660	1,000	L	N/A	6408374.89	1891525.53
N/A	22S/23E-16	N/A	1,300	1,210	560	1,210	L	N/A	6418887.00	1888796.00
N/A	22S/23E-22	E072308	1,090	1,050	670	1,030	L	N/A	6419172.25	1881612.85
N/A	22S/26E-24	E0094537	1,270	1,240	670	1,220	L	N/A	6529798.27	1881998.97
N/A	22S/27E-16	N/A	1,240	1,240	800	1,240	L	N/A	6544648.00	1891172.00
N/A	23S/24E-24	Well 51	1,515	1,400	770	1,400	L	N/A	6429394.74	1849064.47
23S24E27C001M	23S/24E-27C01	27C01	1,602	1,602	804	1,602	L	N/A	6452419.30	1848580.60
23S26E01J001M	23S/26E-01J01	01J01	1,830	1,830	1,370	1,830	L	N/A	6529185.80	1866958.90
N/A	23S/26E-11	Road 208 Ranches	1,069	1,011	567	1,011	L	N/A	6520095.00	1859642.00
N/A	23S/26E-23R01	23R01	1,720	1,700	600	1,700	L	N/A	6523098.00	1849144.00
N/A	23S/27E-07	942277	1,800	1,800	625	1,800	L	N/A	6531568.34	1859684.45
24S23E22R002M	24S/23E-22R02	22R02	1,205	1,200	500	1,200	L	N/A	6423825.93	1817704.00
24S23E31N001M	24S/23E-31N1	118716	1,190	1,190	490	1,190	C	N/A	6402252.83	1807129.85
N/A	24S/24E-1G	49066 (1G)	1,405	1,382	640	1,382	L	N/A	6463568.45	1836049.64
N/A	24S/24E-04E02	04E02	1,200	1,200	798	1,200	L	N/A	6445339.36	1836429.04
24S26E26F001M	24S/26E-26F01	26F01 (74)	1,402	1,400	550	1,400	L	N/A	6521800.00	1815487.10
N/A	24S/26E-30	E0094489	1,410	1,150	530	1,150	L	N/A	6503110.41	1814991.24
N/A	24S/26E-35P01	35P01	1,600	1,400	600	1,400	L	N/A	6521182.00	1807682.00
24S27E20P001M	24S/27E-20P01	20P01	1,824	1,824	648	1,824	L	N/A	6537355.10	1818727.70
24S27E22P001M	24S/27E-22P01	22P01	N/A	884	503	884	L	N/A	6546649.60	1816315.76
N/A	24S/27E-34	118749	1,750	1,750	600	1,750	L	N/A	6547077.10	1809466.12
N/A	22S/25E-32K01	32K01	700	700	500	700	L	N/A	6475029.00	1872343.10
N/A	23S/27E-03	120307	600	600	200	590	C	N/A	6550348.00	1867500.585
N/A	24S/24E-14R	N/A	N/A	N/A	580	1,395	L	N/A	6460903.82	1822868.19
N/A	24S/24E-22M	N/A	N/A	N/A	650	1,320	L	N/A	6450477.18	1819618.63
N/A	24S/25E-19R	N/A	N/A	N/A	720	1,100	L	N/A	6470931.01	1817586.16
N/A	N/A	C-16	560	548	240	548	C	N/A	6546905.85	1912286.77
N/A	N/A	E12	N/A	2,018	1,260	1,854	L	N/A	6430007.76	1878451.77
N/A	N/A	E14	N/A	1,788	597	1,788	L	N/A	6429364.34	1883346.59
N/A	N/A	E18	960	960	580	930	L	N/A	6426904.38	1880821.15
N/A	N/A	E21	1,220	1,200	640	1,200	L	N/A	6429351.35	1879426.80
N/A	N/A	E22	1,160	1,140	640	1,120	L	N/A	6434650.16	1878355.26
N/A	N/A	G28	1,120	1,120	762	1,122	L	N/A	6423830.05	1870502.10

TABLE A1-3

Summary of Existing Lower Aquifer Monitoring Wells

CASGEM State Well Number	Short State Well Number	Well Name/ Well Log[1]	Borehole Depth (ft bgs)	Casing Depth (ft bgs)	Top of Perforations (ft bgs)	Bottom of Perforations (ft bgs)	Aquifer[2]	Groundwater Level Record	X-Coordinate[3] (ft)	Y-Coordinate[4] (ft)
N/A	N/A	W9	N/A	1,836	674	1,836	L	N/A	6416335.33	1875523.70
N/A	N/A	W11	N/A	1,830	808	1,825	L	N/A	6418652.49	1867891.17
N/A	N/A	W13	N/A	1,830	747	1,809	L	N/A	6418665.26	1873369.95
N/A	N/A	W16	1,332	1,312	870	990	L	N/A	6418611.69	1867979.07
N/A	N/A	E0090245	N/A	680	320	680	C	N/A	6507628.23	1933559.65
N/A	N/A	957132	N/A	1,000	400	1,000	C	N/A	6510431.02	1864866.94
N/A	N/A	AP-2	N/A	720	270	720	C	N/A	6538858.37	1892320.63
N/A	N/A	785622	N/A	1,020	800	1,000	C	N/A	6413250.92	1842366.61
N/A	N/A	1095876	N/A	1,245	1,025	1,210	L	N/A	6418751.35	1842025.74
N/A	N/A	E0083113	N/A	1,000	600	1,000	L	N/A	6441270.92	1819422.91
N/A	N/A	E0077871	N/A	1,000	600	1,000	L	N/A	6442496.57	1815506.46
N/A	N/A	E0346058	N/A	1,260	440	970	C	N/A	6451860.34	1812265.02
N/A	N/A	E01033591	N/A	800	320	800	C	N/A	6484766.18	1860104.52
N/A	N/A	E0070434	N/A	760	260	760	C	N/A	6521740.06	1830270.25
N/A	N/A	489110	N/A	850	480	830	C	N/A	6531099.23	1809811.80
N/A	N/A	E0052358	N/A	1,870	1,281	1,860	L	N/A	6532531.94	1828018.91
N/A	N/A	E0155481	N/A	1,500	1,090	1,500	L	N/A	6553106.33	1821698.65
N/A	N/A	E0146035	N/A	1,435	422	1,435	C	N/A	6556353.14	1834766.91
N/A	23S/27E-27	925804	N/A	1,405	1,035	1,385	L	N/A	6546651.22	1844949.66
N/A	N/A	154514	N/A	1,341	1,136	1,336	L	N/A	6548254.61	1844217.46
N/A	N/A	956181	N/A	770	340	700	C	N/A	6543581.82	1852748.44
N/A	N/A	E005996	N/A	1,000	520	1,000	L	N/A	6536939.02	1866999.73
N/A	N/A	783364	N/A	612	246	612	C	N/A	6523188.53	1866237.80
N/A	N/A	E0084286	N/A	650	320	640	C	N/A	6493617.81	1905178.76
N/A	N/A	E0259438	N/A	840	340	840	C	N/A	6475059.65	1883261.03

Note:

[1] 

[2] L = Well Perforated in Lower Aquifer
C = Well Perforated Across Multiple Aquifers (i.e. Composite)

[3] X-Coordinates in State Plane Zone 4 (feet)

[4] Y-Coordinates in State Plane Zone 4 (feet)

[5] N/A = Not Available

Summary of Proposed New Lower Aquifer Monitoring Wells

GSA	Name	X-Coordinate (ft)	Y-Coordinate (ft)
LTRID	4L[1]	6470559	1929673
Eastern Tule	1	6563239	1898658
Eastern Tule	6L	6546470	1818649
Eastern Tule	12	6555939	1912715
Eastern Tule	14L	6557843	1861531
Pixley	2L	6451539	1869024
Pixley	3L	6495374	1856980
Pixley	13	6452211	1885136
Delano-Earlimart	7L	6478589	1828230
Delano-Earlimart	15L	6516121	1799091
Tri-County	5L	6408771	1817667

Notes:

[1] L = Nested Monitoring Well in Lower Aquifer

Groundwater Quality Trend Monitoring Constituents

Annual Sampling				Five Year Sampling			
Field Analysis	**Units**	**Laboratory Analysis**	**Units**	**Field Analysis**	**Units**	**Laboratory Analysis**	**Units**
Electrical Conductivity (EC)	µmhos/cm[1] (at 25˚C)	Nitrate as N	mg/L	Electrical Conductivity (EC)	µmhos/cm (at 25˚C)	Total Dissolved Solids (TDS)	mg/L
pH	Standard Unit	-	-	pH	Standard Unit	Nitrate as N	mg/L
Dissolved Oxygen (DO)	mg/L[2]	-	-	Dissolved Oxygen (DO)	mg/L	Carbonate	mg/L
Temperature	˚C[3]	-	-	Temperature	˚C	Bicarbonate	mg/L
-	-	-	-	-	-	Chloride	mg/L
-	-	-	-	-	-	Sulfate	mg/L
-	-	-	-	-	-	Boron	mg/L
-	-	-	-	-	-	Calcium	mg/L
-	-	-	-	-	-	Sodium	mg/L
-	-	-	-	-	-	Magnesium	mg/L
-	-	-	-	-	-	Potassium	mg/L

Note:

[1] µmhos/cm = micromhos per centimeter

[2] mg/L = milligrams per liter

[3] ˚C = Degrees Celcius

Stream Gages in the Tule Subbasin

River	Stream Gage	Location (Latitude, Longitude)	Period of Record	Gage Type	Comments
Tule River	Success Dam	Lat 36º 03' 23", Long 118º 55' 22"	October 1953 - Present	Water stage recorder	The discharge at this station is controlled by the release from Success Reservoir. The recorder is operated and maintained by the U.S. Army Corps of Engineers.
	Rockford Station	Lat. 36º 04' 40", Long 119º 06' 22"	February 1957 - Present	Concrete weir equipped with a water stage recorder	The recorder is operated and maintained by the Tule River Association.
	Turnbull Weir	Lat 36º 03' 4", Long 119º 30'	1942 - Present	Rated section of the natural channel equipped with a staff gage	Records currently maintained by the TRA with the assistance of Downstream Kaweah and Tule Rivers Association. Manual measurements of stream velocity and stage are conducted by LTRID.
	Friant-Kern Canal Discharge into the Tule River	Lat. 36º 04' 25", Long 119º 05' 15"	June 1950 - Present	Modified 20 ft parshall flume	Records are furnished by the U.S. Bureau of Reclamation.
	Friant-Kern Canal Discharge into the Porter Slough	Lat. 36º 05' 00", Long. 119º 04' 50"	June 1950 - Present	15 ft rectangular weir	Records are furnished by the U.S. Bureau of Reclamation.
Deer Creek	Deer Creek at Fountain Springs	Lat 35º 56' 30", Long 118º 49' 19"	1968 - Present	Water stage recorder	Gage operated, managed and data collected by the USGS.
	Deer Creek at Trenton Weir*	Lat 36° 56' 46", Long 119° 10' 52"	N/A	Concrete weir equipped with a water stage recorder	Records currently maintained by the U.S. Army Corps of Engineers.
	Deer Creek at Homeland Canal	N/A[1]	N/A	N/A	
White River	Road 208*	Lat 35° 51' 32", Long 119° 6' 28"	N/A	N/A	Streamflow in this river is currently monitored manually at Road 208 by the Tule Basin Water Quality Coalition and Delano-Earlimart Irrigation District.

Notes:

[1] N/A = Not Available

* Latitude and Longitude are estimated from ArcGIS for Deer Creek at Trenton Weir and at Road 208 along the White River. All other latitude and longitude measurements are reported by the United States Geological Survey.

Surface Water Quality Constituents for Analysis

Constituent	Units	Trigger Limit	Tule River Poplar Avenue (2004 - 2005)	Deer Creek Road 248 (2010 - 2013)	White River Road 208 (2011)
Electrical Conductivity	µS/cm[1]	*1,000.00*	67.7 - 157.8	148 - 284	272 - 304
pH	n/a[6]	*6.5 - 8.3*	7.02 - 8.94	7.7 - 8.9	8.18 - 9.03
Total Dissolved Oxygen	mg/L[2]	*min. 7.0*	6.3 - 9.4	7.0 - 11.1	8.94 - 10.64
E. Coli	MPN[5]/100 mL	*235.00*	n/a	81.3 - 2,419	980.40
Total Organic Carbon	mg/L	*n/a*	0.58 - 6.77	1.65 - 7.2	6.2 - 8.7
Hardness (as $CaCO_3$)	n/a	*n/a*	22.4 - 66.6	51.5 - 95.5	97.8 - 109.0
Total Suspended Solids	mg/L	*n/a*	n/a	4.75 - 574	73.3 - 91.0
Total Dissolved Solids	mg/L	*450.00*	50.0 - 120.0	99 - 398	180 - 211
Turbidity	NTU[4]	*n/a*	4.4 - 35	1.58 - 12.0	55.8 - 86.9
Arsenic	µg/L[3]	*10*	1.47 - 2.37	1.71 - 2.36	n/a
Boron	µg/L	*700.00*	19 - 38	28.6 - 93.7	n/a
Cadmium (Total)	µg/L	*5*	0.011 - 0.050	0.03 - 0.2	n/a
Copper (Total)	µg/L	*1,300.00*	3.54 - 5.93	1.58 - 3.82	n/a
Lead (Total)	µg/L	*15.00*	0.23 - 0.81	0.32 - 5.43	n/a
Molybdenum (Total)	µg/L	*10 / 35*	n/a	0.0044 - 0.0082	n/a
Nickel (Total)	µg/L	*100.00*	0.47 - 2.23	0.51 - 3.84	n/a
Selenium (Total)	µg/L	*50.00*	0.36	1.0 - 2.0	n/a
Zinc (Total)	µg/L	*n/a*	2.54 - 6.19	4.86 - 34.5	n/a
Phosphorus as P	mg/L	*n/a*	21.1 - 64.1	0.01 - 0.014	0.06 - 0.34
Ammonia	mg/L	*1.50*	0.07	0.05 - 0.028	0.069 - 0.20
Nitrate as N	mg/L	*10.00*	0.07 - 0.30	0.03 - 1.00	0.70 - 2.90
Orthophosphate as P	mg/L	*n/a*	0.01 - 0.16	0.03 - 0.022	0.23 - 0.84
Phosphorus as P	mg/L	*n/a*	21.1 - 64.1	0.01 - 0.014	0.06 - 0.34

Note:

[1] µS/cm = microsiemen per centimeter
[2] mg/L = milligrams per liter
[3] µg/L = micrograms per liter
[4] NTU = Nephelometric Turbidity Unit
[5] MPN = Most Probable Number
[6] n/a = Not Available

Appendices

Appendix A

Driller's Logs and Hydrographs for Existing Upper Aquifer Wells

DUPLICATE
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

21/24-35A1

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

Do Not Fill In
State Well No. 21/24E-34A1
Other Well No.
Region 5

Delv 257

21/24-35A1 (G.S.)

WATER WELL DRILLERS REPORT

Dec. 21, 1950

(Sections 7076, 7077, 7078, Water Code)

(1) Driller:
Name Knapp & Graham
Address 463 W. Inyo Tulare, Calif.
License No. 11456 Classification C-57

(2) Proposed use or uses (check):
Domestic ☐ Municipal ☐
Irrigation ☑ Industrial ☐
Domestic and Irrigation ☐ Test well ☐
Other

(3) Equipment used (check):
Rotary ☐
Cable ☑
Dug well ☐
Other

(4) Type of work (check):
New well ☑ Reconditioning of well ☐
Deepening existing well ☐

CONFIDENTIAL

(5) Well log:
Total depth of well 315 ft.

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Depth From Ground Surface				
0	ft. to	4	ft.	Soil
4	" "	23	"	Yellow Clay
23	" "	26	"	Sand med.
26	" "	63	"	Sandy Clay
63	" "	104	"	Rock Sand
104	" "	106	"	med Sand
106	" "	134	"	Sandy Clay
134	" "	139	"	Rock Sand
139	" "	154	"	Sandy Clay
154	" "	168	"	Coarse Sand
168	" "	204	"	Sandy Clay
204	" "	213	"	Blue Clay
213	" "	246	"	Blue Sandy Clay
246	" "	268	"	Blue Sand med.
268	" "	279	"	Sticky Blue Clay
279	" "	302	"	Coarse Blue Sand
362	" "	313	"	Sticky Blue Clay
313	" "	?	"	Blue Clay
	" "		"	
	" "		"	
	" "		"	

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE FT.
928	12	S	10 ga.	313
			.134	

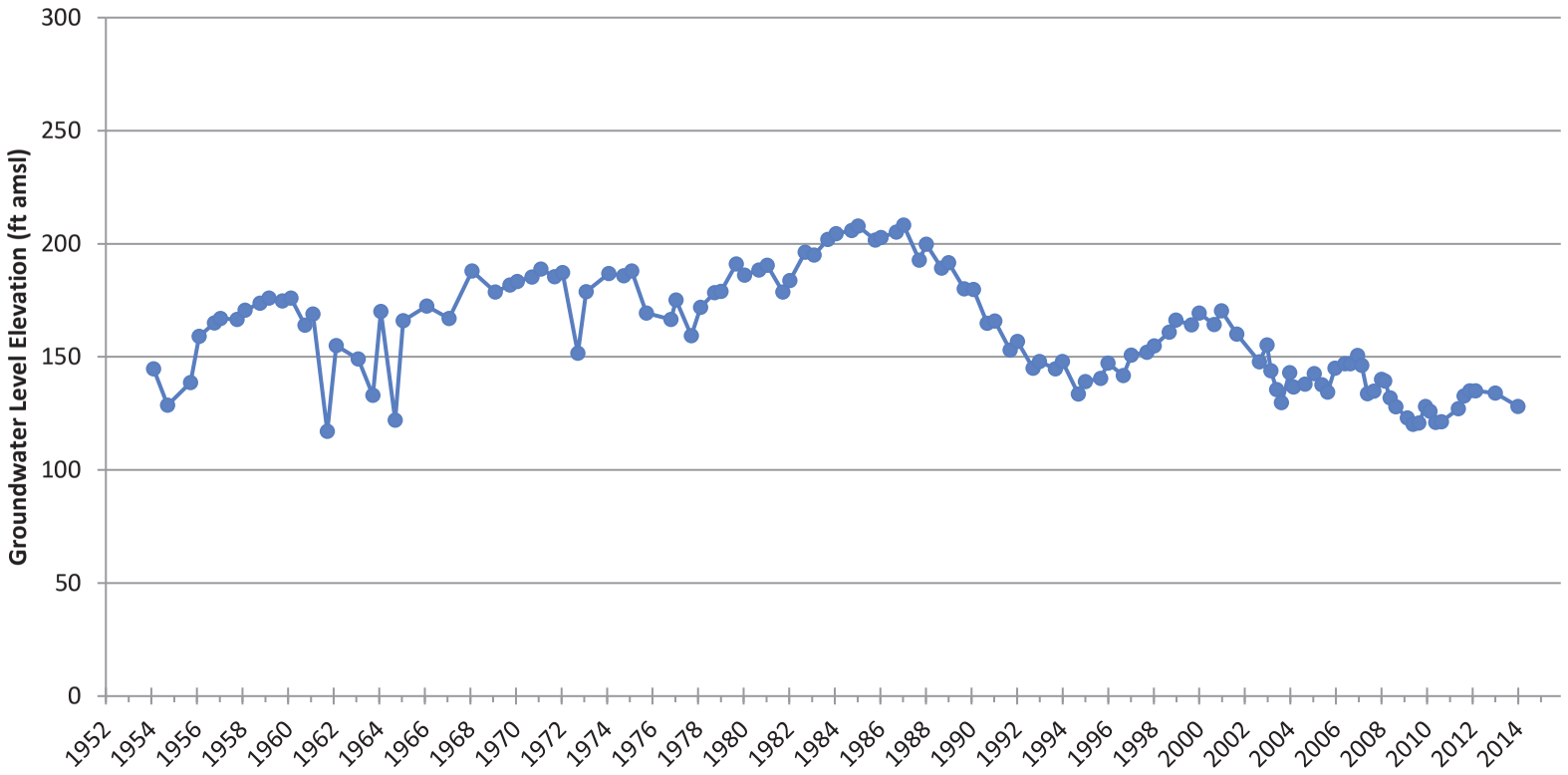
Type and size of shoe or well ring 12"x8"x5/16" steel
Welded joints—☑ Yes ☐ No

D.W.R. FORM NO. 248

33471 3-50 60M SMITH BFG

Groundwater Hydrographs - Shallow

21S/24E-35A01



21/23-32K1 TOP 21/23-32K1

Well Log #2

[redacted] Corcoran, Calif.

W.H. Lambert - Driller
Phone 946R2 - Corcoran, Cal.

Top	109	Plain.
	5'	Pers.Y screen.
	6'	Plain.
	14'	Pers.Y screen.
	21	Plain.
	6'	Pers.Y screen.
	11'	Plain.
	14'	Pers.Y screen.
	3'	Plain.
	6'	Pers.Y screen.
	22'	Plain.
	10'	Pers.Y screen.
	25'	Plain.
	10'	Pers.Y screen.
	5'	Plain.
	11'	Pers.Y screen.
	3'	Plain.
	12'	Pers.Y screen.
	8'	Plain.
	6'	Pers.Y screen.
	2'	Plain.
	8'	Pers.Y screen.
	11'	Plain.
	14'	Pers.Y screen.
	2'	Plain.
	8'	Pers.Y screen.
	28'	Plain
	10'	Pers.Y screen
	5'	Plain.
	7'	Pers.Y screen.
Bottom	4'	Plain

Plain Pipe - 265'
Pers.Y screen = 141'
Total Ft. = 406

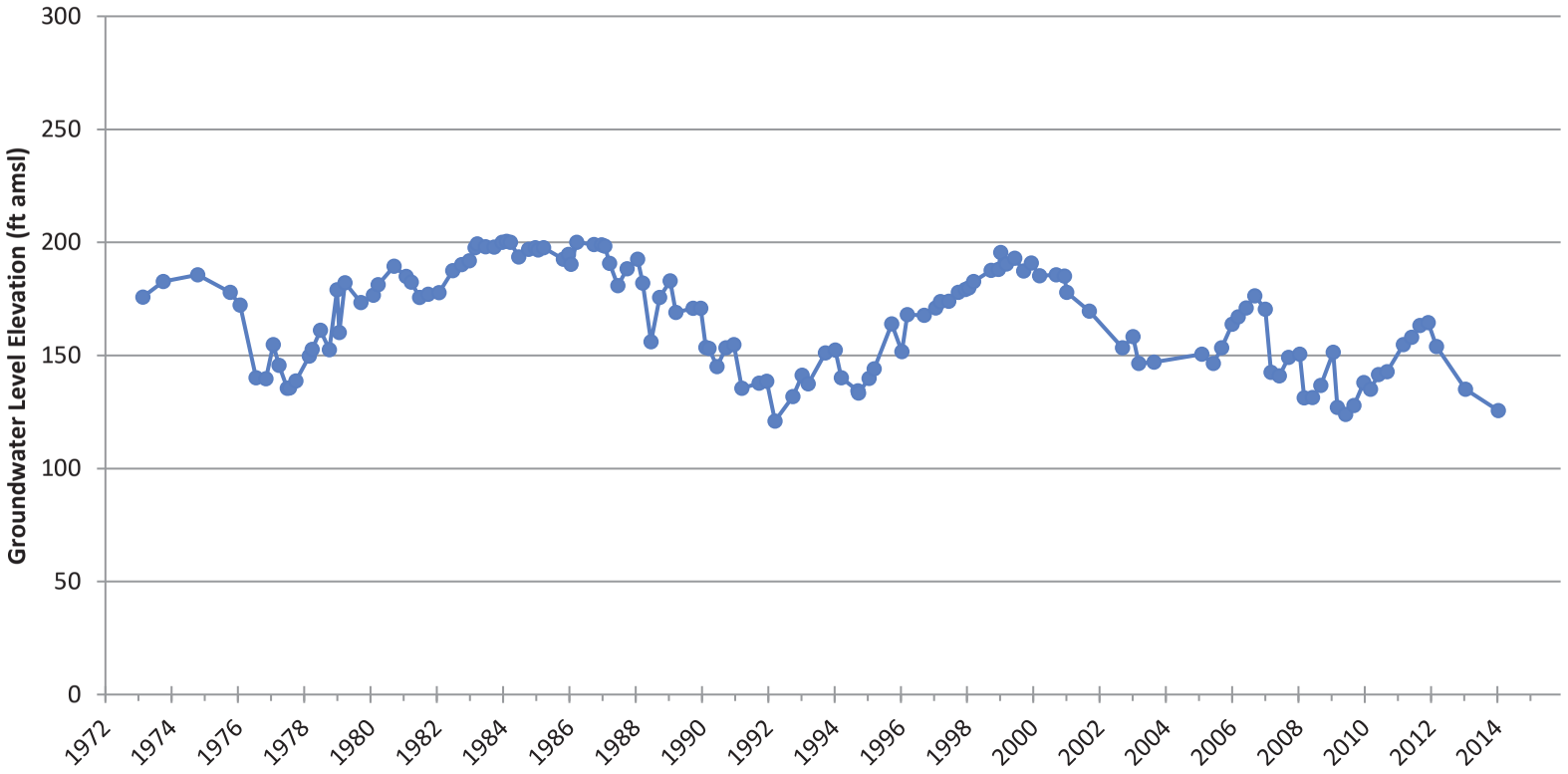
Relin 32-21-23
Southeast well
March 4-1937

DESCRIPTION:

JOB NO.	CONSOLIDATED PIPE CO. BAKERSFIELD ENGINEERING DEPARTMENT	DATE
NUMBER REQUIRED		SALESMAN

Groundwater Hydrographs - Shallow

21S/23E-32K01



21/25-3R1

DUPLICATE
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

21/25-3R1 (G.S.)

SHEET 1 of

Do Not Fill In
State Well No. 21S/24E-3R1
Other Well No.
Region 5

LSD 300

WATER WELL DRILLERS REPORT

Feb. 3, 1950

(Sections 7076, 7077, 7078, Water Code)

(1) Driller:
Name Knapp & Graham
Address 4681 W. Ind.
Fresno Calif.
License No. 6956 Classification C-57

(2) Proposed use or uses (check):
Domestic ☐ Municipal ☐
Irrigation ☑ Industrial ☐
Domestic and Irrigation ☐ Test well ☐
Other

(3) Equipment used (check):
Rotary ☐
Cable ☑
Dug well ☐
Other

Owner:
Name [redacted]
Address

(4) Type of work (check):
New well ☑ Reconditioning of well ☐
Deepening existing well ☐

(5) Well log:
Total depth of well 328 ft.

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Depth From Ground Surface			
0 ft.	to 6 ft.	Soil	
6	82	Sandy Clay	
82	90	Sand	
90	102	Sandy Clay	
102	115	Fine Sand	
115	122	Sandy Clay	
122	132	Coarse Sand	Perf upto 145 ft.
132	168	Fine Sand	
168	188	Sandy Clay	
188	198	Fine Sand	
198	208	Sandy Clay	
208	231	Fine Sand	
231	238	Sandy Clay	
238	292	Coarse Sand	stayed open
292	324	Sandy Clay	
324	328	Fine Sand	

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
274	14	D. Casing	12.92	274
			(.105)	

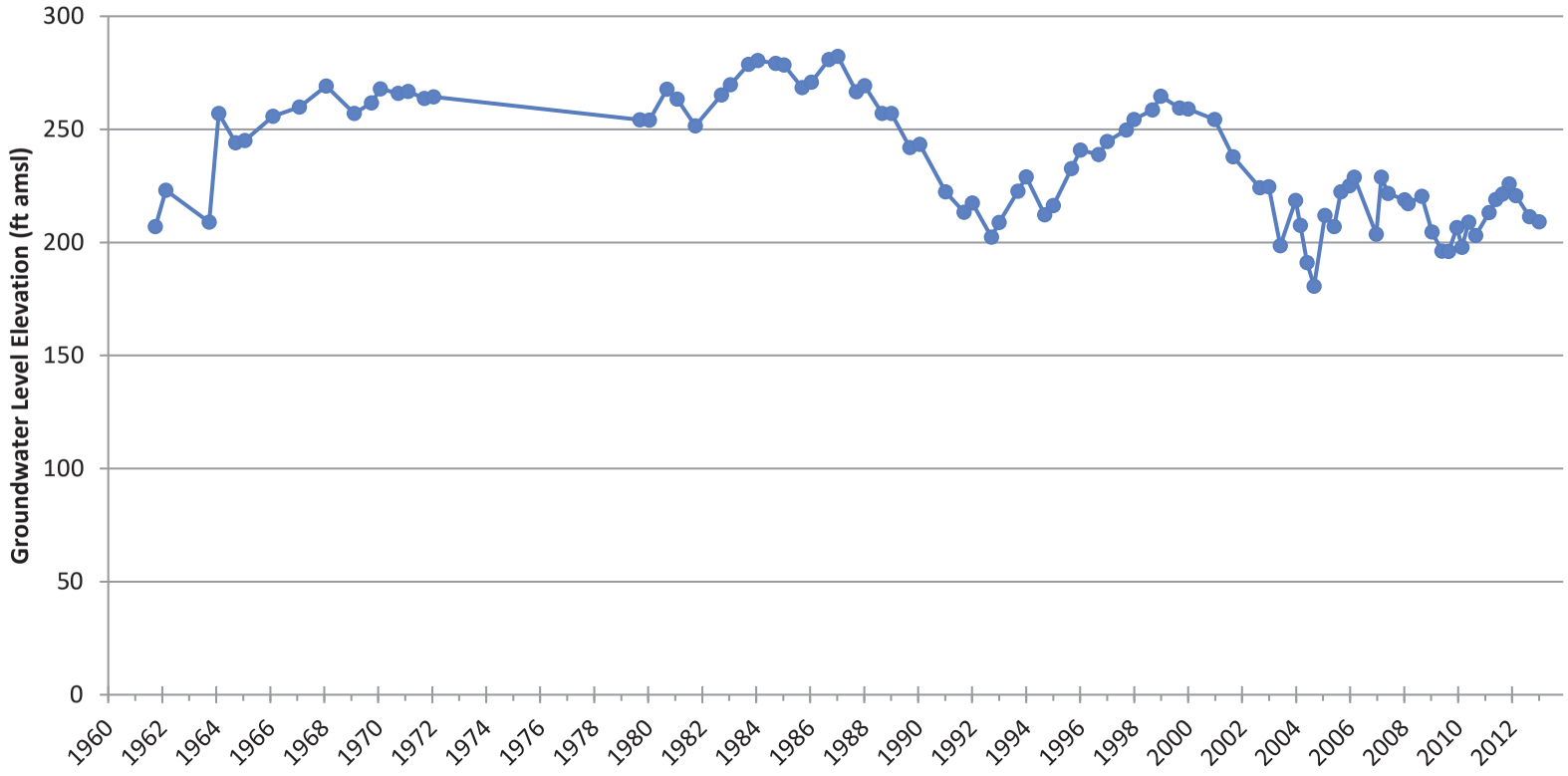
Type and size of shoe or well ring 14" x 8" x 5/8" Shoe Welded joints ☑ Yes ☐ No

400 feet north, 250 feet west of SE corner of section 3, (USGS)

D.W.R. FORM NO. 240

Groundwater Hydrographs - Shallow

21S/25E-03R01



DUPLICATE
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

21/26-32A1

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

21/26-32 A1 (G.S.)

SHEET 1 of 2 Sheets

Do Not Fill In
State Well No.
Other Well No.
Region

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LSD Elev. 348

(1) **Driller:**
Name QE(Ed) Owens
Address 700 E. Harrison St.
Porterville
License No. ____ Classification ____

(2) **Proposed use or uses** *(check)*:
Domestic ☐ Municipal ☐
Irrigation ☐ Industrial ☐
Domestic and Irrigation ☑ Test well ☐
Other 1

(3) **Equipment used** *(check)*:
Rotary ☐
Cable ☑
Dug well ☐
Other 2

Owner:
Name [redacted]
Address

(4) **Type of work** *(check)*:
New well ☐ Reconditioning of well ☐
Deepening existing well ☑

CONFIDENTIAL

(5) **Well log:**
Total depth of well 267 ft.

Depth From Ground Surface				Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).
215	ft. to	222	ft.	Sandy Clay – Brown
222	" "	230	"	Sand & Gravel
230	" "	240	"	Sandy Clay – Brown
240	" "	253	"	Sand coarse
253	" "	258	"	Sandy – clay – Brown
258	" "	262	"	Sand – Medium
262	" "	267	"	Sandy clay – Brown

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) **Casing left in well:**

LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
120	10	Single welded	12 Ga.	267
			.125	

Type and size of shoe or well rings ____ Welded joints ☑ Yes ☐ No

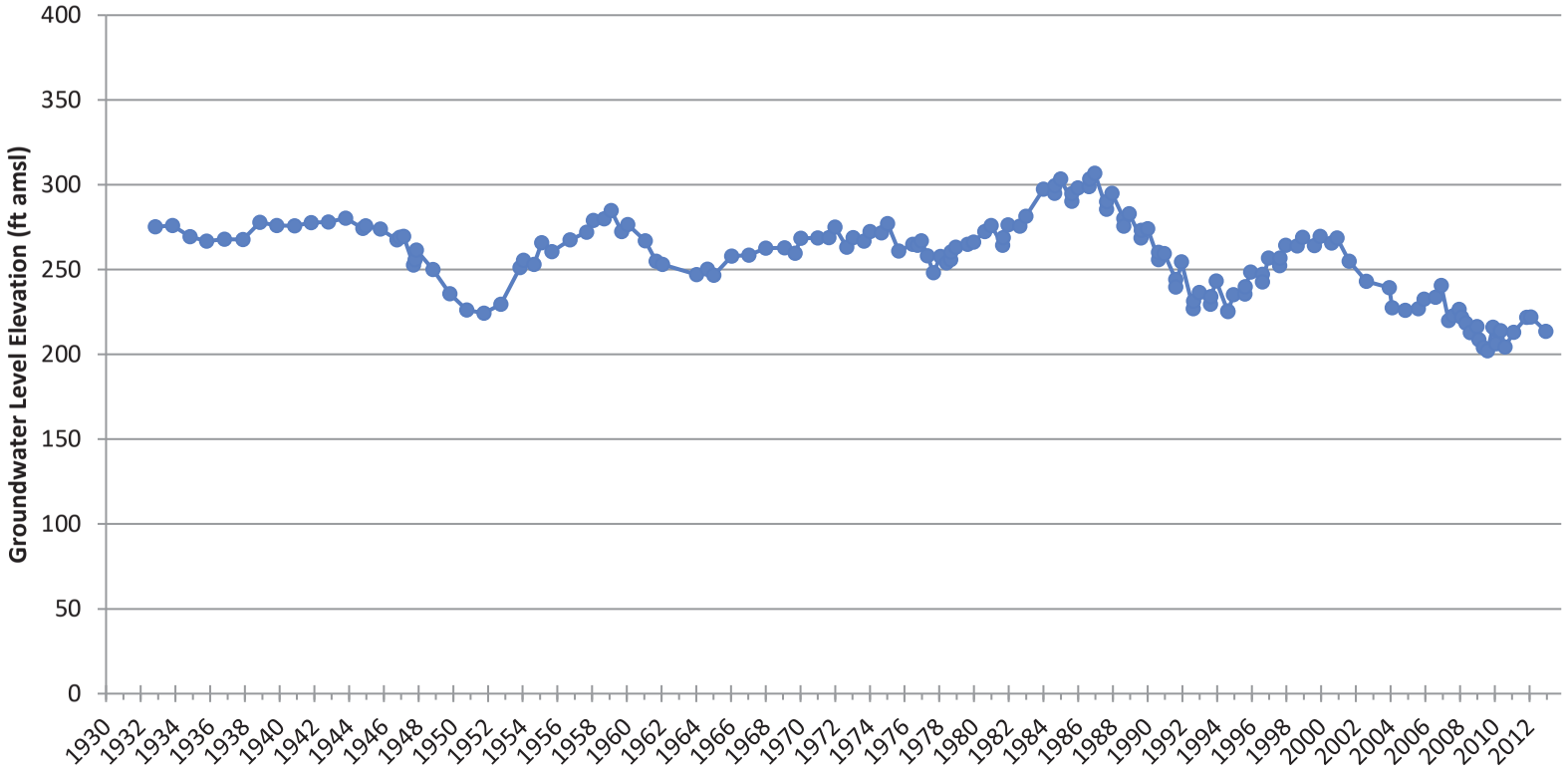
D.W.R. FORM NO. 246

5100 feet north, 25 feet west of [illegible] corner of section 32, (USGS)

23671 3-50 40M SUIN SPO

Groundwater Hydrographs - Shallow

21S/26E-32A01



22/24-9A1

U.S. DEPARTMENT OF THE INTERIOR - [illegible] OF RECLAMATION - REGION II
WELL [illegible]

22/24-9A1

County [illegible] Owner [redacted] U.S.B.R. No. [illegible]
Dist. Use [illegible] Local No.
Quad. [illegible] Driller [illegible] Date [illegible]
Location [illegible]

Surf. Elev. [illegible] Groundwater Elev. Date
Depth [illegible] Groundwater Elev. Date
Yield Aquifers
Drawdown Artesian [illegible] Date
Casing [illegible] Sand-Gravel

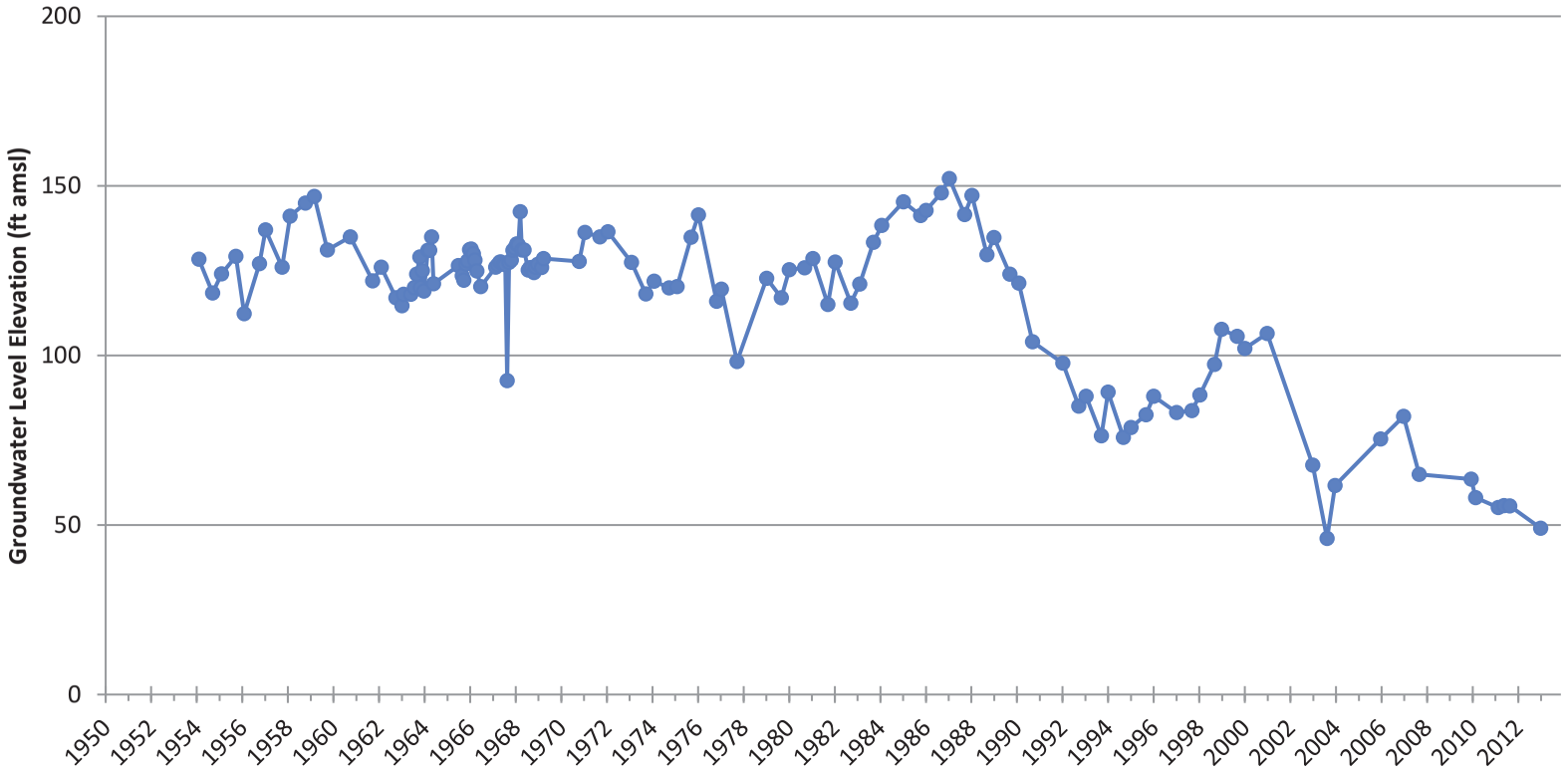
Source of data [illegible] Type drill [illegible] Diam. hole [illegible]

Depth	Elev.	Thick	Description
0	[illegible]	8	[illegible]
8	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] clay
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] clay
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible] clay

	50	100	200
G			
S	3	4	37
[illegible]			
[illegible]	36	17	28
[illegible]	18	38	37
	88	50	200

Groundwater Hydrographs - Shallow

22S/24E-09A01



LSD Elev 373 22/26 - 10J1

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION, - REGION II
WELL LOG

22/26-10J1

County Tulare | Owner [redacted] | U.S.B.R. No. 22-26-10A
Dist. | Use Irrigation | Local No.
Quad. Woodville | Driller James Woods | Date March 15, 1947
Location 22-26-10 (0.98-0.41)

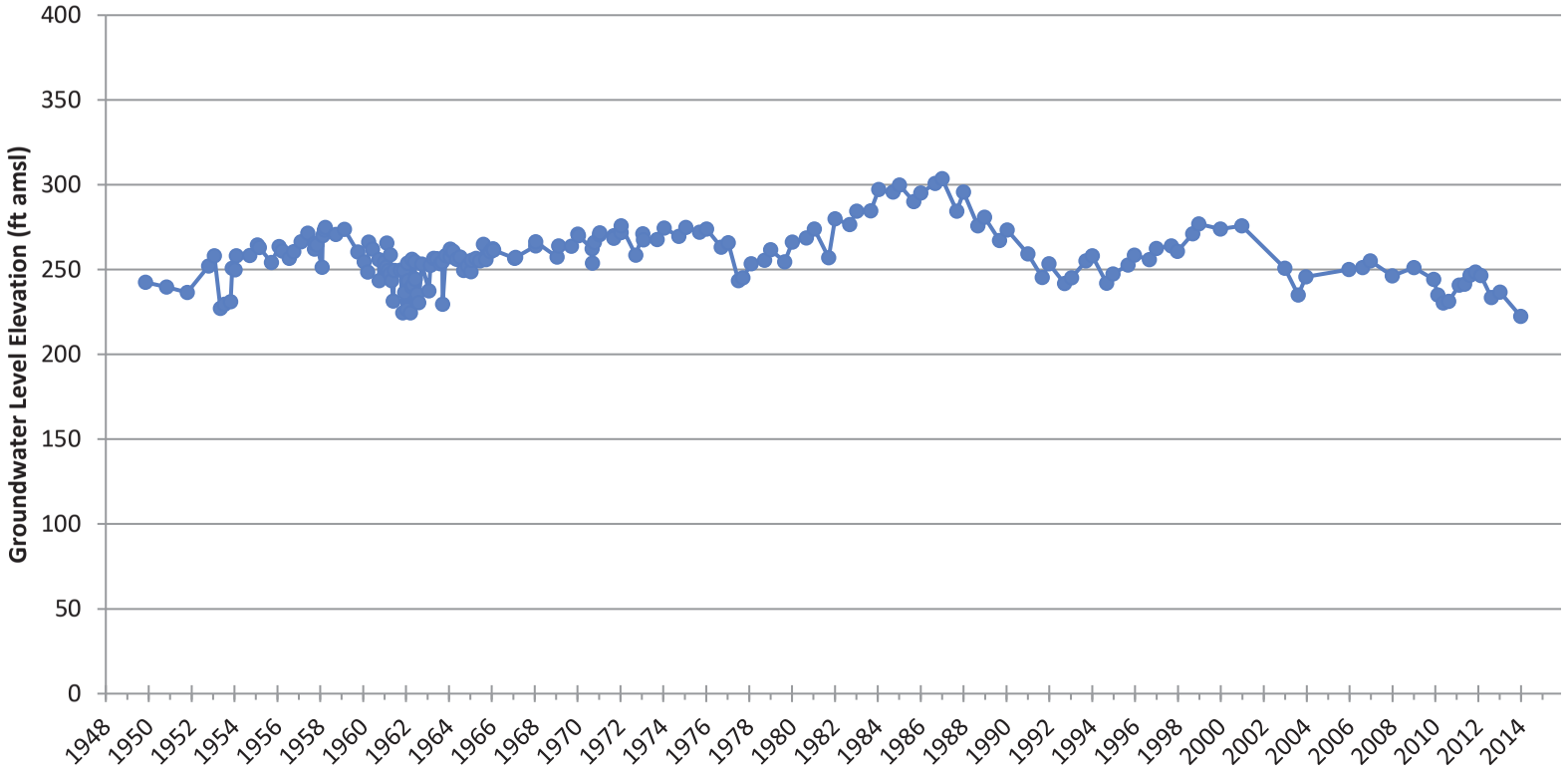
Surf.Elev. 373 | Groundwater Elev. 278 | Date March 15, 1947
Depth 351 | Groundwater Elev. | Date
Yield | Aquifers
Drawdown | Artesian head | Date
Casing 351'x14" perf. | % Sand-Gravel | 107

Source of data Anderson | Type drill Cable-Tools | Diam. hole 14"

Depth	Elev.	Thick	Description
0	373	8	(Top soil - Brown, soft, fine sandy loam, poor permeability)
8	365	62	(Sandy silt, light brown, hard sandy silt, relatively impermeable)
70	303	4	(Sand - brown, subrounded, fairly well sorted, loose, 0.50mm to 1.00mm in diameter, sand, predominently quartzose)
74	299	56	(Sandy silt, brown, hard sandy silt, poor permeability)
130	243	36	(Sand and cobbles, gray to brown, subrounded, 0.50mm to 1.00mm in diameter, loose, quartz sand and subroudned cobbles up to 2½" in diameter)
166	207	19	(Sandy clay, brown, very hard, sandy clay, relatively impermeable)
185	188	11	(Cobbles, subrounded, loose, cobbles up to 2" in diameter)
196	177	24	(Sandy clay, brown, hard, sandy clay, relatively impermeable)
220	153	108	Clay
328	45	7	Sand and gravel
335	38	10	Clay
345	28	6	Hard clay
351	22		Bottom

Groundwater Hydrographs - Shallow

22S/26E-10J01



Jr 207

R-6

R-6 R#6

ROY PULLIAM

WATER WELL DRILLING
ROUTE I BOX 744 SU 4 I593

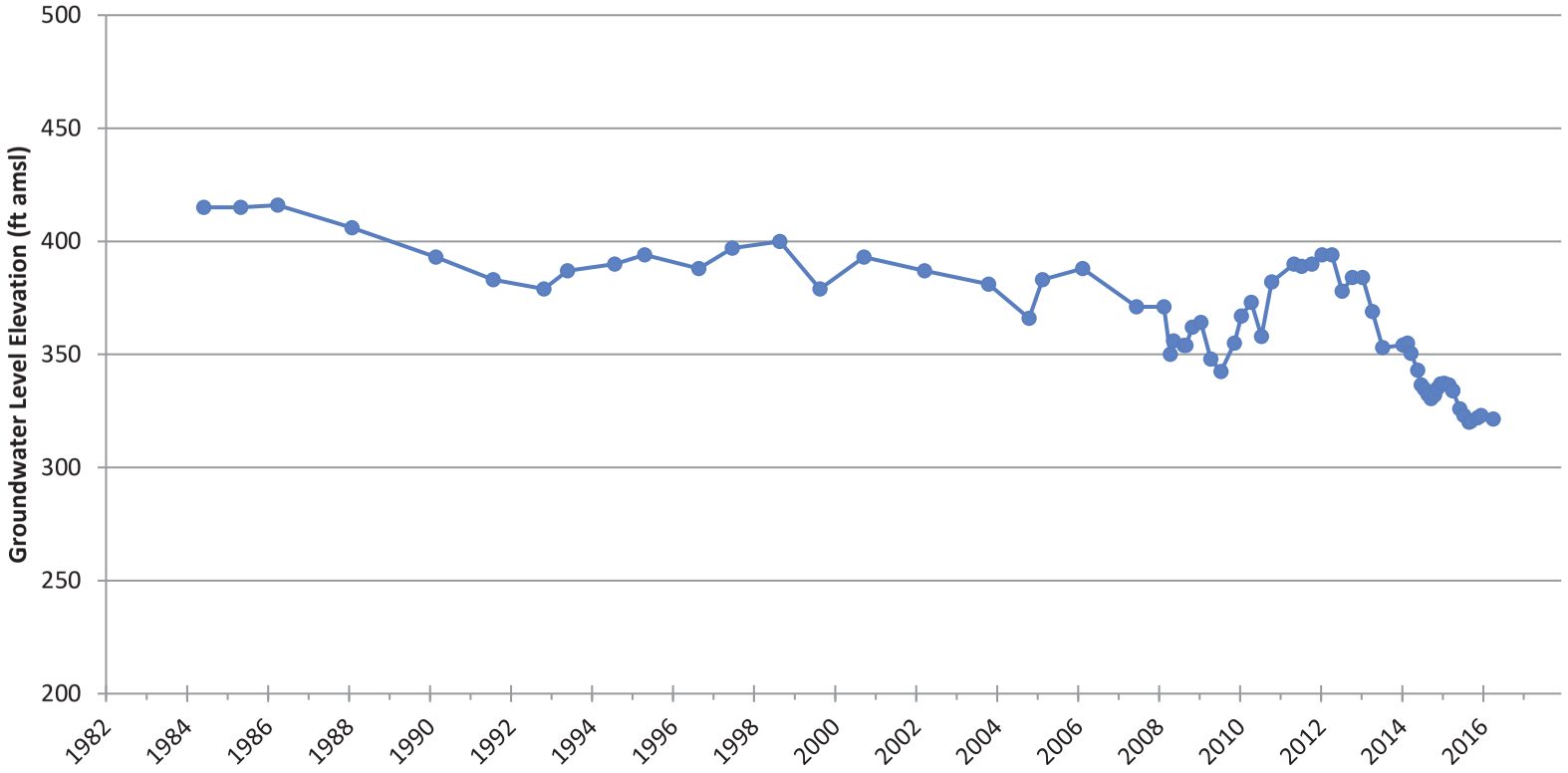
Log of I0 in. Well

0 to 4I ft.	Sandy Clay
4I to 80 ft.	Water, Sand and Gravel
80 toI23 ft.	Sandy Clay
I23 toI35 ft.	Water, Sand and Gravel
I35 toI50 ft.	Clay

Cast to I44 ft.
6 ft. opsn hole
Perforated from 4I ft. to I44 ft.
Water Level 32 ft.

Groundwater Hydrographs - Shallow

R-6



TRIPLICATE
Retain this copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

R#11

R-11

Do Not Fill In
No 67312

Other Well Nos. R-11

(1) OWNER:

Name [redacted]
Address

(2) LOCATION OF WELL:

County Tulare Owner's number, if any

Township, Range, and Section 5 miles west of Portersville

Distance from cities, roads, railroads, etc. on Olive, ¼ North on Cedar, ~~on last st in back of Rowland Tract.~~

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☒
Other ☐

(6) CASING INSTALLED:

STEEL: X OTHER:
SINGLE ☒ DOUBLE ☐

If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	84	14	10			
0	212	10	10			

Type shoe or well ring: 3/4x6x14 Size of gravel: 3/4x4x10

Describe joint Plain End

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen None

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.

(8) CONSTRUCTION:

Was surface sanitary seal provided? Yes ☒ No ☐ To what depth 84 ft.

Were any strata sealed against pollution? Yes ☒ No ☐ If yes, note depth of strata

31 ft. to 36 ft. Fine Sand

56 ft. to 79 ft. Cobbers & Sand

Method of sealing Grout

(9) WATER LEVELS:

Depth at which water was first found, if known 32 ft.

Standing level before perforating, if known 32 ft.

Standing level after perforating and developing 32 ft.

(10) WELL TESTS:

Was pump test made? Yes ☒ No ☐ If yes, by whom? By Owner

gal./min. with ft. drawdown after hrs.

Bailer test of water Was a chemical analysis made? Yes ☐ No ☒

Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:

Total depth 216 ft. Depth of completed well 220 ft.

Formation: Describe by color, character, size of material, and structure

ft. to	ft.	
0	31	Sandy Loam
31	36	Fine Sand
36	43	Very soft Silt
43	48	Very Fine Sand
48	56	Very Soft Silt
56	65	Cobbers & Sand
65	70	Cobbers
70	79	Cobbers & Sand
79	101	Brown Clay
101	114	Fine Sand
114	120	Med Sand & Gravel
120	131	Coarse Sand & Cobbers
131	178	Brown Clay
178	180	Tight Dark Sand
180	216	Tough Brown Clay
216	220	Coarse Sand & Sm. Rocks

Well Log
Lot 40 Fr. 213

R#11

Work started 1/24 19 72 Completed 2/7 19 72

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME ROGER L. NATION
(Person, firm, or corporation) (Typed or printed)

Address 26521 South Mooney
Visalia, California

[SIGNED] Roger L. Nation
(Well Driller)

License No. 259884 Dated 2/9 19 72

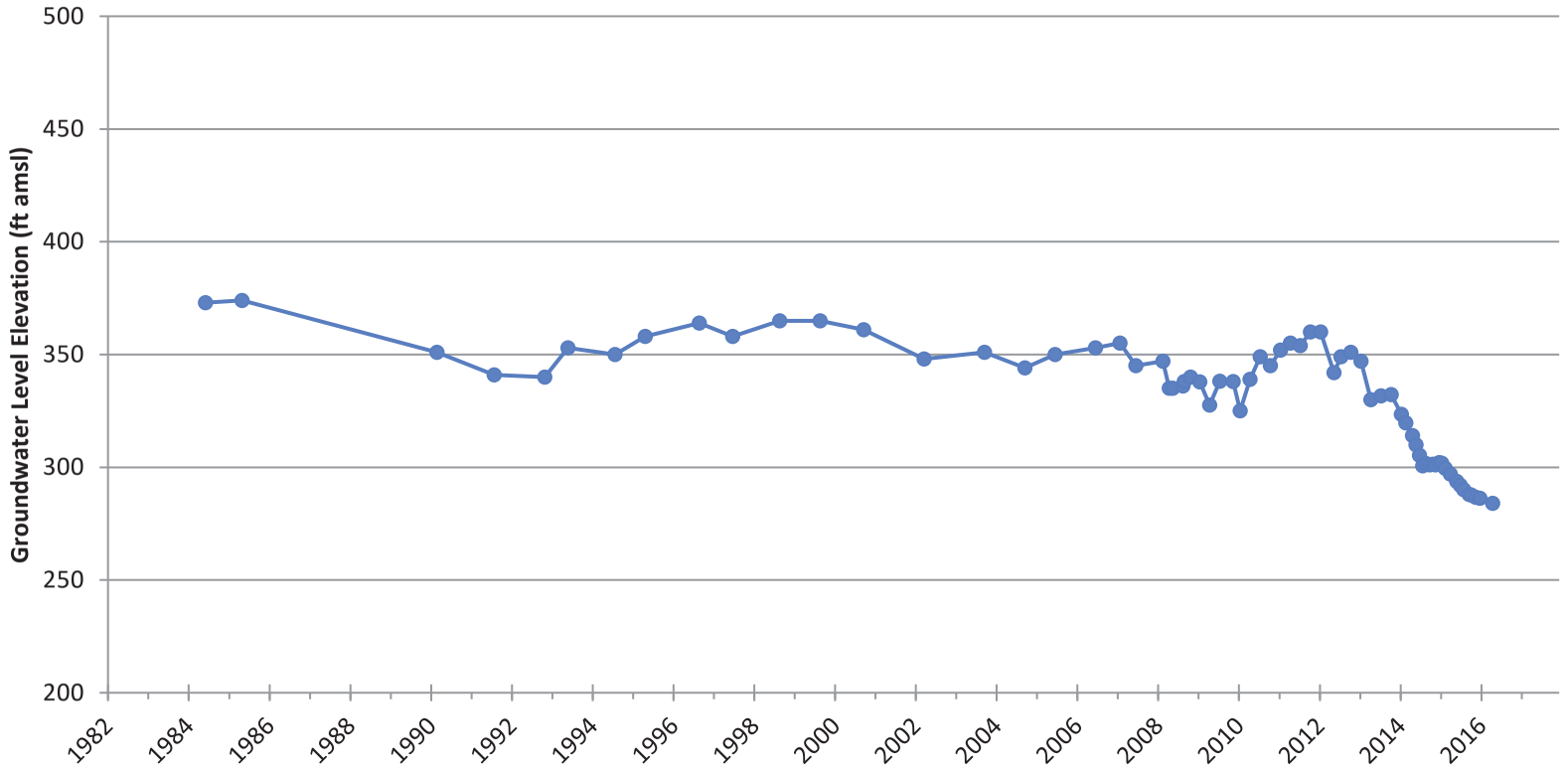
SKETCH LOCATION OF WELL ON REVERSE SIDE

R 188 (REV. 9-68)

88178-850 9-68 WH TRIP AD OBP

Groundwater Hydrographs - Shallow

R-11



23/26-9C1

DUPLICATE
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF WATER RESOURCES

23/26-9C1 (GS)

SHEET 1 of 2

Tulare

Do Not Fill In
State Well No.
Other Well No.
Region

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LSD Elev. 440

(1) Driller:
Name L. R. Henderson
Address 675 Vandalia Ave Porterville Calif
License No. 125434 Classification C 57

(2) Proposed use or uses (check):
Domestic ☐ Municipal ☐
Irrigation ☒ Industrial ☐
Domestic and Irrigation ☐ Test well ☐
Other

(3) Equipment used (check):
Rotary ☐
Cable ☒
Dug well ☐
Other

Owner:
Name [redacted]
Address

(4) Type of work (check):
New well ☒ Reconditioning of well ☐
Deepening existing well ☐

CONFIDENTIAL

(5) Well log:
Total depth of well 440 ft.

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Depth From Ground Surface			
0	ft. to	45	ft.	silt & clay
45	" "	56	"	sand
56	" "	117	"	clay
117	" "	125	"	sand
125	" "	145	"	clay
145	" "	170	"	sand
170	" "	195	"	clay
195	" "	215	"	sand
215	" "	225	"	clay
225	" "	245	"	sand
245	" "	260	"	clay
260	" "	275	"	sand
275	" "	295	"	clay
295	" "	315	"	sand
315	" "	325	"	clay
325	" "	330	"	sand
330	" "	360	"	clay
360	" "	380	"	sand
380	" "	440	"	clay
	" "		"	
	" "		"	
	" "		"	
	" "		"	

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies.

(6) Casing left in well:

LENGTH FT.	DIAMETER INCHES	SINGLE, DOUBLE, WELDED, OTHER	LBS. PER FOOT OR GAGE OF CASING	SEATING BELOW GROUND SURFACE, FT.
400	14	dubble	12 gage	
			105	

Type and size of shoe or well ring 14" Welded joints—☒ Yes ☐ No

5150 feet north, 7250 feet west of SE Corner of section 9 (USGS)

D.W.R. FORM NO. 246

DUPLICATE
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

23/26-9C1

SHEET 2

Tulare

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

Do Not Fill In
State Well No.
Other Well No.
Region

CONFIDENTIAL

(7) **Perforations:**
Type of perforator used Mills Perforator.
Perforated 200 ft. to 390 ft. Hole size ____ No. of holes ____
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "
" " " " " " " " " " " " " " " " " " " "

(8) **Water levels:**
Depth at which water first encountered 190 ft.
Depth to water before perforating ____ ft.
Depth to water after perforating ____ ft.
Note any change in water level while drilling

(9) **Well pumping test:**
Date of test ____ By whom ____
Depth to water when test started ____ ft.
G.P.M. at beginning of test ____
Drawdown from standing level ____ ft.
G.P.M. at completion of test ____
Drawdown at completion of test ____ ft.
Length of time tested ____
Temperature of water ____
Was gas present in water? ☐ Yes ☐ No

(10) **General:**
Was well gravel packed? No Size of rock ____ Thickness of pack ____
Was a surface sanitary seal provided? ____
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, attach detailed description.
Strata sealed ____
Was analysis made of water? ☐ Yes ☒ No If yes, attach copy.
Was electric log made of well? ☐ Yes ☒ No If yes, attach copy.
If well abandoned, was it plugged and sealed? ____
Method of plugging and sealing ____

(11) **Location:**

North

	X O		

1 MILE

Section No. 9
Township 23 South
Range 26 East
Base & Meridian M. D.
Show location of well in Section, thus (X)
Distances to section lines from well, N or S 100 ft. and E or W 2050 ft.
Show location of nearest known well, thus (O)
Distance to nearest known well 800 ft.

(12) **Time of work:**
Work started date March 17 Completed date March 20, 52
Date of this report March 24, 52

WELL DRILLER'S STATEMENT:

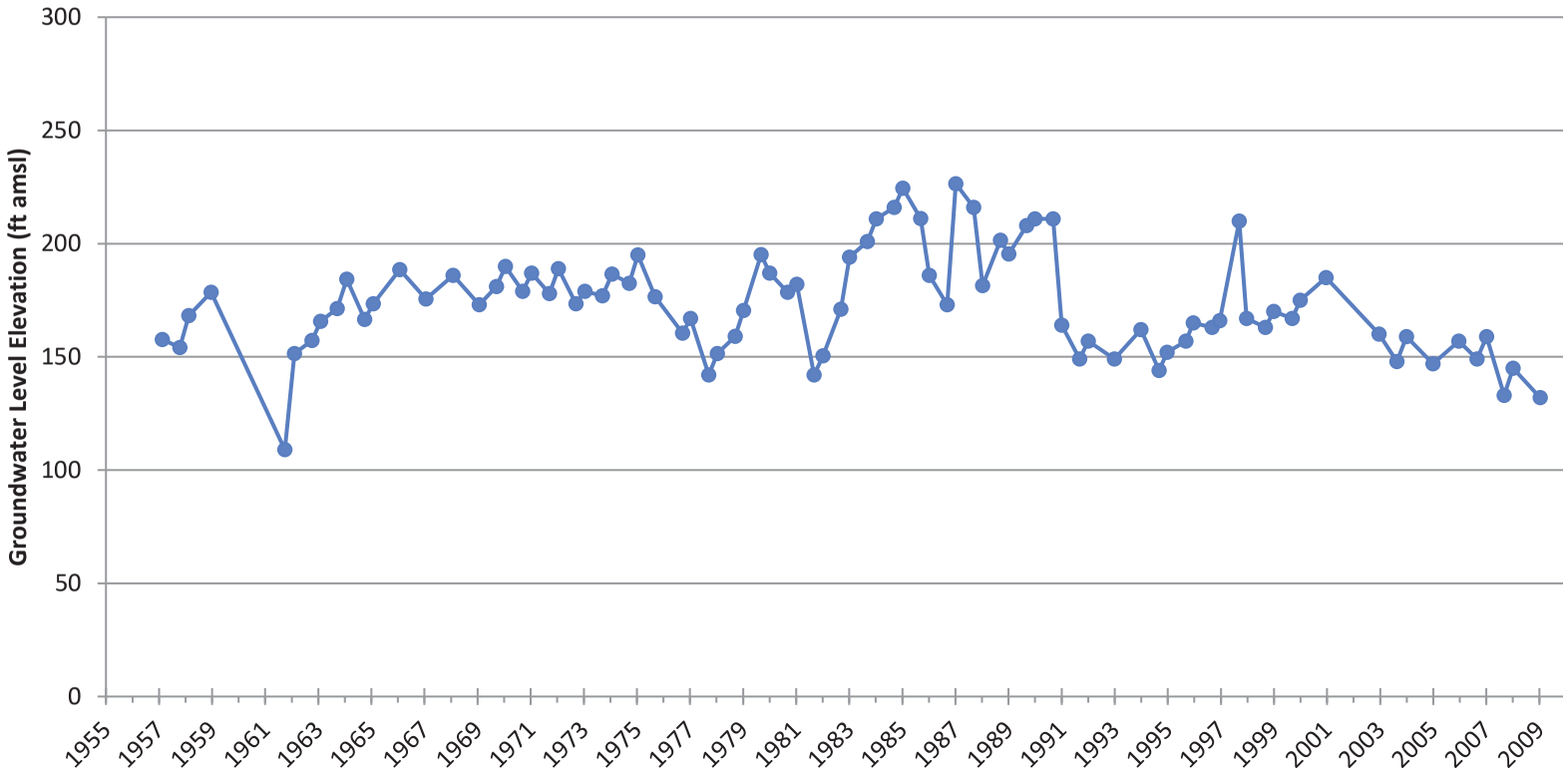
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

[SIGNED] L. R. Henderson
Well Driller
By Mrs L. R. Henderson
License No. 12534 Classification C 57
Dated March 24, 1952

D.W.R. FORM NO. 246

Groundwater Hydrographs - Shallow

23S/26E-09C01



23/26-12J1 PEG 23/26-12J1

Local Form No. 483 LSD Elev. 419

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II

WELL LOG

County Tulare Owner [redacted] U.S.B.R. No. 23-26-12
Dist. Use Test Local No.
Quad. Exeter Driller [redacted] Date March 1940
Location 23-26-12 (a26-a16)

Surf.Elev. 420 Groundwater Elev. Date
Depth 280 Groundwater Elev. Date
Yield Aquifers
Drawdown Artesian head Date
Casing 230-270' perfs % Sand-Gravel

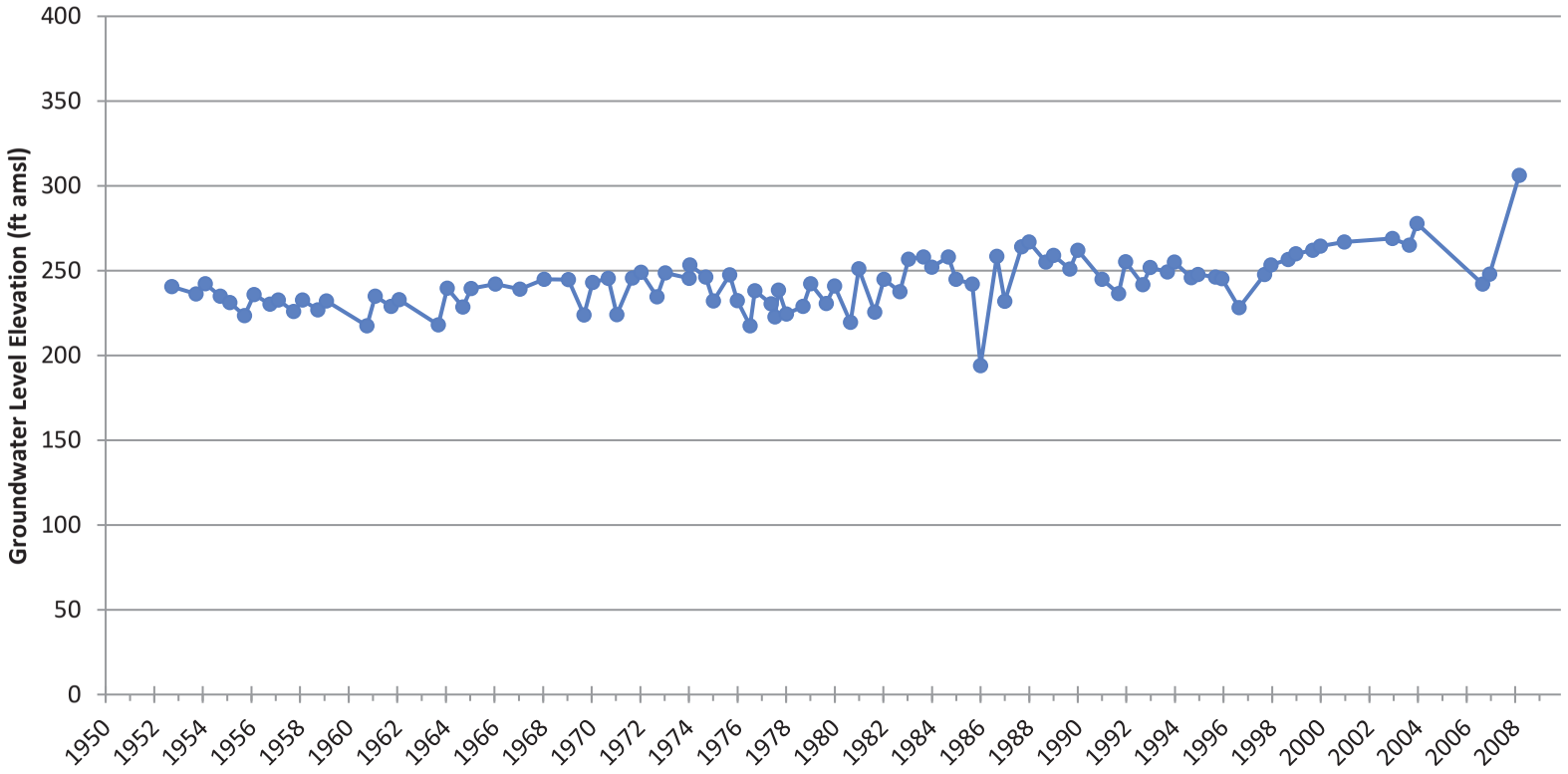
Source of data Driller Type drill Cable-tool Diam. hole 10"

Depth	Elev.	Thick	Description		
0	+420	130	valley shale	40/50/30	C
130	+290	5	hard clay	5	C
135	+285	30	sandy shale	30	G
165	+255	2	gravel, some water	2	F
167	+253	28	sandy shale	28	G
195	+225	10	hard clay	5/5	C
205	+215	58	sticky clay		
263	+157	4	sand, water showing		
267	+153	13	sandy shale, gray		
280	+140		bottom of well		

	50	100	200
G			
S			
F			2
C			58
C	40	50	40
	40	50	100

Groundwater Hydrographs - Shallow

23S/26E-12J01



USGS Elev. [illegible] 22/24-23 J1

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II

WELL LOG

22/24-23J1

County Tulare
Dist.
Quad. [illegible]
Location [illegible]

Owner [redacted]
Use
Driller
Groundwater Elev.
Groundwater Elev.
Aquifers
Artesian head
Sand-Gravel

U.S.B.R. No. 22-24-23J1
Local No.
Date [illegible]
Date 7/[illegible]/46
Date
Date

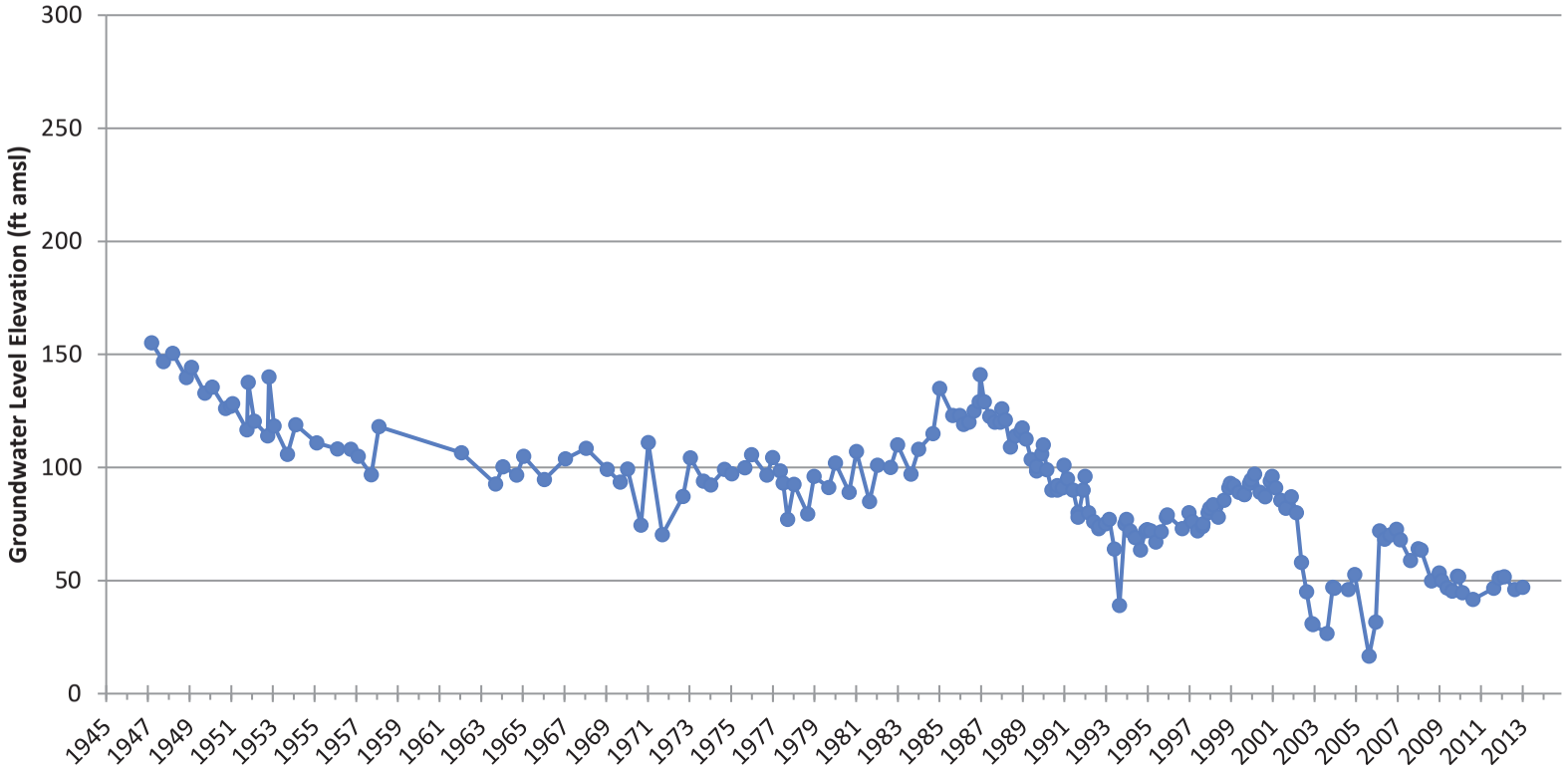
Surf.Elev. [illegible]
Depth 400
Yield
Drawdown
Casing

Source of data [illegible] Type drill [illegible] Diam. hole [illegible]

Depth	Elev.	Thick	Description
0	1357	F2	
2	1355	4 1/2 F 61	
63	1294	2 Cs 2	
65	1292	1 F 13	
78	1279	2 Cs 7	
85	1272	F 6	
91	1266	1/2 F 8 1/2	
117	1240	2 Cs 9	
126	1231	1 Cs 9	
135	1222	5 F 5	
140	1217	1 Cs 20	
160	1197	1 Cs 6	
166	1191	1 Cs 6	
172	1185	1 Cs 6	
178	1179	1 Cs 6	
184	1173	1 Cs 6	
190	1167	1 Cs 6	
196	1161	1 Cs 6	
202	1155	1 Cs 6	
208	1149	1 Cs 6	
214	1143	1 Cs 6	
220	1137	1 Cs 6	
226	1131	1 Cs 6	
232	1125	1 Cs 6	
238	1119	1 Cs 6	
244	1113	1 Cs 6	
250	1107	1 Cs 6	
256	1101	1 Cs 6	
262	1095	1 Cs 6	
268	1089	1 Cs 6	
274	1083	1 Cs 6	
280	1077	1 Cs 6	
286	1071	1 Cs 6	
292	1065	1 Cs 6	
298	1059	1 Cs 6	
304	1053	1 Cs 6	
310	1047	1 Cs 6	
316	1041	1 Cs 6	
322	1035	1 Cs 6	
328	1029	1 Cs 6	
334	1023	1 Cs 6	
340	1017	1 Cs 6	
346	1011	1 Cs 6	
352	1005	1 Cs 6	
358	999	1 Cs 6	
364	993	1 Cs 6	
370	987	1 Cs 6	
376	981	1 Cs 6	
382	975	1 Cs 6	
388	969	1 Cs 6	
394	963	1 Cs 6	
400	957	1 Cs 6	

Groundwater Hydrographs - Shallow

22S/24E-23J01



LSD Elev. [illegible] **22/25-25**

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II

WELL LOG

[illegible]-25N1

County Tulare | Owner [redacted] | U.S.B.R. No. 22-25-25
Dist. | Use Irrigation | Local No.
Quad. Saucelito School | Driller [illegible] & Graham | Date March 25, 1937
Location 22-25-25 (0.25 - 0.07)

Surf. Elev. 315 | Groundwater Elev. | Date
Depth 437 | Groundwater Elev. | Date
Yield | Aquifers
Drawdown | Artesian head | Date
Casing | % Sand-Gravel

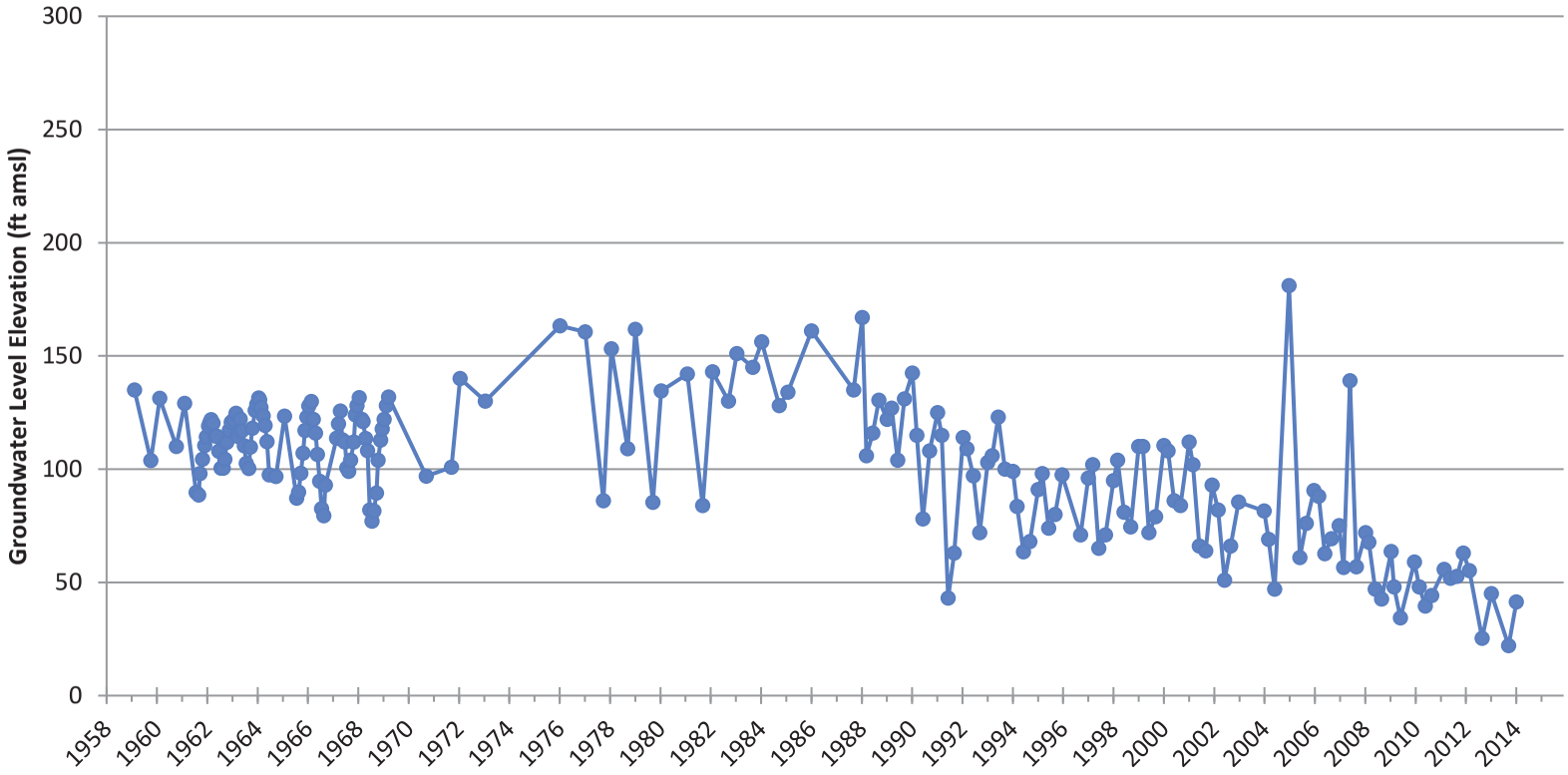
Source of data Anderson | Type drill Cable-Tools | Diam. hole 12"

Depth	Elev.	Thick	Description
0	315	14	(Sandy loam - light brown, fine grained very sandy loam, relatively permeable)
14	301	6	(Sand and gravel - light brown, poorly sorted, subrounded, 0.75 mm to 1.00 mm in diameter, loose quartz sand and subrounded quartz gravel up to 2.5mm)
20	295	36	(Sand, gravel and silt, brown, subrounded, 0.75mm to 1.00 mm in diameter, quartz sand, subrounded gravel up to 3.0 mm, and some silt)
56	259	64	(Same as above)
120	195	14	Sandy clay
134	181	26	(Sandy loam - [illegible] brown hard, sandy loam, relatively impermeable
160	155	70	(Sandy loam, brown, soft, sandy loam, poor permeability)
230	85	15	(Sandy clay, brown, hard, sandy clay, relatively impermeable)
245	70	3	(Silt - brown, very soft, silt, relatively impermeable)
248	67	155	(Sandy loam - brown, compact, very sandy loam, relatively impermeable)
404	-89	4	Sand - [illegible], subrounded, 0.50mm to [illegible] mm, sand, [illegible] quartz, [illegible] silt)
408	-93	3	(Sand [illegible], subangular to subrounded, 0.50 mm to [illegible] in diameter, quartz sand)
411	-96	26	(Sandy clay - brown, hard, sandy clay, relatively impermeable)
437	-122		(Sand - [illegible], subangular to subrounded, 0.[illegible] to [illegible] in diameter, quartz sand) Bottom of well

50	100	200
34	50	100
40	50	200

Groundwater Hydrographs - Shallow

22S/25E-25N01



23/24-16R1

(December 1949)

PLG

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR TEST WELL
23/24-16R1

No. 23-24-16B

Other Nos.

WELL LOG

Depth 1400'

elev 224'

State _____ County TULARE Subarea _____

Owner [redacted]

Location 99-.01

Drilled by USBR Address _____

Date 10/51 Casing diam. _____ Land-surf. alt. 224'

Core data 40-50, 90-98, 140-150, 190-200, 240-250, 290-300, 340-350, 390-400, 450-600,

Source of data 640-700, 790-800, 890-900, 990-994, 1090-1100, 1190-1203, 1270-1280, 1390-1400

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
	No core		0
	Sand	10	40
	Sandy clay	35	50
	Sand	10	85
	Sandy clay	48	95
	Clay	7	143
	Sandy clay	~~80~~ 70	150
	Sand	90	290
	Sandy clay	15	240
	Sand	7	255
	Sandy clay	58	262
	Clay	23	320
	Sand	5	343
	Clay	5	348
	Sandy clay	22	353
	Clay	10	375
	Sandy clay	5	385

Record by Goldman Date 7/20/53

Sheet 1 of 5

U. S. GOVERNMENT PRINTING OFFICE 16—61887-1

23/24-16R1

(December 1949)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR Test Well

No. 23-24-16 & R1

Other Nos. .....

WELL LOG

State ..... County ~ ..... Subarea .....

Owner .....

Location .....

.....

Drilled by ..... Address .....

Date ..... Casing diam. ..... Land-surf. alt. .....

Source of data .....

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
	Sand	80	390
	Clay	5	470
	Sandy Clay	15	475
'Corcoran Clay' ±501'-553'	Clay	70	490
	Sand	7	560
	Sandy Clay	13	567
	Sand	5	580
	Sandy Clay	30	585
	Sand	7	615
	Sandy Clay	33	622
	Sand	5	655
	Sandy Clay	5	660
	Sand	10	665
	Sandy Clay	40	675
	Sand	17	715
	Sandy Clay	7	732
	Sand	6	739

Record by ..... Date .....

Sheet 2 of 5

U. S. GOVERNMENT PRINTING OFFICE 16—61857-1

23/24-16R1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR TEST WELL

No. 23-24-16B R1

Other Nos. _____

WELL LOG

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
	Sandy Clay	30	745
	Sand	7	775
	Sandy Clay	8	782
	Sand	11	790
	Sandy Clay	6	801
	Sand	5	807
	Sandy Clay	18	812
	Sand	10	830
	Sandy Clay	10	840
	Sand	4	850
	Sandy Clay	6	854
	Sand	10	860
	Sandy Clay	10	870
	Sand	8	880
	Sandy Clay	12	888
	Sand	5	900
	Sandy Clay	20	905

Record by _____ Date _____

Sheet 3 of 5

U. S. GOVERNMENT PRINTING OFFICE 16—41867-1

23/24-16R1

USBR Test Well

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

No. 23-24-16 & R1

WELL LOG

Other Nos. _____

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
	Sand	5	925
	Sandy Clay	5	930
	Sand	4	935
	Sandy Clay	26	939
	Sand	8	965
	Sandy Clay	42	973
	Sand	40	1015
	Clay	5	1055
	Sandy Clay	30	1060
	Sand	10	1090
	Sandy Clay	10	1100
	Sand	25	1110
	Sandy Clay	15	1135
	Sand	35	1150
	Clay	8	1185
	Sand	#7	1193
	Clay	3	1200

Record by _____ Date _____

Sheet 4 of 5

U. S. GOVERNMENT PRINTING OFFICE 16—61887-1

23/24-16R1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

USBR TEST WELL

No. 23-24-16 & R 1

OTHER NOS. _____

WELL LOG

State _____ County _____ Subarea _____

Owner _____

Location _____

Drilled by _____ Address _____

Date _____ Casing diam. _____ Land-surf. alt. _____

Source of data _____

(Enter type of well, perforations, yield, and drawdown at end of log)

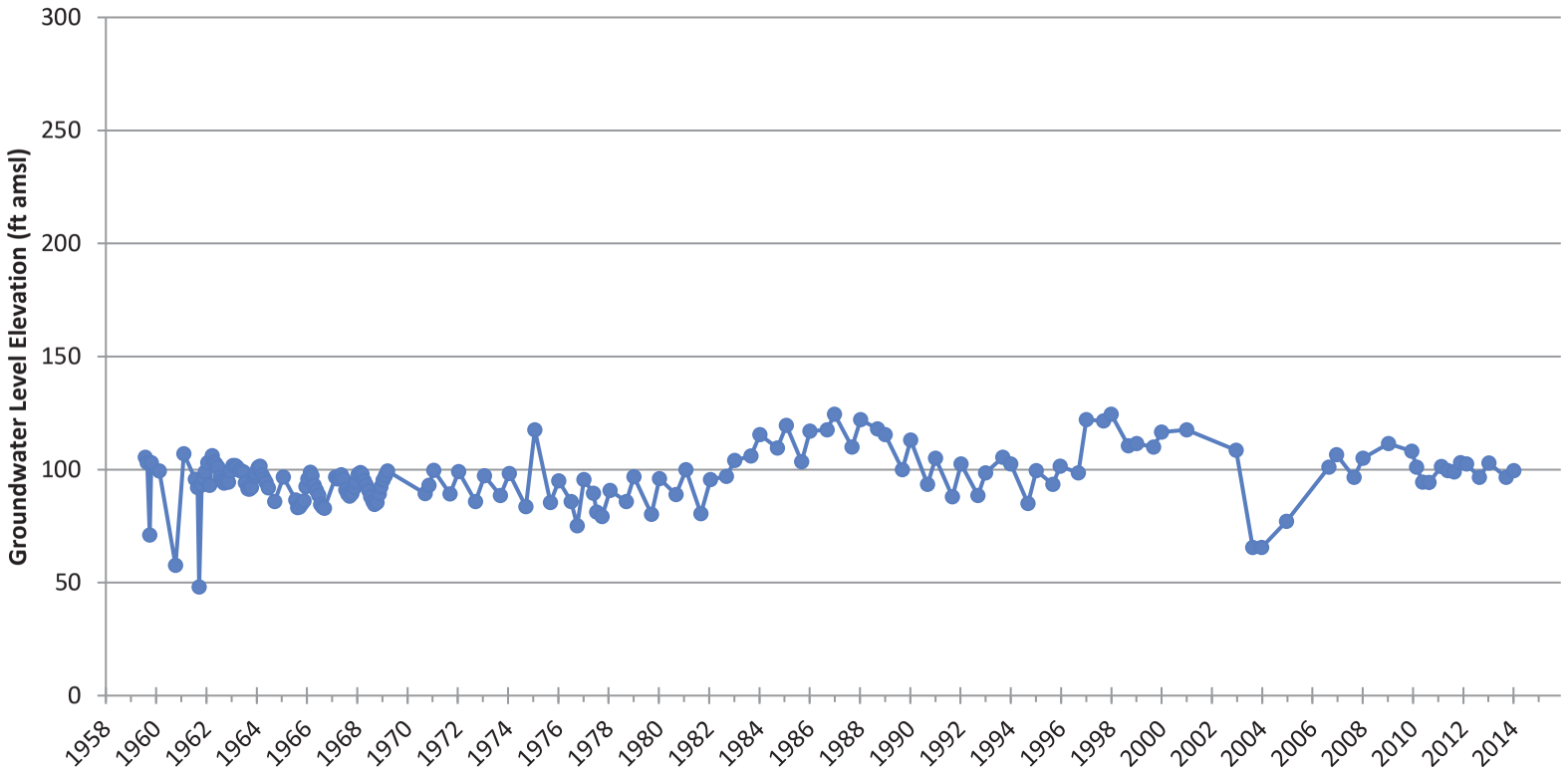
CORRELATION	MATERIAL	THICKNESS (feet)	DEPTH (feet)
	Sandy Clay	17	1203
	Sand	10	1220
	Sandy Clay	12	1230
	Sand	6	1242
	Sandy Clay	7	1248
	Sand	3	1255
	Sandy Clay	7	1258
	Sand	25	1265
	Sandy Clay	3	1290
	Sand	7	1293
	Sandy Clay	7	1300
	Sand	11	1307
	Sandy Clay	3	1318
	Sand	41	1321
	Sandy Clay	15	1362 ~~1400~~
	Sand	23	1377
	B.H.		1400

RECORD BY _____ DATE _____ SHEET 5 OF 5

U. S. GOVERNMENT PRINTING OFFICE 16—61537-1

Groundwater Hydrographs - Shallow

23S/24E-16R01



TRIPLICATE
Owner's Copy

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. EO117919

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

Owner's Well No. MW-6
Date Work Began 9/24/2010, Ended 9/24/2010
Local Permit Agency ENVIRO HEALTH, TULARE
Permit No. 10-0338 Permit Date 8/30/2010

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD ROTARY FLUID WATER

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	20	TOP SOIL, MEDIUMFINE/COARSE SANDS
20	40	MEDIUM/FINE/COARSE SANDS
40	80	EDIUM/FINE/COARSE SANDS WITH SOME CLAY
80	120	MEDIUM/FINE/COARSE SANDS WITH MORE CLAY
120	140	MEDIUM/FINE/COARSE SANDS, WITH SOME CLAY
140	160	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
160	200	MEDIUM/FINE/COARSE SANDS
200	300	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
300	340	MEDIUM/FINE/COARSE SANDS, SOME CLAY SOME D.G.
340	420	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
420	560	CLAY WITH SOME SANDS
560	620	CLAY WITH MORE SANDS MEDIUM/FINE
620	680	CLAY WITH SOME MEDIUM/FINE SANDS
680	720	MOSTLEY CLAY
720	740	CLAY WITH SOME MEDIUM/FINE SANDS
740	760	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY AND SHALE
760	810	MEDIUM/FINE/COARSE SANDSWITH CLAY

TOTAL DEPTH OF BORING 810 (Feet)
TOTAL DEPTH OF COMPLETED WELL 805 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address 1/2 MI N AVE. 26 & 1/2 MI E. ROAD 16
City DELANO CA 93215
County TULARE
APN Book 3381 Page 003 Parcel 24
Township 24 Range 26 Section 17
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 AIR LIFT
TEST LENGTH 4 (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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
#1										
0	200	16"	✓				PVC	4"	SCH 40	
200	350	16"		✓			PVC	4"	SCH 40	.030
#2										
0	705	12 1/4"	✓				PVC	4"	SCH 40	
705	805	12 1/4"		✓			PVC	4"	SCH 40	.030

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	130	✓			
360	370		✓		
464	474		✓		
590	600		✓		
630	640		✓		
660	670		✓		

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 BRADLEY & SONS
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

3625 S. HIGHLAND ADDRESS, DEL REY CITY, CA STATE, 93616 ZIP

Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE

10/06/10 DATE SIGNED

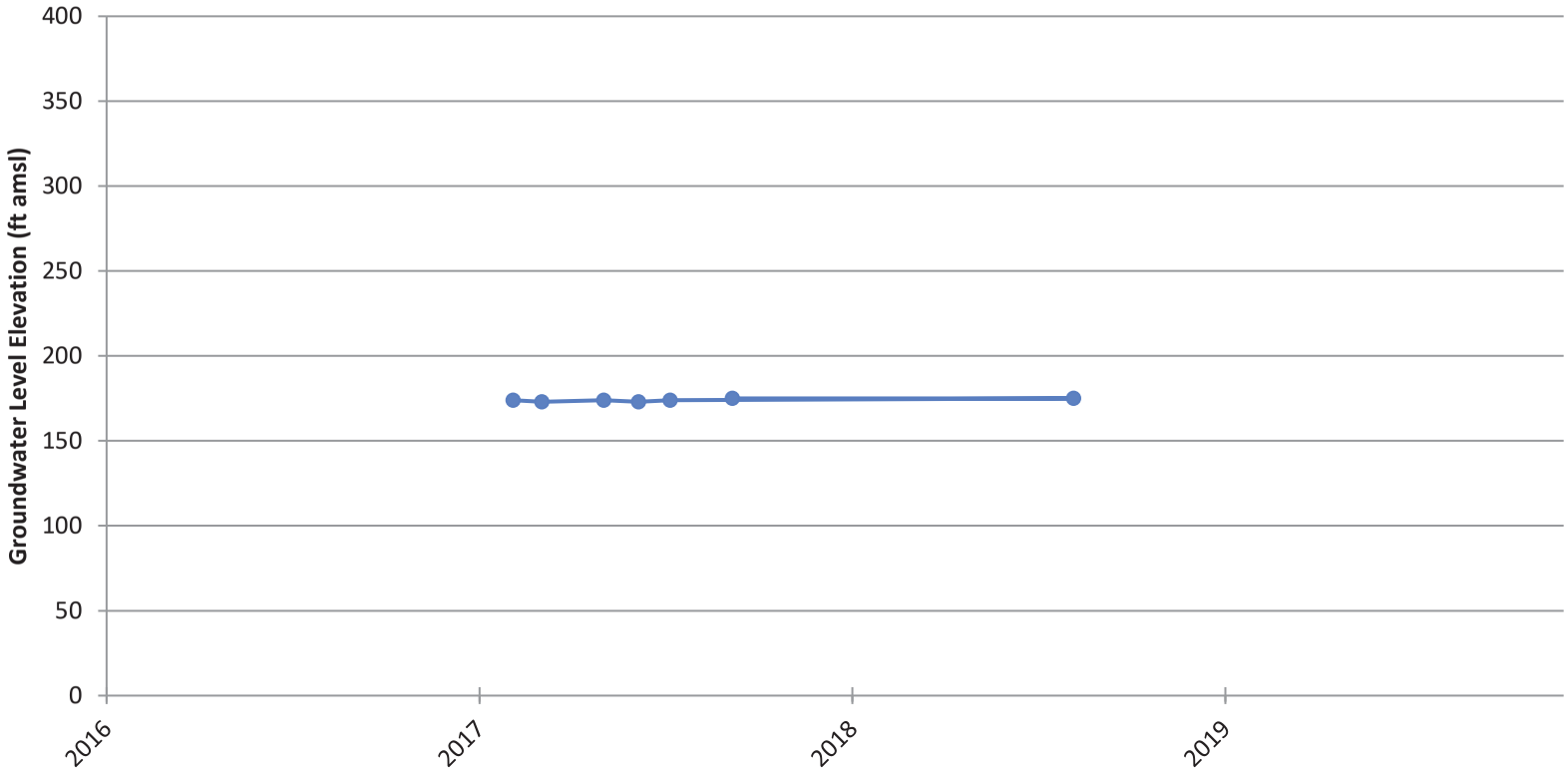
414178 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Groundwater Hydrographs - Shallow

M-19 (Formerly MW-6)



24/26-32G1

24/26-32G1

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION

Sierra Vista Ranch

County Tulare
Dist. Delano-Earlimart
Quad. Delano
Location Center of NW Quarter of Section 32.

Owner [redacted]
Use
Driller A. B. Lambridge
U.S.B.R. No. 24-26-32 G1
Local No. 4-H
Date 4-H-47

Surf. Elev. 693
Depth 470
Yield
Drawdown
Casing

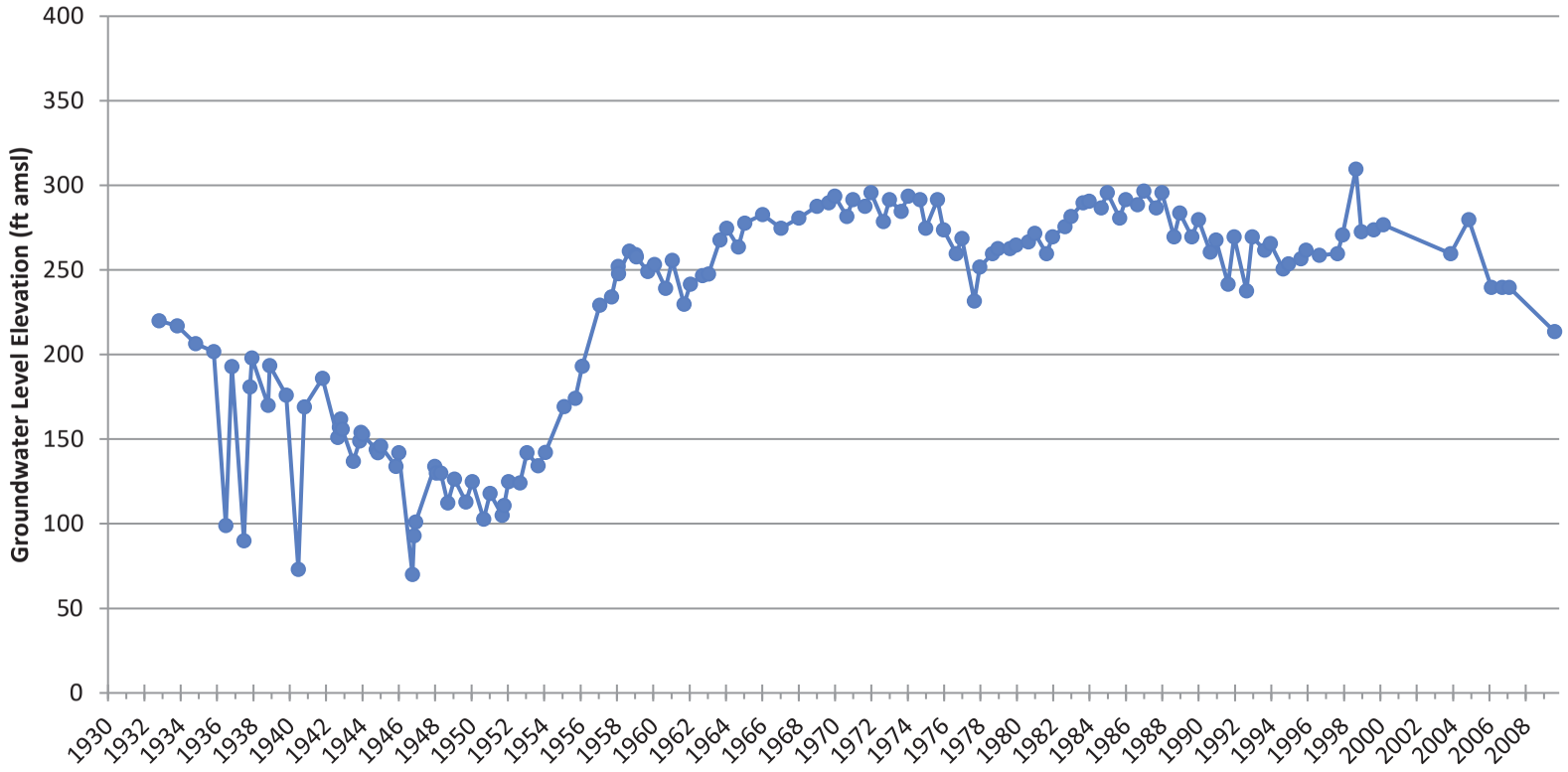
Groundwater elev. Date
Groundwater elev. Date
Aquifers
Artesian head Date
% Sand-gravel

Source of data Type drill cable tool Diam. hole 16"

Depth	Elev.	Thick.	Description
0	693	135	top soil and (sand and clay)
135	558	5	water sand
140	553	35	clay
175	518	16	good water gravel
191	502	17	clay
208	485	9	water sand
217	476	31	clay
248	445	12	water sand
260	433	49	clay
309	384	7	water sand
316	377	20	clay and silt
336	357	12	lime stone
348	345	8	water sand
356	337	22	clay
378	315	7	water sand
385	308	85	clay and sand
470	223		bottom of hole

Groundwater Hydrographs - Shallow

24S/26E-32G01



ORIGINAL
File with DWR

22/23-30

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 396637

Page ___ of ___
Owner's Well No. Angiola #1
Date Work Began 3-25-92 Ended 3-25-92
Local Permit Agency Tulare
Permit No. 63779 Permit Date 3-23-92

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)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	5	Top Soil
5	24	clay
24	26	sand
26	44	clay
44	49	sand
49	86	clay
86	104	sand
104	140	clay
140	144	sand
144	186	clay
186	192	sand
192	200	clay
200	208	sand
208	218	clay
218	224	sand
224	280	clay
280	284	sand
284	288	clay
288	309	sand
309	315	clay
315	330	sand
330	334	clay
334	339	sand
339	344	clay
344	351	sand
351	354	clay
354	373	sand
373	377	clay
377	419	sand
419	433	clay
433	437	sand
437	439	clay
439	444	sand
444	450	clay

UNCONFINED

TOTAL DEPTH OF BORING 460 (Feet)
TOTAL DEPTH OF COMPLETED WELL 450 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address ½ mi S. of Ave. 112 & 50 ft. W. of Rd 24
City Corcoran
County Tulare
APN Book Echoe Page 78 Parcel 291-130-01
or Township 22S Range 23E Section 30
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

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

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
X Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Reverse FLUID Natural

WATER LEVEL & YIELD OF COMPLETED WELL

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	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	240	30	X				steel	15.5	1/4	
240	450	30		X			louver	15.5	1/4	.070

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	20	X			
20	450				5/16x4

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 Grabow Well Drilling, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 12522 9th Ave. CITY Hanford, STATE CA ZIP 93230

Signed Jean E Grabow
WELL DRILLER/AUTHORIZED REPRESENTATIVE

3-29-92
DATE SIGNED

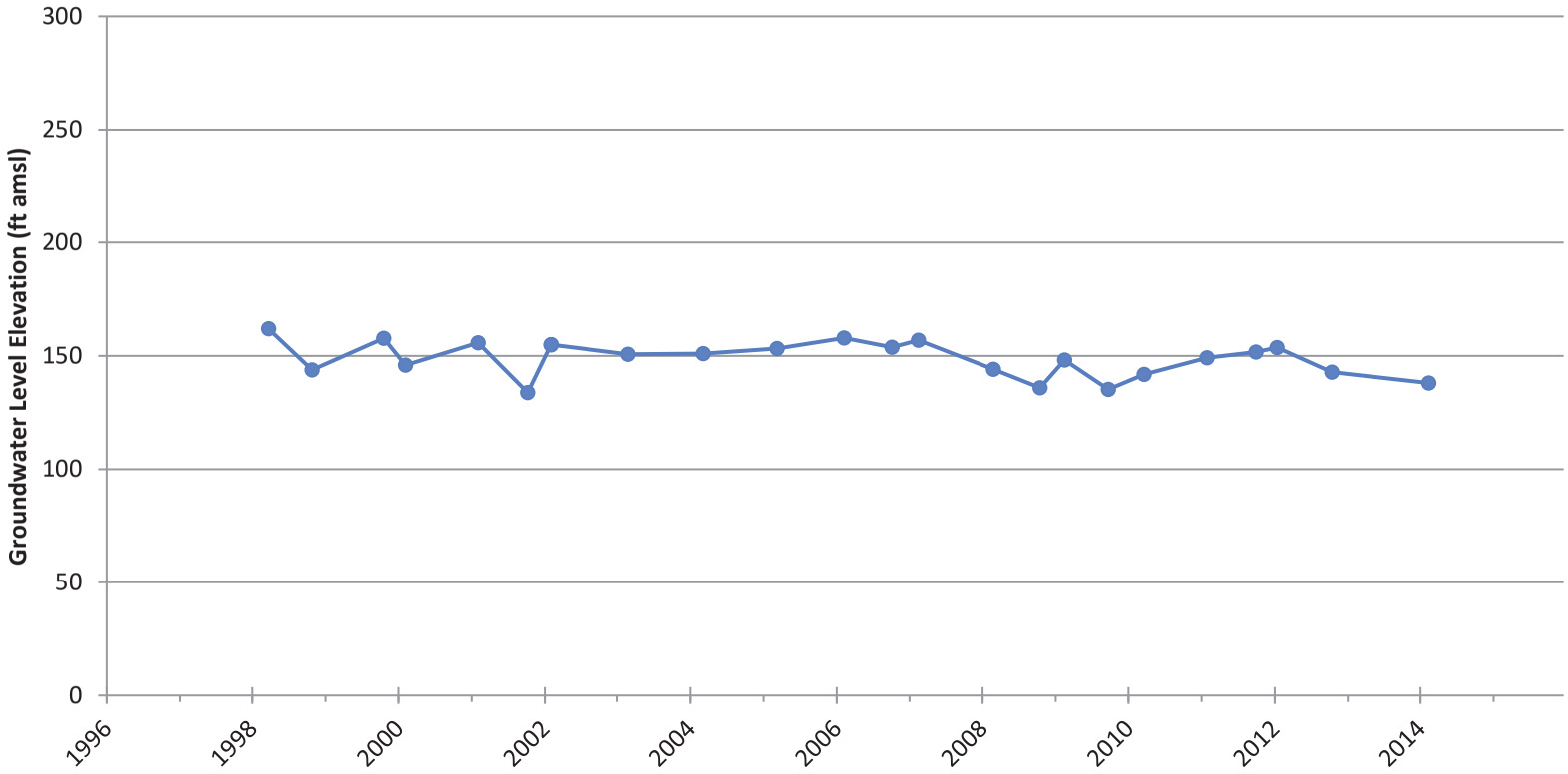
288489
C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Groundwater Hydrographs - Shallow

22S/23E-30J01



TRIPLICATE
Owner's Copy

Page 1 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E054449

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

Owner's Well No. 20-E
Date Work Began 6/20/2007, Ended 6/27/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0221 Permit Date 5/16/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	4	TOP SOIL
4	7	MEDIUM SAND
7	45	SANDY BROWN CLAY
45	50	COARSE SAND & BROWN CLAY
50	53	SAND (MEDIUM COARSE)
53	54	BROWN CLAY
54	58	SAND (MEDIUM COARSE)
58	61	SAND & CLAY
61	70	SAND (MEDIUM COARSE)
70	93	CLAY BROWN
93	104	SAND (MEDIUM COARSE)
104	116	SAND & CLAY
116	121	BROWN CLAY
121	124	SAND & CLAY
124	130	BROWN CLAY
130	141	SAND (MEDIUM COARSE)
1471	150	BROWN CLAY
150	152	SAND (MEDIUM)
152	159	BROWN CLAY
159	160	SAND & CLAY
160	163	BROWN CLAY
163	169	SAND & CLAY
169	178	SAND
178	181	BROWN CLAY
181	183	SAND & CLAY
183	200	BROWN CLAY
200	202	SAND
202	214	BROWN CLAY
214	217	SAND (MEDIUM COARSE)
217	219	BROWN CLAY

TOTAL DEPTH OF BORING 500 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

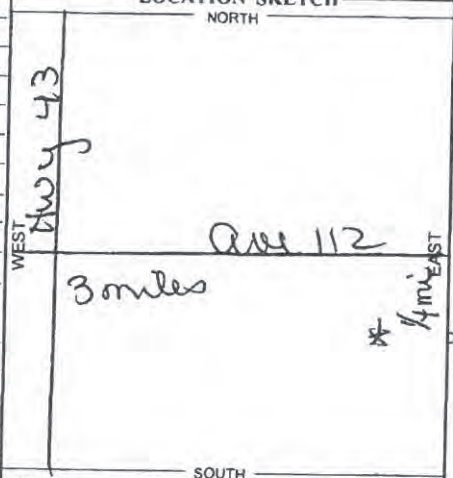
WELL OWNER

[redacted]

WELL LOCATION

Address AVE 112
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 01
Township 22 S Range 23 E Section 28
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 (✓)
✓ 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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	240	30"	✓				STEEL	18" OD	5/16"	
240	480	30"		✓			STEEL	18" OD	5/16"	.050 SLO
480	490	30"	✓				STEEL	18" OD	5/16"	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			6 SACK
0	500				MIX 6 X 16 & 1/4

ATTACHMENTS (✓)
— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed Carla Farrell 06/28/07 548214
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

AWD01807

TRIPLICATE
Owner's Copy
Page 2 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E054449

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

Owner's Well No. 20-E
Date Work Began 6/20/2007, Ended 6/27/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0221 Permit Date 5/16/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
219	222	SAND (MEDIUM COARSE)
222	245	BROWN CLAY
245	261	SAND & CLAY
261	282	BROWN CLAY
282	318	SAND (COARSE MEDIUM)
318	326	SANDY BROWN CLAY
326	331	COARSE SAND
331	345	SANDY BROWN CLAY
345	348	COARSE SAND
348	362	SANDY BROWN CLAY
362	367	SANDY BLUE CLAY
367	376	COARSE SAND
376	382	SANDY BLUE CLAY
382	385	COARSE SAND
385	387	SANDY BLUE CLAY
387	389	COARSE SAND
389	393	COARSE SAND & GRAVEL
393	398	COARSE SAND
398	406	SANDY BLUE CLAY
406	408	BLUE CLAY & COARSE SAND
408	410	COARSE SAND
410	413	BLUE SANDY CLAY
413	417	COARSE SAND
417	442	SANDY BLUE CLAY
442	453	COARSE SAND
453	459	MEDIUM & COARSE SAND
459	480	SANDY BLUE CLAY
480	500	BLUE CLAY

TOTAL DEPTH OF BORING 500 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address AVE 112
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 01
Township 22 S Range 23 E Section 28
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	240	30"	✓				STEEL	18" OD	5/16"	
240	480	30"		✓			STEEL	18" OD	5/16"	.050 SLO
480	490	30"	✓				STEEL	18" OD	5/16"	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			6 SACK
0	500				MIX 6 X 16 & 1/4

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed ____ 06/28/07 548214
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

AWD01808

9-185—July 1935
Revised

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

WELL SCHEDULE

Date OCT. 10, 1950 Field No. 22.23-2141

Record by MEC Office No.

Source of data FT.

1. *Location:* State California County TULARE
Map LAKE WEIR QUAD. TAYLOR WEIR 5-429c
¼ ¼ sec. T N S R E W
2. *Owner:* [redacted]
Tenant
Driller Goldring Packing Co. Address
3. *Topography* PLAIN
4. *Elevation* 205 ft. above / below
5. *Type:* Dug, drilled, driven, bored, jetted 1950
6. *Depth:* Rept. 521 ft. Meas. ft.
7. *Casing:* Diam. 12 in., to in., Type
Depth ft., Finish
8. *Chief Aquifer* From ft. to ft.
Others perfs - 321' - 521'
9. *Water level* ft. rept. meas. 19 above / below
NO REPORT which is ft. above / below surface
10. *Pump:* Type Turb. Capacity G. M.
Power: Kind Elec. Horsepower 50
11. *Yield:* Flow G. M., Pump G. M., Meas., Rept. Est.
Drawdown ft. after hours pumping G. M.
12. *Use:* Dom., Stock, PS., RR., Ind., Irr., Obs.
Adequacy, permanence
13. *Quality* Temp °F.
Taste, odor, color Sample Yes / No
Unfit for
14. *Remarks:* (Log, Analyses, etc.) D-log

U. S. GOVERNMENT PRINTING OFFICE 6—7478

AWD02010

Well G1

22.23-2141

PLOTTED FEB 1970

100 FT W of DITCH on HALF SECTION LINE

40-FT SOUTH of SECTION LINE

0.51 miles South of & Ave. 120

.52 mi. W/o Rd 40 (sec. line)
.485 mi. N/o Ave. 112 (sec. line) on W. side of Canal.

Water No. ~~S-4469~~ 322502

Trans. No. — 3661

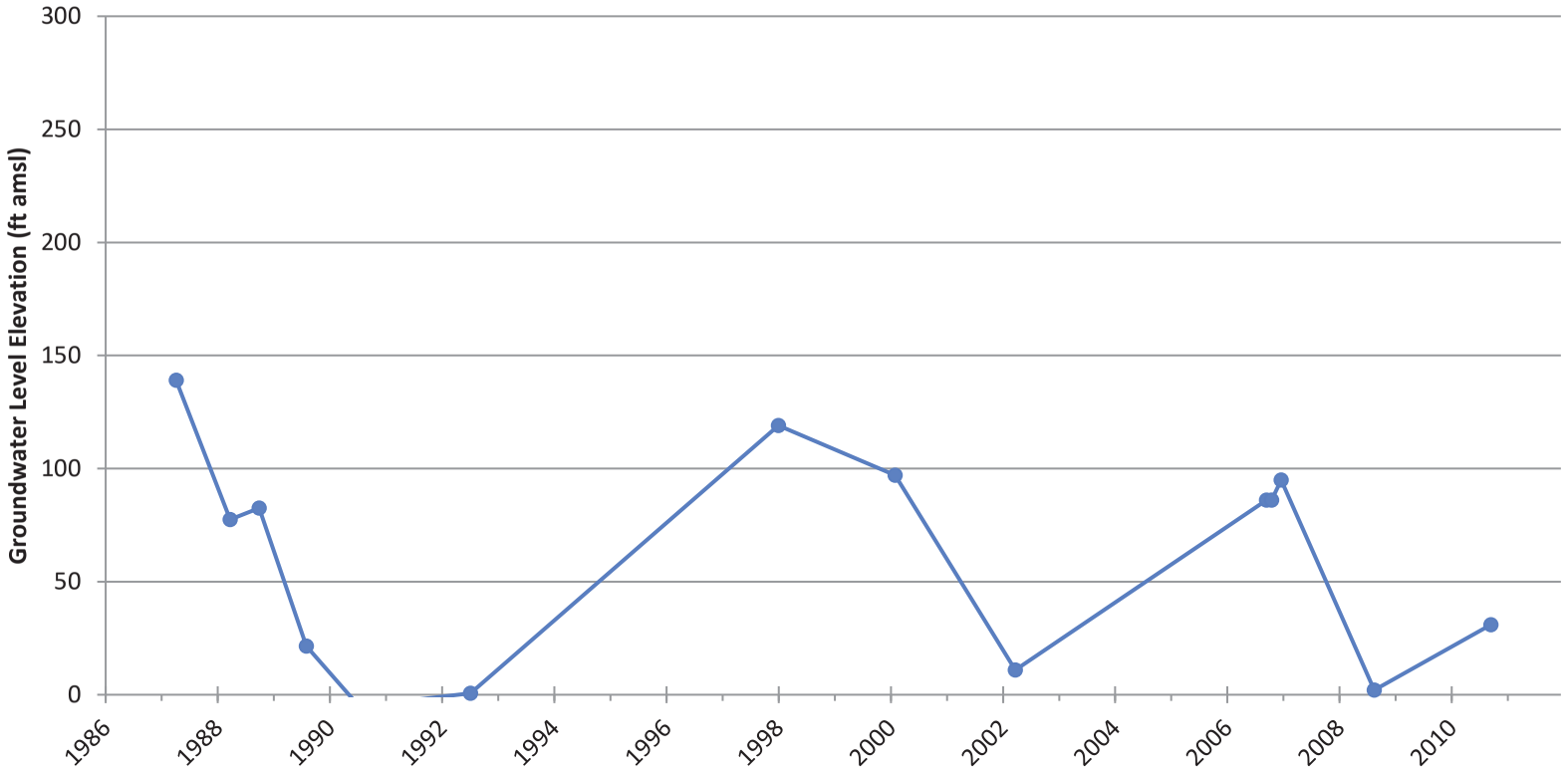
Disc. Diam. ~~8~~ 10 in Length 11 Ft into ditch 15 FT ~~E into~~ DITCH 161 Ft. into ditch East of CANAL

Remarks

Nov. 6, 1958
Byron-Jackson turb
U.S. Elec. 75 H.P.
S.W.L. = 65.78 Ft.
W.P. = T.C. W. Scale which is 1.5 Ft. above L.S.D.
WL = 67.4' (12-51)

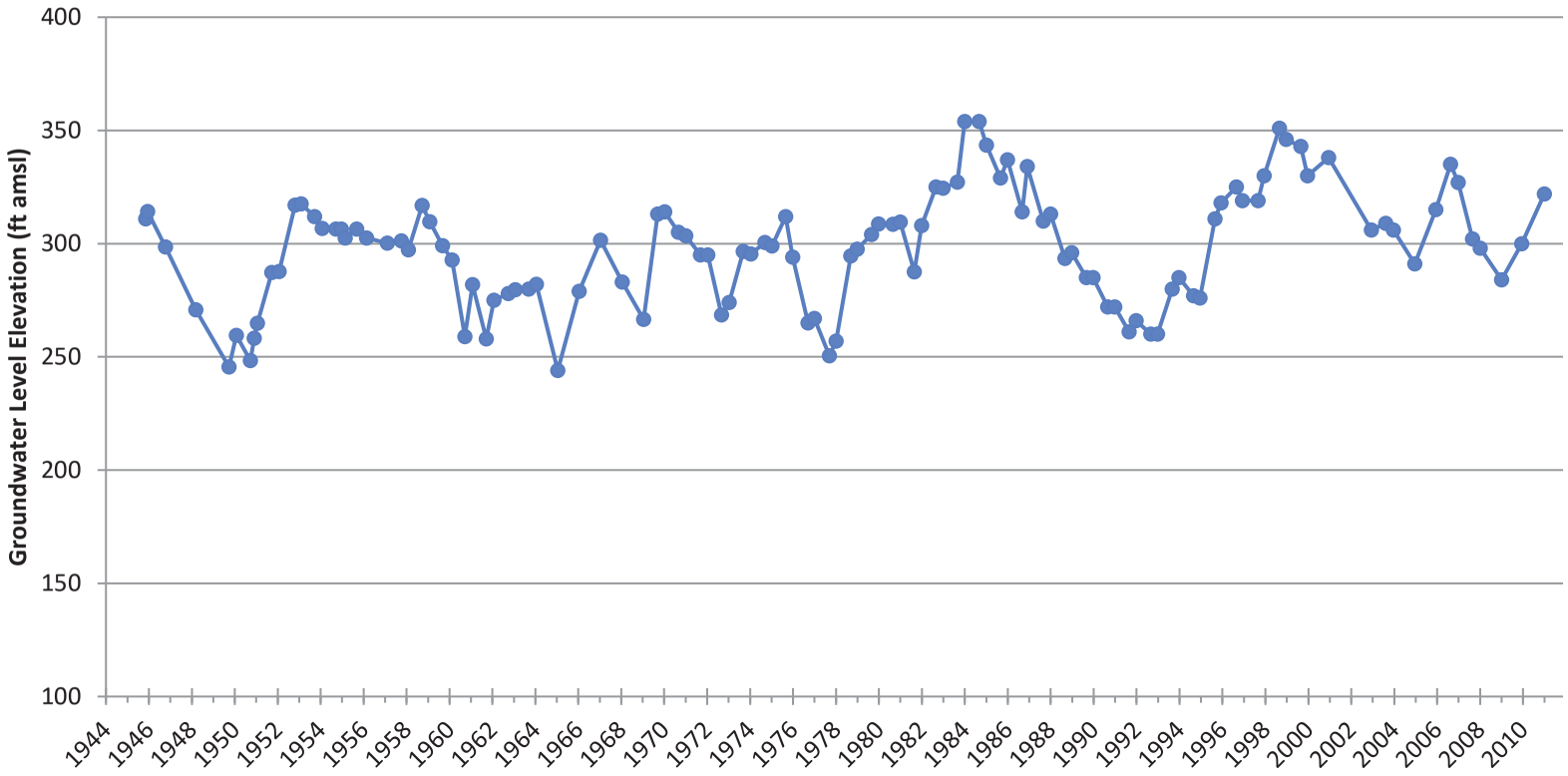
Groundwater Hydrographs - Shallow

G-1



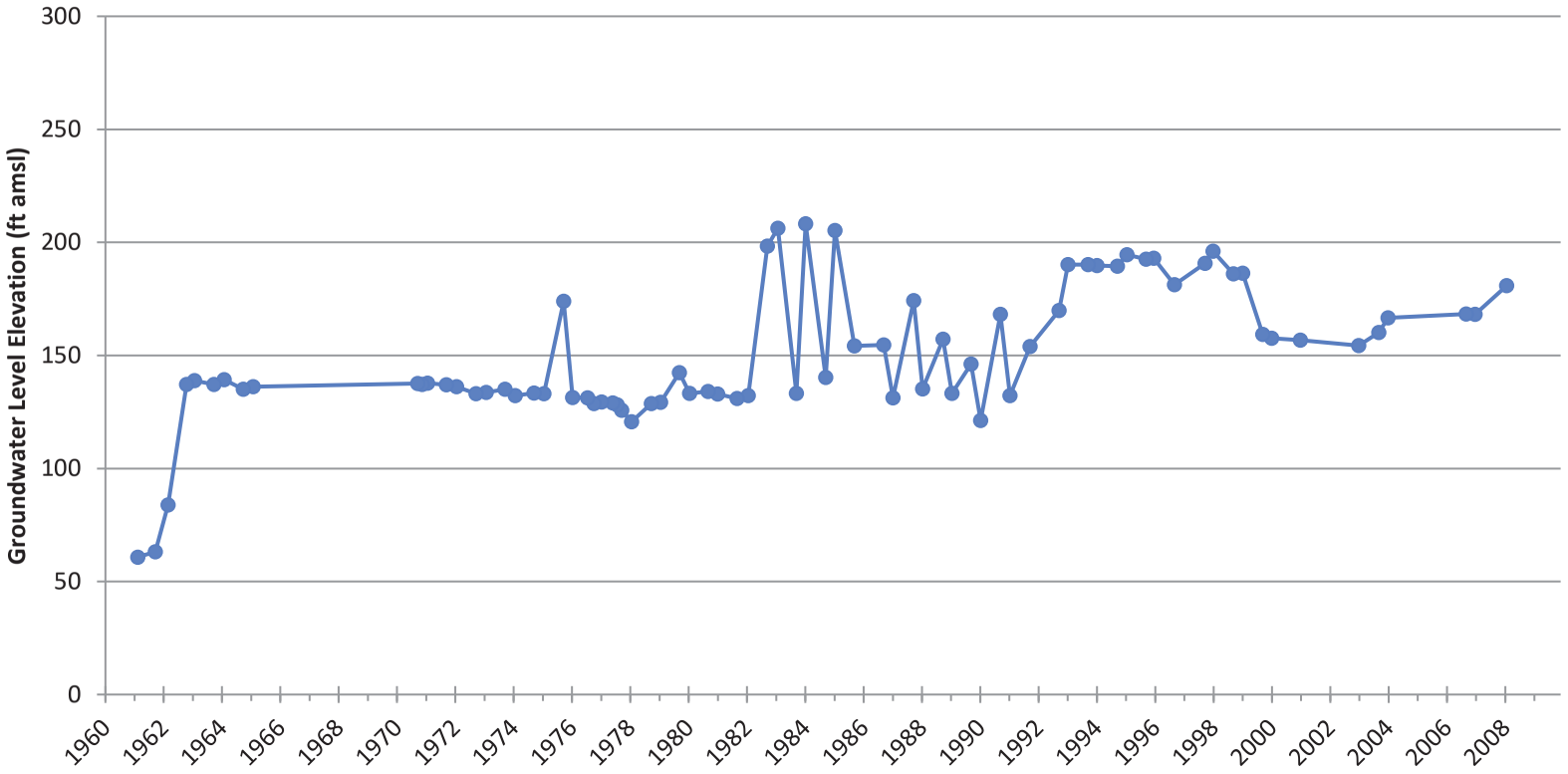
Groundwater Hydrographs - Shallow

22S/26E-25J01



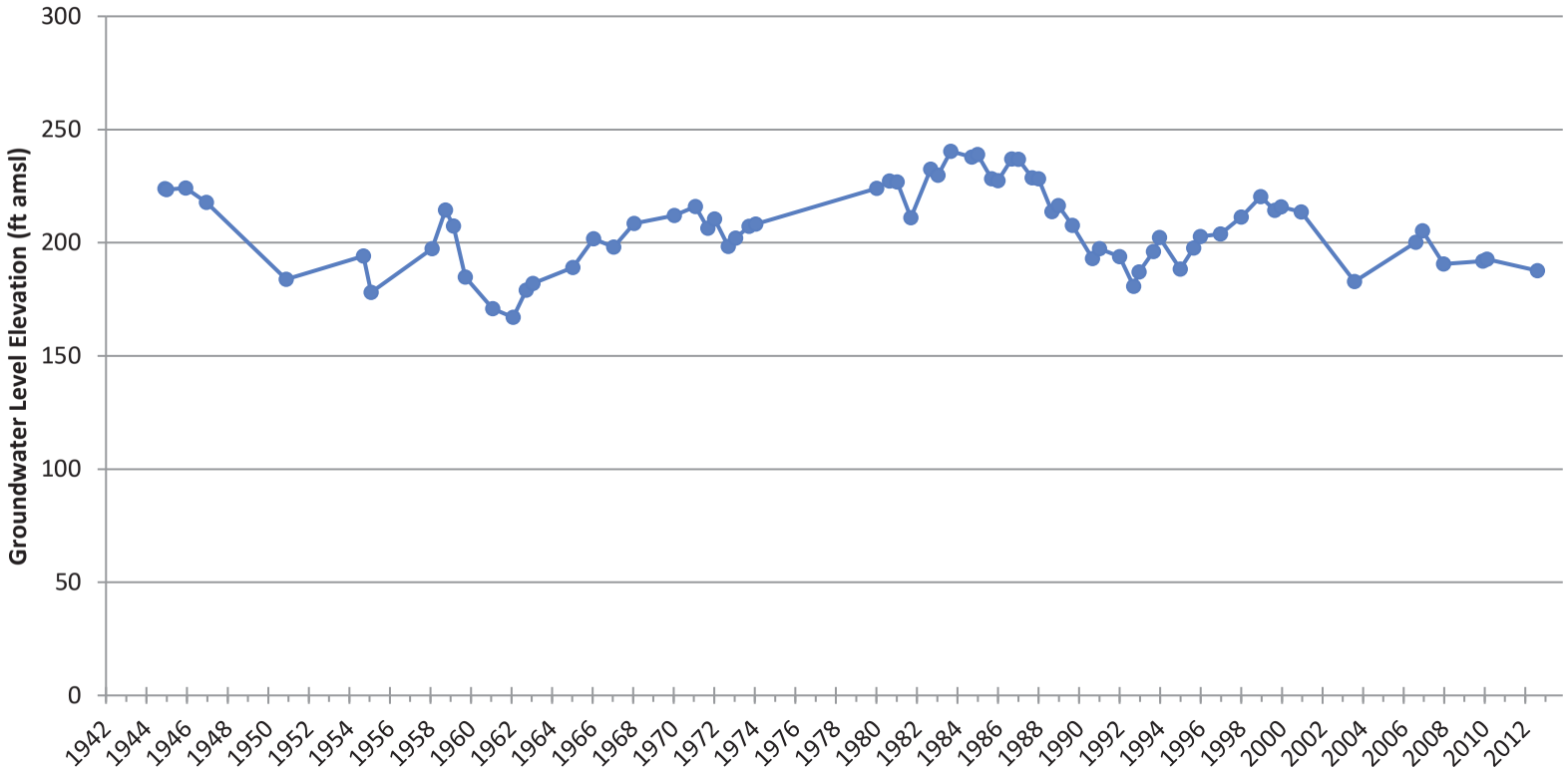
Groundwater Hydrographs - Shallow

23S/23E-33A02



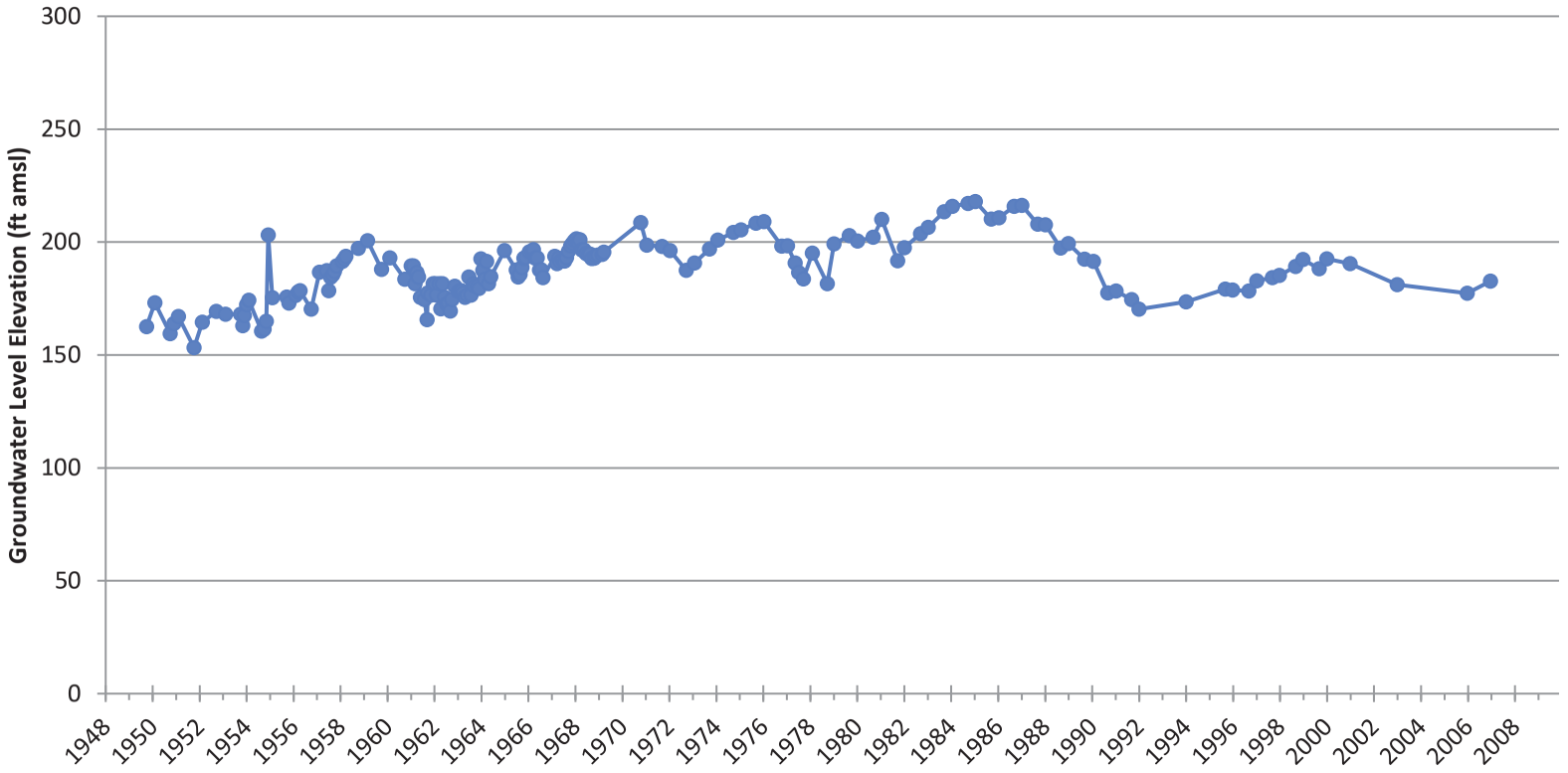
Groundwater Hydrographs - Shallow

21S/24E-15H01



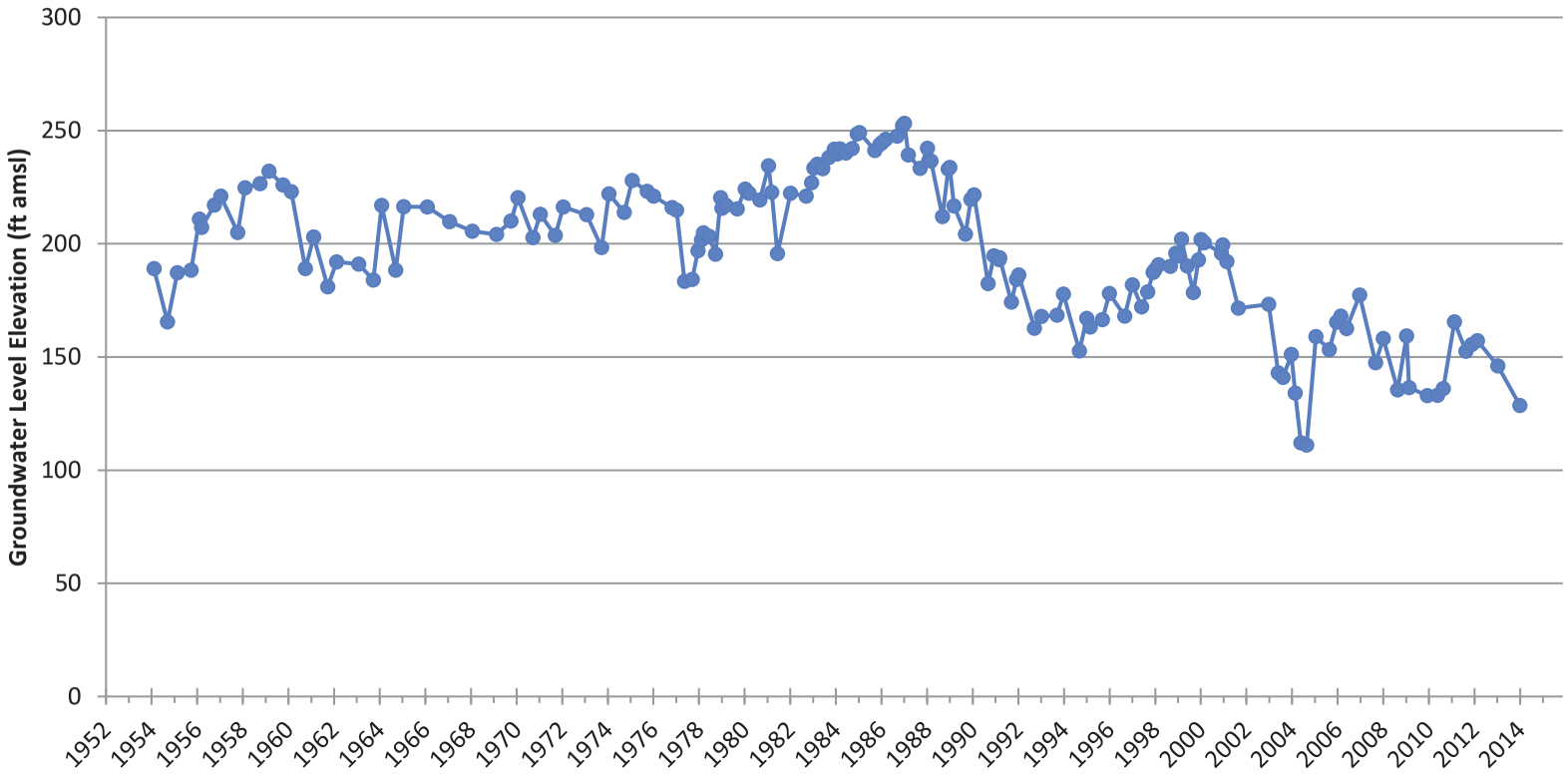
Groundwater Hydrographs - Shallow

22S/25E-10E01



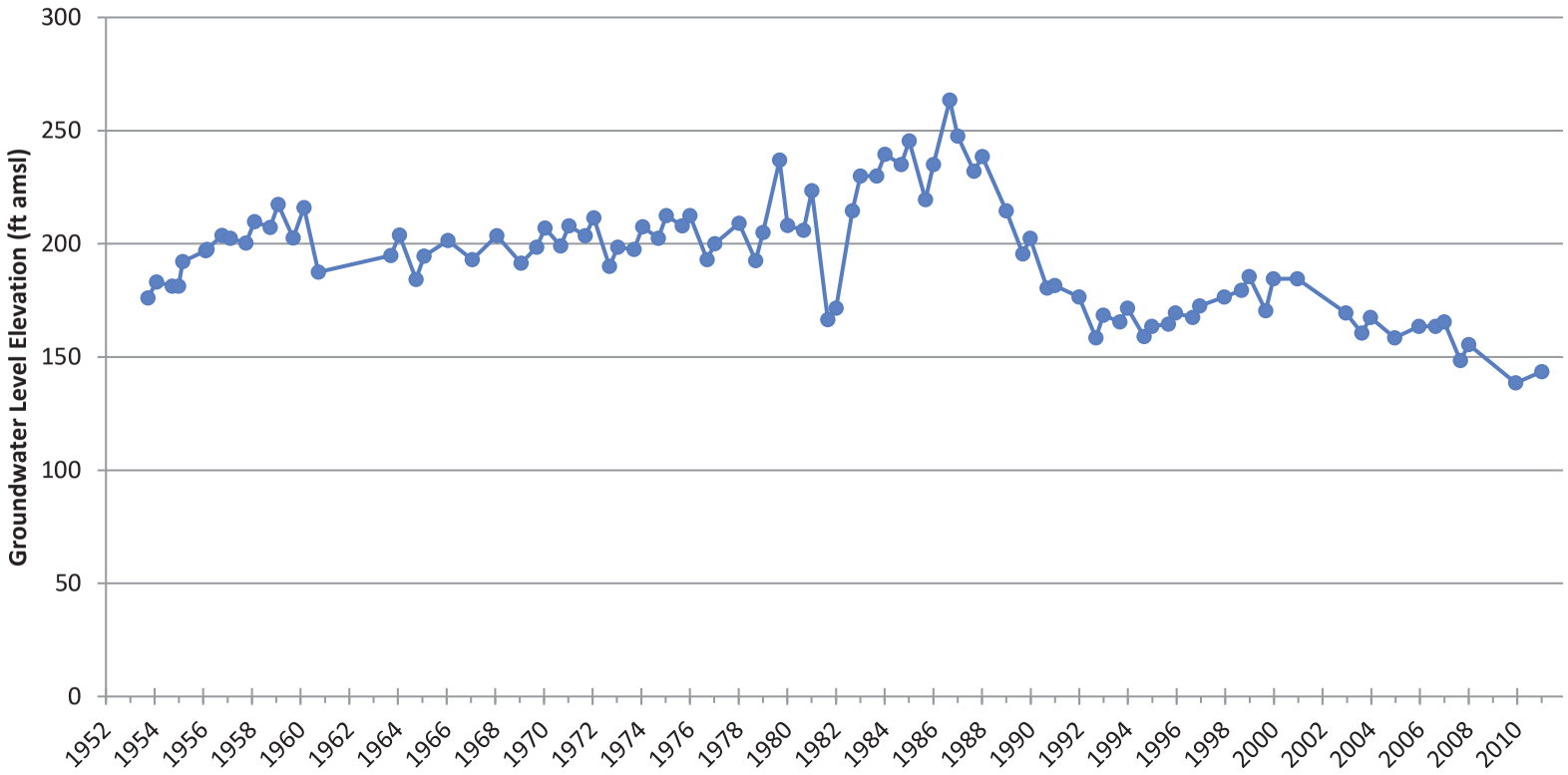
Groundwater Hydrographs - Shallow

21S/25E-36R01



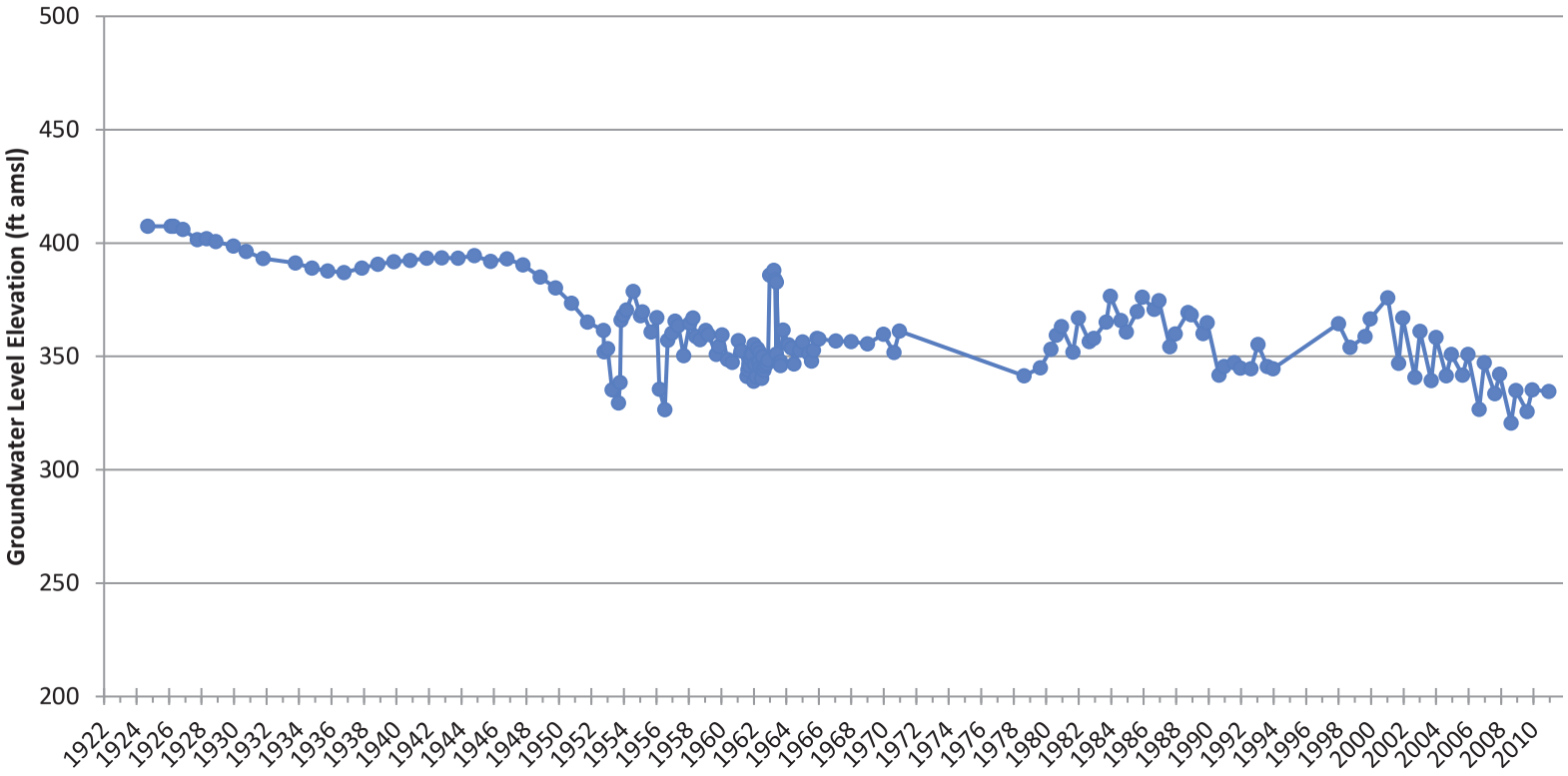
Groundwater Hydrographs - Shallow

22S/26E-07J01



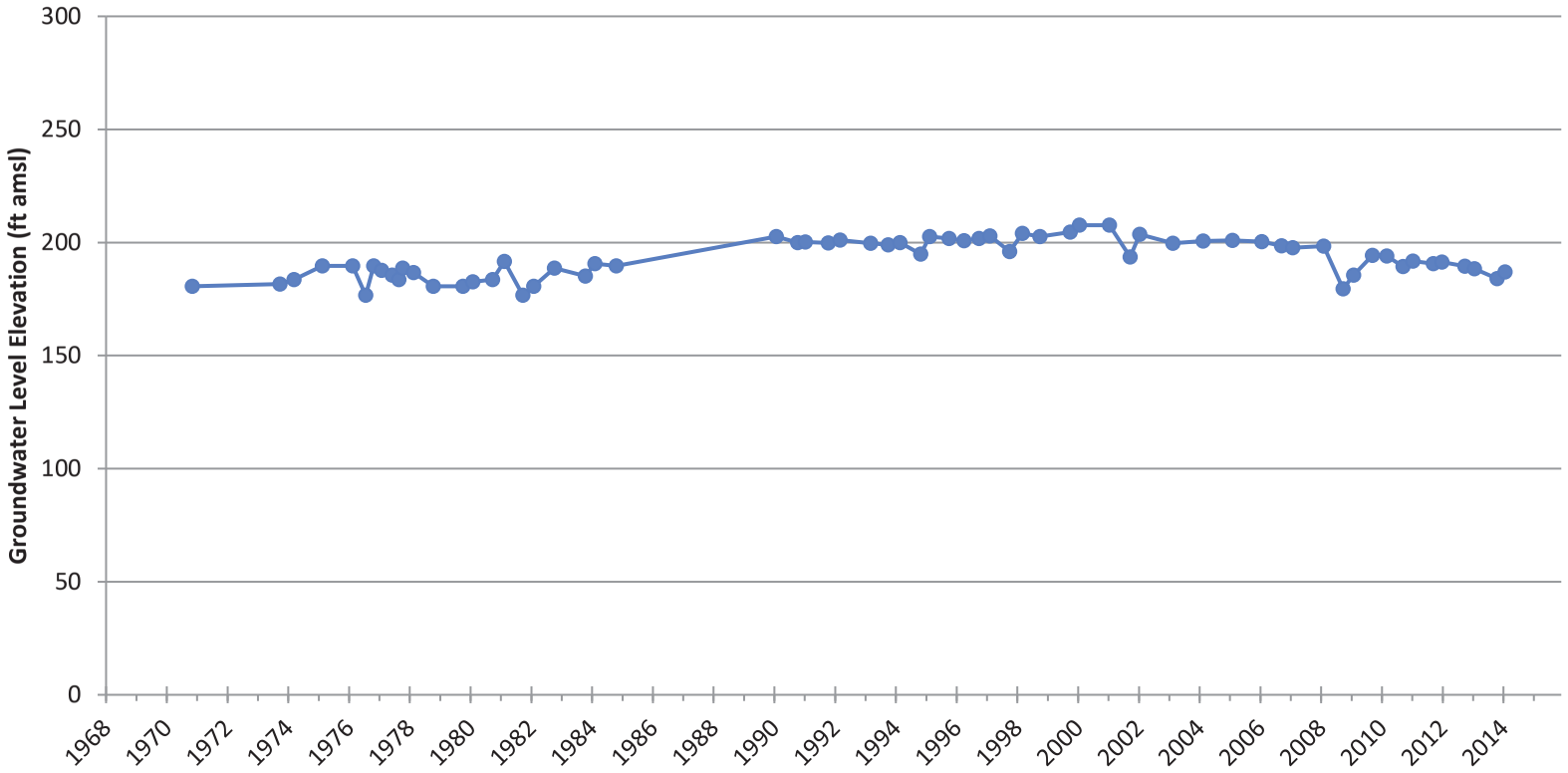
Groundwater Hydrographs - Shallow

22S/27E-10R01



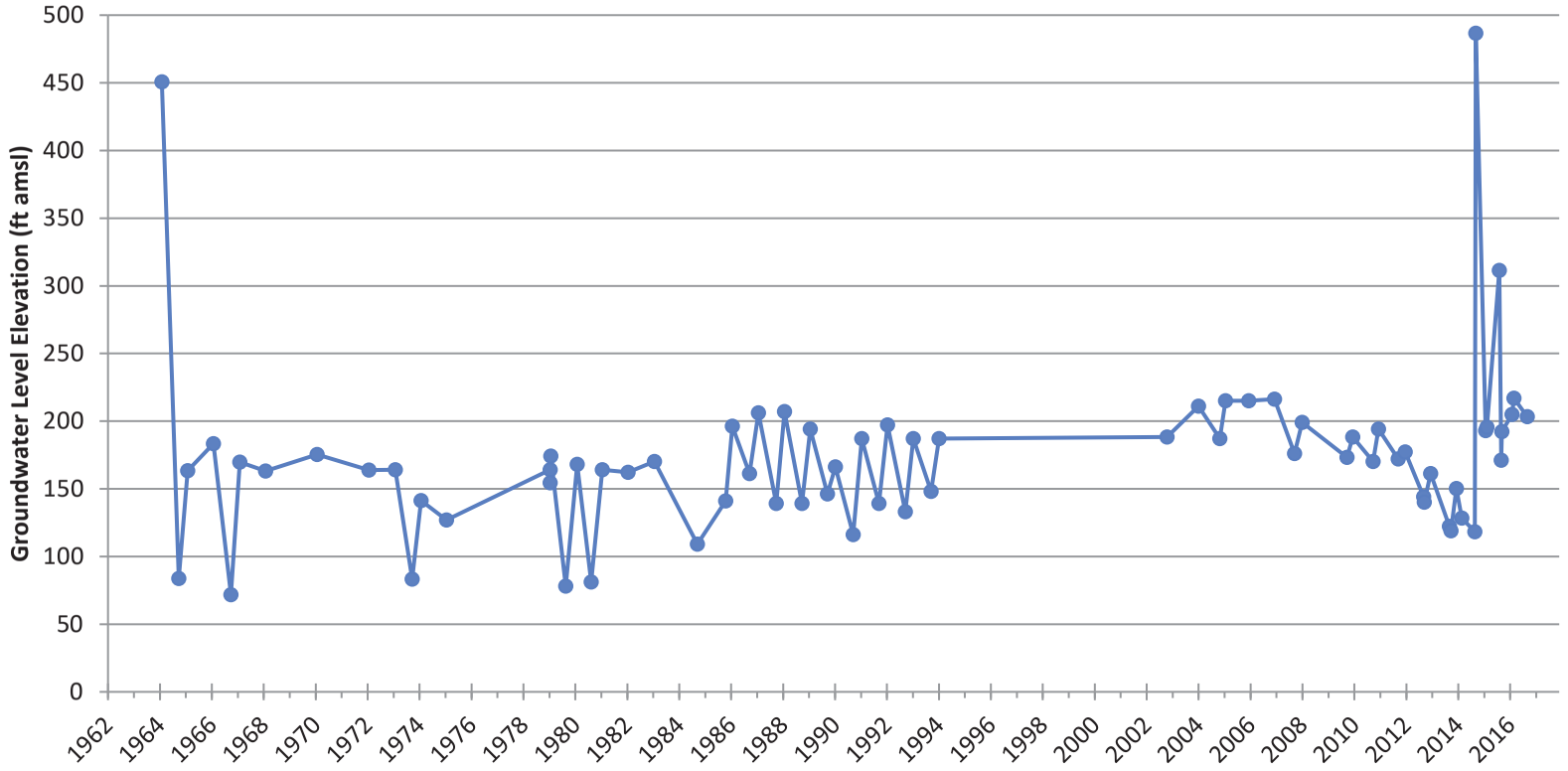
Groundwater Hydrographs - Shallow

24S/24E-25J01



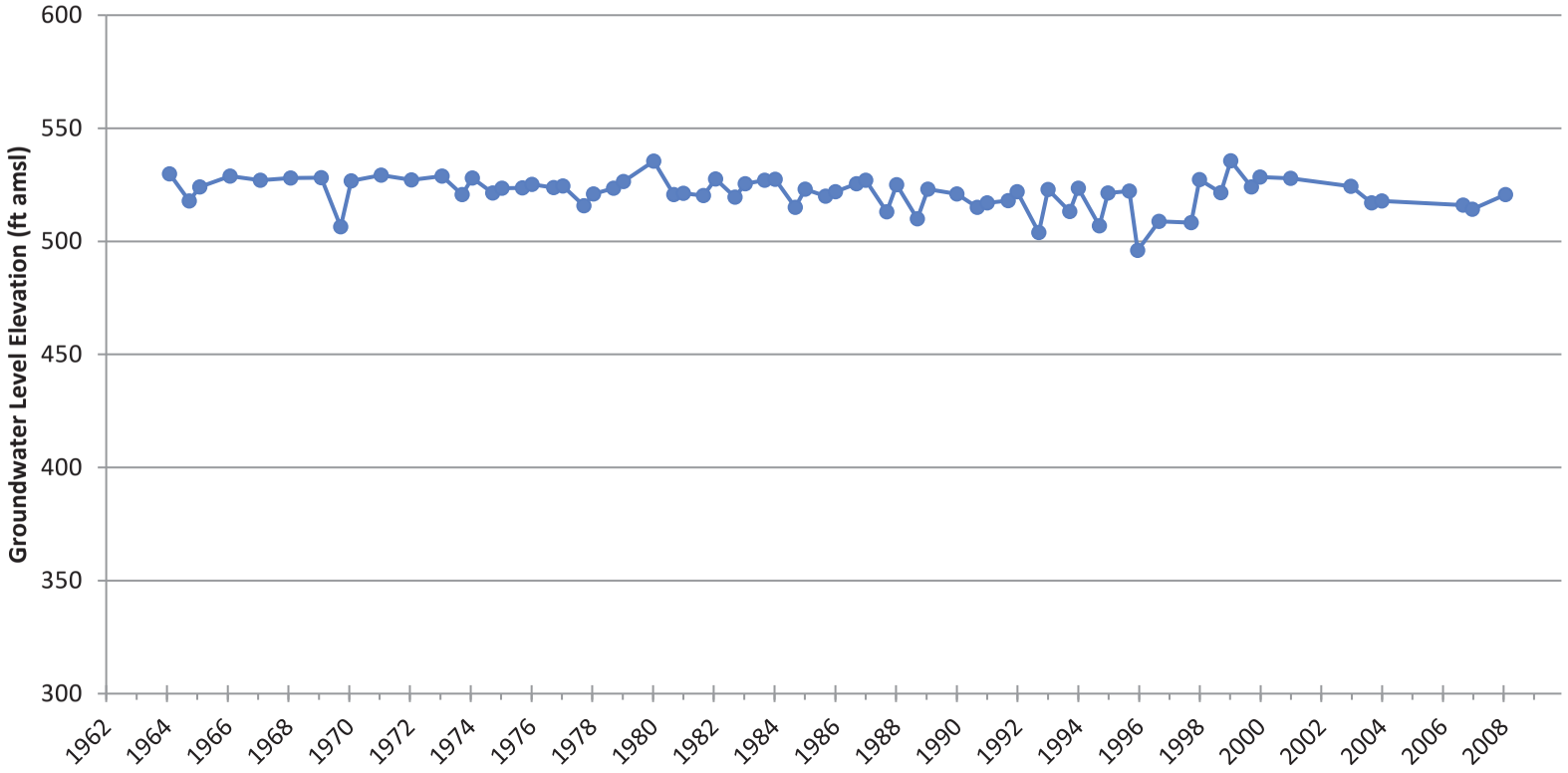
Groundwater Hydrographs - Shallow

24S/26E-01R01



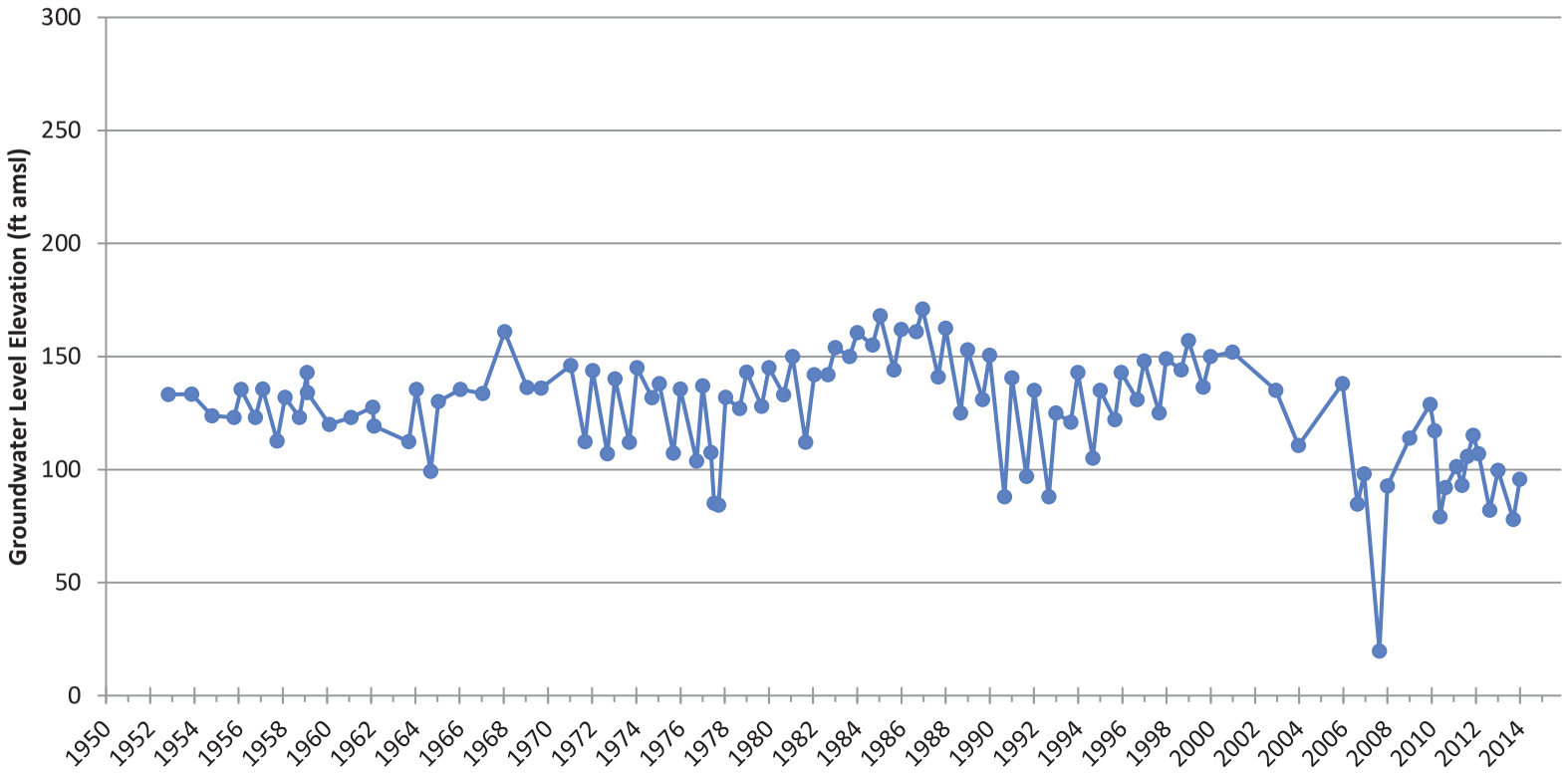
Groundwater Hydrographs - Shallow

22S/28E-03H01



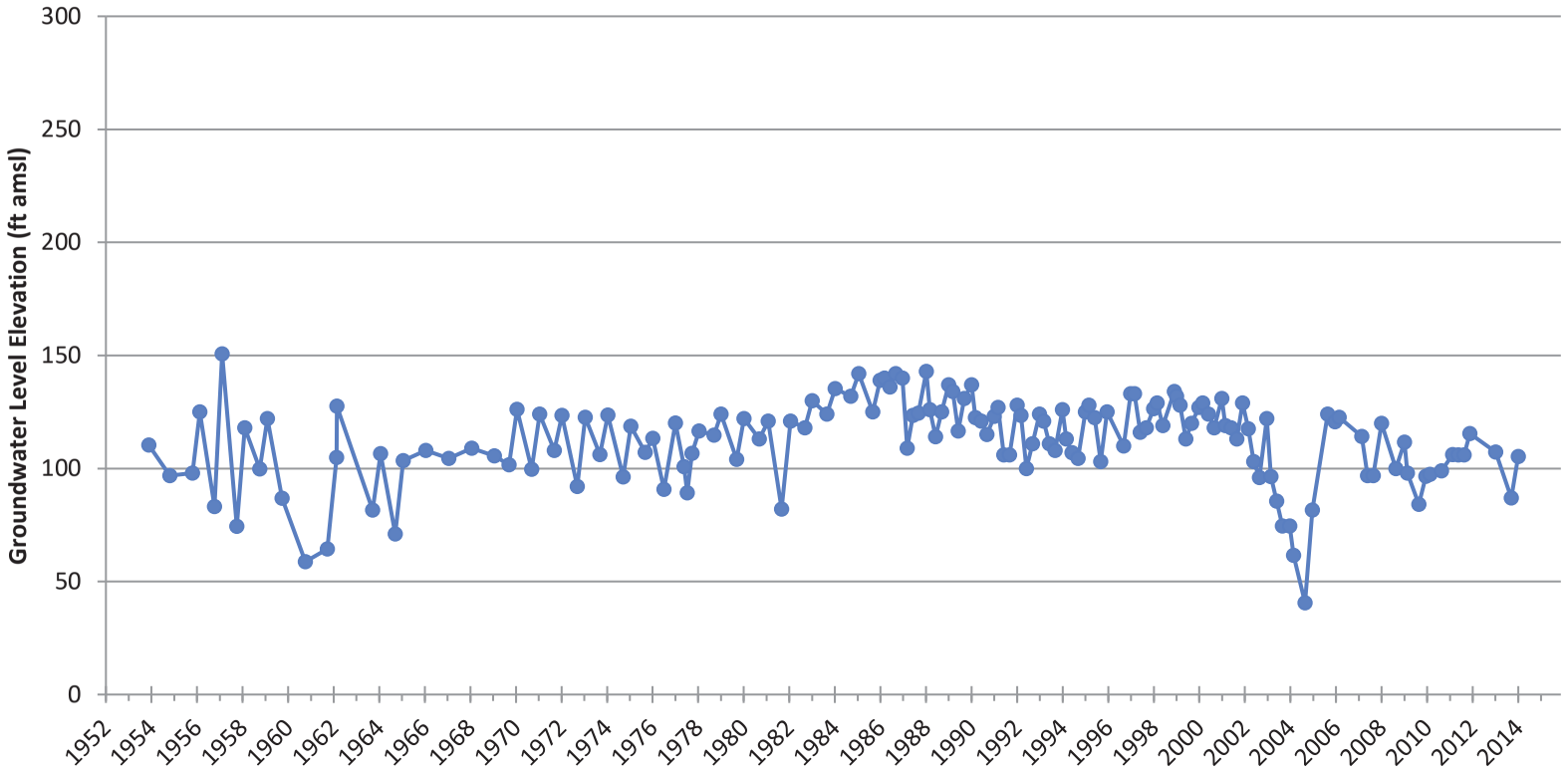
Groundwater Hydrographs - Shallow

23S/25E-19D01



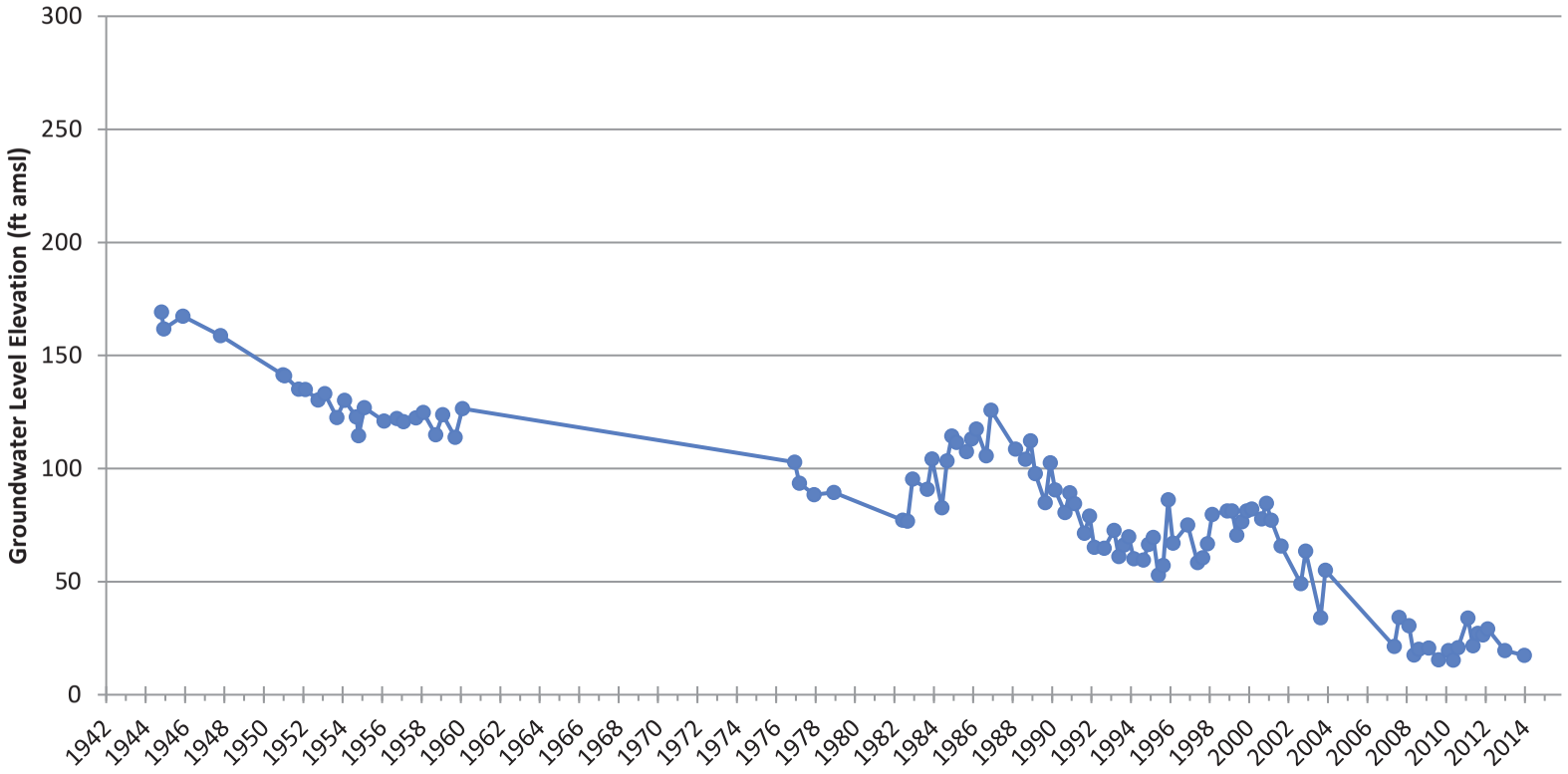
Groundwater Hydrographs - Shallow

23S/24E-28J02



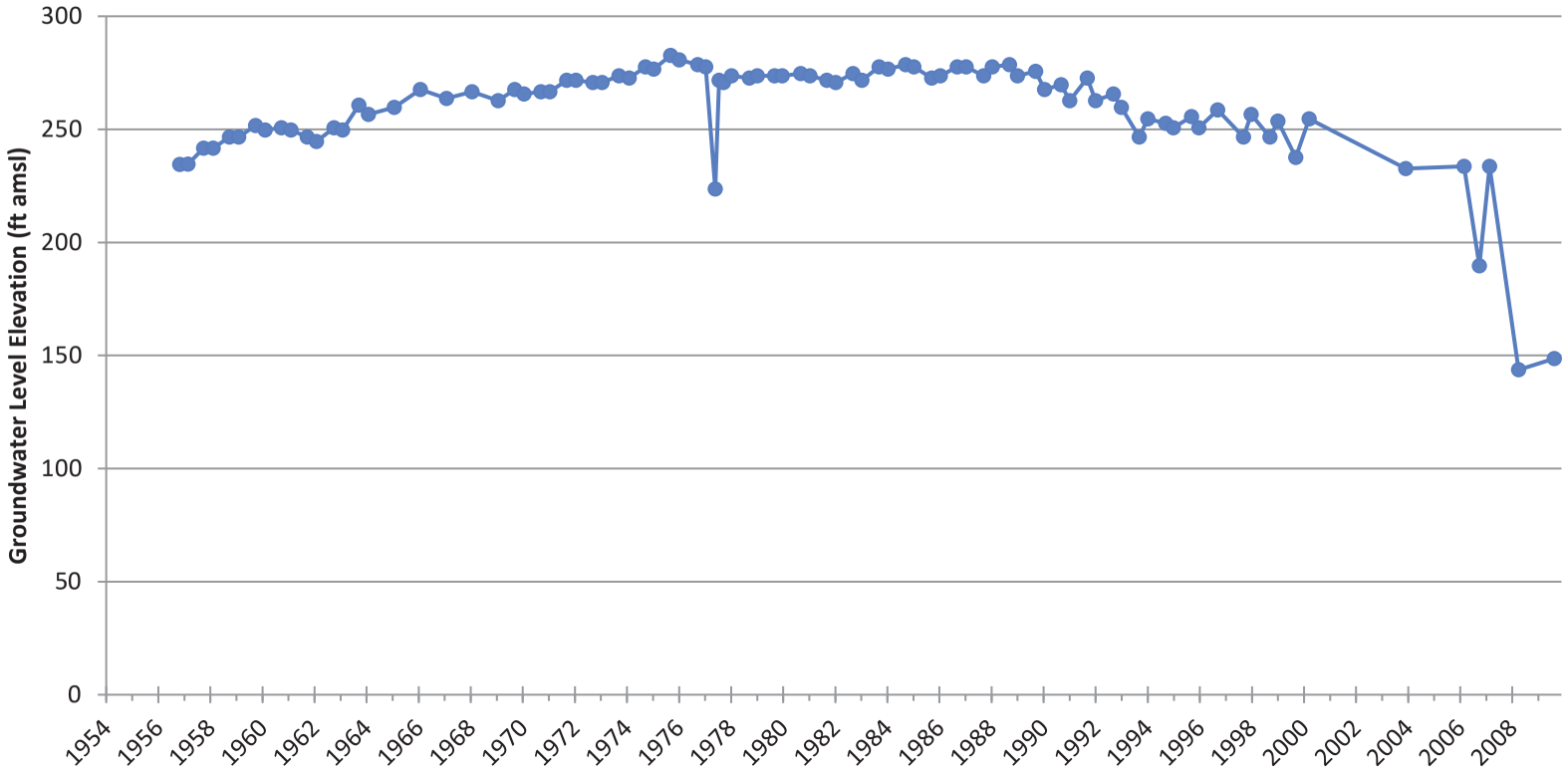
Groundwater Hydrographs - Shallow

22S/24E-20A01



Groundwater Hydrographs - Shallow

24S/25E-35P01



22/23-2L1

BOISEY PORTABLE

ORIGINAL

DEEP WELL

WINTEN BROS. DRILLING COMPANY

"The Oldest and Largest"

PHONE 2821

Well Log

Name California Packing Company

Address Angwin, California

Well Started 7/20/50 Well Finished 8/31/50 Diameter 16"

Gauge 5/16 Total Depth 521 Depth to Water

Strata Formation	From Feet	To Feet	Perforated
Top Soil	0	6	371 ft. 16" 5/16 O.D. perforated
Sand	6	15	
Clay	15	52	371 ft. 5/16 16" O.D. plain
Sandy Clay	52	105	
Sand	105	113	
Sandy Clay	113	202	
Hard Sand	202	262	
Sand	262	265	
Sandy Clay	265	320	
Sand	320	432	
Sandy Clay	432	460	
Tough Clay	460	480	
Sandy Clay	480	510	
Hard Blue Slate	510	521	

BOISEY PORTABLE

Well G1

AWD02011

TRIPLICATE
Owner's Copy

Page 1 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

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

Owner's Well No. #2-13W ~~E2200~~ W-14 No. E054456

Date Work Began 6/19/2007, Ended 7/12/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0220 Permit Date 5/15/2007

GEOLOGIC LOG

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

DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION Describe material, grain, size, color, etc.
0 25	SANDY BROWN CLAY
25 38	SANDY BLUE CLAY
38 50	SANDY BROWN CLAY
50 54	SAND
54 61	CLAY
61 66	SANDY CLAY
66 74	CLAY
74 79	SANDY CLAY
79 86	CLAY BROWN
86 91	BLUE CLAY
91 95	SAND
95 98	SANDY CLAY
98 111	CLAY
111 118	FINE SAND
118 126	SANDY CLAY
126 133	BLUE CLAY
133 142	SAND
142 158	BLUE CLAY
158 161	SAND
161 170	BLUE CLAY
170 177	SAND
177 196	BLUE CLAY
196 202	SANDY CLAY
202 205	BLUE CLAY
205 216	SANDY CLAY
216 228	BLUE CLAY
228 234	BLUE CLAY & SAND
234 243	CLAY
243 248	SAND
248 253	SANDY CLAY

TOTAL DEPTH OF BORING 490 (Feet)

TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112

City ANGIOLA CA

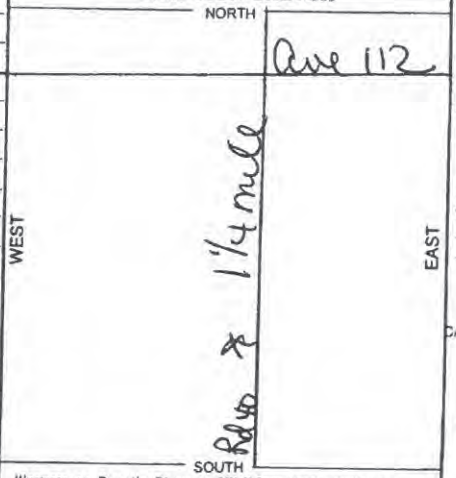
County TULARE

APN Book 291 Page 110 Parcel 05

Township 22 S Range 23 E Section 33

Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 (✓)

✓ 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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 50	44"			✓		STEEL	36"	5/16"	
0 240	30"	✓				STEEL	18"	5/16"	
240 480	30"		✓			STEEL	18"	5/16"	.050 SLO
480 490	30"	✓				STEEL	18"	5/16"	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 50	✓			SIX SACK
0 490			✓	1/4 X 10

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP

Signed Carla Harrell 07/16/07 548214
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

AWD02863

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E054456

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

Owner's Well No. #2-13W
Date Work Began 6/19/2007, Ended 7/12/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0220 Permit Date 5/15/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
253	265	SAND
265	269	CLAY
269	276	SAND
276	278	CLAY W/SAND
278	296	CLAY
296	303	SAND
303	309	CLAY
309	316	SAND
316	322	SANDY CLAY
322	325	SAND
325	337	CLAY
337	346	SAND
346	354	SANDY CLAY
354	367	CLAY
367	374	SAND
374	381	SANDY CLAY
381	384	CLAY
384	385	SANDY CLAY
385	391	SAND
391	404	CLAY
404	410	SAND
410	423	CLAY
423	434	CLAY W/LITTLE SAND
434	439	SAND
439	443	SANDY CLAY
443	454	SAND
454	456	CLAY
456	463	SAND
463	472	CLAY
472	480	SAND

TOTAL DEPTH OF BORING 490 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 05
Township 22 S Range 23 E Section 33
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	240	30"	✓				STEEL	18"	5/16"	
240	480	30"		✓			STEEL	18"	5/16"	.050 SLO
480	490	30"	✓				STEEL	18"	5/16"	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	490			✓	1/4 X 10

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed ____ 07/16/07 548214
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

AWD02864

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E054456

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

Owner's Well No. #2-13W
Date Work Began 6/19/2007, Ended 7/12/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0220 Permit Date 5/15/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
480 490	CLAY

TOTAL DEPTH OF BORING 490 (Feet)
TOTAL DEPTH OF COMPLETED WELL 490 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 05
Township 22 S Range 23 E Section 33
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 50	44"			✓		STEEL	36"	5/16"	
0 240	30"	✓				STEEL	18"	5/16"	
240 480	30"		✓			STEEL	18"	5/16"	.050 SLO
480 490	30"	✓				STEEL	18"	5/16"	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 50	✓			SIX SACK
0 490			✓	1/4 X 10

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed ——— 07/16/07 548214
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

AWD02865

ORIGINAL
File with DWR 21/25-13

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 488425

Page ___ of ___
Owner's Well No. ___
Date Work Began 2/8/92 , Ended 2/12/92
Local Permit Agency Tulare County Health Dept.
Permit No. ___ Permit Date 1/9/92

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

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	12	Sandy clay.
12	15	Sand
15	88	Sandy clay.
88	112	Sand
112	124	Sandy clay
124	154	Sand
154	178	Grey clay.
178	190	Red grey clay.
190	210	red clay
210	222	Sand & pint clay.
222	252	red clay.
252	260	Sand.

OUTSIDE CORE CLAY AREA

TOTAL DEPTH OF BORING 256 (Feet)
TOTAL DEPTH OF COMPLETED WELL 257 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address 15754 Ave 168
City Tulare
County Tulare
APN Book 230 Page 090 Parcel 16
or Township 21S Range 25E Section 13
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST — Owell — EAST
Ave 168
SOUTH
Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

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

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
✓ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Cable tool FLUID Mud

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 112 (Ft.) & DATE MEASURED 2/12/92
ESTIMATED YIELD* 250 (GPM) & TEST TYPE air lift
TEST LENGTH 12 (Hrs.) TOTAL DRAWDOWN 116 (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	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	80	20"	✓		✓		Steel	19 1/2	.250	None
0	243	12"	✓				Steel	10	Loge.	
175	235	mills			perforations from 175-235					

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	20	✓			

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 Lott Drilling Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 1593 Joyce Circle CITY Tulare STATE Ca. ZIP 93274

Signed Marlon Lott
WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 3/12/92
C-57 LICENSE NUMBER 398407

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 2

Date Work Began 2-5-99, Ended 2-13-99

Local Permit Agency TCEH

Permit No. 79084 Permit Date 2-2-99

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 519706

DWR USE ONLY — DO NOT FILL IN
21S/26E-10
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

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

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	3	Top Soil
3	15	(Fine) sand
15	19	(Coarse) sand
19	30	Green clay
30	35	(Coarse) sand (H2O)
35	41	(Fine) sand
41	57	Sand + Gravel (H2O)
57	105	Brown sandy clay
105	107	(Coarse) sand (H2O)
107	132	Brown clay + sand
132	140	Sandstone (Hard)
140	162	Red clay + sand
162	167	(Coarse) sand (H2O)
167	172	Sandstone (Hard)
172	176	(Coarse) sand (H2O)
176	205	Brown clay + sand

TOTAL DEPTH OF BORING 205 (Feet)

TOTAL DEPTH OF COMPLETED WELL 200 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address ___

City Same

County ___

APN Book 236 Page 030 Parcel 1008

or Township 21S Range 26E Section 10

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

LOCATION SKETCH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

✓ NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY ✓

___ Domestic

___ Public

___ Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD Rotary FLUID H2O

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 24 (Ft.) & DATE MEASURED 2-13-99

ESTIMATED YIELD* 100 (GPM) & TEST TYPE Airlift

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN NA (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	80	12¼	✓				PVC	6"	Sch 40	[redacted]
80	200	12¼		✓			PVC	6"	Sch 40	90 slot 3

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	23	✓			
23	205			✓	3/8 minus

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 D'590 Drilling (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

1410 Tomah ADDRESS Porterville CITY Ca. STATE 93257 ZIP

Signed Kenny R Corder WELL DRILLER/AUTHORIZED REPRESENTATIVE 2-15-99 DATE SIGNED 662109 C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

21/26-22A1

9-063
(December 1949)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

No. 21/26-22A1
(Domestic well)

Other Nos. .....

WELL LOG

State Calif County Tulare Subarea .....

Owner [redacted]

Location .....

.....

Drilled by Wade Bros Address Porterville

Date August 1949 Casing diam. 10 Land-surf. alt. .....

Source of data Owner's log

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
0-75	Soil		
75-83	Muddy sand		
83-96	Sand, rock gravel		
96-110	Sandy clay		
110-125	Brown clay		
125-144	Muddy sand		
144-149	Sand		
149-160	Brown clay		
260. 164	Muddy sand		
164-174	clay		
	9-170 10" pipe, 2 perf. pipe		
	Perf. 118' to 162'		

Record by B. L. Klausing Date 12/7/59

Sheet 1 of 1

U. S. GOVERNMENT PRINTING OFFICE 16—61687-1

ORIGINAL
File with DWR 21/26-34

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 489973

Page ___ of ___
Owner's Well No. ___
Date Work Began 4-29-92 Ended 4-30-92
Local Permit Agency Tulare co.
Permit No. 64027 Permit Date 4-27-92

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)
DEPTH TO FIRST WATER ___ (FT.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	5	Top Soil
5	10	Clay
10	20	Sandy Clay
20	40	Gravely sand
40	60	Sandy Clay Gray
60	80	Sandy Clay Coarse
80	100	Cobbles
100	120	Gravely Clay
120	140	Sandy Clay (some cobbles)
140	160	Coarse sand
160	180	" "
180	200	" "

SIDE CORC. WAY AREA

TOTAL DEPTH OF BORING 220 (Feet)
TOTAL DEPTH OF COMPLETED WELL 200 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address 18975 Ave 152
City Porterville Ca.
County Tulare
APN Book 237 Page 010 Parcel 14
or Township 21S Range 26E Section 34
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
Rd 192
Ave 152
WEST
EAST
SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

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

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
X Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Rotary FLUID Mud

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 89 (Ft.) & DATE MEASURED 4-30-92
ESTIMATED YIELD* 175 (GPM) & TEST TYPE Air Lift
TEST LENGTH 5 (Hrs.) TOTAL DRAWDOWN 97 (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	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	200	14								
0	80		X				PVC	6	Scd 40	
80	200			X			"	"	"	3/32

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	X			
50	200				3/8 Grav

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 L & L Well Drilling (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 2459 N. Oaks Sp. # 47 CITY Tulare Ca. STATE 93274 ZIP
Signed Ken Lujan WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 4-30-92
C-57 LICENSE NUMBER 620671

R 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 2 of 2

Owner's Well No. [redacted]

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 47663

DWR USE ONLY — DO NOT FILL IN
2/S/23E-30
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Date Work Began 5/21/2007, Ended 5/22/2007

Local Permit Agency Tulare Co.

Permit No. 07-0116 Permit Date 3/28/2007

GEOLOGIC LOG

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

DRILLING METHOD CABLE FLUID WATER/POL

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
332	342	CLAY
342	356	SAND
356	362	CLAY
362	370	SAND
370	375	CLAY
375	395	SAND
395	406	CLAY
406	411	SAND
411	440	CLAY

TOTAL DEPTH OF BORING 440 (Feet)

TOTAL DEPTH OF COMPLETED WELL 420 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address 1/4 mile s. ave 160 1/2 mile w. rd 24

City Corcoran, Ca CA

County tulare

APN Book 200 Page 230 Parcel 02

Township 21 S Range 23 E Section 30

Latitude ___ DEG. ___ MIN. ___ SEC.

___ DEG. ___ MIN. ___ SEC.

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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	260	28	✓				STEEL	15.5	1/4	
260	420	28		✓			STEEL	15.5	5/16	.125

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	20	✓			
20	440				GRAVEL

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 Myers Well Drilling
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

12522 9th ave ADDRESS — Hanford CITY — CA STATE — 93230 ZIP

Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE — 05/23/07 DATE SIGNED — 865822 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)
THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
Nº 105172
State Well No. 22/23-6
Other Well No.____

(1) OWNER:
[redacted]

(2) LOCATION OF WELL:
County Tulare Owner's number, if any—
R. F. D. or Street No. 1/4 mi. No. E. of Ave. 4th. So. side of Tule river, section 6. corcoran, ca.
22/23/6

(3) TYPE OF WORK (check):
New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

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

(5) EQUIPMENT:
Rotary air ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	450	16x1/4	

Type and size of shoe or well ring
Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
0	450	

Size of gravel:

(7) PERFORATIONS:
Type of perforator used shand. louver
Size of perforations ____ in., length, by ____ in.

From ft.	to ft.	Perf. per row	Rows per ft.
240	450		

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ____ ft.
Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

(11) WELL LOG:
Total depth 462 ft. Depth of completed well 450 ft.
Formation: Describe by color, character, size of material, and structure.

ft. to	ft.	
0	6	top soil
6	13	sand fine & clay gray
13	27	sand med.
27	32	clay gray
32	45	sand med.
45	48	sand & blue clay
48	61	sand med.
61	96	clay blue
96	121	sand med.
121	128	clay blue
128	142	sand stone & fine & med. sand
142	179	clay blue
179	184	sand med.
184	189	clay blue
189	209	sand med.
209	225	clay blue
225	236	sand fine
236	238	clay blue
238	240	sand fine
240	252	sand med. & fine
252	260	blue clay & med. sand
260	269	sand med.
269	275	clay blue
275	279	sand med & coarse
279	289	clay blue
289	291	sand stone & med sand
291	297	clay blue
297	302	sand med. & fine
302	310	clay blue
310	324	sand med. & coarse
324	332	clay blue
332	345	sand med.
345	348	green clay
348	351	clay blue
351	359	clay blue
359	371	sand coarse & med.
371	379	clay blue
379	398	sand fine & med.
398	410	clay blue
410	419	fine & med. sand
419	432	clay green
432	434	sand fine

continued

Work started 6/24 19 77. Completed 6/30 19 77

UNCONFINED

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

NAME Dail Rhoads Well drilling
(Person, firm, or corporation) (Typed or printed)
Address 570 E. Gail ave. Tulare, Calif. 93274

[SIGNED] Dail Rhoads
Well Driller

License No. 303612 Dated 7/7, 19 77

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)
THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
Nº 105157
State Well No.____
Other Well No.____

(11) WELL LOG:
Andy Wheat
Total depth 462 ft. Depth of completed well 450 ft.
Formation: Describe by color, character, size of material, and structure.

ft. to	ft.	
434	437	sand med.
437	440	clay
440	445	sand & clay
445	462	clay blue. Bottom

Was electric log made of well? ☐ Yes ☐ No

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

No. 30889

State Well No. _____

Other Well No. 22S-23E-18

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Kular c Owner's number, if any Mitchell-1

Township, Range, and Section Sec 18 - R23E - T22S

Distance from cities, roads, railroads, etc. 60 W. Rd 24 and 1/4 mi N - Ave 120 Kular c Co -

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE ☐ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall
0	440	14OD	1/4

If gravel packed

Diameter of Bore	From ft.	To ft.
26	0	440

Size of shoe or well ring:

Size of gravel:

Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
0	200	3	14	1/8

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☒ To what depth 70 ft.

Were any strata sealed against pollution? Yes ☐ No ☐ If yes, note depth of strata

From 0 ft. to 70 ft.

From ft. to ft.

Method of sealing Cement

(9) WATER LEVELS:

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing 94 ft.

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☐ If yes, by whom? _____

Yield: 2000 gal./min. with 80 ft. drawdown after 4 hrs.

Temperature of water Was a chemical analysis made? Yes ☐ No ☐

Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:

Total depth ft. Depth of completed well ft.

Formation: *Describe by color, character, size of material, and structure*

ft.	to ft.	
100	114	Sand
114	130	Clay
130	148	Sand
148	154	Clay
154	170	Sand
170	180	Clay
180	195	Sand
195	200	Clay
200	205	Sand
205	215	Clay
215	230	Sand
230	255	Clay
255	260	Sand
260	270	Clay
270	277	Sand
277	295	Clay
295	305	Sand
305	315	Clay
315	335	Sand
335	340	Clay
340	376	Sand
376	390	Clay
390	402	Sand
402	420	Clay
420	424	Sand
424	430	Clay
430	434	Sand
434	456	Clay
456		

UNCONFINED

CONFIDENTIAL
Water Code Sec. 13752

Work started 19 , Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kular c Well Drilling
(Person, firm, or corporation) (Typed or printed)

Address PO Box 787 Corcoran Cal

[SIGNED] _____
(Well Driller)

License No. 144440 Dated Oct 20, 1970

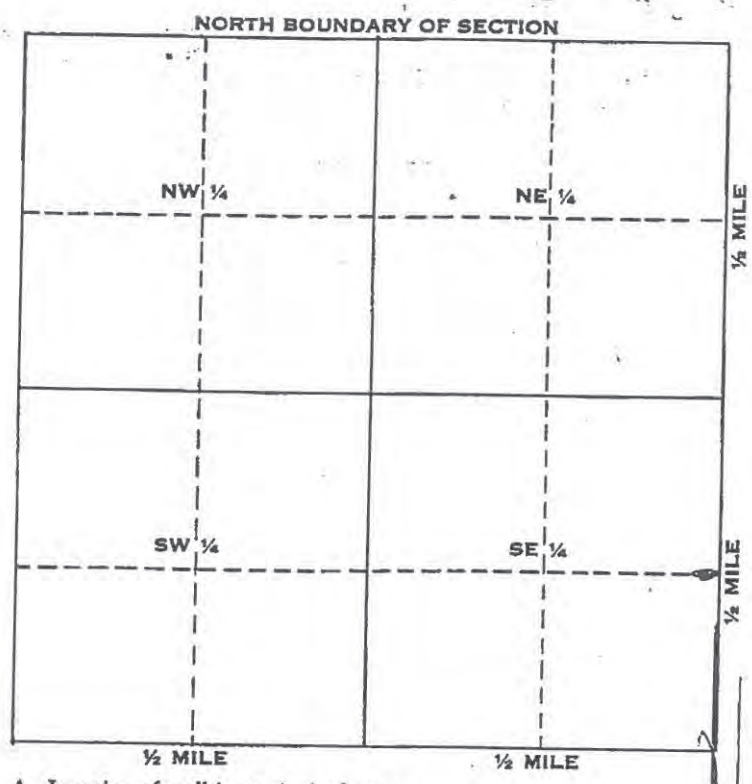
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

No. N.I.

58391-950 10-65 50M TRIP ① △ OSP

WELL LOCATION SKETCH



Township 22 S N/S

Range 23 E E/W

Section No. 18

Tulare Co

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.

Ave 128

NORTH

Ave 124

Sec 18

Tulare County

WEST

EAST

SAN JOAQUIN VALLEY

RECEIVED

Well

SOUTH

Ave 120

B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

ORIGINAL
File with DWR

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

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 458715

DWR USE ONLY — DO NOT FILL IN
21S/24E/19
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER 88 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	11	L.B.Clay
11	15	Fine Sand
15	25	L.B.Clay
25	31	Coarse Sand
31	68	L.B.Clay
68	72	Med Sand
72	88	L.B.Clay
88	96	Fine Sand(water)
96	102	Med Coarse Sand
102	108	L.B.CLAY
108	114	Med Sand
114	116	L.CLAY
116	124	Coarse Sand
124	142	L.B.Clay
142	145	Coarse Sand
145	165	Brown Clay
165	168	Coarse Sand
168	173	Brown Clay
173	185	Med Coarse Sand
185	190	Brown Clay
190	206	Med Coarse Sand
206	230	L.B.Clay
230	235	Blue Clay

TOTAL DEPTH OF BORING 235 (Feet)
TOTAL DEPTH OF COMPLETED WELL 235 (Feet)

WELL OWNER
[redacted]

WELL LOCATION
Address ½ mi. north of ave 160 on Rd.64,
City west side of rd.,south side of tule
County Tulare, Tipton
APN Book 200 Page 160 Parcel 016
or
Township 21s Range 24e Section 19
or
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH
NORTH / WEST / EAST / SOUTH
Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

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

PLANNED USE(S) (✓)
___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
XX Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD CABLE FLUID _____

WATER LEVEL & YIELD OF COMPLETED WELL
DEPTH OF STATIC WATER LEVEL 86 (Ft.) & DATE MEASURED 12/29/95
ESTIMATED YIELD* 250 (GPM) & TEST TYPE Air
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN 6 (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	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	228	14	X				Cal.Weld	14	10	
							½"x4"x14" Steel Shoe			
163	208						Mills Perf.			¼"x3"

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	20	x			

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 Roger L. Nation (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 26521 South Mooney Blvd. Visalia, Ca. 93277 CITY STATE ZIP
Signed Roger L. Nation (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 12/30/95
C-57 LICENSE NUMBER 259884

DWR 188 REV. 7-90
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in

No. 165525

State Well No. 21/29-29

Other Well No.

Notice of Intent No.

Local Permit No. or Date

(1) [redacted]
Addr
City [redacted] Zip

(2) LOCATION OF WELL (See instructions):
County TULARE Owner's Well Number
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc. ½ mi. south of Ave 160 on Rd. 80, 75' west side of road north side of ditch bank.

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 ☐
Stock ☐
Municipal ☐
Other ☐

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

(6) GRAVEL PACK:
Yes ☐ No ☒ Size
Diameter of bore
Packed from ft. to ft.

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

From ft.	To ft.	Dia. in.	Gage or Wall
0	184	14	10

¼x4x14" Steel Shoe

(8) PERFORATIONS:
Type of perforation or size of screen: Mills

From ft.	To ft.	Slot size
132	175	¼x3

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

(10) WATER LEVELS:
Depth of first water, if known 50 ft.
Standing level after well completion 44 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? N ation
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test 44 ft. At end of test 50 ft.
Discharge 250 gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 220 ft. Depth of completed well 220 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	25	L.B.Clay
25	32	Coarse Sand
32	46	L.B.Clay
46	53	Med Sand (Water)
53	54	Soft Clay
54	62	Coarse Sand
62	95	L.B.Clay
95	98	Coarse Sand
98	100	Soft Clay
100	102	Coarse Sand
102	104	Soft Sandy Clay
104	107	Coarse Sand
107	133	L.B.Clay
133	157	Coarse Sand
157	161	L.B.Sandy Clay
161	173	Coarse Sand & Sandstones
173	190	L.B.Clay
190	194	Med Sand
194	220	L.B.Clay

UNCONFINED

Work started 10/19 19 87 Completed 11/6 19 87

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 Roger L. Nation (Well Driller)

NAME ROGER L. NATION (Person, firm, or corporation) (Typed or printed)

Address P.O. BOX 216

City IVANHOE, CA. Zip 93235

License No. 259884 Date of this report 11/6/87

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

No 30891

State Well No.

Other Well No. 22S/23E-15

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any

Township, Range, and Section Sec 15 - T22S - R23E

Distance from cities, roads, railroads, etc. 80ft N of Ave 120 and 1¼ miles E of Hiway 43

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [X] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [X]
Cable [ ]
Other [ ]

(6) CASING INSTALLED:

STEEL: OTHER:

SINGLE [ ] DOUBLE [ ]

From ft.	To ft.	Diam.	Gage or Wall
0	420	14 10	1/4

If gravel packed

Diameter of Bore	From ft.	To ft.
26	0	420

Size of shoe or well ring:

Size of gravel:

Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
240	420	4	12	1/8 Louv.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [ ] No [ ] To what depth ft.

Were any strata sealed against pollution? Yes [X] No [ ] If yes, note depth of strata

From 0 ft. to 50 ft.

From ft. to ft.

Method of sealing Cemente

(9) WATER LEVELS:

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS:

Was pump test made? Yes [X] No [ ] If yes, by whom? Wilson

Yield: 1500 gal./min. with 38 ft. drawdown after 4 hrs.

Temperature of water Was a chemical analysis made? Yes [ ] No [ ]

Was electric log made of well? Yes [ ] No [X] If yes, attach copy

(11) WELL LOG:

Total depth ft. Depth of completed well ft.

Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.	
160	171	Clay
171	179	Sand
179	184	Clay
184	200	Sand
200	212	Clay
212	217	Sand
217	226	Clay
226	234	Sand
234	239	Clay
239	245	Sand
245	261	Clay
261	266	Sand
266	277	Clay
277	298	Sand
298	314	Clay
314	324	Sand
324	328	Clay
328	340	Sand
340	348	Clay
348	352	Sand
352	355	Clay
355	368	Sand
368	398	Clay
398	407	Sand
407	412	Clay
412	424	Sand

UNCONFINED

CONFIDENTIAL
Water Code Sec. 13752

Work started 19 , Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Terry's Well Drilling
(Person, firm, or corporation) (Typed or printed)

Address Box 787 Corcoran Cal

[SIGNED] [signature]
(Well Driller)

License No. 144990 Dated 10-20, 1970

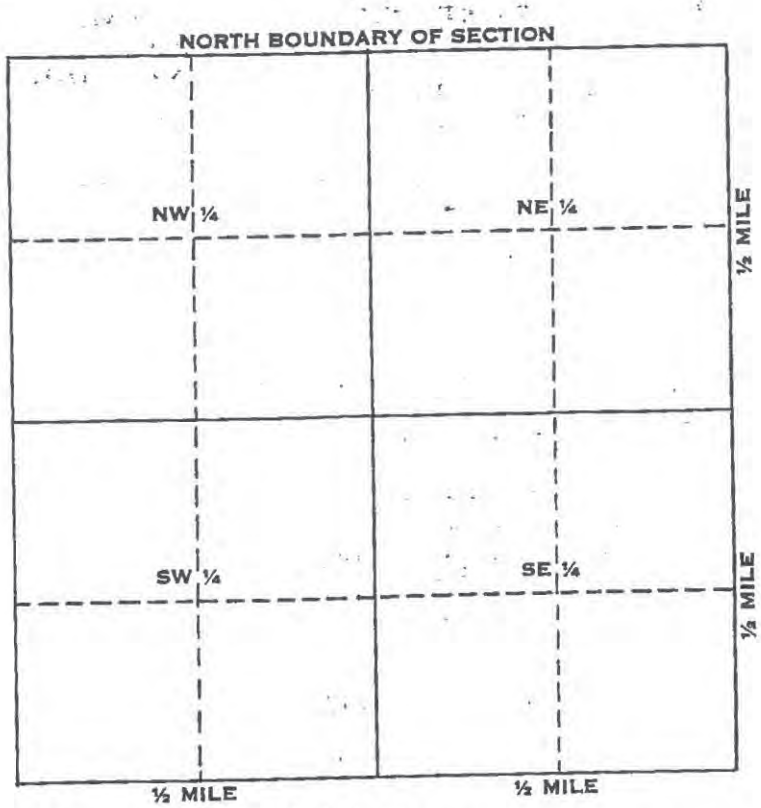
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

No N.I.

85391-950 10-65 80M TRIP ① △ OSP

WELL LOCATION SKETCH

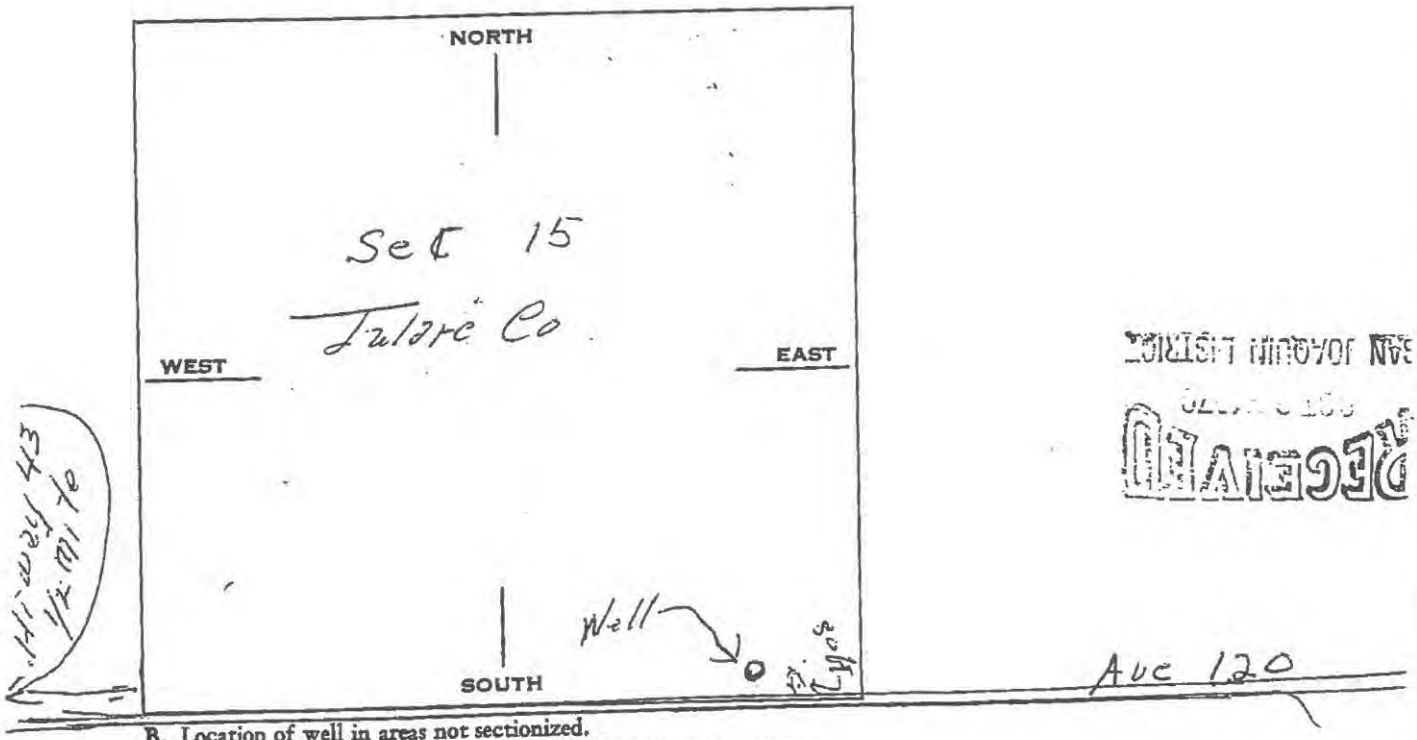


Township 22 S N/S

Range 23 E E/W

Section No. 15

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

22/24-6L

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

Nº 23071

State Well No. 22/24E-6L

Other Well No. #6 I

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any #6 I

Township, Range, and Section S 6 — R 24 E — T 22 S

Distance from cities, roads, railroads, etc. 1/2 Mile SW of AVE 144 & RD 72 INTERSECTION

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE ☐ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall
0	466	16	1/4

If gravel packed

Diameter of Bore	From ft.	To ft.
27	0	460

Size of shoe or well ring:
Size of gravel:
Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
160	360	24	2	1/8

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☐ No ☐ To what depth ft.
Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing

(9) WATER LEVELS:

Depth at which water was first found, if known ft.
Standing level before perforating, if known ft.
Standing level after perforating and developing ft. 110

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☒ If yes, by whom?
Yield: 1200 gal./min. with 50 ft. drawdown after hrs.
Temperature of water Was a chemical analysis made? Yes ☐ No ☐
Was electric log made of well? Yes ☐ No ☒ If yes, attach copy

(11) WELL LOG:

Total depth ft. Depth of completed well ft.

Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.	Formation
100	111	Clay
111	123	Sand
123	135	Clay
135	141	Sand
141	144	Clay
144	148	Sand
148	170	Clay
170	177	Sand C.
177	188	Clay
188	194	Sand C.
194	219	Clay
219	228	Sand C.
228	233	Clay
233	238	Sand C.
238	251	Clay
251	254	Sand C.
254	256	Clay
256	258	Sand C.
258	267	Clay
267	275	Sand C.
275	284	Clay
284	293	Sand C.
293	304	Clay
304	308	Sand C.
308	310	Clay
310	316	Sand M. + F.
316	324	Clay
324	330	Sand M.
330	334	Clay
334	340	Sand F.
340	345	Clay
345	360	Sand C.

CONFIDENTIAL
Water Code Sec. 7080

Work started 19 , Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Terry's Well Drilling
(Person, firm, or corporation) (Typed or printed)

Address 2125 VanDorsten Circle

[SIGNED] [signature]
(Well Driller)

License No. 140990 Dated Aug 31, 1966

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

85281-930 10-65 80M TRIP ⓓ △ OSP

EP-5

EP-5

PROPERTY LOCATED I MILE EAST OF PORTERVILLE

Date drilling completed Oct. I7th. I934

Depth of well I54 ft.

Depth of caseing I54 ft.

Water level 60 ft.

I45 ft. Of I4 gage I2 ineh single collar hard red steel casing I/2 X 8 shoe

Depth perforated 60 to I44 ft.

Penetration record

From	To	Type of formation
68	II9	Coarse
II9	I35	Clay Rocky
I35	I52	Sand and Bolders
I52	I54	Black Rock

Driller; Hickman

9765-C

Well 21

MYERS BROTHERS, Inc.

Reverse Circulation Rotary Gravel Pack Well Log
8650 E. Lacey Blvd. — Hanford, California — Phone 582-9031

Dates:
Started: 11-16-67
Completed: 11-23-67
Driller Simmers
Well No. TH 21

CUSTOMER [redacted]
ADDRESS [redacted]
WELL LOCATION Corner of Harrison & Hockett Sts. Porterville. Tulare Co.

Industrial ☐
Domestic ☐
Irrigation ☐
Other ☐

TYPE OF WORK

1. Hole Size 5 5/8"
2. Casing Dia. .....
3. Casing Thickness .....
4. Blank Casing .....
5. Perforation .....
6. Type of Perforation .....
7. Depth 280'
8. Gravel Tops .....
9. Gravel size .....

EXTRAS

1. Hole Size .....
2. Conductor Pipe Size .....
3. Depth .....
4. Cement Yds. .....

Remarks:
Got water samples with submersible pump 138-143' & 179-184'
Filled hole with cuttings 280'-100'
Put in 15 bags Bentonite
Hole plug 100'-20'
Pumped in cement & Bentonite 20'-0'

STRATA INFORMATION

Brown Clay	Ft. 0	to Ft. 7
Sand	Ft. 7	to Ft. 16
Rocks & Gravel	Ft. 16	to Ft. 31
Sand, Stringers Brown Clay	Ft. 31	to Ft. 44
Brown Clay	Ft. 44	to Ft. 72
Red Clay	Ft. 72	to Ft. 101
Brown Clay	Ft. 101	to Ft. 130
Coarse Sand	Ft. 130	to Ft. 137
Brown Clay	Ft. 137	to Ft. 143
Sand	Ft. 143	to Ft. 150
Brown Clay	Ft. 150	to Ft. 152
Sand	Ft. 152	to Ft. 161
Rocks	Ft. 161	to Ft. 165
Sand	Ft. 165	to Ft. 166
Rocks & Sand	Ft. 166	to Ft. 174
Sand, Small Stringers Br. Clay	Ft. 174	to Ft. 187
Brown Clay	Ft. 187	to Ft. 215
Br. Clay & Sand Stringers	Ft. 215	to Ft. 217
Sand	Ft. 217	to Ft. 221
Brown Clay	Ft. 221	to Ft. 225
Hard Br. Clay, Rock Stringers	Ft. 225	to Ft. 257
Hard Blue Rock	Ft. 257	to Ft. 256
Med. Hard Brown Rock	Ft. 256	to Ft. 263
Hard Green Rock	Ft. 263	to Ft. 280
	Ft.	to Ft.
	Ft.	to Ft.
	Ft.	to Ft.
	Ft.	to Ft.

ED

LSD Elev 471 23/27-3D1 [illegible] ①

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

23/27-3D1

County Tulare Owner [redacted] U.S.B.R. No. 23-27-3
Dist. Use [illegible] Local No. Sancelito 5
Quad. Ducor Driller [illegible] Date 11-10-47
Location 23-27-3 (0.01-0.99) [illegible] of S.3, T.23, R.27

Surf. Elev. 471.0 Groundwater Elev. Date
Depth 172.5 Groundwater Elev. Date
Yield Aquifers
Drawdown Artesian head 280 Date
Casing 3" x 172.5' Perf. alternate Sand-Gravel
10' Lengths from 26' to 172.5
Source of data Logan Type drill Core Drill Diam. hole [illegible]

Depth	Elev.	Thick	Description
0	471	2.0	Chocolate brown slightly calcareous silty loam with 15% scattered angular sand grains to 3mm, relatively impermeable.
2	469	4.5	Brown ill-sorted calcareous sandy clay loam, sand angular arkosic ranging to 1mm, streaks of white calcareous material Low permeability.
6.5	464.5	3.5	Reddish-brown ill-sorted subangular friable arkosic sandy loam; sand, av. 0.1mm, max. 3mm; 20% red silt and clay matrix, low perm.
10	461	7.3	Reddish-brown loose to friable ill-sorted subangular arkosic coarse sand, av. 0.5mm, max. 5mm, with much silty material, grains slightly coated with red clay, perm.
17.3	453.5	1.7	Tan firm fairly well sorted, silty clay loam, areas of white calcareous material, manganese stains, rel. imperm.
19	452.	6.8	Tan firm, ill-sorted, subangular arkosic coarse sand, av. 0.5mm, max. 4mm, 20% silt and clay matrix, rel. perm.
25.8	445.2	2.2	Tan friable fairly well sorted, silty loam with 5% sand, manganese stains. Top 6" red plastic impermeable clay, low permeability.
28	443	8.5	Tan friable to loose well sorted arkosic sandy silt; sand, av. 0.1 mm, max. 0.5mm, mafics 5%, prominent biotite flakes to 0.5mm, rel. perm.
36.5	434.5	15.0	Loose subangular poorly sorted arkosic coarse gravel; av. 3mm, max. 15mm, occasionally 50 mm; grading down to fine sand, some scattered lenses with micaceous silt and fine sand as matrix, predominently granitic materials also fine-grained basics, very perm.
51.5	419.5	3.	Loose subangular - subround cobbles; min 20mm, max. 40mm, composition as above, matrix of coarse sand largely lost in drilling, very perm.
54.5	416.5	3.5	Coarse gravel as 36.5 - 51.5
58	413	10	Tan firm fairly well sorted, silty loam, 10% sand ranging to max. of 0.1mm, clay filled tubular openings, mafics 5% , biotite prominent, low permeability.
68	403	6.2	Tan loose angular well sorted fine sand, av. 0.2 mm, max. 1mm, 10% silt, mafics 5%, perm.
74.2	396.8	8.3	Reddish-brown clay with many fractues fine tubular openeings and manganese stains, rel. imperm.

23/27-3D1 (2)

U.S. DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II

WELL LOG

County Tulare | Owner | U.S.B.R. No. 23-27.3
Dist. | Use | Local No. Sancelito 5
Quad. Ducor | Driller | Date 11.10.47
Location 23-27.3 (0.00-0.995)

Surf.Elev. | Groundwater Elev. | Date
Depth | Groundwater Elev. | Date
Yield | Aquifers
Drawdown | Artesian head | Date
Casing | % Sand-Gravel

Source of data | Type drill | Diam. hole

Depth	Elev.	Thick	Description
82.5	388.5	5.	Tan firm fairly well sorted micaceous sandy silt; sand 20% ranging to 1mm, low permeability.
87.5	383.5	8.5	Tan firm fairly well sorted silty loam; 10% sand chiefly quartz ranging to 0.5mm, many fine tubular openings; manganese stains, rel. imperm.
96	375	3	Tan firm clay with 30% scattered sand & pebbles arkosic ranging to 7mm, tubular openings and manganese stains, rel. imperm.
99	372	3	Tan firm poorly sorted sandy silt; sand angular arkosic, ranging to max. of 2mm, tubular openings, manganese stains, low perm.
102	369	8.5	Tan firm silty loam, as 85.7 - 96.
110.5	360.5	8	Tan loose fairly well sorted, subangular arkosic coarse sand, av. 0.5mm, max. 3mm, pebble 15 mm, 15% silt & clay decomposition product matrix, relatively permeable.
118.5	352.5	4.0	Reddish-brown firm clay with 10% angular arosic sand grains to 1mm, slickensides, manganese stains, rel. imperm.
122.5	348.5	9.5	Tan firm sitly loam, as 87.5 - 96 with thin streaks, of white clay, rel. imperm.
132	339	7.5	Tan firm clay loam; 30% sand subangular arkosic, to max. o 2mm, Tubular openings, manganese stains, rel. imperm.
139.5	331.55	1.5	Brown friable ill-sorted arkosic sandy loam; sand ave. 0.2mm, max. 3mm, many tubular openings, low perm.
141	330	4	Reddish-brown clay as 118.5 - 122.5
145	326	3	Tan silty loam as 87.5 - 96
148	323	5	Tan firm clay with many fractures abundant manganese stains, many thin seams of white clay, 10% scattered angular sand grains to 0.5mm, relatively impermeable.
153	318	3.3	Tan silty loam as 87.5 - 96
156.3	314.7	1.7	Tan friable angular poorly sorted arkosic medium sandy loam; 30% silt and clay matrix relatively permeable.
158	313	3	Tan firm silty loam; 5% sand grains, chiefly quartz to 0.2 mm, small openings, manganese stains, low perm.

23/27-3D1

U.S.DEPARTMENT OF THE INTERIOR - BUREAU OF RECLAMATION - REGION II
WELL LOG

County Tulare | Owner | U.S.B.R. No. 23-27-3
Dist. | Use | Local No. Saucelito 5
Quad. Ducor | Driller | Date 11-10-47
Location 23-27-3 (0.01-0.995) 53' E & 22.5' S of NW Cor. S 3, T 23 R 27

Surf. Elev. | Groundwater Elev. | Date
Depth | Groundwater Elev. | Date
Yield | Aquifers
Drawdown | Artesian head | Date
Casing | % Sand-Gravel

Source of data | Type drill | Diam. hole

Depth	Elev.	Thick	Description
161	310	4.2	Reddish-brown firm clay with many fractures & manganese stains. 10% angular sand grains to 1mm; white feldspars very prominent, relatively impermeable.
165.2	305.8	2.7	Tan silty loam as 87.5 - 96 but with 20% sand
167.9	303.1	4.6	Tan loose subang. fairly well sorted arkosic coarse sand, av. 0.6mm, max. 3mm; 15% white silty clay, decomposition product matrix, permeable.
172.5	298.5		Bottom

Note; Above core examined while very dry. As materials were found in place, indurations were much different than here noted.

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 258421

State Well No. 22/27-4

Other Well No.

Notice of Intent No.

Local Permit No. or Date

[redacted]

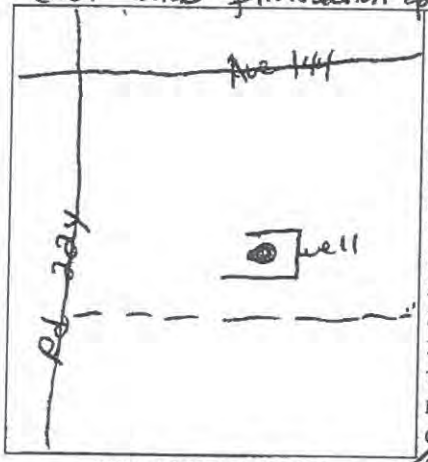
(2) LOCATION OF WELL (See instructions):

County Tulare Owner's Well Number

Well address if different from above 22511 Ave 144

Township 22 S Range 27E Section 4

Distance from cities, roads, railroads, fences, etc. Approximately 2 miles Southwest of Porterville to intersection of Ave 144 + Rd 224 in Southeast corner of intersection approx 250 feet S.E. of Well



WELL LOCATION SKETCH

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

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Municipal [ ]
Other [X]
(Describe)

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [X] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [X] Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
0	140	8	12

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
104	140	18x4

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [ ] No [X] If yes, to depth ft
Were strata sealed against pollution? Yes [ ] No [X] Interval ft
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known 32 ft.
Standing level after well completion 32 ft.

(11) WELL TESTS:
Was well test made? Yes [ ] No [ ] If yes, by whom? Lott Drilling.
Type of test Pump [ ] Bailer [ ] Air lift [X]
Depth to water at start of test 22 ft. At end of test 60 ft.
Discharge 100 gal/min after hours Water temperature
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 156 ft. Completed depth 156 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	2	hard clay.
2	3	hardpan
3	32	sandy clay.
32	44	sand
44	84	rock, gravel, cobbles.
84	104	sandy clay.
104	140	joint clay.
140	150	hard clay.
150	156	gravel + joint clay.

Work started 3-24 1988 Completed 3-31 1988

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 Lott Drilling Co.
(Person, firm, or corporation) (Typed or printed)

Address 1593 Joyce Court

City Tulare Ca. ZIP 93274

License No. 398407 Date of this report 4-6-88

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

22/26-17A1

22/26-17A1

Poplino well 6

245 Hole

90 ft. 16". Casing

155 ft. 12" "

245

Set 13-50 (190')

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e064534

Page 1 of 3

Owner's Well Number 1

Date Work Began 11/05/2007 Date Work Ended 11/7/2007

Local Permit Agency TULARE COUNTY EHD

Permit Number 07-0532 Permit Date 11/1/07

DWR Use Only – Do Not Fill In

21S/27E-36

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method MUD ROTARY Drilling Fluid BENTONITE

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	20	SAND, FINE TO COARSE GRAINS
20	50	COBBLE
50	55	SAND, FINE TO COARSE GRAINS
55	70	COBBLE
70	75	SAND, FINE TO COARSE GRAINS
75	80	COBBLE
80	100	SAND, FINE TO COARSE GRAINS
100	115	COBBLE
115	138	BROWN SILTY CLAY, FINE TO COARSE GRAINS

Total Depth of Boring 138 Feet

Total Depth of Completed Well 138 Feet

Well Owner

[redacted]

Well Location

Address 474 S. MAIN

City PORTERVILLE County Tulare

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Decimal Lat. ___ Decimal Long. ___

APN Book 261 Page 070 Parcel 003

Township 21S Range 27E Section 36

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

see attached

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 and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other ___
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☑ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other ___

Water Level and Yield of Completed Well

Depth to first water 55 (Feet below surface)

Depth to Static Water Level 29 (Feet) Date Measured 11/9/07

Estimated Yield * 24.7 (GPM) Test Type Sub. pump

Test Length 24.0 (Hours) Total Drawdown 110 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	58	12.25	BLANK	PVC	SDR17			
58	138	12.25	SCREEN	PVC	SDR17		MILLED SLO	0.032

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	CEMENT	GROUT
50	138	GRAVEL	3/8" ROCK

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☑ Other LOCATION MAP

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 CONSOLIDATED TESTING LABS., INC.
Person, Firm or Corporation

603 E. WORTH AVENUE Address PORTERVILLE City CA State 93257 Zip

Signed [signature] C-57 Licensed Water Well Contractor

11-19-07 Date Signed

544541 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 085866

Notice of Intent No.

Local Permit No. or Date

State Well No. 21/27-24

Other Well No.

[redacted]

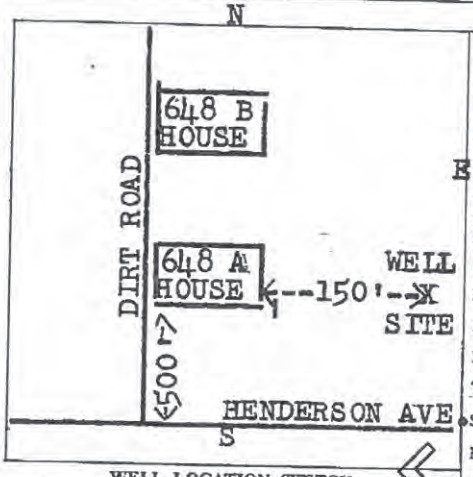
(2) LOCATION OF WELL (See instructions):

County TULARE Owner's Well Number

Well address if different from above

Township Range Section

Distance from cities, roads, railroads, fences, etc. 150 FT. EAST OF 648 A EAST HENDERSON, PORTERVILLE



WELL LOCATION SKETCH

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

(4) PROPOSED USE:
Domestic [ ]
Irrigation [X]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [X] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [X] Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
0	152	18	10

(8) PERFORATIONS: FACTORY
Type of perforation or size of screen

From ft.	To ft.	Slot size
124	148	1"X¼"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [ ] No [X] If yes, to depth ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ft.
Method of sealing PUMP CO. PROVIDES

(10) WATER LEVELS:
Depth of first water, if known 76 ft.
Standing level after well completion 56 ft.

(11) WELL TESTS:
Was well test made? Yes [ ] No [X] If yes, by whom?
Type of test Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test ft. At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 152 ft. Depth of completed well 152 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	3	TOP SOIL
3	74	RED CLAY
74	76	GREY CLAY
76	82	GREY ROCK
82	108	GREY CLAY
108	112	GREY ROCK
112	118	GREY CLAY
118	128	GREY ROCK
128	142	GREY CLAY
142	152	1/8" to ½ ROCK

NOT VALID FOR PUBLIC USE
NOT FOR WATER CODE SEC. 13752

OUTSIDE CORC. CLAY AREA

Work started 6-8 19 79 Completed 6-14 19 79

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 Arthur Cuddeback RIG #1
(Well Driller)

NAME STAR WELL DRILLING
(Person, firm, or corporation) (Typed or printed)

Address 14583 AVE. 384 RT. #1

City VISALIA, CALIF. Zip 93277

License No. #373338 Date of this report 6-19-79

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

GROUND WATER

23/25-16N4

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

1887

LOCATION NOT CHECKED
Do Not Fill In
No 55087
State Well No. 23S/25E-16N4
Other Well No.

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—
R. F. D. or Street No.

650' West of Southern Pacific R.R.
near 99 Hwy
470' North of Avenue 72

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☒ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From	ft. to	Diam.	Gage or Wall
0	240 ft.	8"	# 12

Type and size of shoe or well ring: None
Describe joint: Belled End, Welded

If gravel packed

Diameter of Bore	from ft.	to ft.
14"	0	250

Size of gravel: Rejects

(7) PERFORATIONS:

Type of perforator used: Milled slots
Size of perforations: 2- 1/2 in., length, by 1/8 in.

From ft.	to ft.	Perf. per row	Rows per ft.
200	240	8	2

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found: 115 ft.
Standing level before perforating: ft.
Standing level after perforating: 115 ft.

(10) WELL TESTS: (Air lift)

Was a pump test made? ☒ Yes ☐ No If yes, by whom? Belknap
Yield: 60 gal./min. with 15 ft. draw down after 1 hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☒ No
Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Page 1 of 2

Total depth 250 ft. Depth of completed well Est. 238 ft.

Formations: Describe by color, character, size of material, and structure.

ft. to	ft.	
0	6	Sand
6	16	Sandy Clay
16	33	Coarse Sand
33	40	Brown Sandy Clay
40	43	Brown Hardpan
43	57	Brown Clay
57	58	Medium Coarse Sand
58	59	Clay
59	64	Medium Coarse Sand
64	72	Hard Clay
72	75	Coarse Sand
75	80	Brown Sandy Clay
80	84	Coarse Sand
84	89	Brown Clay
89	90	Coarse Sand
90	95	Brown Clay
95	103	Coarse Sand
103	107	Brown Clay
107	110	Coarse Sand
110	111	Brown Clay
111	115	Coarse Sand
115	122	Sandy Brown Clay
122	125	Coarse Sand
125	126	Brown Clay
126	129	Coarse Sand
129	137	Brown Clay
137	146	Coarse Sand
146	153	Sandy Brown Clay
153	157	Coarse Sand
157	158	Borw Clay
158	164	Coarse Sand
164	168	Brown Clay
168	170	Coarse Sand
170	178	Brown Sandy Clay
178	180	Coarse Sand
180	181	Sandy Brown Clay
181	183	Coarse Sand
183	190	Sandy Brown Clay
190	201	Coarse Sand
201	203	Sandy Brown Clay
203	211	Coarse Sand
211	218	Brown Clay
218	219	Coarse Sand (OVER)

Work started 6-19-59 19 Completed 6-23-59 19

WELL DRILLER'S STATEMENT: Cont-

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Bill Bellman BH
(Person, firm, or corporation) (Typed or printed)
Address 9274 So. Buttonwillow Ave.,
Reedley, Calif.

[SIGNED] Bill Belknap
Well Driller
License No. 106833 Dated 6-26-59 19

37028 6-57 50M QUIK △ SPO

DWR 188 (REV. 3-54)

23/25-16N4 Page 2 of 2

Log No 55089

U.S.G.S.

TEST WELL

219	221	Sandy Brown Clay
221	225	Course Sand -
225	230	Sandy Brown Clay
230	237	Course Sand
237	244	Sandy Brown Clay
244	250	Course Sand

All strata where no color is designated were logged as being yellow-brown

The bottom of the casing is open and the gravel was allowed to flow into the well on top of an anchor to which a plastic covered wire rope is attached.

25/26-9

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7071, Water Code)

25/26-9N1 (G.S.)

STATE OF CALIFORNIA

1020

LOCATION NOT CHECKED

Do Not Fill In

No. 36188

State Well No.

Other Well No. 25S/26E-9

(11) WELL LOG:

Total depth ft. Depth of completed well ft.

Formation: Describe by color, character, size of material, and structure.

From (ft.)	To (ft.)	Formation
0	5	Top Soil
5	150	Hard Sand
150	240	Clay
240	250	Sand
250	310	Sandy Clay
310	320	Sand
320	351	Clay

1627 feet north, 0.96 mile west of SE corner of section 9 (USGS)

CONFIDENTIAL
Section 4076.1, Water Code

Work started 19 . Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High St.
Delano, Calif.

[SIGNED] Donald E. Ryan
Well Driller

License No. 148282 Dated 4/9/56

(2) LOCATION OF WELL:

County Kern Owner's number, if any—

R. F. D. or Street No.

Sec. 9
Twnshp 25 S
Range 26 E

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	351	8"	12 ga.

If gravel packed

Diameter of Bore	from ft.	to ft.
12½"	0	351

Type and size of shoe or well ring

Size of gravel:

Describe joint

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1" in., length, by 1/8" in.

From ft.	to ft.	Perf. per row	Rows per ft.
276	351		

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☐ Yes ☐ No

DWR FORM NO. 246 (REV. 5-54)

24/25-16B1

ORIGINAL

LOG OF WELL

WHITTEN BROS. DRILLING COMPANY

"The Oldest and Still Best"

DELANO, CALIFORNIA

Well Drilled For

PHONE 2621

SINCE 1913

Name [redacted]

Well Started---March 6--- Well finished---March 20--- Diameter 12"

Gauge---12-Dble--- Total Depth---300'--- Depth to Water---Water level 104'

Strata Formation	From Feet	To Feet
Clay	0	187
Sand	187	190
Clay	190	300

Perforated	From Feet	To Feet
Perforating well from 120' to 265'		

BOISEY PORTABLE

23/26-28H1

23/26-28H1(G-5)

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

1193

LOCATION NOT CHECKED
Do Not Fill In
No. 32114
State Well No.
Other Well No. 23S/26E-28

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

Section NW¼ 28
Township 23S
Range 26E

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
300 ft.		8"	x # 12

Type and size of shoe or well ring

Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
12½	0	300

Size of gravel

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8" x 1" cc in., length, by in.

From ft.	to ft.	Perf. per row	Rows per ft.
190 ft.	to 300 ft.		

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft.	to ft.
140	160

Method of Sealing Cement plug

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:

Total depth 300 ft. Depth of completed well 300 ft.

Formation: *Describe by color, character, size of material, and structure.*

0 ft. to	6 ft.	Top Soil
6 "	24 "	Hard Pan
24 "	100 "	Sandy Clay
100 "	125 "	Sand
125 "	200 "	Yellow Clay
200 "	215 "	Sand
215 "	280 "	Clay
280 "	285 "	Sand
285 "	300 "	Hard Clay

General
Section 7076.1, Water Code

Work started 4/55 19 . Completed 4/55 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High St.
Delano, California

[SIGNED] [signature]
Well Driller

License No. 148282 Dated 6/6 1955

DWR FORM NO. 248 (REV. 3-54)

Appendix B

Driller's Logs and Hydrographs for Existing Lower Aquifer Wells

21/23-36R1

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In
No 23051
State Well No.
Other Well No. 21/23E-36R1

(1) OWNER: [redacted]

(2) LOCATION OF WELL:
County Tulare Owner's number, if any S116
Township, Range, and Section 21S-23E-36
Distance from cities, roads, railroads, etc.

(3) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐
If destruction, describe material and procedure in Item 11.

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

(5) EQUIPMENT:
Rotary ☐
Cable ☐
Other ☐

(6) CASING INSTALLED:
STEEL: OTHER:
SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall
0	400	18"	3/8"
400	1000	12"	

If gravel packed

Diameter of Bore	From ft.	To ft.
28"	0	1000

Size of shoe or well ring:
Size of gravel: 1/4"
Describe joint Weld

(7) PERFORATIONS OR SCREEN:
Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
400	1000	12	24	1/8

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes ☐ No ☐ To what depth ft.
Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing

(9) WATER LEVELS:
Depth at which water was first found, if known ft.
Standing level before perforating, if known ft.
Standing level after perforating and developing ft. 190

(10) WELL TESTS:
Was pump test made? Yes ☒ No ☐ If yes, by whom? Wilson
Yield: 2000 gal./min. from 190 ft. drawdown after hrs.
Temperature of water Was a chemical analysis made? Yes ☐ No ☒
Was electric log made of well? Yes ☒ No ☐ If yes, attach copy

(11) WELL LOG:
Total depth 1000 ft. Depth of completed well ft.
Formation: Describe by color, character, size of material, and structure

ft. to	ft.	
300	300	Clay
300	330	Sand
330	390	Clay
390	400	Sand
400	460	Clay
460	475	Sand
475	590	Clay
590	600	Sand
600	620	Clay
620	635	Sand
635	650	Clay
650	660	Sand
660	675	Clay
675	770	Sand
770	810	Clay
810	820	Sand
820	845	Clay
845	850	Sand
850	880	Clay
880	900	Sand
900	930	Clay
930	950	Sand
950	1000	Clay

CONFIDENTIAL
Water Code Sec. 7080

2 wells
Same
¼ mile apart

Work started 19 , Completed 19

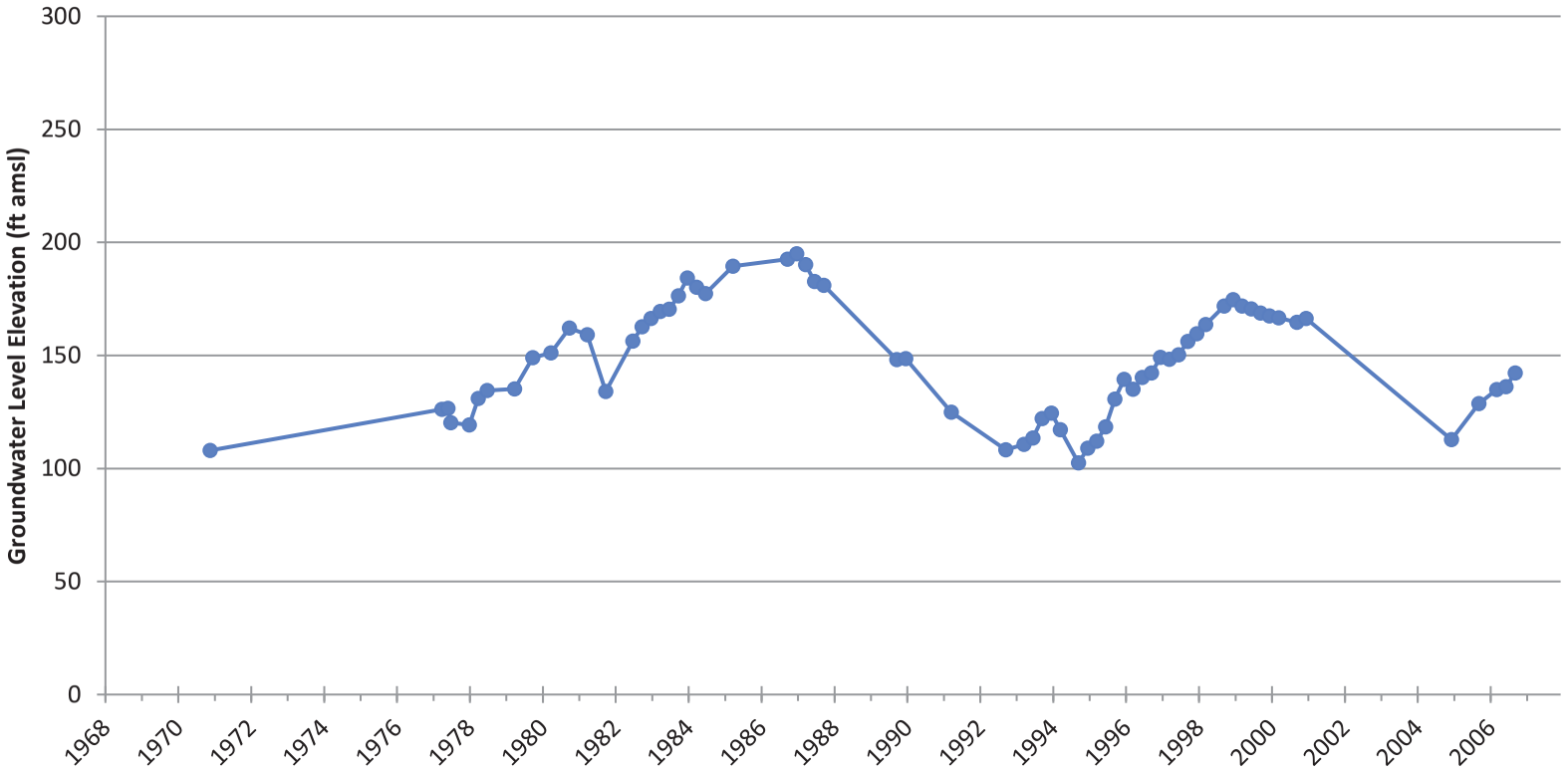
WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME Terry's Well Drilling
(Person, firm, or corporation) (Typed or printed)
Address 2125 Van Dorsten
[SIGNED] (Well Driller)
License No. 140990 Dated 4-20, 1960

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-63)

Groundwater Hydrographs - Deep

21S/23E-36R01



22/24-1Q1

LOCATION NOT CHECKED

ORIGINAL - File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.____ (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In

No 66984

State Well No.____

Other Well No. 22/24-1Q1

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

(3) TYPE OF WORK (*check*):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☐ Industrial ☐ Municipal ☐

Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒

Cable ☐

Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
480'		3/16" Wall	

Type and size of shoe or well ring

Describe joint 7# ton

If gravel packed

Diameter of Bore	from ft.	to ft.

Size of gravel: 6-20

(7) PERFORATIONS:

Type of perforator used

Size of perforations ____ in., length, by ____ in.

From 480 ft. to 700 ft. Perf. per row ____ Rows per ft. ____

220' perforated

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ____ ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ____ ft. to ____ ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found 90 ft.

Standing level before perforating ____ ft.

Standing level after perforating ____ ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: ____ gal./min. with ____ ft. draw down after ____ hrs.

Temperature of water ____ Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 720 ft. Depth of completed well 700 ft.

Formations: *Describe by color, character, size of material, and structure.*

0 ft. to	50 ft.	Sandy clay
50 "	140 "	Sand, clay strks.
140 "	152 "	Clay
152 "	230 "	Sand, clay strks.
230 "	245 "	Clay
245 "	320 "	Sand
320 "	328 "	Clay
328 "	420 "	Sand, clay strks.
420 "	440 "	Clay
440 "	550 "	Sand
550 "	572 "	Hard sand
572 "	720 "	Sand, clay strks.

[illegible] Section 7076.1, Water Code

Work started Jan. 23 19 61 Completed Feb. 7 19 61

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Knapp & Graham, Inc. (Person, firm, or corporation) (Typed or printed)

Address 1155 W. Inyo St. Tulare, Calif.

[SIGNED] [signature] Well Driller

License No. 193493 Dated Feb. 8 19 61

57025 5-57 SOM QUIN △ 6PO

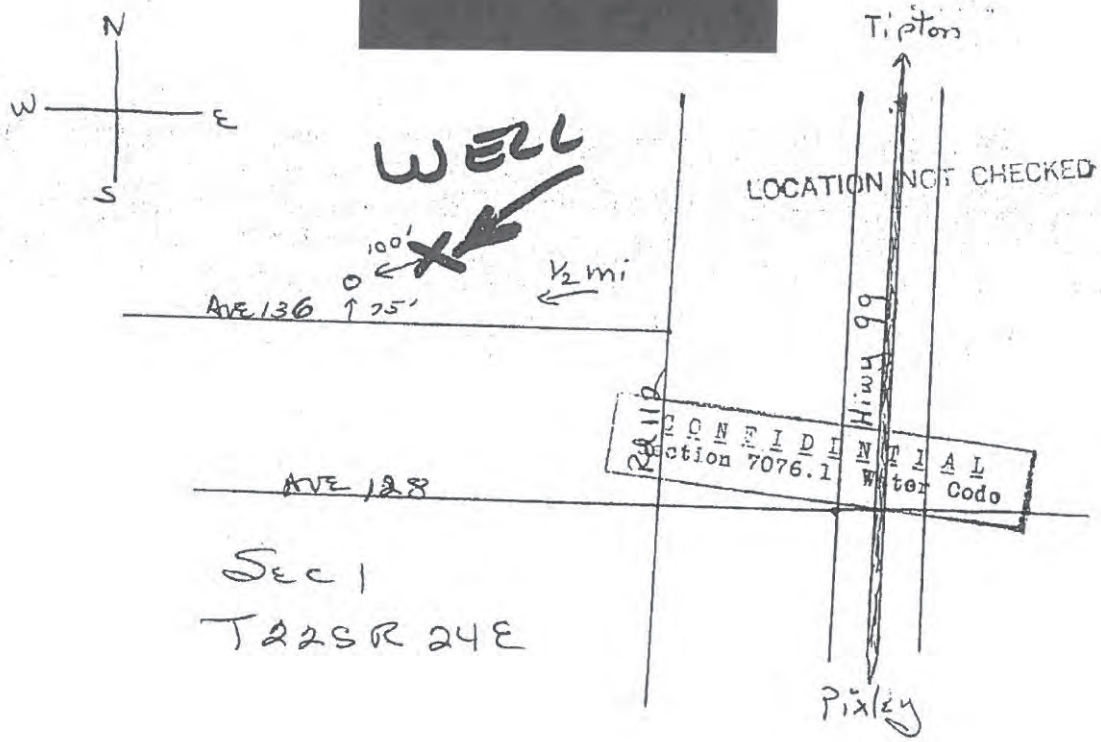
DWR. 188 (REV. 3-54)

22/24-1Q1

Location of well

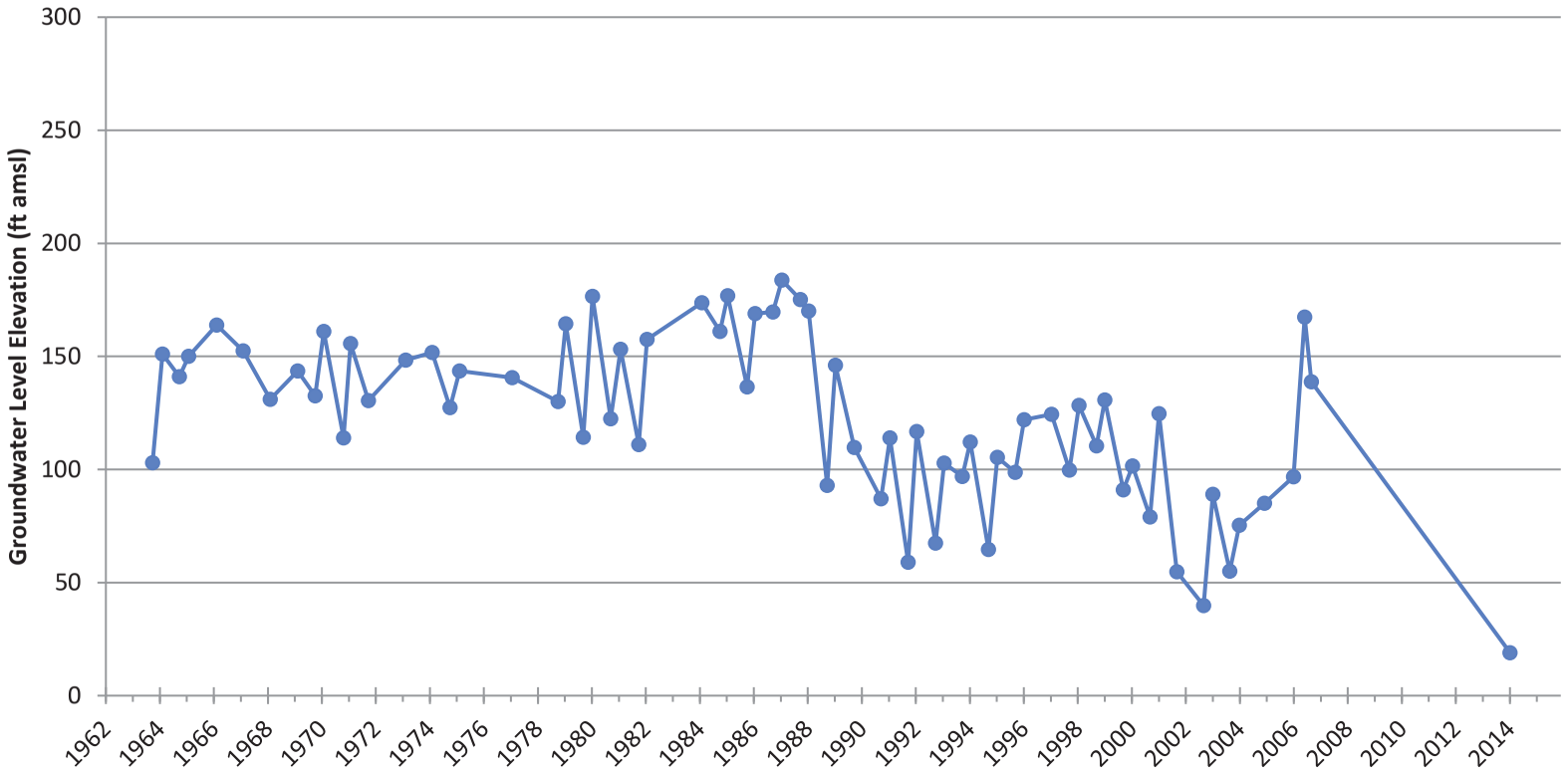
Log # 66984

[redacted]



Groundwater Hydrographs - Deep

22S/24E-01Q01



ORIGINAL File with DWR 24/27-8L

WATER WELL DRILLERS REPORT

(Sections 7073, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

No 337

State Well No.

Other Well No. 24/27E-8L

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any

Township, Range, and Section

Distance from cities, roads, railroads, etc. ½ mile North of Ave. 32 and ½ mile East of Rd. 216

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall
0	703	16"	¼"
703	1747	14"	¼"
16" to 14" slip jt.			

If gravel packed

Diameter of Bore	From ft.	To ft.
25½	top	bottom

Size of shoe or well ring:

Size of gravel: ¼"

Describe joint collar w/ fillet weld.

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen machine

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
522	703	2	16	.100 x 2
703	1747	2	14	.100 x 2

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☐ No ☒ To what depth ft.

Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing

(9) WATER LEVELS:

Depth at which water was first found, if known unknown.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☒ If yes, by whom?

Yield: gal./min. with ft. drawdown after hrs.

Temperature of water Was a chemical analysis made? Yes ☐ No ☒

Was electric log made of well? Yes ☒ No ☐ If yes, attach copy

(11) WELL LOG:

Total depth 1747 ft. Depth of completed well 1747 ft.

Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.	
0 ft. to	9 ft.	top soil
9	60	sandy clay
60	63	sand
63	253	sandy clay
253	257	sand
257	473	sandy clay
473	479	sand
479	695	sandy clay
695	745	blue clay
745	748	sand
748	812	blue clay
812	943	sandy clay
943	1033	sediment
1033	1246	shale & clay
1246	1361	blue clay
1361	1371	hard shale
1371	1455	shale & clay
1455	1488	hard shale
1488	1588	hard shale & clay
1588	1729	hard sand
1729	1747	sand & clay

CONFIDENTIAL
Water Code Sec. 13752

Work started 11/1/67 Completed 11/14/67

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (*Typed or printed*)

Address 1744 Inyo St.
Delano, Calif. 93215

[SIGNED] Donald Whitten
(Well Driller)

License No. 148282 Dated 11/13/68, 19

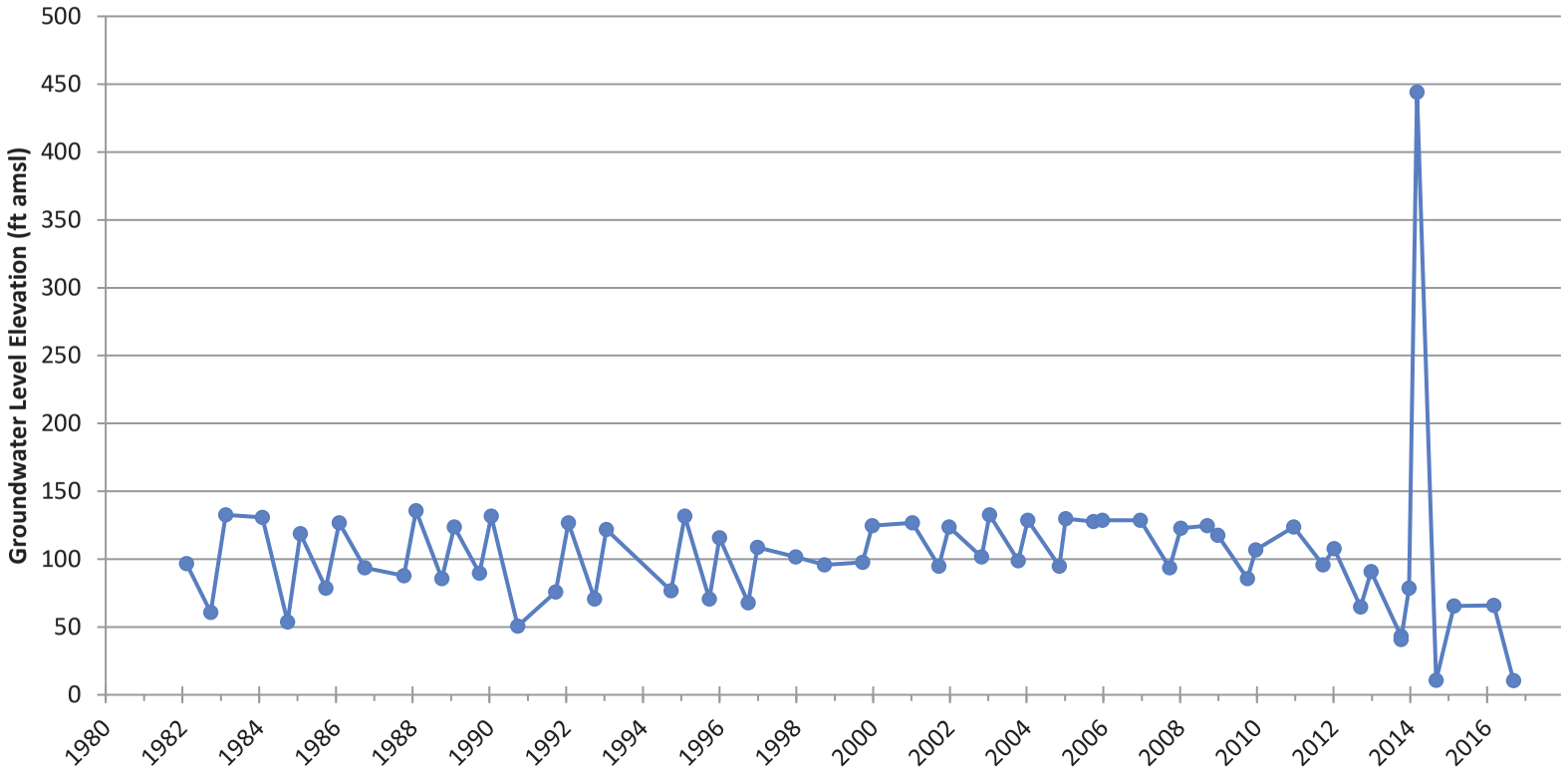
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

86291-250 10-65 SOM TRIP ① △ OSP

Groundwater Hydrographs - Deep

24S/27E-08L01



24/27-32K1

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5 (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

24/27-32K1 (G.S.)

STATE OF CALIFORNIA

1160

LOCATION NOT CHECKED

Do Not Fill In

No. 32108

State Well No. _____

Other Well No. 24S/27E-32

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

SE ¼ Section 32
Township 24S
Range 27E

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
1800 ft.		14" x 4"	casing

Type and size of shoe or well ring

Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
26"	0	1800 ft.

Size of gravel: 3/8"

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8" x 1" cc in., length, by in.

From ft. to ft. Perf. per row Rows per ft.

1002 ft. to 1800 ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:

Total depth 1800 ft. ft. Depth of completed well 1800 ft. ft.

Formations: Describe by color, character, size of material, and structure.

ft. to	ft.	
0	3	Top Soil
3	180	Sandy Clay
180	183	Sand
183	240	Hard Sand
240	310	Sandy Clay
310	356	Hard Clay
356	360	Sand
360	395	Hard Clay
395	420	Hard Sand
420	427	Sand
427	465	Sandy Clay
465	500	Blue Clay
500	516	Blue Shale
516	530	Clay
530	544	Sediment
544	569	Hard Sandy Clay
569	633	Sediment
633	650	Shale & Clay
650	679	Sediment
679	709	Blue Clay
709	712	Sand
712	739	Blue Sediment
739	742	Sand
742	767	Hard Clay
767	770	Hard Slate
770	802	Shale
802	812	Blue Clay
812	816	Sand
816	822	Clay
822	850	Sediment
850	865	Sediment Clay
865	944	Sediment
944	948	Sand
948	958	Hard Clay
958	1004	Sediment
1004	1008	Sand
1008	1080	Blue Sediment
1080	1082	Sand
1082	1108	Sediment
1108	1271	Shale & Clay
1271	1301	Hard Slate
1301	1401	Shale

Started 4/2/55 Completed 5/5/55

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

1800'

NAME Whitten Pump, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High St.
Delano, California

[SIGNED] _____
Well Driller

License No. 148282 Dated _____, 19____

32885 3-54 BOM QUIN ⓓ SPO

DWR FORM NO. 240 (REV. 3-54)

24/27-32K1

LOG NO. 32108

PAGE 2 OF 2

Well Log Continued

1401	ft. to	1410 ft.	Hard Clay
1410	" "	1413	Sand
1413		1423	Clay
1423		1426	Sand
1426		1433	Clay
1433		1435	Hard Shale
1435		1475	Shale
1475		1493	Blue Shale
1493		1500	Clay
1500		1515	Shale
1515		1522	Clay
1522		1526	Shale
1526		1551	Very Hard Slate
1551		1590	Shale
1590		1628	Sandy Shale
1628		1750	Sand & Shale
1750		1765	Sandy Clay
1765		1780	Clay
1780		1800	Blue Shale

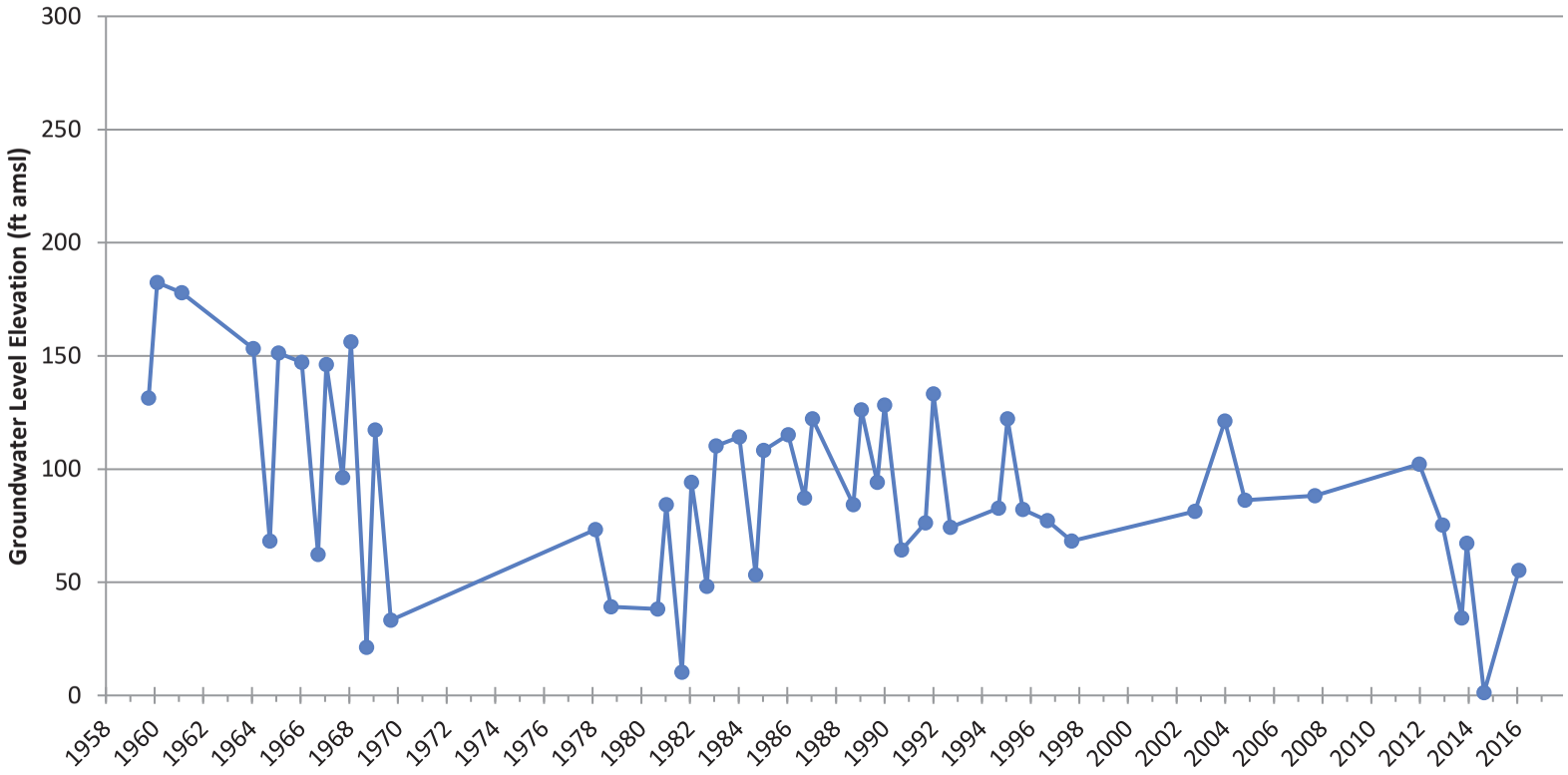
0.47 mile feet north, 0.49 mile feet west of

Section 32 (USGS)

24/27-32K1

Groundwater Hydrographs - Deep

24S/27E-32K01



24/24-3A1

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA 2406

LOCATION NOT CHECKED

Do Not Fill In
No. 63263

State Well No. 24S/24E-3A1
Other Well No. 24S/24E-3

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

Southwest corner of intersection of Ave. 48 and Rd. 92.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
600		16"	Single
1,002		14"	Single

Type and size of shoe or well ring

Describe joint Butt Welded

If gravel packed

Diameter of Bore	from ft.	to ft.
28"	Top to bottom	

Size of gravel: 3/8

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8 in., length, by 1 cc in.

From 804 ft. to 1,602 ft.

4 Perf. per row 18 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found Unknown ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 1,602 ft. Depth of completed well 1,602 ft.

36 L-4802 C.F. 7-5-61

Formations: Describe by color, character, size of material, and structure.

0 ft. to	35 ft.	Sandy Clay
35 "	153 "	Sandy
153 "	188 "	Clay
188 "	235 "	Hard Sand
235 "	270 "	Clay
270 "	273 "	Sand
273 "	315 "	Sandy Clay
315 "	338 "	Hard Shale
338 "	430 "	Sandy Clay
430 "	436 "	Sand
436 "	458 "	Sandy Clay
458 "	582 "	Clay
582 "	643 "	Blue Clay
643 "	710 "	Sandy Clay
710 "	730 "	Sand
730 "	745 "	Sandy Clay
745 "	792 "	Shale
792 "	892 "	Clay
892 "	906 "	Sand
906 "	945 "	Sandy Clay
945 "	960 "	Blue Clay
960 "	963 "	Sand
963 "	1036 "	Hard Shale
1036 "	1070 "	Clay
1070 "	1096 "	Shale
1096 "	1125 "	Clay
1125 "	1140 "	Sand
1140 "	1170 "	Shale
1170 "	1200 "	Clay
1200 "	1247 "	Sandy Clay
1247 "	1257 "	Hard Shale
1257 "	1260 "	Sand
1260 "	1390 "	Shale
1390 "	1405 "	Sand
1405 "	1425 "	Sandy Clay
1425 "	1488 "	Shale
1488 "	1502 "	Clay
1502 "	1575 "	Shale
1575 "	1590 "	Sand
1590 "	1602 "	Hard Shale

Section 3 A D E F I E I

Work started 6/7/60 19 Completed 6/24/60 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High St.

Delano, Calif.

[SIGNED] Donald E. Whitten
(As Well Driller)

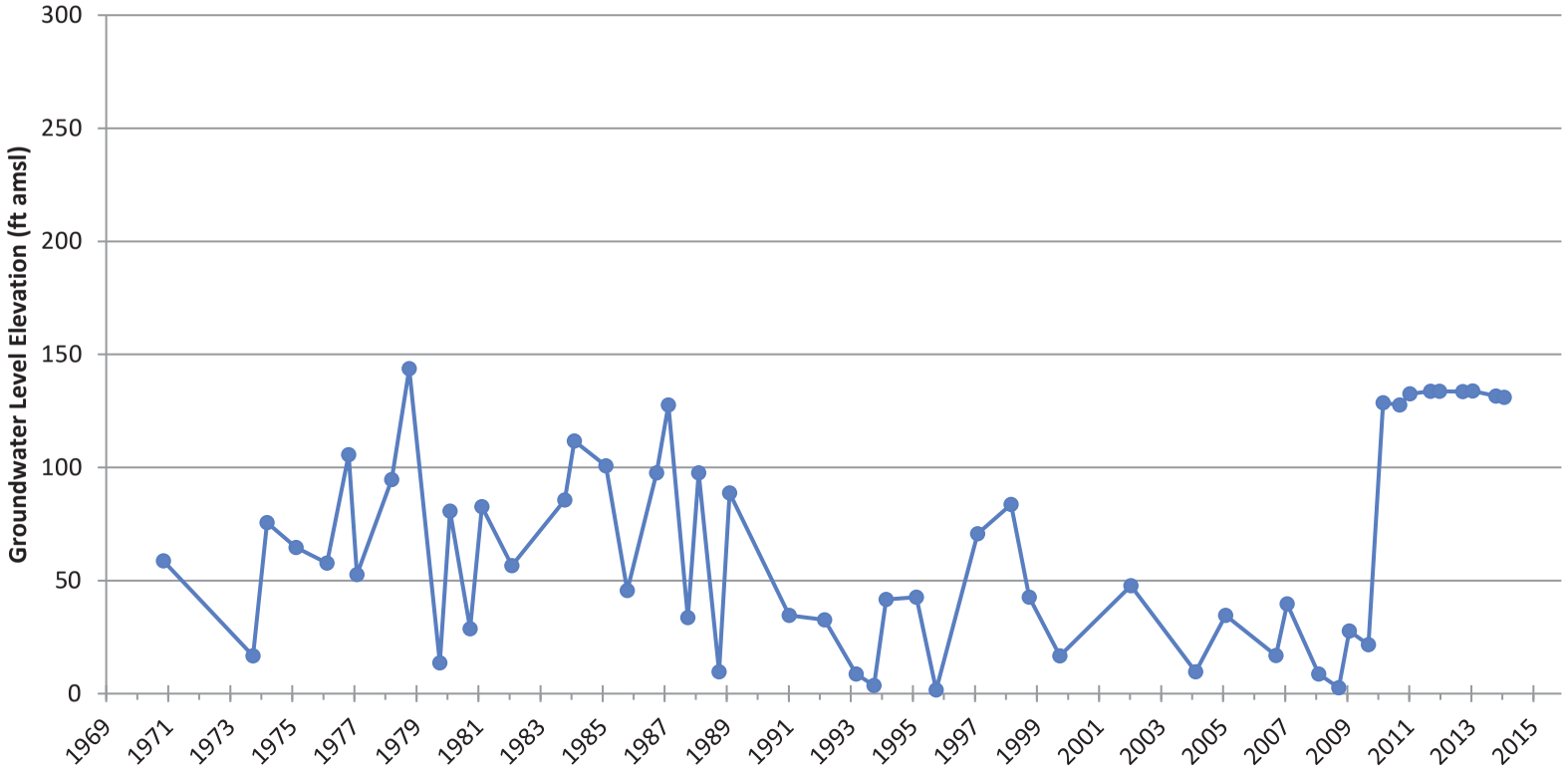
License No. 148282 Dated 11-1-60

STOCK 4-57 BOOK QUIN △ SPO

DWR 188 (REV. 3-54)

Groundwater Hydrographs - Deep

24S/24E-03A01



TRIPLICATE
Owner's Copy

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. EO117919

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

Owner's Well No. MW-6
Date Work Began 9/24/2010, Ended 9/24/2010
Local Permit Agency ENVIRO HEALTH, TULARE
Permit No. 10-0338 Permit Date 8/30/2010

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD ROTARY FLUID WATER

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	20	TOP SOIL, MEDIUMFINE/COARSE SANDS
20	40	MEDIUM/FINE/COARSE SANDS
40	80	EDIUM/FINE/COARSE SANDS WITH SOME CLAY
80	120	MEDIUM/FINE/COARSE SANDS WITH MORE CLAY
120	140	MEDIUM/FINE/COARSE SANDS, WITH SOME CLAY
140	160	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
160	200	MEDIUM/FINE/COARSE SANDS
200	300	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
300	340	MEDIUM/FINE/COARSE SANDS, SOME CLAY SOME D.G.
340	420	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY
420	560	CLAY WITH SOME SANDS
560	620	CLAY WITH MORE SANDS MEDIUM/FINE
620	680	CLAY WITH SOME MEDIUM/FINE SANDS
680	720	MOSTLEY CLAY
720	740	CLAY WITH SOME MEDIUM/FINE SANDS
740	760	MEDIUM/FINE/COARSE SANDS WITH SOME CLAY AND SHALE
760	810	MEDIUM/FINE/COARSE SANDSWITH CLAY

TOTAL DEPTH OF BORING 810 (Feet)
TOTAL DEPTH OF COMPLETED WELL 805 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address 1/2 MI N AVE. 26 & 1/2 MI E. ROAD 16
City DELANO CA 93215
County TULARE
APN Book 3381 Page 003 Parcel 24
Township 24 Range 26 Section 17
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 AIR LIFT
TEST LENGTH 4 (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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
#1										
0	200	16"	✓				PVC	4"	SCH 40	
200	350	16"		✓			PVC	4"	SCH 40	.030
#2										
0	705	12 1/4"	✓				PVC	4"	SCH 40	
705	805	12 1/4"		✓			PVC	4"	SCH 40	.030

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	130	✓			
360	370		✓		
464	474		✓		
590	600		✓		
630	640		✓		
660	670		✓		

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

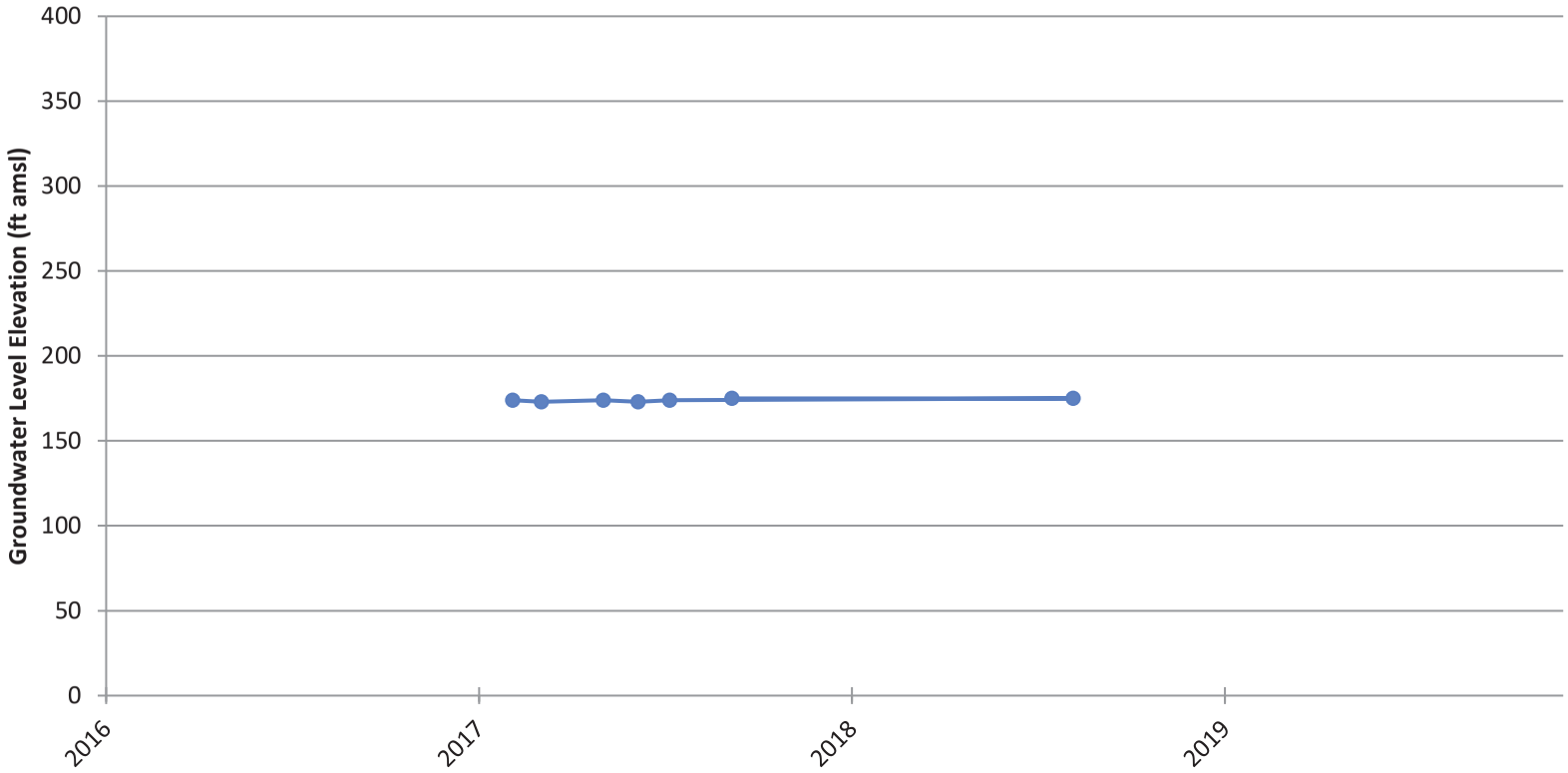
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME BRADLEY & SONS
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
3625 S. HIGHLAND ADDRESS DEL REY CITY CA STATE 93616 ZIP
Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE
10/06/10 DATE SIGNED
414178 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

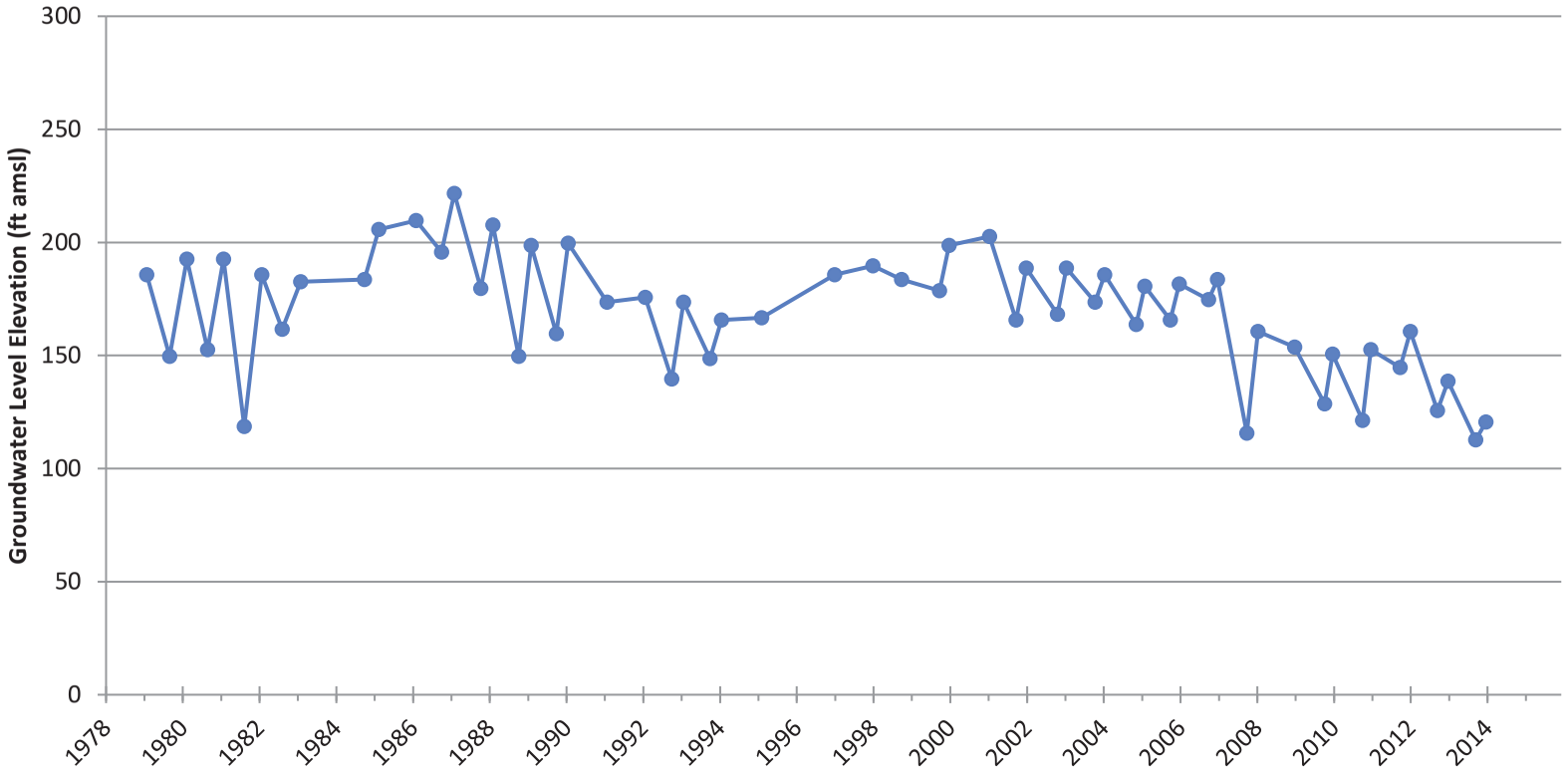
Groundwater Hydrographs - Deep

M-19



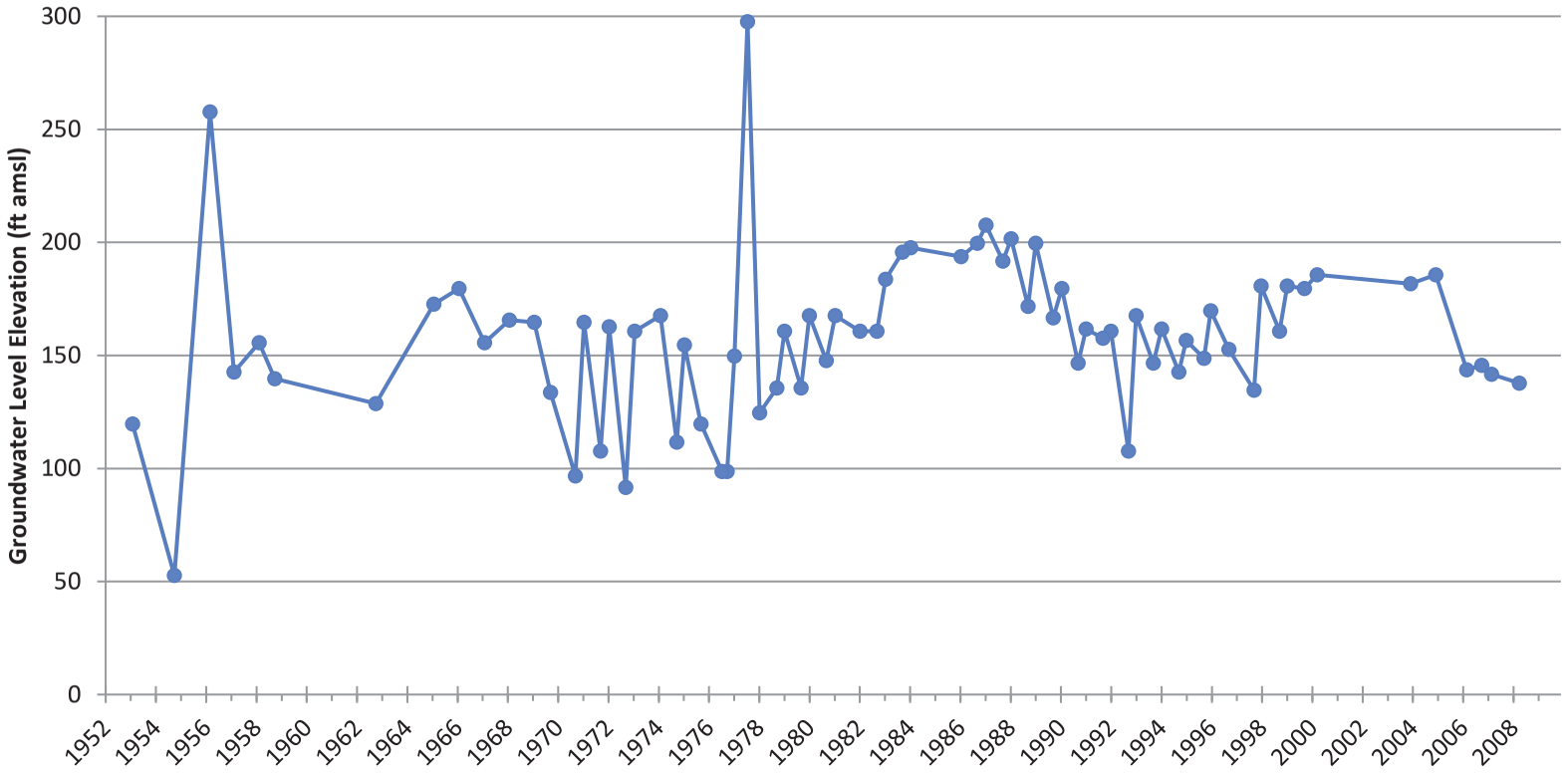
Groundwater Hydrographs - Deep

24S/25E-13F01



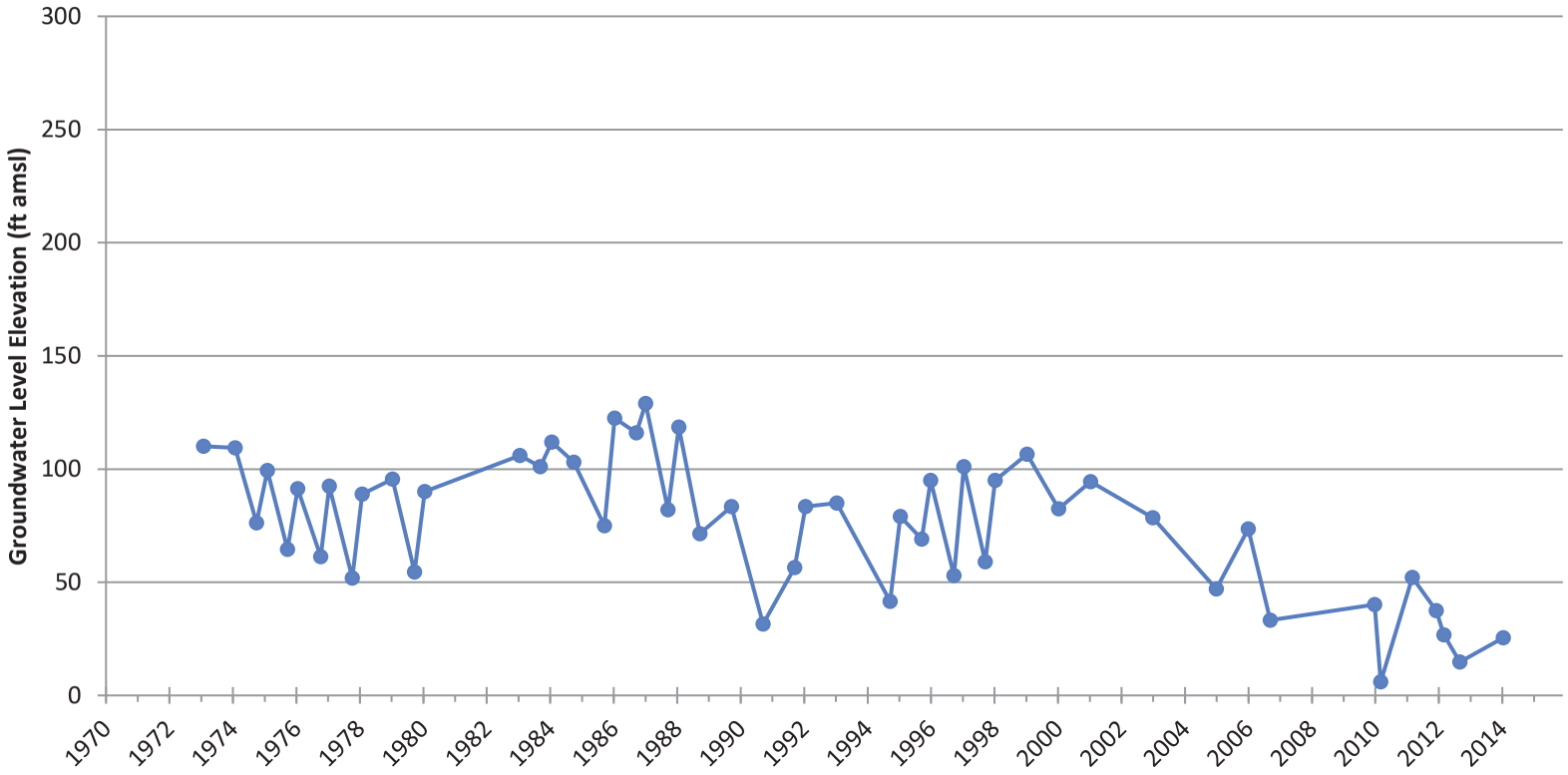
Groundwater Hydrographs - Deep

24S/25E-36J01



Groundwater Hydrographs - Deep

23S/23E-02A01



File Original with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

Page 1 of 2
Owner's Well No. Well #1 No. e0078297
Date Work Began 8/16/08 Ended 10/07/08
Local Permit Agency Tulare County Environmental Health Division
Permit No. 08-0339 Permit Date 7/9/08

DWR USE ONLY — DO NOT FILL IN
215/23E25 1/1
STATE WELL NO./STATION NO. 1/B
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (X) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Reverse Rotary FLUID ___

DEPTH FROM SURFACE FL to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
50 – 80	Brown clay, gravel
80 – 90	Brown clay
90 – 230	Brown clay, gravel
230 – 260	Gray clay, gravel
260 – 280	Gray clay
280 – 310	Gray clay, sand
310 – 320	Gray clay, gravel
320 – 360	Gray clay, sand
360 – 370	Gray clay
370 – 380	Gray clay, sand
380 – 410	Gray clay, gravel
410 – 420	Clay and cobbles, gravel
420 – 470	Clay and gravel
470 – 490	Gray clay
500 – 510	Gray clay, sandy
510 – 530	Gray clay
530 – 540	Gray clay, sandy
540 – 550	Gray clay
550 – 570	Clay and gravel
570 – 580	Coarse sand
580 – 590	Clay, gravel, and sand
590 – 610	Clay and little gravel
610 – 620	Clay and gravel
620 – 630	Gray clay and gravel
630 – 640	Gray clay
640 – 720	Gray clay and gravel
720 – 730	Gravel
730 – 740	Clay
740 – 760	Gray clay and gravel
760 – 790	Gray clay

TOTAL DEPTH OF BORING 1280 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1270 (Feet)

WELL OWNER

[redacted]
CITY STATE ZIP

WELL LOCATION

Address 5850 Ave 160
City Tipton CA 93272
County Tulare County
APN Book 200 Page 190 Parcel 004
Township 21S Range 23E Section 25
Latitude 36 DEG. 4 MIN. 46.53 SEC. NORTH Longitude 119 DEG. 26 MIN. 11.47 SEC. WEST

LOCATION SKETCH

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

ACTIVITY (X)

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

PLANNED USES (X)
WATER SUPPLY
X Domestic ___ Public
X 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 N/A (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 259.6 *(Ft.)* & DATE MEASURED 10/04/08-10/07/08
ESTIMATED YIELD 2008 (GPM) & TEST TYPE Constant
TEST LENGTH 37 (Hrs.) TOTAL DRAWDOWN 216.88 *(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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 – 40	40			X		Steel	32	.375	
0 – 640	28	X				Steel	18	.375	
640 – 660	28		X			Steel	16	.312	.060 Standard Louver
660 – 1260	26		X			Steel	16	.312	.060 Standard Louver
1260 – 1270	26	X				Steel	18	.375	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (X)	BENTONITE (X)	FILL (X)	FILTER PACK (TYPE/SIZE)
0 – 20	X			
20 – 1260			X	1/4 x 10 Gravel Pack

ATTACHMENTS (X)

X Geologic Log
X 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 Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 11001 Etiwanda Ave CITY Fontana STATE CA ZIP 92337
Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/10/08
C-57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

File Original with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY — DO NOT FILL IN
21S/23E-25 2/B
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Page 2 of 2
Owner's Well No. Well #1 No. e0078297
Date Work Began 8/16/08 Ended 10/07/08
Local Permit Agency Tulare County Environmental Health Division
Permit No. 08-0339 Permit Date 7/9/08

GEOLOGIC LOG

ORIENTATION (X) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Reverse Rotary FLUID ___

DEPTH FROM SURFACE FT. to FT.	DESCRIPTION *Describe material, grain size, color, etc.*
790 to 910	Gray clay and gravel
910 to 920	Gray clay, sand and gravel
920 to 940	Clay and coarse sand
940 to 950	Clay, sand, and gravel
950 to 960	Sand and gravel
960 to 1030	Sandy clay
1030 to 1040	Sandy clay and gravel
1040 to 1060	Gray clay and gravel
1060 to 1070	Gravel and gray clay
1070 to 1120	Gray clay
1120 to 1150	Gray clay and coarse sand
1150 to 1160	Gray clay and gravel
1160 to 1200	Gray clay
1200 to 1260	Gray clay and gravel

TOTAL DEPTH OF BORING 1280 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1270 (Feet)

WELL OWNER

[redacted]
CITY STATE ZIP

WELL LOCATION

Address 5850 Ave 160
City Tipton CA 93272 (STATE, ZIP)
County Tulare County
APN Book 200 Page 190 Parcel 004
Township 21S Range 23E Section 25
Latitude 36 DEG. 4 MIN. 46.53 SEC. NORTH Longitude 119 DEG. 26 MIN. 11.47 SEC. WEST

LOCATION SKETCH

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

ACTIVITY (X)

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

PLANNED USES (X)
WATER SUPPLY
X Domestic ___ Public
X 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 N/A (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 259.6 (Ft.) & DATE MEASURED 10/04/08-10/07/08
ESTIMATED YIELD 2008 (GPM) & TEST TYPE Constant
TEST LENGTH 37 (Hrs.) TOTAL DRAWDOWN 216.88 (Ft.)
* *May not be representative of a well's long-term yield.*

DEPTH FROM SURFACE FT. to FT.	BORE-HOLE DIA. (inches)	CASING (S) TYPE (-') BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

DEPTH FROM SURFACE FT. to FT.	ANNULAR MATERIAL TYPE CEMENT (X)	BENTONITE (X)	FILL (X)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (X)

X Geologic Log
X 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 Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 11001 Etiwanda Ave CITY Fontana STATE CA ZIP 92337
Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/10/08
C-57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR 22S/23E/16

Page 1 of 1

Owner's Well No. 6535

Date Work Began 09/26/94, Ended 10/04/94

Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH

Permit No. 30036 Permit Date 08/24/94

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 545936

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)

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	3	TOP SOIL
3	15	SANDY YELLOW CLAY
15	110	SAND WITH BROWN CLAY STREAKS
110	250	SANDY BLUE CLAY W/SAND STRKS
250	300	SAND W/BLUE CLAY STREAKS
300	325	SANDY BLUE CLAY
325	400	SAND WITH BLUE CLAY STREAKS
400	420	BLUE CLAY
420	435	SANDY BLUE CLAY
435	555	CORCORAN CLAY
555	700	SAND WITH BLUE CLAY STREAKS
700	860	INTERBEDDED SAND & BLUE CLAY
860	885	SANDY BLUE CLAY
885	930	SAND WITH BLUE CLAY STREAKS
930	970	INTERBEDDED SAND & BLUE CLAY
970	1010	SAND WITH BLUE CLAY STREAKS
1010	1090	INTERBEDDED SAND & BLUE CLAY
1090	1210	SILTY BLUE SAND
1210	1300	INTERBEDDED SAND

CONFINED

TOTAL DEPTH OF BORING 1270 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address HWY 43 AVE 120

City

County TULARE

APN Book 291 Page 060 Parcel 19001

or Township 22 S Range 23 E Section 16

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

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

___ Public

X Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD ROTARY FLUID MUD

WATER LEVEL & YIELD OF COMPLETED WELL

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	CONDUCTOR	FILL MPL	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	540	28"					ACCESS TUBE	2"	SCH 40	
0	560	28"	X				ASTM-135	16"	.312	
560	690	28"		X			DBL MILLSLOT	16"	.312	0.060
690	710	26"	X				ASTM-135	12-3/4	.312	
710	720	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
720	730	26"	X				ASTM-135	12-3/4	.312	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	X			SAND SLURRY
50	540			X	GRAVEL
540	1270			X	SAND PACK

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 EATON DRILLING COMPANY, INC. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 20 W. Kentucky Ave. CITY Woodland STATE CA ZIP 95695

Signed ___ (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/13/94

C-57 LICENSE NUMBER 132783C57

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 545937

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

Owner's Well No. 6535P2
Date Work Began 09/26/94 Ended 10/04/94
Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH
Permit No. 30036 Permit Date 08/24/94

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

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

TOTAL DEPTH OF BORING 1270 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

WELL OWNER

[redacted]
CITY STATE ZIP

WELL LOCATION

Address SAME AS PAGE ONE
City
County TULARE
APN Book 291 Page 060 Parcel 19001
or
Township 22 S Range 23 E Section 16
or
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH
WEST
EAST
SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

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

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
X Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD ROTARY FLUID MUD

WATER LEVEL & YIELD OF COMPLETED WELL

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	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
730 to 760	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
760 to 810	26"	X				ASTM-135	12-3/4	.312	
810 to 860	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
860 to 900	26"	X				ASTM-135	12-3/4	.312	
900 to 930	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
930 to 970	26"	X				ASTM-135	12-3/4	.312	

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 EATON DRILLING COMPANY, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. Kentucky Ave. Woodland CA 95695
ADDRESS CITY STATE ZIP

Signed ___ 10/13/94 133783C57
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 6535P3

Date Work Began 09/26/94 , Ended 10/04/94

Local Permit Agency TULARE CO ENVIRONMENTAL HEALTH

Permit No. 30036 Permit Date 08/24/94

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 545938

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)

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

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

TOTAL DEPTH OF BORING 1270 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address SAME AS PAGE ONE

City

County TULARE

APN Book 291 Page 060 Parcel 19001

or Township 22 S Range 23 E Section 16

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

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

___ Public

X Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD ROTARY FLUID MUD

WATER LEVEL & YIELD OF COMPLETED WELL

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	TYPE (✓) SCREEN	TYPE (✓) CONDUCTOR	TYPE (✓) FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
970 : 1000	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
1000 : 1020	26"					COMPRESSON		SECTION	
1020 : 1050	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
1050 : 1060	26"	X				ASTM-135	12-3/4	.312	
1060 : 1080	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
1080 : 1090	26"	X				ASTM-135	12-3/4	.312	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE: CEMENT (✓)	TYPE: BENTONITE (✓)	TYPE: FILL (✓)	TYPE: 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 EATON DRILLING COMPANY, INC. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 20 W. Kentucky Ave. CITY Woodland STATE CA ZIP 95695

Signed ___ (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/13/94

C-57 LICENSE NUMBER 332782

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 6535P4

Date Work Began _____, Ended _____

Local Permit Agency TULARE CO ENVIORNMENTAL HEALTH

Permit No. 30036 Permit Date 08/24/94

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 545939

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)

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

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

TOTAL DEPTH OF BORING 1270 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1210 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address SAME AS PAGE ONE

City _____

County TULARE

APN Book 291 Page 060 Parcel 19001

or Township 22 S Range 23 E Section 16

or Latitude _____ DEG. MIN. SEC. NORTH Longitude _____ DEG. MIN. SEC. WEST

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

___ Public

X Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD ROTARY FLUID MUD

WATER LEVEL & YIELD OF COMPLETED WELL

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	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
1090 to 1140	26"		X			DBL MILLSLOT	12-3/4	.312	0.050
1140 to 1150	26"	X				ASTM-135	12-3/4	.312	
1150 to 1210	26"		X			DBL MILLSLOT	12-3/4	.312	0.050

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 EATON DRILLING COMPANY, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

20 W. Kentucky Ave. Woodland CA 95695
ADDRESS CITY STATE ZIP

Signed _____ 10/13/94 133783C57
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

23/26-1J1

9-003
(December 1949)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

(Conflict in Haskel Sheet)

No. 23/26-1J1

Other Nos. 11322 d1

WELL LOG

State California County Tulare Subarea Ducor-Famoso

Owner [redacted] T.D. = 1913 Elg
T.D. = 1830 completed

Location 0.49 miles N of sec. line (4th Ave 88) + 50 ft. W of Rd 208

Drilled by Hylton Drilling Co. Address 17th & I st., Bakersfield

Date 12-6-56 Casing diam. _____ Land-surf. alt. 410

Source of data Examination of dry rotary samples - Partial log

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Material	Thickness (feet)	Depth (feet)
1030-1110	Sand, medium to coarse	80	
1110-1230	Sand and clay, dark green	120	
1230-1270	Sand medium to coarse, some dark green clay	40	
1270-1290	Sand, medium to coarse	20	
1290-1390	Clay, sandy, dark greenish	100	
1390-1430	Sand, fine to coarse	40	
1430-1450	Clay, dark green	20	
1470-1490	Sand, medium to coarse	20	
1490-1510	Clay, dark green	20	
1510-1630	Clay, sandy, dark green	120	
1630-1650	Sand, clayey, to coarse	20	
1650-1690	Clay, sandy, dark green	40	
1690-1700	Sand, clayey, to coarse	10	
1700-1780	Gravel, 2-8mm with some dark green clay and	80	
1780-1820	Gravel 2-8mm + dark green clay	40	
1820-1840	Gravel 2-8mm with some dark green clay + sand	20	
1840-1900	Gravel 2-8mm + dark green clay	60	

Record by George A. Hilton Date 12-6-56

Sheet 1 of 1

U. S. GOVERNMENT PRINTING OFFICE 16—61587-1

23/26-1J1

23/26-1J1

23/26-1J1 Maze (Camp, S.A.) #1 12-14-56
1830 ft pipe, perf 1310-1830, Schlumber-
ger ran to 2100+ E-log completed
3 Mi W Terrabella 1/2 mi S on 208.

0-20 Surf fm
20-46 Sd & Gravel
46-84 Sdy brn clay
84-290 Sdy brn clay w/little gyp.
290-314 Tough sdy brown clay
314-378 Sdy brn clay w/some gyp
378-390 Hard Sd
390-620 Sdy brn clay w/some hard
620-675 Sdy blue clay w/some sd.
975-1015 Hard sdy gy blue clay & shale.
1015-1127 Hard blue clay w/some shale
1127-1350 Hard sdy clay
1350-1830 Sdy blue clay w/streaks of sd

RECORD BY Lloyd A. Hilton DATE 12-6-56 SHEET 1 OF 1

U. S. GOVERNMENT PRINTING OFFICE 16—61867-1

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 085678

State Well No. 22/27-16

Other Well No.

Notice of Intent No.

Local Permit No. or Date

[redacted]

(2) LOCATION OF WELL (See instructions):

County Tulare Owner's Well Number

Well address if different from above

Township 22 Range 27 Section 16

Distance from cities, roads, railroads, fences, etc. 3/8 mile East of Road 224 on South side of Ave. 128.

Rd 224 ←3/8 mi→ (X) AVE 128

WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic [ ]
Irrigation [X]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:

Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:

Yes [X] No [ ] Size 1/4"
Diameter of bore 27-1/2"
Packed from 0 to 1240 ft.

(7) CASING INSTALLED:

Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
0	1240	14"	1/4"

(8) PERFORATIONS:

Type of perforation or size of screen

From ft.	To ft.	Slot size
800'	1240'	125x 2-1/2"

(9) WELL SEAL:

Was surface sanitary seal provided? Yes [ ] No [X] If yes, to depth ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ft.
Method of sealing

(10) WATER LEVELS:

Depth of first water, if known Unknown ft.
Standing level after well completion ft.

(11) WELL TESTS:

Was well test made? Yes [X] No [ ] If yes, by whom?
Type of test Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made? Yes [X] No [ ] If yes, attach copy to this report

(12) WELL LOG: Total depth 1240 Depth of completed well 1240

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	90	Sand
90	94	Gravel
94	237	Gravel
237	277	Gravel
277	338	Clay w/Sand Streaks
338	399	Clay w/Gravel Streaks
399	522	Clay w/Sand Streaks
522	590	Blue Clay
590	700	Blue Clay
700	770	Clay
770	936	Sandy Clay
936	1088	Sand w/Clay Streaks
1088	1166	Sandy Clay
1166	1186	Coarse Sand & Clay
1186	1240	Sand w/Shale Streaks

OUTSIDE CORC. CLAY AREA

Work started 11-5- 19 79 Completed 11-30- 19 79

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 Whitten Pumps, Inc. (Person, firm, or corporation) (Typed or printed)

Address Rt. 1 Box 1101

City Delano, CA Zip 93215

License No. 148282 Date of this report 3-24-80

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 1 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number: 22S/26E-24

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Polybore

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay

Total Depth of Boring 1270 Feet

Total Depth of Completed Well 1240 Feet

Well Owner

[redacted]

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

City Pixley County Tulare

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

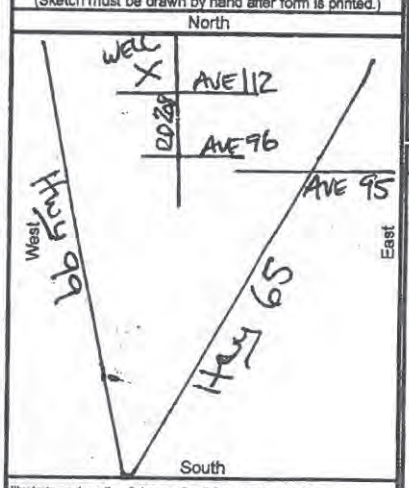
Datum Decimal Lat. Decimal Long.

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 270 (Feet below surface)

Depth to Static Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	40	42	Conductor	A53 Grade B	.375	30		
0	670	26	Blank	A53 Grade B	.312	16		
670	700	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.080
700	800	26	Standard Flo	SF A139	.312	16	Louver	
800	820	26	Ful Flo	Ful flo A139	.312	16	Louver	0.080
820	840	26	Standard Flo	SF A139	.312	16	Louver	

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	40	Cement	Annular Seal
0	1,270	Filter Pack	4x16 SRI

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

7212 Fruitvale Ave. Bakersfield CA 93308
Address City State Zip

Signed [signature] 7/13/2009 440537
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 2 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number: 21S/26E-24

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Polybore

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay

Total Depth of Boring 1270 Feet

Total Depth of Completed Well 1240 Feet

Well Owner

[redacted]

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

City Pixley County Tulare

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S

Location Sketch

(Sketch must be drawn by hand after form is printed.)

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 and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 270 (Feet below surface)

Depth to Static Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
840	900	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.080
900	910	26	Standard Flo	SF A139	.312	16	Louver	
910	930	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.080
930	950	26	Standard Flo	SF A139	.312	16	Louver	
950	990	26	Ful Flo	Ful flo A139	.312	16	Louver	0.080
990	1,030	26	Standard Flo	SF A139	.312	16	Louver	

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	40	Cement	Annular Seal
0	1,270	Filter Pack	4x16 SRI

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

7212 Fruitvale Ave. Bakersfield CA 93308
Address City State Zip

Signed [signature] 7/13/2009 440537
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

3/6

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 3 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only – Do Not Fill In

22S/26E-24

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Polybore

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay

Total Depth of Boring 1270 Feet

Total Depth of Completed Well 1240 Feet

Well Owner

[redacted]

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

City Pixley County Tulare

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S

Location Sketch

(Sketch must be drawn by hand after form is printed.)

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 and complete.

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply

☐ Domestic ☐ Public

☑ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 270 (Feet below surface)

Depth to Static Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
1,030	1,060	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.080
1,060	1,110	26	Standard Flo	SF A139	.312	16	Louver	
1,110	1,130	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.080
1,130	1,145	26	Standard Flo	SF A139	.312	16	Louver	
1,145	1,170	26	Ful Flo	Ful flo A139	.312	16	Louver	0.080
1,170	1,200	26	Standard Flo	SF A139	.312	16	Louver	

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	40	Cement	Annular Seal
0	1,270	Filter Pack	4x16 SRI

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

7212 Fruitvale Ave. Bakersfield CA 93308
Address City State Zip

Signed [signature] 7/13/2009 440537
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

4/5

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0094537

Page 4 of 4

Owner's Well Number #2

Date Work Began 03/28/2009 Date Work Ended 5/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-138 Permit Date 3/16/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number: 22S/26E-24

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Polybore

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
40	110	Sand Gravel
110	150	Sand
150	190	Sand Gravel Clay
190	240	Sand Clay
240	290	Sand
290	360	Sand Clay
360	400	Clay
400	1,120	Sand Clay
1120	1,270	Clay

Total Depth of Boring 1270 Feet

Total Depth of Completed Well 1240 Feet

Well Owner

[redacted]

Well Location

Address 1/4 Mile North of Ave 112 / 50' West of Rd. 208

City Pixley County Tulare

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Decimal Lat. ___ Decimal Long. ___

APN Book 302 Page 280 Parcel 013

Township 22S Range 26E Section 24 S

Location Sketch

(Sketch must be drawn by hand after form is printed.)

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 and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other ___
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other ___

Water Level and Yield of Completed Well

Depth to first water 270 (Feet below surface)

Depth to Static Water Level 270 (Feet) Date Measured 05/06/2009

Estimated Yield * 2,600 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 190 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
1,200	1,220	26	Ful Flo	Ful Flo A139	.312	16	Louver	
1,220	1,240	26	Blank	A53 Grade B	.312	16		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	40	Cement	Annular Seal
0	1,270	Filter Pack	4x16 SRI

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

7212 Fruitvale Ave Bakersfield CA 93308
Address City State Zip

Signed [signature] 7/13/2009
C-57 Licensed Water Well Contractor Date Signed

440537
C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

24/27-34

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No.
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
Nº 118749
State Well No. 24/27E-34
Other Well No.

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Kern Owner's number, if any—
R. F. D. or Street No. ¼ mile East of Hwy 65 and ¼ mile North of Ave. 2

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐
From 0 ft. to 1750 ft. 14" Diam. ¼" Gage or Wall

If gravel packed
Diameter of Bore 25½ from ft. to ft.
top to bottom

Type and size of shoe or well ring
Size of gravel: ¼"
Describe joint collar w/ fillet weld

(7) PERFORATIONS:

Type of perforator used machine
Size of perforations .125 x 2 in., length, by 6 cc in.
From 600 ft. to 1750 ft. 2 Perf. per row 14 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found unknown ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☒ No
Was electric log made of well? ☒ Yes ☐ No

(11) WELL LOG:

Total depth 1750 ft. Depth of completed well 1750 ft.

Formation: *Describe by color, character, size of material, and structure.*

From (ft.)	To (ft.)	Formation
0	9	top soil
9	127	sand
127	409	sandy clay
409	564	clay
564	740	sandy clay
740	743	sand
743	881	blue clay
881	943	sandy clay
943	1066	hard shale
1066	1220	sandy clay
1220	1370	blue shale
1370	1441	hard blue shale
1441	1565	hard shale
1565	1750	shale w/ sand streaks

CONFIDENTIAL
Water Code Sec. 13752

Work started 12-28-68 19 , Completed 1-15-68 19

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

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 Inyo St.
Delano, Calif. 93215

[SIGNED] [signature]
Well Driller

License No. 148282 Dated 10-23-68, 19

24/27-20

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 5
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED
Do Not Fill In
No 60087
State Well No.
Other Well No. 24S/27E-20

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

1/4 mile North of Ave. 16
3/8 mile East of Rd. 216

(3) TYPE OF WORK (*check*):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
1,824 ft.		14"	¼ single

Type and size of shoe or well ring

Describe joint Butt welded

If gravel packed

Diameter of Bore 26 from 3¼" to ft.

Top to bottom

Size of gravel: 3/8"

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8 X 1cc in., length, by in.

From ft.	to ft.	Perf. per row	Rows per ft.
648 ft.	1824 ft.	21	3

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found not known ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 1824 ft. Depth of completed well 1824 ft.

Formation: *Describe by color, character, size of material, and structure.*

0 ft.	to 86 ft.	Sandy Top Soil
86 "	196 "	Sandy Clay
196 "	200 "	Hard Sand
200 "	285 "	Sandy Clay
285 "	302 "	Hard Sand
302 "	460 "	Sandy Clay
460 "	500 "	Sandy Clay
500 "	540 "	Hard Clay
540 "	543 "	Sand
543 "	620 "	Hard Clay
620 "	640 "	Hard Shale
640 "	723 "	Hard Clay
723 "	763 "	Shale
763 "	840 "	Blue Clay
840 "	843 "	Sand
843 "	1042 "	Blue Clay
1042 "	1105 "	Shale
1105 "	1125 "	Soft Clay
1125 "	1140 "	Shale
1140 "	1230 "	Blue Clay
1230 "	1233 "	Sand
1233 "	1275 "	Blue Shale
1275 "	1295 "	Hard Shale
1295 "	1450 "	Clay
1450 "	1452 "	Hard Shale
1452 "	1481 "	Clay
1481 "	1515 "	Hard Shale
1515 "	1526 "	Clay
1526 "	1570 "	Hard Shale
1570 "	1574 "	Sand
1574 "	1616 "	Hard Shale
1616 "	1626 "	Sand
1626 "	1636 "	Shale
1636 "	1691 "	Clay & Shale
1691 "	1739 "	Sand
1739 "	1824 "	Hard Shale

CONFIDENTIAL
Section 7076 1. Water Code

Work started 12/26/59 19 . Completed 1/21/60 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High Street
Delano, Calif.

[SIGNED] Ronald E. Egan
Well Driller

License No. 148282 Dated 7-15-60

87035 6-57 30M GUIN △ SPC

DWR 188 (REV. 3-54)

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e059519

Page 1 of 2

Owner's Well Number

Date Work Began 07/12/2007 Date Work Ended 9/25/2007

Local Permit Agency Tulare County Environmental Health Department

Permit Number 07-0234 Permit Date 5/23/07

DWR Use Only – Do Not Fill In

23S/27E-34

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	32	Drill conductor
32	115	Fine to coarse sand
115	125	80% fine to coarse sand, 20% clay
125	135	Coarse sand with some clay
135	155	Fine to coarse sand
155	186	Fine to coarse sand with a little clay
186	245	5% fine to medium sand, 95% brown clay
245	330	95% brown and white clay, 5% medium sand
330	345	60% brown clay, 40% fine to medium sand
345	350	Brown clay
350	370	70% brown clay, 30%fine to medium sand
370	470	80% brown clay, 20% fine to medium sand
470	483	60% white and brown clay, 40% fine to medium sand
483	493	90% white and brown clay, 10% sand
493	503	80% fine to medium sand, 20% clay
503	535	95% blue & brown clay, 5% fine sand
535	567	Blue and brown clay, with some shale and fine sand
567	785	80% blue and brown clay, 20% sand
785	816	Hard blue and brown clay with some sand
816	878	90% blue-green shale and fine sand
878	888	80% blue clay and shale with some fine sand
888	898	90% clay and hard shale with fine to medium sand
898	970	Clay and hard shale
970	1,006	Clay and hard shale with some fine sand
1006	1,038	80% blue clay with shale and fine sand
1038	1,058	70% blue clay and shale with fine to medium sand
1058	1,100	80% blue clay and shale with fine sand
1100	1,110	60% clay and shale, 40% fine to coarse sand
1110	1,130	Blue clay and shale with some fine sand

Total Depth of Boring 1832 Feet

Total Depth of Completed Well 1800 Feet

Well Owner

[redacted]

Well Location

Address Hwy 56 & 240th, 1 mile SW

City Ducor County Tulare

Latitude 35 Deg. 52 Min. 51 Sec. N Longitude 119 Deg. 2 Min. 37 Sec. W

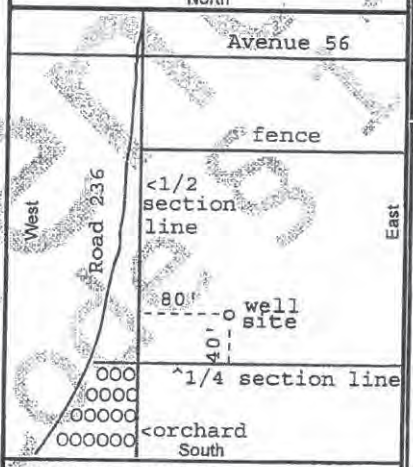
Datum WGS84 Decimal Lat. Decimal Long.

APN Book 321 Page 160 Parcel 009

Township 23S Range 27E Section 34

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 511 (Feet below surface)

Depth to Static Water Level 511 (Feet) Date Measured 09/25/2007

Estimated Yield * 2,000 (GPM) Test Type Constant Rate

Test Length 8.0 (Hours) Total Drawdown 26 (Feet)

*May not be representative of a well's long term yield. PL 537

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	20	36	Conductor	A53B	.375	30		
0	160	26	Solid	A53B	.375	16		
160	760	26	Solid	A53B	.312	16		
760	880	26	Perforated	A53B	.312	16	Millslot	0.070
880	1,000	26	Perforated	A53B	.312	16	Millslot	0.070
1,000	1,260	26	Perforated	A53B	.312	16	Millslot	0.040

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	150	Cement	10-sack
150	1,832	Filter Pack	1/4 x 10 Gravel

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 Rottman Drilling Co.
Person, Firm or Corporation

46471 N. Division Street Lancaster CA 93535-5906
Address City State Zip

Signed Matthew W Rottman 10/26/07 316599
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

Page 2 of 2

Owner's Well Number

Date Work Began 07/12/2007 Date Work Ended 9/25/2007

Local Permit Agency Tulare County Environmental Health Department

Permit Number 07-0234 Permit Date 5/23/07

State of California
Well Completion Report
Refer to Instruction Pamphlet
No. e059520

DWR Use Only – Do Not Fill In

235/27E-34

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation ⊙ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
1,130	1,200	Blue clay and shale with some fine sand
1,200	1,210	Blue clay, 30% fine to medium sand
1210	1,240	blue clay, shale, and some fine sand
1240	1,290	Fie to medium sand with some clay
1290	1,330	Blue clay with some sand
1330	1,400	Grey-blue clay and shale
1400	1,440	Fine to coarse sand with some clay
1440	1,452	70% clay with fine to medium sand
1452	1,534	Fine to coarse sand, 30%clay
1534	1,630	Fine to coarse sand, 30%clay with some silt
1630	1,693	Fine to coarse sand with some clay and silt
1693	1,724	Fine sand with some silty clay
1724	1,755	Fine to coarse sand with silty blue-green clay
1755	1,774	Blue-green silty clay with shale and fine sand
1774	1,786	Coarse sand with hard silty clay
1786	1,817	Hard blue clay with a little sand or shale
1817	1,832	Hard blue clay

Total Depth of Boring 1832 Feet

Total Depth of Completed Well 1800 Feet

Well Owner

Well Location

Address Hwy 56 & 240th, 1 mile SW

City Ducor County Tulare

Latitude 35 Deg. 52 Min. 51 Sec. N Longitude 119 Deg. 2 Min. 37 Sec. W

Datum WGS84 Decimal Lat. Decimal Long.

APN Book 321 Page 160 Parcel 009

Township 23S Range 27E Section 34

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

West SEE PAGE 1 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 and complete.

Activity

⊙ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

⊙ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 511 (Feet below surface)

Depth to Static Water Level 511 (Feet) Date Measured 09/25/2007

Estimated Yield * 2,000 (GPM) Test Type Constant Rate

Test Length 8.0 (Hours) Total Drawdown 26 (Feet)

*May not be representative of a well's long term yield. PL 537

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
1,260	1,500	26	Perforated	A53B	.312	16	Millslot	0.080
1,500	1,740	26	Perforated	A53B	.312	16	Millslot	0.070

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	150	Cement	10-sack
150	1,832	Filter Pack	1/4 x 10 Gravel

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 Rottman Drilling Co. (Person, Firm or Corporation)

46471 N. Division Street (Address) Lancaster (City) CA (State) 93535-5906 (Zip)

Signed Matthew W Rottman (C-57 Licensed Water Well Contractor) 10/26/07 (Date Signed) 316599 (C-57 License Number)

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 0925804

DWR USE ONLY — DO NOT FILL IN
23S/27E-27
STATE WELL NO./STATION NO.
LATITUDE | LONGITUDE
APN/TRS/OTHER

Owner's Well No. North
Date Work Began 6-4-04, Ended 8-20-04
Local Permit Agency Tulare County Environmental Health
Permit No. 5400542 Permit Date 5-19-04

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Reverse Circulation FLUID Poly Bore

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	60	Clay & Gravel
60	200	Sand & Clay
200	240	Sand & Little Clay
240	370	Sand & Grey Clay
370	380	Clay & Little Sand
380	390	Green Clay & Sand
390	400	Clay & Little Sand
400	410	Sand & Clay
410	440	Green Clay & Sand
440	540	Green Clay & Fine Sand
540	550	Green Clay Sand & Little Rock
550	930	Sand & Grey Clay
930	940	Grey Clay
940	960	Fine Sand & Grey Clay
960	1000	Sand Grey Clay & Shell
1000	1060	Sand & Grey Clay
1060	1090	Sand Grey Clay & Little Rock
1090	1150	Sand & Grey Clay
1150	1230	Sand Shell & Grey Clay
1230	1270	Shell & Grey Clay
1270	1290	Fine Sand & Shell & Grey Clay
1290	1380	Fine Sand & Grey Clay
1380	1430	Grey Clay
1430	1460	Fine Sand & Grey Clay
1460	1500	Grey Clay

TOTAL DEPTH OF BORING 1425 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1405 (Feet)

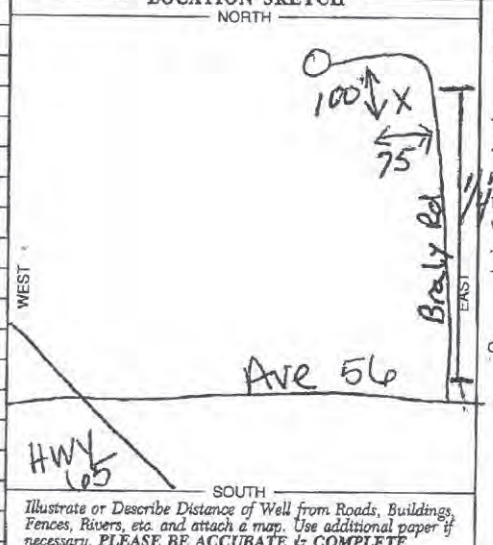
WELL OWNER

[redacted]

WELL LOCATION

Address ¼ Mile N. of Ave 56 on 15' W. of Brady
City Ducor
County Tulare
APN Book 321 Page 080 Parcel 025
Township 23 Range 27E Section 27
Lat ___ DEG. ___ MIN. ___ SEC. N
Long ___ DEG. ___ MIN. ___ SEC. W

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")

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 502 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 502 (Ft.) & DATE MEASURED 7-26-04
ESTIMATED YIELD * 550 (GPM) & TEST TYPE Constant/ Flowmeter
TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 97 (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	42			x		ASTM 139	30	5/16	
+2	1015	26	x				ASTM A 606	14	5/16	
1015	1035	26	x				ASTM A 606	14	5/16	Comp Section
1035	1385	26		x			A 606 Ful Flo	14	5/16	.060
1385	1405	26	x				ASTM A 606	14	5/16	
+2	1010	26				x	A53 Grade B	3	Sch.40	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	995	x			
995	1000		x		
1000	1425				6x16
					CCST

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 11-11-04

C-57 LICENSE NUMBER 440537

DWR 188 REV. 05-03

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

OSP 03 78836

23/27-19R1

ORIGINAL — File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. _____ (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED — Do Not Fill In

No 14164

State Well No. 19R1

Other Well No. 23S/27E-34

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any— 5

R. F. D. or Street No. E. End of Road 64

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐

Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒

Cable ☐

Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	795	16"	5/16"
780	1610	14"	1/4"

Type and size of shoe or well ring

Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
27½"-0	1610	

Size of gravel: 1/2"

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 125 mesh in., length, by 2" in.

From ft.	to ft.	Perf. per row	Rows per ft.
645	1610	14 rows on 6" centers	

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.

Were any strata sealed against pollution? ☒ Yes ☐ No If yes, note depth of strata

From 1610 ft. to 1817 ft.

Method of Sealing cemented

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☒ Yes ☐ No If yes, by whom? L.S.A. Camp Co.

Yield: 3500 gal./min. with 37 ft. draw down after 6 hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☒ Yes ☐ No

(11) WELL LOG:

Total depth 1817' ft. Depth of completed well 1610 ft.

Formations: Describe by color, character, size of material, and structure.

0	ft. to	15 ft.	Surface
15	"	130 "	Sand with strs of clay
130	"	360 "	Sandy brown clay
360	"	460 "	Sandy br. clay w/ stks of sand
460	"	696 "	Sandy blue " " " "
696	"	800 "	Sandy clay
800	"	845 "	Hard Sand
845	"	900 "	Hard Sandy Blue Clay
900	"	960 "	Sand w/ thin streaks blue clay
960	"	1127 "	Blue shale
1127	"	1220 "	Hard blue shale w/ stks hard sand
1220	"	1517 "	Blue clay w/ streaks of sand
1517	"	1817 "	Sand w/ streaks of blue clay and hard shale

CONFIDENTIAL Section 7076, Water Code

Work started 6-5-57 19 . Completed 6-21-57 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME HYLTON DRILLING CO. (Person, firm, or corporation) (Typed or printed)

Address 716 Eye Street

Bakersfield, Calif.

[SIGNED] Reese Hylton (Well Driller)

License No. 111580 Dated June 25, 1957

25489 3-56 50M QUIN ⊙ SPO DWR FORM NO. 246 (REV. 3-56)

ORIGINAL
File with DWR

Page 1 of 2

Owner's Well No. _____

Date Work Began 5-19-08, Ended 6-30-08

Local Permit Agency TULARE COUNTY

Permit No. 08-0200 Permit Date 4-23-08

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 0942277

DWR USE ONLY — DO NOT FILL IN
23S/27E-07 1/3
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD ROTARY FLUID MUD

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0 50	TOP SOIL
50 100	SAND
100 140	SANDY CLAY
140 150	SAND
150 180	CLAY
180 190	SAND
190 290	CLAY
290 310	SAND
310 350	SANDY CLAY
350 360	SAND
360 390	SANDY CLAY
390 410	SAND
410 490	SANDY CLAY
490 510	SAND
510 660	SANDY CLAY
660 690	SAND
690 730	SANDY CLAY
730 750	SAND
750 820	SANDY CLAY
820 830	CLAY
830 850	SAND
850 960	SANDY CLAY
960 980	SAND
980 1010	SHALE
1010 1050	SANDY CLAY
1050 1060	CLAY
1060 1080	SAND
1080 1090	CLAY
1090 1100	SAND
1100 1110	CLAY

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

WELL OWNER
[redacted]

WELL LOCATION
Address 1/4 M/O RD 208 1/2 M/O AVE 80
City TERRA BELLA
County TULARE
APN Book 320 Page 010 Parcel 013
Township 23S Range 27E Section 07
Lat ___ DEG. ___ MIN. ___ SEC. N Long ___ DEG. ___ MIN. ___ SEC. W

LOCATION SKETCH
NORTH
RD. 208
WEST
EAST
1/4 → X NEW WELL
AVE 80
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 ___ Public
X 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 476 (Ft.) & DATE MEASURED 8-6-08
ESTIMATED YIELD * 1300 (GPM) & TEST TYPE PUMP
TEST LENGTH 16 (Hrs.) TOTAL DRAWDOWN 551 (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 40					X	A53B	33¾	.188	
0 625		X				A53B	15¼	.312	
625 1800			X			A53B	15¼	.312	.90

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 30	X			
30 1800				¼" GRAVEL

ATTACHMENTS (✓)
___ Geologic Log
___ Well Construction Diagram
X 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 WHITTEN PUMP INC. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 502 COUNTYLINE RD CITY DELANO STATE CA ZIP 93215
Signed [signature] C-57 LICENSED WATER WELL CONTRACTOR
DATE SIGNED 8/11/2008
C-57 LICENSE NUMBER 148282

DWR 188 REV. 05-03
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM
OSP 03 78836

ORIGINAL
File with DWR

(Continued)

Page 2 of 2

Owner's Well No. _____

Date Work Began 5-19-08, Ended 6-30-08

Local Permit Agency Tulare County

Permit No. 08-0200 Permit Date _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 0942278

DWR USE ONLY — DO NOT FILL IN
23S/27E-07 | | 2Y/2
STATE WELL NO./STATION NO.
LATITUDE | LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

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

DRILLING METHOD _____ FLUID _____

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
1110	1130	SAND
1130	1140	CLAY
1140	1150	SAND
1150	1170	CLAY
1170	1180	SAND
1180	1220	CLAY
1220	1250	SAND
1250	1290	SANDY CLAY
1290	1310	CLAY
1310	1330	SAND
1330	1350	CLAY
1350	1360	SAND
1360	1440	CLAY
1440	1450	SANDY CLAY
1430	1570	SAND
1570	1580	CLAY
1580	1610	SAND
1610	1670	CLAY
1670	1720	SAND
1720	1760	SAND/ CLAY
1760	1800	SAND

TOTAL DEPTH OF BORING _____ (Feet)

TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address _____

City _____

County _____

APN Book _____ Page _____ Parcel _____

Township 23S Range 27E Section 07

Lat. _____ DEG. _____ MIN. _____ SEC. N

Long _____ DEG. _____ MIN. _____ 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 (✓)

X 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 _____ (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: 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 _____
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS _____ CITY _____ STATE _____ ZIP _____

Signed Daniel A. Whitt
C-57 LICENSED WATER WELL CONTRACTOR

8/11/2008
DATE SIGNED

C-57 LICENSE NUMBER

DWR 188 REV. 05-03

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

OSP 03 78836

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. _____

Date Work Began 01-03-01 Ended 01-30-01

Local Permit Agency TULARE COUNTY ENVIRONMENTAL HEALTH

Permit No. _____ Permit Date 01-03-01

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 783343

DWR USE ONLY — DO NOT FILL IN
23S/26E-23R1
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD ROTARY FLUID BENTONITE MUD

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION (Describe material, grain size, color, etc.)
0	260	SANDY CLAY
260	275	SAND
275	500	SANDY CLAY
500	515	SAND
515	570	SANDY CLAY
570	590	CLAY
590	635	SANDY CLAY
635	660	SAND
660	700	SANDY CLAY
700	720	SAND
720	770	SANDY CLAY
770	795	CLAY
795	875	SANDY CLAY
875	895	SAND
895	960	SANDY CLAY
960	995	SAND
995	1105	SANDY CLAY
1105	1120	SAND
1120	1145	CLAY
1145	1165	SAND
1165	1240	SANDY CLAY
1240	1265	CLAY
1265	1510	CLAY WITH SAND STREAKS
1510	1530	SAND
1530	1620	SANDY CLAY
1620	1645	SAND
1645	1670	SANDY CLAY
1670	1685	SAND
1685	1690	SANDY CLAY
1690	1720	SAND

TOTAL DEPTH OF BORING 1720 Feet
TOTAL DEPTH OF COMPLETED WELL 1700 Feet

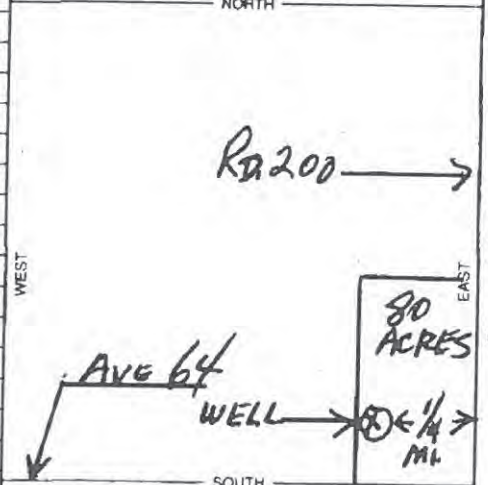
WELL OWNER

[redacted]

WELL LOCATION

Address 1-1/8 MILE NORTH OF AVENUE 56 AND
City 1/4 MILE WEST OF ROAD 200
County TULARE COUNTY ENVIRONMENTAL HEALTH
APN Book 319 Page 160 Parcel 01
Township 23S Range 26E Section 23R
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
X Domestic ___ Public
X 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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	600	27	X				A53B	15.37	.312	
600	1700	27		X			A53B	15.37	.312	.100X2-1/2
0	30					X	A252	3.75		

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE-SIZE)
0	20	X			
20	1700				1/4" GRAVEL

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 WHITTEN PUMPS, INC. (PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 502 COUNTY LINE RD. CITY DELANO STATE CA. ZIP 93215
Signed Donald E Ryan WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED 3/9/01
C-57 LICENSE NUMBER 148282

DWR 188 REV. 11/97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 0915717

DWR USE ONLY — DO NOT FILL IN
23S/26E-11
STATE WELL NO./STATION NO.
LATITUDE | LONGITUDE
APN/TRS/OTHER

Date Work Began 3/16/05, Ended 4/13/05

Local Permit Agency Environmental Health Services

Permit No. 23791 Permit Date 2/24/05

GEOLOGIC LOG

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

DRILLING METHOD _____ FLUID _____

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
50' 30"	Cond. Pipe
50 58	Clay
58 80	Sand
80 118	Clay
118 128	Sand
128 200	Clay
200 220	Sand
220 225	Clay
225 238	Sand
238 280	Clay
280 290	Sand
290 440	Sand, Clay
440 458	Sand, Rock
458 568	Sand, Clay
568 578	Sand
578 660	Clay
660 718	Sand, Rock
718 720	Clay
720 742	Sand
742 768	Clay
768 778	Sand
778 788	Clay
788 818	Sand
818 828	Clay, Sand
828 898	Sand
898 920	Clay
920 1000	Sand
1000 1069	Clay

TOTAL DEPTH OF BORING 1069 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1011 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address Ave. 56 E. to 192, 192 N. to Ave. 80,

City Ave. 80, 3/8 mi. E. On L. side of rd.

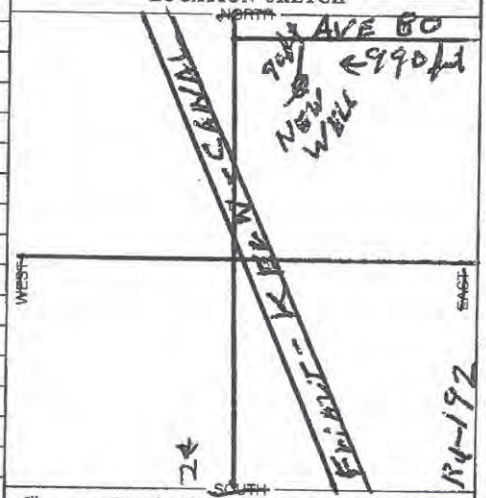
County Tulare

APN Book _____ Page _____ Parcel _____

Township 23 Range 26 Section 11

Lat _____ N Long _____ W
DEG. MIN. SEC. DEG. MIN. SEC.

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")*

USES (✓)

WATER SUPPLY
X Domestic ___ Public
X 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)
0 1011	27½						16	312	.090
									32 Row
Blank Casing - 567'									
Perf. " - 444'									
0 - 50' top sanitary seal									

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 WASCO DRILLING COMPANY, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS P. O. Box 181 CITY Wasco STATE Ca. ZIP 93280

Signed [signature] C-57 LICENSED WATER WELL CONTRACTOR

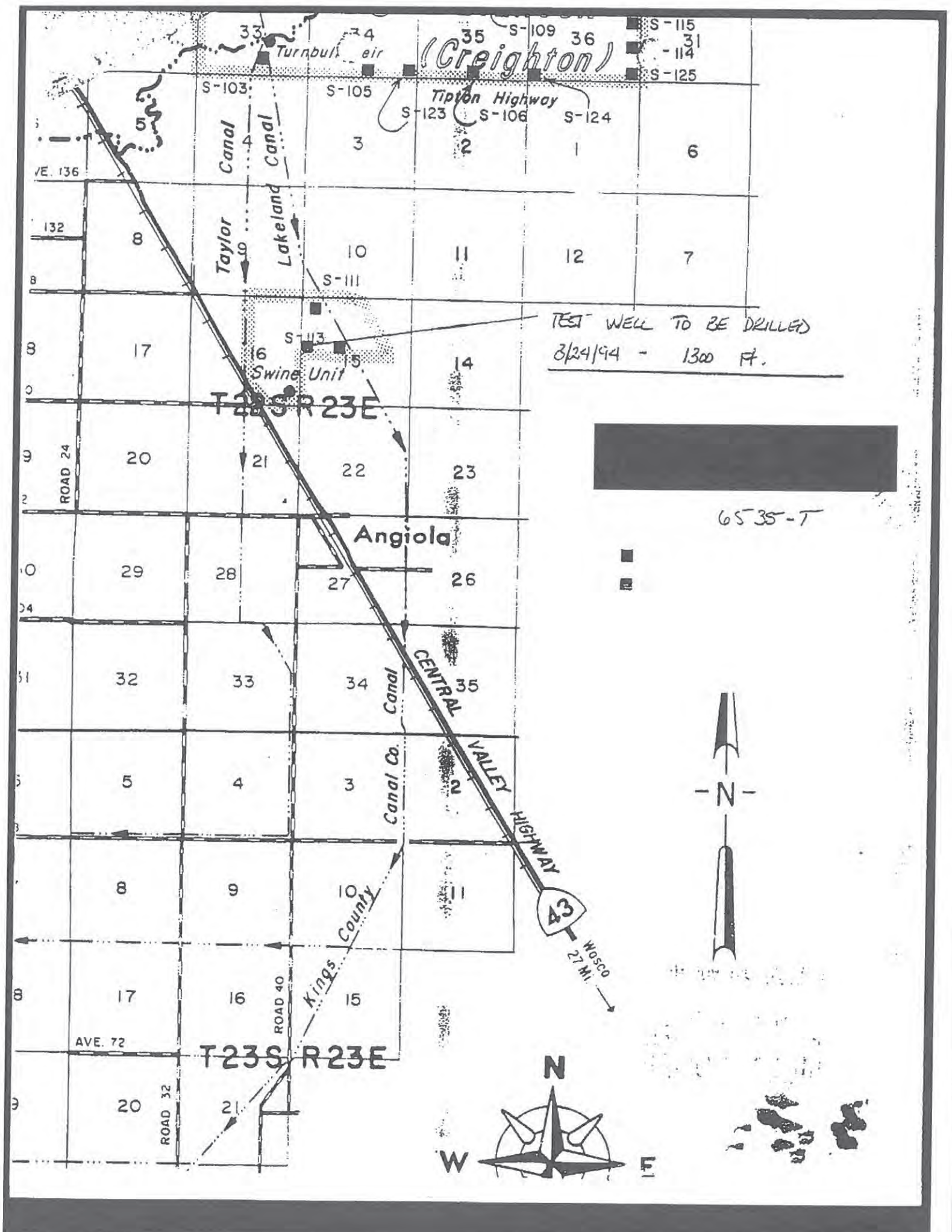
DATE SIGNED 4/18/05

C-57 LICENSE NUMBER 582658

DWR 188 REV. 05-03

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

OSP 03 78836


(Creighton)
S-103
S-105
S-109
S-115
S-114
S-125
S-123
S-106
S-124
Tipton Highway
Turnbull
Canal
Canal
Taylor
Lakeland
S-111
S-113
TEST WELL TO BE DRILLED
8/24/94 - 1300 FT.
Swine Unit
T22S R23E
Angiola
ROAD 24
CENTRAL VALLEY HIGHWAY
43
Canal Co.
Kings County
ROAD 40
ROAD 32
AVE. 72
T23S R23E
WOSCO 27 MI
65-35-T
N
W
E

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0079777

Page 1 of 1

Owner's Well Number 1

Date Work Began 10/15/2007 Date Work Ended 2/25/2008

Local Permit Agency Tulare Co. Environmental Health

Permit Number 07-0493 Permit Date 10/4/07

DWR Use Only – Do Not Fill In

22S/23E-05

State Well Number/Site Number

N Latitude W Longitude

APN/TRS/Other

Geologic Log

Orientation O Vertical O Horizontal O Angle Specify

Drilling Method Drilling Fluid

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
50	220	Fine Sand
220	280	Sand , Light Clay
280	310	Fine Sand
310	380	Fine Sand , Light Clay
380	450	Fine Sand , Light Clay
450	590	Clay
590	830	Fine Sand , Light Clay
830	970	Clay , Light Sand
970	1,050	Clay , Sand
1050	1,060	Fine Sand , Clay
1060	1,240	Sand , Clay ,

Total Depth of Boring 1240 Feet

Total Depth of Completed Well 1240 Feet

Well Owner

[redacted]

Well Location

Address West side Hwy. 43 @ Ave. 136

City Corcoran County Tulare

Latitude 36 Deg. 2 Min. 24 Sec. N Longitude 119 Deg. 30 Min. 49 Sec. W

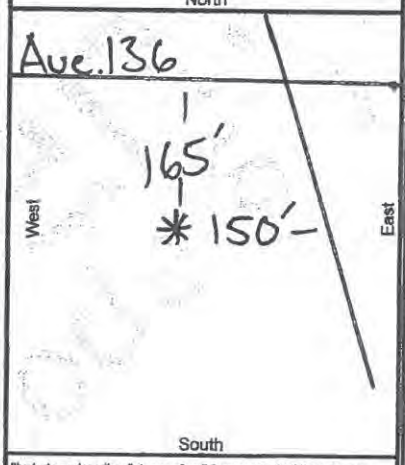
Datum Decimal Lat. Decimal Long.

APN Book 291 Page 030 Parcel 043

Township 22S Range 23E Section 5

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

- (•) New Well
- ( ) Modification/Repair
  - ( ) Deepen
  - ( ) Other
- ( ) Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

- (•) Water Supply
  - [x] Domestic [ ] Public
  - [x] Irrigation [ ] Industrial
- ( ) Cathodic Protection
- ( ) Dewatering
- ( ) Heat Exchange
- ( ) Injection
- ( ) Monitoring
- ( ) Remediation
- ( ) Sparging
- ( ) Test Well
- ( ) Vapor Extraction
- ( ) Other

Water Level and Yield of Completed Well

Depth to first water 275 (Feet below surface)

Depth to Static Water Level 275 (Feet) Date Measured 02/25/2008

Estimated Yield * 1,650 (GPM) Test Type Constant Rate

Test Length 6.0 (Hours) Total Drawdown 430 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	50	40	Conductor	A 53 Grade B	5/16	32		
0	590	26	Blank	A 53 Grade B	5/16	16		
590	700	26	Screen	A 53 Grade B	5/16	16	Milled Slots	0.060
700	910	26	Blank	A 53 Grade b	5/16	16		
910	1,240	26	Screen	A 53 Grade B	5/16	16	Milled Slots	0.060

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	100	Cement	Sanitary Seal
100	1,240	Filter Pack	6 X 12

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

7212 Fruitvale Avenue Address Bakersfield City CA State 93308 Zip

Signed C-57 Licensed Water Well Contractor

9-24-2008 Date Signed

440537 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

23/24-27 C

ORIGINAL

File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5 (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

LOCATION NOT CHECKED

Do Not Fill In

No 63272

State Well No. 27C1

Other Well No. 23S/24E-27

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

1/2 mile East of Road 88 and
1 mile North of Ave. 56.

1253 ± 0.45 mi E/o NW Cor.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐

Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒

Cable ☐

Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
600 ft.	16"	¼	single
1002 ft.	14"	¼	single

Type and size of shoe or well ring

Describe joint Butt Welded

If gravel packed

Diameter of Bore 26" from ft. to ft.: Top to bottom

Size of gravel: 3/8"

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations 1/8 X 1cc in., length, by in.

From ft. to ft.: 804 ft. to 1602 ft.

4 Perf. per row 18 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found Unknown ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 1602 ft. Depth of completed well 1602 ft.

Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	
0	3	Top Soil
3	279	Sandy Clay
279	330	Clay
330	334	Sand
334	420	Sandy Clay
420	423	Sand
423	466	Sandy Clay
466	490	Clay
490	493	Sand
493	580	Sandy Clay
580	634	Clay
634	645	Shale
645	670	Clay
670	680	Shale
680	726	Clay
726	770	Blue Clay
770	773	Sand
773	778	Shale
778	820	Blue Clay
820	823	Sand
823	879	Blue Clay
879	910	Clay
910	970	Sandy Clay
970	1029	Clay
1029	1040	Shale
1040	1095	Sandy Clay
1095	1100	Sand
1100	1125	Sandy Clay
1125	1221	Hard Shale
1221	1310	Hard Clay
1310	1320	Hard Shale
1320	1324	Sand
1324	1355	Clay
1355	1450	Hard Shale
1450	1454	Sand
1454	1503	Shale
1503	1595	Shale & Clay
1595	1602	Hard Shale

DTW = 170' 11-18-70 JD

SUPPLEMENTAL Water Code

Work started 1/28/61 19 Completed 2/18/61 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 High Street
Delano, California

[SIGNED] [signature] Well Driller

License No. 148282 Dated 3/27/61 19

57025 5-57 80M QUIN △ SPO

DWR 188 (REV. 3-54)

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

1/4

File Original with DWR

State of California
Well Completion Report

Refer to Instruction Pamphlet

No. e0094489

Page 1 of 3

Owner's Well Number

Date Work Began 03/18/2009 Date Work Ended 4/20/2009

Local Permit Agency Tulare County Environmental Health Services

Permit Number 09-0120 Permit Date 3/9/09

DWR Use Only – Do Not Fill In

24S/26E-30

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Water

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
50	80	Sand Gravel
80	120	Sand Gravel Clay
120	160	Sand
160	280	Sand Clay
280	360	Sand Gravel
360	470	Sand Gravel Clay
470	500	Clay
500	550	Sand Clay
550	640	Sand Gravel Clay
640	770	Sand Clay
770	820	Sand Gravel Clay
820	1,190	Clay Sand
1190	1,290	Clay
1290	1,330	Sand Clay
1330	1,410	Clay

Total Depth of Boring 1410 Feet

Total Depth of Completed Well 1150 Feet

Well Owner

[redacted]

Well Location

Address N / W corner of Ave 12, Rd. 168

City Delano County Tulare

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

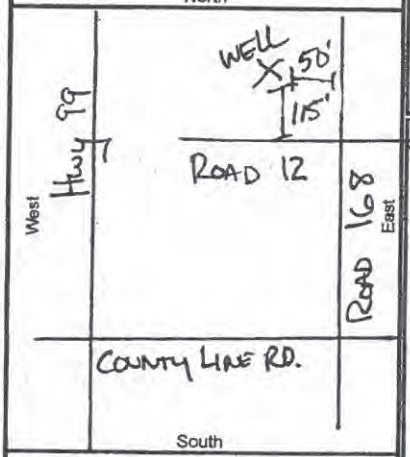
Datum Decimal Lat. Decimal Long.

APN Book 338 Page 080 Parcel 018

Township 24 S Range 26 E Section 30

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☐ Domestic ☐ Public
☑ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 223 (Feet below surface)

Depth to Static Water Level 223 (Feet) Date Measured 04/18/2009

Estimated Yield * 1,500 (GPM) Test Type Constant Rate

Test Length 12.0 (Hours) Total Drawdown 166 (Feet)

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

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	50	42	Conductor	A53Grade B	.312	30		
0	530	26	Blank	A53Grade B	.312	16		
530	600	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.090
600	620	26	StandardFlo	SF A139	.312	16	Louver	
620	640	26	Ful Flo	Ful Flo A139	.312	16	Louver	0.090
640	680	26	Standard Flo	SF A139	.312	16	Louver	

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	Cement	Annular Seal
0	1,170	Filter Pack	4x16 SRI
1,170	1,410	Fill	Backfill

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

7212 Fruitvale Ave. N Bakersfield CA 93308
Address City State Zip

Signed [signature]
C-57 Licensed Water Well Contractor

7/9/2009 Date Signed

440537 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Notice of Intent No. 159690
Local Permit No. or Date 5/20/82

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

1/3
Do not fill in
No. 49066
State Well No. 24/24-1G
Other Well No.

1) OWNER: [redacted]

2) LOCATION OF WELL: (See instructions)
County Tulare Owner's Well Number 010-13A
Well address or different from above SW corner of the NW 1/4
Township 24S Range 24E Section 1G.
Distance from cities, roads, railroads, fences: 3 3/4 miles west of Earlimart, CA and 1½ miles south of the Alpaugh-Ducor Road; Avenue 56.

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

(4) PROPOSED USE:
Domestic ( )
Irrigation (X)
Industrial ( )
Test Well ( )
Stock ( )
Municipal ( )
Other ( )

ALL LOCATION SKETCH

5) EQUIPMENT:
Rotary (X) Reverse (X)
Cable ( ) Air ( )
Other ( ) Bucket ( )

6) GRAVEL PACK:
Size XX No. Birdseye
Placement Interval 20'
From 1400 ft. To 450 ft.

7) CASING INSTALLED:
Steel (X) Plastic ( ) Concrete ( )

From ft.	To ft.	Dia. in.	Gage or Wall
0	640	16	5/16
760	780	12	5/16
		12	5/16

8) PERFORATIONS: RM - FF
Type of perforation or size of screen

From ft.	To ft.	Slot size
640	760	3/32
Reduction & comp. sect.		
780	1382	3/32

9) WELL SEAL:
Was surface sanitary seal provided? Yes (X) No ( ) If yes, to depth 50 ft.
Were strata sealed against pollution? Yes (X) No ( ) Interval 40 ft.
Method of sealing Bentonite Pellets

10) WATER LEVELS:
Depth of first water, if known Unknown ft.
Standing level after well completion 207 ft.

11) WELL TESTS:
Was well test made? Yes (X) No ( ) If yes, by whom? Driller
Type of test Pump (X) Bailer ( ) Air lift ( )
Depth to water at start of test 207 ft. At end of test 241 ft.
Discharge 2500 gal/min after 12 hours Water temperature N/A
Chemical analysis made? Yes ( ) No (X) If yes, by whom?
Electric log made? Yes (X) No ( ) If yes, attach copy to this report

(12) WELL LOG: Total depth 1405 ft. Depth of completed well 1382 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	50	Conductor
50	70	70% sand, 30% clay
70	80	50% sand, 50% clay
80	90	Sand
90	130	Brown Clay
130	170	80% sand, 20% sandy brown clay
170	190	Hard brown clay
190	210	90% brown clay 20% sand
210	220	50% clay, 50% sand
220	230	Soft brown clay
230	240	Sandy gray clay
240	250	90% sand, 10% clay
250	260	50% sandy gray clay, 50% sand
260	270	70% sandy gray clay, 30% sand
270	280	50% sandy gray clay, 50% sand
280	350	Gray clay
350	360	Gray sandy clay
360	390	70% sandy blue clay, 30% sand
390	400	60% sandy gray clay, 40% fine sand
400	410	Sandy gray clay
410	420	80% sandy gray clay, 20% sand
420	440	100% gray clay
440	480	100% soft blue clay
480	490	50% gray clay, 50% sand
490	500	70% gray clay, 30% sand
500	510	100% soft blue clay
510	520	Hard blue clay
520	530	50% sand, 50% brown clay
530	540	100% fine sand
540	550	100% clay
550	560	70% sand, 30% clay
560	570	50% sand, 50% blue & gray clay
570	600	100% sand
600	610	100% brown clay
610	620	100% sand
620	630	95% brown & blue clay, 5% sand
630	650	100% brown & blue clay
650	660	70% soft brown clay, 30% sand

DUPLICATE

Work started 5-24- 19 82 Completed 6-10- 19 82

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 Leary E. Knoll (Well Driller)
NAME Layne-Western Company, Inc. (Person, firm, or corporation) (Typed or printed)
Address P.O.Box 3216
City Bakersfield, CA Zip 93385
License No. 407409 Date of this report July 6, 1982

WR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

Page ___ of ___

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 489856

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

Owner's Well No. 18E
Date Work Began 7-15-91 Ended 7-17-91
Local Permit Agency Tulare
Permit No. 369745 Permit Date 7-12-91

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*	DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION
0 4	Top Soil	294-298	sand
4 9	clay	298-301	clay
9 15	sand	310-310	sand
15 21	clay	310-316	clay
21 37	sand	316-336	sand
37 39	clay	336-347	clay
39 42	sand	347-355	sand
42 63	clay	355-400	clay
63 74	sand	400-408	sand
74 85	clay	408-411	clay
85 91	sand	411-426	sand
91 97	clay	426-431	clay
97 101	sand	431-435	sand
101 105	clay	435-440	clay
105 125	sand	440-452	sand
125 131	clay	452-669	clay
131 142	sand	669-716	sand
142 176	clay	716-722	clay
176 196	sand	722-731	sand
196 222	clays	731-747	clay
222 228	sand	747-765	sand
228 244	clay	765-771	clay
244 250	sand	771-775	sands
250 256	clay	775-800	clay
256 262	sand	800-807	sand
262 270	clay	807-820	clay
270 274	sand	820-825	sand
274 277	clay	825-830	clay
277 281	sand	830-852	sand
281 294	clay	852-863	clay
294 298	sand	863-868	

TOTAL DEPTH OF BORING 960 (Feet)
TOTAL DEPTH OF COMPLETED WELL 930 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address Ave 112-½ mi N of Rd 56-2200 ft S.
City Corcoran
County Tulare
APN Book Echoe Page 78 Parcel 293-240-03
or Township 22S Range 23 E Section 26
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

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

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
___ Public
X Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Reverse FLUID Natural

WATER LEVEL & YIELD OF COMPLETED WELL

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	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 50	38			X		steel	30	1/4	
0 560	30	X				steel	16	5/16	
560 580	30	Compression section 18/16 5/16							
580 930	30		X			louver	16	5/16	.070

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 50	X			Conductor
0 540				5/16x4
540 550		X		Tablets
550 930				5/16x4

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 Graben Well Drilling, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 12522 9th Ave. Hanford, CA 93230
CITY STATE ZIP
Signed ___ 8-1-91 289489
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01763

TRIPLICATE
Owner's Copy

Page ___ of ___

Owner's Well No. ~~18E Continued~~

Date Work Began _____ , Ended _____

Local Permit Agency _____

Permit No. _____ Permit Date _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 489857

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

GEOLOGIC LOG

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

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
863	868	sand
868	874	clay
874	879	sand
879	890	clay
890	902	sand
902	912	clay
912	920	sand
920	930	clay
930	938	sand
938	960	clay

TOTAL DEPTH OF BORING _____ (Feet)

TOTAL DEPTH OF COMPLETED WELL _____ (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address _____

City _____

County _____

APN Book _____ Page _____ Parcel _____

or Township _____ Range _____ Section _____

or Latitude _____ DEG. MIN. SEC. NORTH Longitude _____ DEG. MIN. SEC. WEST

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

___ Public

___ Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD _____ FLUID _____

WATER LEVEL & YIELD OF COMPLETED WELL

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 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 _____
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS _____ CITY _____ STATE _____ ZIP _____

Signed _____ DATE SIGNED _____ C-57 LICENSE NUMBER _____
WELL DRILLER/AUTHORIZED REPRESENTATIVE

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01764

22/23-23J1

CAL T7-54

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WELL SCHEDULE

CALIFORNIA

COUNTY: Tulare

AREA: Dunlap - Sanger

Date 12-11, 1957 Well No. 22/23-23J1

Reported by R. L. Klausing Other No. Southlake # 14E

Source of data E. T. Other No.

Well No. 22/23-23J1

1. *Location:* Map Visalia Photo 5-452a
2. *Owner* [redacted]
   Former
   Driller Address
3. *Topography* Plain
4. *Altitude:* Lsd 211 ft; how obtained Topo; MP ft.
5. *Type:* Dug, cable, rotary, auger, jet Mc Cullough; Finish C. P.
6. *Depth:* Rept. 1788 ft; Meas. ft; Obstruction ft.
7. *Casing:* Diam. 16 in. to 597 ft; 12 in. to 1768 ft. Type
   Perforations 597 to 1788
8. *Aquifers* 96, 66 Oct 9, 1958
9. *Water Oil level* 120.25 ft Stdg; rept Pmpg; meas 12-11 1957 above below T.C.
   which is 1.0 ft above below Lsd
   Access on North side
10. *Pump:* Type Peerless Sub; Dschg diam 10 in; length 25 ft
    Power U. S. Elec; HP 100; Meter No. 270917
11. *Yield:* Flow gpm, pump gpm, meas, rept, est.
    Drawdown ft after min hrs pmpg. Specific cap.
12. *Use:* Dom, Stock, PS, Rlt, Ind, Irr, Obs, Destroyed, Unused, Test,
13. *Quality* Temp °F 19
    Taste, odor, color Sampled 19
14. Other data: log, analyses, water levels, electric log
15. *Remarks:*

14E

PLOTTED FEB 1970

Well No. 22/23-23J1

Location: N. 44 unit N. 1 77

0.45 ft mile north and 90 ft mile west of SE corner sec. 23

Remarks: Sanger # 4304

10-10 fld. ch'd. DTW-138' PERMISSION TO MEASURE PER FOR: WORKING LAND, WHO VERIFIED DEPTH, PERFS & APPROX. DATE DRILLED T.

MOTOR # 1012417

AWD01664

24/24-4

DUPLICATE
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 5 (Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA 3437

LOCATION NOT CHECKED

Do Not Fill In No. 63276 4E2 U8E2

State Well No.
Other Well No. 24S/24E-4

(1) OWNER: [redacted]

(2) LOCATION OF WELL:
County Tulare Owner's number, if any—
R. F. D. or Street No.
1/2 mile North of the town of Allensworth and 300 ft. West of Santa Fe Railway tracks.

(3) TYPE OF WORK (check):
New well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic [ ] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [X] Other [ ]

(5) EQUIPMENT:
Rotary [X]
Cable [ ]
Dug Well [ ]

(6) CASING INSTALLED:
SINGLE [ ] DOUBLE [X]
From ft. to ft. Diam. 14" Gage or Wall 1/4"
Top to 1,200 ft.

If gravel packed
Diameter of Bore 26" from ft. to ft.
Top to bottom

Type and size of shoe or well ring
Describe joint Butt welded
Size of gravel 3/8"

(7) PERFORATIONS:
Type of perforator used Machine
Size of perforations 1/8 x 1 cc in., length, by in.
From ft. in. ft. 4 Perf. per row 18 Rows per ft.
798 ft. to 1,200 ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? [ ] Yes [X] No To what depth ft.
Were any strata sealed against pollution? [ ] Yes [X] No If yes, note depth of strata
From ft. to ft.
Method of Sealing

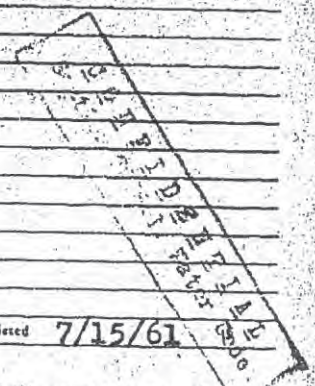
(9) WATER LEVELS:
Depth at which water was first found Unknown ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:
Was a pump test made? [ ] Yes [X] No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? [ ] Yes [X] No
Was electric log made of well? [ ] Yes [X] No

(11) WELL LOG:
Total depth 1,200 ft. Depth of completed well 1,200 ft.
Formation: Describe by color, character, size of material, and structure.

0 to	35	Sandy Clay Top Soil
35	218	Clay
218	300	Sandy Clay
300	369	Clay
369	482	Shale
482	487	Sand
487	610	Clay
610	616	Hard Clay
616	630	Sandy Clay
630	638	Hard Clay
638	787	Clay
787	813	Shale
813	935	Clay
935	995	Sandy Clay
995	1015	Clay
1015	1025	Sand
1025	1089	Clay
1089	1104	Hard Shale
1104	1178	Clay
1178	1200	Shale

DTW = 166 - 11-5-70 J-D



Work started 6/27/61 19 Completed 7/15/61

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

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)
Address 1744 High Street
Delano, California

[SIGNED] [signature] Well Owner

License No. 148282 Dated January 31, 1962

STOCK S-87 SON QUIN △ SPO

DWR 188 (REV. 3-54)

24/23-31N1

ORIGINAL
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
No 118716

State Well No.
Other Well No. 24S/23E-31N1

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any— #20

R. F. D. or Street No.

SW Corner S 31, T24 S, R23 E

65'N & 85' E/o SW Cor.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From	ft. to	ft.	Diameter	Gage or Wall
0	400	16"OD		1/4
400	1190	14"OD		"

Type and size of shoe or well ring

Describe joint Collared with fillet weld

If gravel packed

Diameter of Bore	gpm	ft.	to ft.
25 1/2		top	to bottom

Size of gravel: 1/4

(7) PERFORATIONS:

Type of perforator used Machine

Size of perforations .100"X2 in., length, by 6cc in.

From 490 ft. to 1190 ft. 2 Perf. per row 14 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found Unknown ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☒ Yes ☐ No

(11) WELL LOG:

Total depth ft. Depth of completed well ft.

Formation: *Describe by color, character, size of material, and structure.*

0	ft. to 4	ft.	top soil
4	" 92	"	sandy clay
92	"304	"	sandy clay
304	"680	"	sandy clay
680	"684	"	sand
684	"723	"	sandy clay
723	"843	"	Sandy clay
843	"873	"	clay
873	"934	"	sandy clay
934	"1055	"	hard shale
1055	"1186	"	hard clay
1186	"1190	"	hard shale

PRM 10/70 292' TS+JD

C. Clay = 381'

CONFIDENTIAL
Water Code Sec. 7060

Work started Sept. 7 19 66. Completed Sept. 19 19 66

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, firm, or corporation) (Typed or printed)

Address 1744 Inyo Street
Delano, California

[SIGNED] [signature]
Well Driller

License No. 148282 Dated November 18, 1966

ORIGINAL 24/23-22R2

File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.______ (Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In

Nº 116291

State Well No. 22R2

Other Well No. 24S/23E-22

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

Southeast corner sec 22 ~~SR 23~~
township 24S Range 23E

220'N & 75'N/D SE Cor.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	500	16	1/4
500	1200	14	1/4

16" OD to 14" OD
Transition Joint Slip jt.

Type and size of shoe or well ring

Describe joint collared W/ fillet weld

If gravel packed

Diameter of Bore 25½ from ft. to ft.

top to bottom

Size of gravel:

(7) PERFORATIONS:

Type of perforator used machine

Size of perforations .100 x 2 in., length, by 6cc in.

From 500 to 1200 ft. 2 Perf. per row 1ft Rows per ft.

[illegible]CTION:

[illegible]vided? ☐ Yes ☒ No To what depth ft.

[illegible]? ☐ Yes ☒ No If yes, note depth of strata

ft.

ft.
ft.
ft.

[illegible]hom)

ft. draw down after hrs.

a chemical analysis made? ☐ Yes ☒ No

No

SAN [illegible] APR [illegible] RECE[illegible]

(11) WELL LOG:

Total depth 1205 ft. Depth of completed well 1205 ft.

Formation: Describe by color, character, size of material, and structure.

From ft.	to ft.	Formation
0	4	top soil
4	35	sandy clay
35	78	sandy clay
78	121	sandy clay
121	329	sandy clay
329	540	sandy clay
540	664	blue clay
664	874	clay hard
874	900	sandy clay
900	904	sand
904	934	clay
934	1058	shale & clay
1058	1146	hard shale
1146	1205	blue sand

DTW = 244' 10/30/70 TS+JD

CONFIDENTIAL
Water Code Sec. 13752

Work started 10/31/66 19 , Completed 11/14/66 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc. (Person, firm, or corporation) (Typed or printed)

Address 1744 Inyo Street
Delano, California

[SIGNED] [signature] Well Driller

License No. 148282 Dated 4/22/67, 19

24/23-22R2

ORIGINAL
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In
No. 116291
State Well No. 22R2
Other Well No. 24S/23E-22

(1) OWNER:

[redacted]

(2) LOCATION OF WELL:

County Tulare Owner's number, if any—

R. F. D. or Street No.

Southeast corner sec 22 ~~NE~~ ~~SW~~
township 24S Range 23E

220'N & 75'W/O SE Cor.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	500	16	1/4
500	1200	14	1/4
"	"	"	"
16" OD to 14" OD			
"Transition" Joint Slip			

Type and size of shoe or well ring

Describe joint collared w/ fillet weld

If gravel packed

Diameter of Bore 25½ from ft. to ft.
top to bottom
Size of gravel: jt.

(7) PERFORATIONS:

Type of perforator used machine
Size of perforations .100 x 2 in., length, by 6cc in.
From 500 to 1200 ft. 2 Perf. per row 1ft Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found unknown ft.
Standing level before perforating ft.
Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☒ No
Was electric log made of well? ☒ Yes ☐ No

(11) WELL LOG:

Total depth 1205 ft. Depth of completed well 1205 ft.

Formation: Describe by color, character, size of material, and structure.

0 ft. to 4 ft.	top soil
4 " 35 "	sandy clay
35 " 78 "	sandy clay
78 " 121 "	sandy clay
121 " 329 "	sandy clay
329 " 540 "	sandy clay
540 " 664 "	blue clay
664 " 874 "	clay hard
874 " 900 "	sandy clay
900 " 904 "	sand
904 " 934 "	clay
934 " 1058 "	shale & clay
1058 " 1146 "	hard shale
1146 " 1205 "	blue sand

OTW = 244' 10/30/70 TS+SD

CONFIDENTIAL
Water Code Sec. 13752

Work started 10/31/66 19 . Completed 11/14/66 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Whitten Pumps, Inc.
(Person, Firm, or corporation) (Typed or printed)

Address 1744 Inyo Street
Delano, California

[SIGNED] [signature]
Well Driller

License No. 148282 Dated 4/22/67, 19

07845 5-67 3BM GUIN Ⓓ △ SPO

DWR 188 (REV. 3-54)

ORIGINAL
File with DWR

Page 1 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E072308

DWR USE ONLY — DO NOT FILL IN
22S/23E-22 1/3
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. 8104
Date Work Began 1/28/2008, Ended 2/1/2008
Local Permit Agency TULARE COUNTY HEALTH DEPT
Permit No. 07-0141 Permit Date 4/9/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID WATER

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	5	CLAY TOP SOIL
5	8	COARSE SAND
8	12	SILTY BROWN CLAY
12	16	COARSE SAND
16	95	SILTY BROWN CLAY
95	175	SILTY TAN CLAY WITH SAND
175	285	SILTY BLUE GRAY CLAY WITH SAND
285	350	SAND WITH SILTY BLUE GRAY CLAY STREAKS
350	365	SILTY BLUE GRAY CLAY
365	420	SAND WITH SILTY BLUE GRAY CLAY STREAKS
420	435	SILTY BLUE GRAY CLAY
435	458	SAND
458	500	SILTY BLUE GRAY CLAY
500	630	SOFT BLUE GRAY CLAY
630	685	SAND WITH SILTY BLUE GRAY CLAY STREAKS
685	740	SAND
740	745	BLUE GRAY CLAY
745	810	SAND
810	865	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS
865	940	BLUE GRAY CLAY WITH SAND STREAKS
940	995	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS
995	1035	SAND
1035	1055	BLUE GRAY CLAY
1055	1140	BLUE GRAY CLAY WITH SAND STREAKS
1140	1196	SAND
1196	1205	BLUE GRAY CLAY

TOTAL DEPTH OF BORING 1090 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1050 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address .15 MI NOF AVE 112 & 250' WOF HWY 43
City CA
County TULARE
APN Book 291 Page 070 Parcel 010
Township 22 S Range 23 E Section 22
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 320 (Ft.) & DATE MEASURED 4/19/2008
ESTIMATED YIELD * 1000 (GPM) & TEST TYPE
TEST LENGTH — (Hrs.) TOTAL DRAWDOWN 30 (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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	360	28					ACCESS TB	2	SCH 40	
0	400	28	✓				ASTM-135	16	.312	
400	510	28	✓				ASTM-135	16	.375	
510	520	28					COMP SEC	16		
520	670	28	✓				ASTM-135	16	.312	
670	850	28		✓			DBL MILLSL	16	.312	.060

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	480	✓			SAND SLURRY
480	1090			✓	SRI#8 SAND

ATTACHMENTS (✓)
— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 EATON DRILLING CO.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
20 WEST KENTUCKY AVE WOODLAND CA 95695
ADDRESS CITY STATE ZIP
Signed [signature] 04/29/08
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED
C57 A HIC - 13378
C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 2 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E072308

DWR USE ONLY — DO NOT FILL IN
22S/23E-22 1 3
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. 8104
Date Work Began 1/28/2008, Ended 2/1/2008
Local Permit Agency TULARE COUNTY HEALTH DEPT
Permit No. 07-0141 Permit Date 4/9/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID WATER

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	5	CLAY TOP SOIL
5	8	COARSE SAND
8	12	SILTY BROWN CLAY
12	16	COARSE SAND
16	95	SILTY BROWN CLAY
95	175	SILTY TAN CLAY WITH SAND
175	285	SILTY BLUE GRAY CLAY WITH SAND
285	350	SAND WITH SILTY BLUE GRAY CLAY STREAKS
350	365	SILTY BLUE GRAY CLAY
365	420	SAND WITH SILTY BLUE GRAY CLAY STREAKS
420	435	SILTY BLUE GRAY CLAY
435	458	SAND
458	500	SILTY BLUE GRAY CLAY
500	630	SOFT BLUE GRAY CLAY
630	685	SAND WITH SILTY BLUE GRAY CLAY STREAKS
685	740	SAND
740	745	BLUE GRAY CLAY
745	810	SAND
810	865	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS
865	940	BLUE GRAY CLAY WITH SAND STREAKS
940	995	SAND WITH BRITTLE BLUE GRAY CLAY STREAKS
995	1035	SAND
1035	1055	BLUE GRAY CLAY
1055	1140	BLUE GRAY CLAY WITH SAND STREAKS
1140	1196	SAND
1196	1205	BLUE GRAY CLAY

TOTAL DEPTH OF BORING 1090 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1050 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address .15 MI NOF AVE 112 & 250' WOF HWY 43
City CA
County TULARE
APN Book 291 Page 070 Parcel 010
Township 22 S Range 23 E Section 22
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 320 (Ft.) & DATE MEASURED 4/19/2008
ESTIMATED YIELD * 1000 (GPM) & TEST TYPE
TEST LENGTH — (Hrs.) TOTAL DRAWDOWN 30 (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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
850	940	28	✓				ASTM-135	16	.312	
940	960	28		✓			DBL MILLSL	16	.312	.060
960	990	28	✓				ASTM-135	16	.312	
990	1030	28		✓			DBL MILLSL	16	.312	.060
1030	1050	28	✓				ASTM-135	16	.312	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	480	✓			SAND SLURRY
480	1090			✓	SRI#8 SAND

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

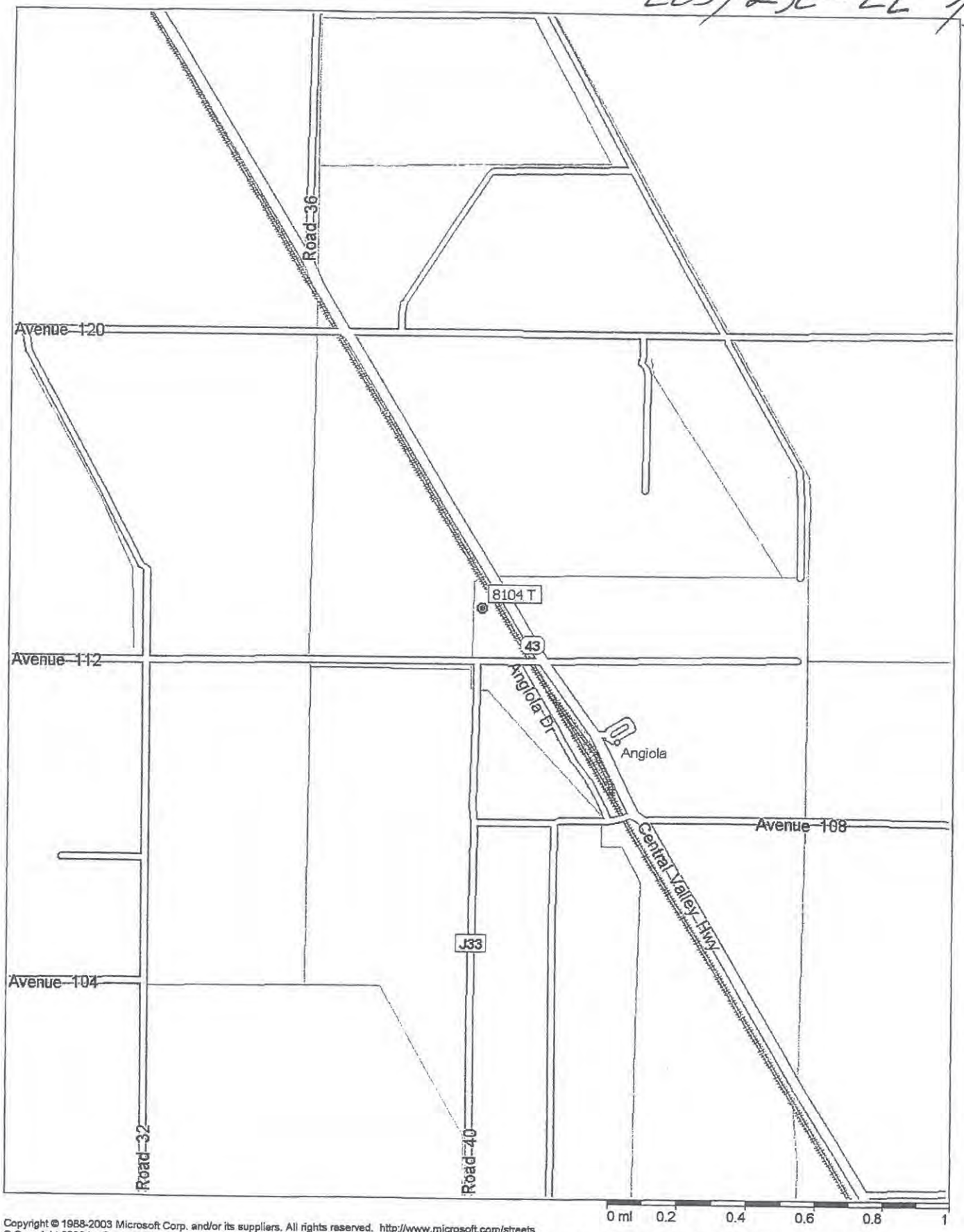
CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME EATON DRILLING CO.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
20 WEST KENTUCKY AVE ADDRESS WOODLAND CITY CA STATE 95695 ZIP
Signed Mark Downes WELL DRILLER/AUTHORIZED REPRESENTATIVE
04/29/08 DATE SIGNED
C57 A HIC - 13378 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

225/23E-22 3/3



W16

File Original with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

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

Page 1 of 1
Owner's Well No. Well #16 or Layne Well #2 No. e077033
Date Work Began 5/8/08 Ended
Local Permit Agency Tulare County Env Health Services Div
Permit No. 08-0222 Permit Date 5/8/08

GEOLOGIC LOG

ORIENTATION (X) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Reverse Rotary FLUID

DEPTH FROM SURFACE FL to Ft.		DESCRIPTION *Describe material, grain size, color, etc.*
60	260	sand, clay
260	300	clay, sand
300	310	clay,sand, little, grvel
310	320	clay, sand
320	1330	sand, clay

TOTAL DEPTH OF BORING 1332 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1312 (Feet)

WELL OWNER

[redacted]
CITY STATE ZIP

WELL LOCATION

Address Ave 112 & Rd 40
City Corcoran CA 93212
County Tulare County
APN Book 311 Page 020 Parcel 010
Township 23S Range 23E Section 4
Latitude 35 DEG. 57 MIN. 26.38 SEC. NORTH Longitude 119 DEG. 29 MIN. 1.7 SEC. WEST

LOCATION SKETCH

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

ACTIVITY (X)

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

PLANNED USES (X)

WATER SUPPLY
X Domestic ___ Public
X 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 Unknown (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 321.93 (Ft.) & DATE MEASURED Late July through 8/1/08
ESTIMATED YIELD 1685 (GPM) & TEST TYPE pump
TEST LENGTH 57 (Hrs.) TOTAL DRAWDOWN 163.56 (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	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (inches)
0 – 40	36			X		Steel	30	.375	
0 – 870	26	X				Steel	16	.375	
870 – 910	26		X			Steel	16	.312	Full Flow .060
910 – 930	26	X				Steel	16	.375	
930 – 990	26		X			Steel	16	.312	VMS .060
990 – 1044	26	X				Steel	16	.375	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (X)	BENTONITE (X)	FILL (X)	FILTER PACK (TYPE/SIZE)
0 – 500	X			
500 – 510				Hole Plug
510 – 1312			X	Gravel Pack 1/4 X 10

ATTACHMENTS (X)

X Geologic Log
X 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 Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 11001 Etiwanda Ave CITY Fontana STATE CA ZIP 92337
Signed [signature] DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED 5/28/08
C-57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD02954

TRIPLICATE
Owner's Copy

Page 1 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. E054498

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

Owner's Well No. G-17 = old 6-28 new
Date Work Began 9/13/2007, Ended 10/9/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0438 Permit Date 9/11/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE FL	to FL	DESCRIPTION *Describe material, grain, size, color, etc.*
0	10	SANDY BROWN CLAY
10	12	COARSE SAND
12	15	SANDY BROWN CLAY
15	34	SANDY BROWN CLAY & GRAVEL
34	41	COARSE SAND
41	50	BROWN CLAY
50	73	SAND
73	76	GRAVEL
76	85	CLAY
85	92	HARD CLAY
92	104	SOFT CLAY
104	116	SANDY HARD CLAY
116	124	SAND
124	136	HARD CLAY
136	141	SANDY CLAY
141	149	CLAY
149	158	SANDY CLAY
158	183	CLAY
183	194	SAND & GRAVEL
194	199	COARSE SAND
199	209	CLAY
209	235	SAND
241	268	SANDY CLAY
268	310	CLAY
310	332	SANDY CLAY
332	356	SAND & GRAVEL
356	365	SAND
365	371	CLAY
371	377	GRAVEL & COARSE SAND
377	384	CLAY

TOTAL DEPTH OF BORING 1120 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1120 (Feect)

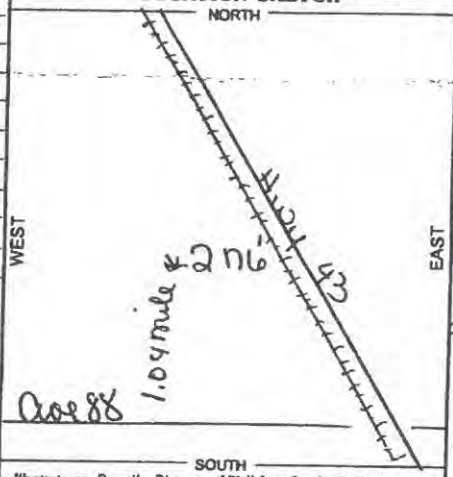
WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 003
Township 22 S Range 23 E Section 34
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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

CASING (S)

DEPTH FROM SURFACE FL	to FL	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	760	30"	✓				STEEL	18"	3/8"	
760	762	30"	✓				STEEL	18" - 16	3/8"	
762	1122	28"		✓			STEEL	16"	3/8"	.050 SLO

ANNULAR MATERIAL

DEPTH FROM SURFACE FL	to FL	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	700			✓	1/4 X #8
700	1120			✓	6 x 16 / 1/4 # 1

ATTACHMENTS (✓)
— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 8650 E. LACEY BLVD. CITY HANFORD STATE CA ZIP 93230-4844
Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 10/12/07
C-57 LICENSE NUMBER 548214

DWR 188 REV. 11-97
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD02578

TRIPLICATE
Owner's Copy

Page 2 of 3

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E054498

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./ STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Owner's Well No. G-17

Date Work Began 9/13/2007, Ended 10/9/2007

Local Permit Agency TULARE COUNTY

Permit No. 07-0438 Permit Date 9/11/2007

GEOLOGIC LOG

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

DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE FL	to FL	DESCRIPTION *Describe material, grain, size, color, etc.*
384	399	COARSE SAND & GRAVEL
399	411	SANDY CLAY
411	416	SAND
416	436	CLAY
436	455	COARSE SAND
455	482	SANDY CLAY
482	547	CLAY
547	553	SAND
553	594	CLAY
594	607	SANDY CLAY
607	663	CLAY
663	672	SANDY CLAY
672	718	CLAY
718	740	SANDY CLAY
740	786	SAND
786	810	SANDY CLAY
810	826	CLAY
826	847	SAND
847	861	COARSE SAND
861	884	SANDY CLAY
884	903	CLAY
903	941	SAND
941	960	CLAY
960	987	COARSE SAND
987	1004	SANDY CLAY
1004	1011	SAND
1011	1025	COARSE SAND
1025	1041	CLAY
1041	1058	SAND
1058	1064	CLAY

TOTAL DEPTH OF BORING 1120 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1120 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112

City ANGIOLA CA

County TULARE

APN Book 291 Page 110 Parcel 003

Township 22 S Range 23 E Section 34

Latitude ___ DEG. ___ MIN. ___ SEC. ___ DEG. ___ MIN. ___ SEC.

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 ___ (FL) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL ___ (FL) & DATE MEASURED ___

ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (FL)

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

CASING (S)

DEPTH FROM SURFACE FL	to FL	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	760	30"	✓				STEEL	18"	3/8"	
760	762	30"	✓				STEEL	18" - 16	3/8"	
762	1122	28"		✓			STEEL	16"	3/8"	.050 SLO

ANNULAR MATERIAL

DEPTH FROM SURFACE FL	to FL	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	700			✓	1/4 X #8
700	1120			✓	6 x 16 / 1/4 # 1

ATTACHMENTS (✓)

— Geologic Log

✓ Well Construction Diagram

— Geophysical Log(s)

— Soil/Water Chemical Analysis

— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP

Signed ___ 10/12/07 548214
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

AWD02579

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E054498

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

Owner's Well No. G-17
Date Work Began 9/13/2007, Ended 10/9/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0438 Permit Date 9/11/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE FL	to FL	DESCRIPTION *Describe material, grain, size, color, etc.*
1064	1081	COARSE SAND
1081	1100	SANDY CLAY
1100	1118	SAND
1118	1120	CLAY

TOTAL DEPTH OF BORING 1120 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1120 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address RD 40 & AVE 112
City ANGIOLA CA
County TULARE
APN Book 291 Page 110 Parcel 003
Township 22 S Range 23 E Section 34
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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

CASING (S)

DEPTH FROM SURFACE FL	to FL	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	36"	5/16"	
0	760	30"	✓				STEEL	18"	3/8"	
760	762	30"	✓				STEEL	18" - 16	3/8"	
762	1122	28"		✓			STEEL	16"	3/8"	.050 SLO

ANNULAR MATERIAL

DEPTH FROM SURFACE FL	to FL	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	700			✓	1/4 X #8
700	1120			✓	6 x 16 / 1/4 # 1

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed _____ 10/12/07 548214
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

AWD02580

File Original with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Owner's Well No. 3 / E-22 No. e0078570

Date Work Began 5/19/08 Ended 10/3/08

Local Permit Agency Tulare County Environmental Health Division

Permit No. 08-0248 Permit Date 5/19/08

GEOLOGIC LOG

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

DRILLING METHOD Reverse Rotary FLUID ___

DEPTH FROM SURFACE FL	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
40	60	Sand, pebbles
60	360	Sand
360	370	Sand, little clay
370	380	Sand, Clay
380	390	Sand, little clay
390	720	Sand, little clay
720	880	Clay, sand
880	1010	Sand, Clay
1010	1150	Clay, sand

RECEIVED
OCT 14 2008
By

TOTAL DEPTH OF BORING 1160 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1140 (Feet)

WELL OWNER

[redacted]

CITY STATE ZIP

WELL LOCATION

Address 1.8 Mi E Hwy 43 off Ave 108

City Corcoran Ca 93212 (STATE / ZIP)

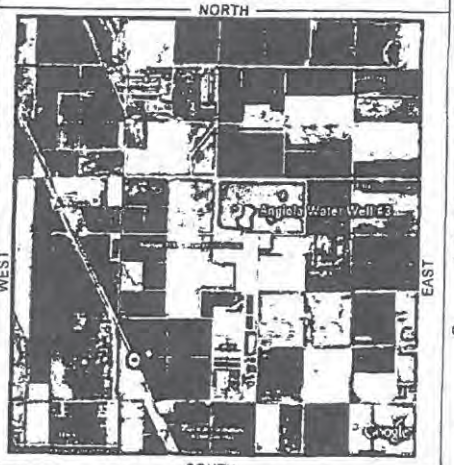
County Tulare County

APN Book 293 Page 230 Parcel 01

Township 22S Range 23E Section 25

Latitude 35 59 8.66 NORTH (DEG. MIN. SEC.) Longitude 119 26 30.18 WEST (DEG. MIN. SEC.)

LOCATION SKETCH



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

ACTIVITY (X)

X NEW WELL

___ MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USES (X)

WATER SUPPLY

X 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 Unknown (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 328.95 (Ft.) & DATE MEASURED 9/30/08-10/3/08

ESTIMATED YIELD 2075 (GPM) & TEST TYPE Step and constant pump

TEST LENGTH 35 (Hrs.) TOTAL DRAWDOWN 74.08 (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	TYPE (-) SCREEN CONDUCTOR	TYPE (-) FILL PIPE	MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	40	40		X		Steel	30	.375	
0	640	26	X			Steel	16	.375	
640	700	26		X		Steel	16	.312	.060 Full Flow
700	720	26	X			Steel	16	.375	
720	800	26		X		Steel	16	.312	.060 Full Flow
800	860	26	X			Steel	16	.375	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (X)	TYPE BENTONITE (X)	TYPE FILL (X)	FILTER PACK (TYPE/SIZE)
0	500	X			8 Sac Sand Slurry
500	510				Hole Plug
510	1140			X	1/4 x 10 Greenfield Gravel Pack

ATTACHMENTS (X)

X Geologic Log

X 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 Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 11001 Etiwanda Ave CITY Fontana STATE Ca ZIP 92337

Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/7/08

C-57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01861

File Original with DWR

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page 2 of 2

Owner's Well No. 3 / E-22 No. e0078570

Date Work Began 5/19/08 Ended 10/3/08

Local Permit Agency Tulare County Environmental Health Division

Permit No. 08-0248 Permit Date 5/19/08

GEOLOGIC LOG

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

DRILLING METHOD Reverse Rotary FLUID ___

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

WELL OWNER

[redacted]

CITY STATE ZIP

WELL LOCATION

Address 1.8 Mi E Hwy 43 off Ave 108

City Corcoran STATE Ca ZIP 93212

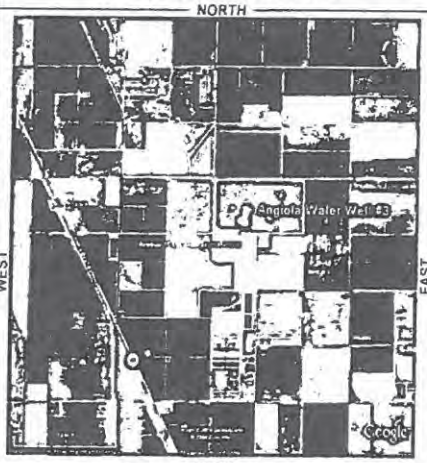
County Tulare County

APN Book 293 Page 230 Parcel 01

Township 22S Range 23E Section 25

Latitude 35 DEG. 59 MIN. 8.66 SEC NORTH Longitude 119 DEG. 26 MIN. 30.18 SEC WEST

LOCATION SKETCH



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

ACTIVITY (X)

X NEW WELL

___ MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

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

PLANNED USES (X)

WATER SUPPLY

X Domestic ___ Public

___ Irrigation ___ Industrial

___ MONITORING

___ TEST WELL

___ CATHODIC PROTECTION

___ HEAT EXCHANGE

___ DIRECT PUSH

___ INJECTION

___ VAPOR EXTRACTION

___ SPARGING

___ REMEDIATION -

___ OTHER (SPECIFY)

TOTAL DEPTH OF BORING 1160 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1140 (Feet)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER Unknown (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 328.95 *(Ft.)* & DATE MEASURED 9/30/08-10/3/08

ESTIMATED YIELD 2075 (GPM) & TEST TYPE Step and constant pump

TEST LENGTH 35 (Hrs.) TOTAL DRAWDOWN 74.08 *(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	TYPE (-) SCREEN	TYPE (-) CON-DUCTOR	TYPE (-) FILL PIPE	MATERIAL / GRADE	OUTSIDE DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
860 900	26		X			Steel	16	.312	.060 Full Flow
900 940	26	X				Steel	16	.375	
940 960	26		X			Steel	16	.312	.060 Full Flow
960 1020	26	X				Steel	16	.375	
1020 1120	26		X			Steel	16	.312	.060 Full Flow
1120 1140	26	X				Steel-sump	16	.375	

ANNULAR MATERIAL

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

ATTACHMENTS (X)

X Geologic Log

X 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 Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 11001 Etiwanda Ave CITY Fontana STATE Ca ZIP 92337

Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 10/7/08

C-57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01862

TRIPLICATE
Owner's Copy

Page 1 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E062799

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

Owner's Well No. E-21
Date Work Began 10/27/2007, Ended 11/16/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0479 Permit Date 10/2/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	10	SANDY BROWN CLAY
10	13	MEDIUM SAND
13	28	SANDY BROWN CLAY
28	37	MEDIUM SAND
37	50	SANDY BROWN CLAY
50	67	CLAY
67	94	FINE SAND
94	107	CLAY
107	111	SAND
111	146	CLAY
146	164	SANDY CLAY
164	192	SAND
192	207	SANDY CLAY
207	239	SAND
239	268	CLAY
268	304	SANDY CLAY
304	309	SAND
309	332	CLAY
332	351	SAND
351	356	SANDY CLAY
356	401	SAND
401	426	SANDY CLAY
426	447	SAND
447	454	CLAY
454	470	SAND
470	492	SANDY CLAY
492	596	CLAY
596	616	SANDY CLAY
616	633	CLAY
633	643	SAND

TOTAL DEPTH OF BORING 1220 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1200 (Feet)

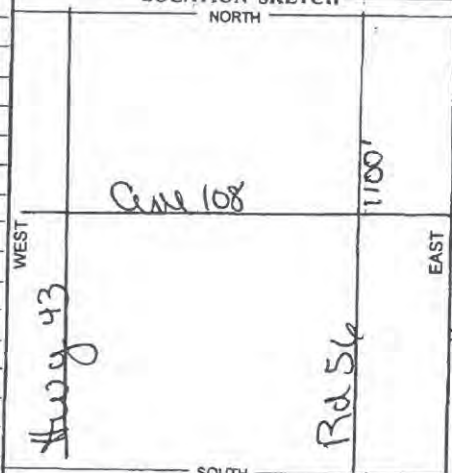
WELL OWNER

[redacted]

WELL LOCATION

Address AVE 108, & HWY 43
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 001
Township 22 S Range 23 E Section 25
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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 (✓)
✓ 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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	34"	5/16"	
0	640	28"	✓				STEEL	16"	3/8"	
640	1200	28"		✓			STEEL	16"	5/16"	.060 DBL

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	600			✓	1/4
600	1220			✓	6 X 16

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. ADDRESS HANFORD CITY CA STATE 93230-4844 ZIP
Signed [signature] WELL DRILLER/AUTHORIZED REPRESENTATIVE
11/26/07 DATE SIGNED
548214 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01824

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. E062799

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

Owner's Well No. E-21
Date Work Began 10/27/2007, Ended 11/16/2007
Local Permit Agency TULARE COUNTY
Permit No. 07-0479 Permit Date 10/2/2007

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD REVERSE FLUID

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
643	668	SANDY CLAY
668	677	CLAY
677	694	SAND
694	703	CLAY
703	716	SANDY CLAY
716	738	SAND
738	743	CLAY
743	760	SANDY CLAY
760	794	SAND
794	799	CLAY
799	811	SANDY CLAY
811	863	SAND
863	882	CLAY
882	910	SAND
910	932	CLAY
932	941	SAND
941	962	SANDY CLAY
962	991	SAND
991	1002	CLAY
1002	1013	SANDY CLAY
1013	1018	CLAY
1018	1026	SAND
1026	1063	SANDY CLAY
1063	1091	SAND
1091	1099	CLAY
1099	1126	SAND
1126	1150	CLAY
1150	1164	SANDY CLAY
1164	1176	SAND
1176	1220	CLAY

TOTAL DEPTH OF BORING 1220 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1200 (Feet)

WELL OWNER

[redacted]

WELL LOCATION

Address AVE 108, & HWY 43
City ANGIOLA CA
County TULARE
APN Book 293 Page 230 Parcel 001
Township 22 S Range 23 E Section 25
Latitude DEG. MIN. SEC. DEG. MIN. SEC.

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	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	44"			✓		STEEL	34"	5/16"	
0	640	28"	✓				STEEL	16"	3/8"	
640	1200	28"		✓			STEEL	16"	5/16"	.060 DBL

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	✓			SIX SACK
0	600			✓	1/4
600	1220			✓	6 X 16

ATTACHMENTS (✓)

— Geologic Log
✓ Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— 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 MYERS BROS. WELL DRILLING, INC.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
8650 E. LACEY BLVD. HANFORD CA 93230-4844
ADDRESS CITY STATE ZIP
Signed
WELL DRILLER/AUTHORIZED REPRESENTATIVE
11/26/07 DATE SIGNED
548214 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

AWD01825

Appendix C

Groundwater Level Field Measurement Form

Field Groundwater Level Measurements

Well Name/ Number:	Checked By:
Project:	Field Personnel:

Well Name/Owner	Date	Time	Reference Point Elevation (ft)	Depth To Groundwater (ft)	Groundwater Elevation (ft)	Instrument Type

Appendix D

Chalk/Tape Groundwater Level Measurement

Sheet ______ of ________

Chalk/Tape Groundwater Level Measurements

Recorded By:

A	B	C	D	E	F	G	H
Well Name/Owner	Date	Time	Reference Point Elevation (ft)	Tape Measurement at Reference Point	Chalk Measurement	Depth To Groundwater (ft) (E - F)	Groundwater Elevation (ft) (D - G)

Thomas Harder & Co.
Groundwater Consulting

Appendix E

Quality Assurance Project Plan

ELEMENT 1: TITLE AND APPROVAL SHEETS

Draft Tule Basin Water Quality Coalition

Surface Water and Groundwater Monitoring Plan
Quality Assurance Program Plan

Revision
July 1, 2019

Approvals

R.L. Schafer, RCE, RAE — Date
Tule Basin Water Quality Coalition
Program Coordinator

David De Groot, RCE — Date
4Creeks, Inc.
Project Manager, Technical Lead

Michelle Parker — Date
R.L Schafer & Associates
Quality Assurance Manager, Laboratory Coordinator

Belinda C. Vega, Laboratory Director — Date
BSK Associates
Laboratory Program Manager

Draft Tule Basin Water Quality Coalition

Surface Water Monitoring Plan
Quality Assurance Program Plan

Revision
July 1, 2019

Approvals, cont.

_____

David Sholes, Non-Point Source/AG Planning Date
California Regional Water Quality Control Board
QAPP Review

_____

Renee Spears, Quality Assurance Officer Date
State Water Resources Control Board
QAPP Review

Element 2: TABLE OF CONTENTS

ELEMENT 1: TITLE AND APPROVAL SHEETS 1
ELEMENT 2: TABLE OF CONTENTS 3
ELEMENT 3: DISTRIBUTION LIST 6
ELEMENT 4: PROJECT ORGANIZATION 8
ELEMENT 5: PROBLEM DESCRIPTION AND BACKGROUND 13
ELEMENT 6: PROJECT DESCRIPTION 21
ELEMENT 7: QUALITY OBJECTIVES AND CRITERIA 27
ELEMENT 8: SPECIAL TRAINING NEEDS / CERTIFICATIONS 32
ELEMENT 9: DOCUMENTS AND RECORDS 33
ELEMENT 10: SAMPLING PROCESS DESIGN 36
ELEMENT 11: SAMPLING METHODS – ADD SOP FOR SUPPLY WELL SAMPLING 43
ELEMENT 12: SAMPLE HANDLING AND CUSTODY 48
ELEMENT 13: ANALYTICAL METHODS AND FIELD MEASUREMENTS 50
ELEMENT 14: QUALITY CONTROL 63
ELEMENT 15: INSTRUMENT/EQUIPMENT TESTING, INSPECTION, AND MAINTENANCE 67
ELEMENT 16: INSTRUMENT/EQUIPMENT CALIBRATION AND FREQUENCY 69
ELEMENT 17: INSPECTION / ACCEPTANCE OF SUPPLIES AND CONSUMABLES 70
ELEMENT 18: NON-DIRECT MEASUREMENTS 70
ELEMENT 19: DATA MANAGEMENT 71
ELEMENT 20: ASSESSMENT AND RESPONSE ACTIONS 72
ELEMENT 21: REPORTS TO MANAGEMENT 73
ELEMENT 22: DATA REVIEW, VERIFICATION AND VALIDATION 74
ELEMENT 23: VERIFICATION AND VALIDATION METHODS 75
ELEMENT 24: RECONCILIATION WITH USER REQUIREMENTS 76
ELEMENT 25: DEFINITIONS 77

TABLES

Table 1: MRP Chemistries and BPOs for Tulare Lake Basin Surface Waters
Table 2: MRP Chemistries and BPOs for Tulare Lake Basin Ground Waters
Table 3: Coalition Sampling Points – Data Evaluation Criteria
Table 4: Data Quality Objectives
Table 5: Coalition Surface Water Sampling Point Coordinates
Table 6: Method Preservation, Storage and Holding Time Requirements
Table 7: Standard Operating Procedures
Table 8: Methods, Reporting Limits and Detection Limits
Table 9: Laboratory Method QC Criteria
Table 10: Required Quality Control by Method
Table 11: BSK Field Instrumentation
Table 12: TBWQC Field Instrumentation
Table 13: Laboratory Instrumentation

FIGURES

Figure 1: Organizational Chart
Figure 2: Tule Basin Water Quality Coalition Boundary Map
Figure 3: Deer Creek at Road 120 Site Map
Figure 4: Deer Creek at Road 176 Site Map
Figure 5: Deer Creek at Road 248 Site Map
Figure 6: Porter Slough near Road 192 Site Map
Figure 7: Tule River at North Fork Road 144 Site Map
Figure 8: Tule River at Road 92 Site Map
Figure 9: GQTMP Well Network

APPENDICES

Appendix A: Sample Forms

A.1: Chain of Custody
A.2: Surface Water Field Sample Collection Logs
A.3: Supply Well Field Sample Collection Logs
A.3: Data Completeness Worksheet (Example)
A.4: Field and Transport Worksheet (Example)

Appendix B: Standard Operating Procedures (Proprietary, excluded from public release)

B.1: BSK Associates Standard Operating Procedures

B.1.1 Ammonia by Gas Diffusion, Automated Phenate
B.1.2 Anions by Ion Chromatography
B.1.3 Carbamates by LC-MS/MS
B.1.4 Glyphosate by HPLC, Post Column Derivatization
B.1.5 Metals by ICP-MS
B.1.6 Metals by ICP-AES
B.1.7 Metals (Total Recoverable) Preparation
B.1.8 o-Phosphate and Phosphorus by Ascorbic Acid Reduction
B.1.9 Paraquat by SPE, HPLC-UV
B.1.10 Multi-tube Fermentation for Total and Fecal Coliform, and E. coli
B.1.11 Nitrogen, Organophosphorus and Pyrethroid Pesticides by GC-MS
B.1.12 Organochlorine Pesticides by GC-ECD
B.1.13 Solids by Gravimetric Determination
B.1.14 Turbidity by Nephelometry
B.1.15 Complex Calculations (Hardness)
B.1.16 Total and Dissolved Organic Carbon by TOC Analyzer
B.1.17 Alkalinity by PC Titrate
B.1.18 Field Sampling from Streams, Rivers and Canals
B.1.19 Safety for Stream and Canal Sampling

B.2: Aquatic Bioassay Consulting Laboratory Standard Operating Procedures

- B.2.1 Chronic Toxicity (Algae)
- B.2.2 Acute Toxicity (Water Flea)
- B.2.3 Acute Toxicity (Fathead Minnow)
- B.2.4 Sediment Toxicity (Hyalella azteca)

B.3: *Pacific EcoRisk Laboratory Standard Operating Procedures*

- B.3.1 Chronic Toxicity (Algae)
- B.3.2 Acute Toxicity (Water Flea)
- B.3.3 Acute Toxicity (Fathead Minnow)
- B.3.4 Sediment Toxicity (Hyalella azteca)

Appendix C: Certifications

- C.1: BSK Associates ELAP and NELAP Certificates
- C.2: ABC Laboratory ELAP Certificate
- C.3: PER Laboratory ELAP and NELAP Certificates

Appendix D: Quality Assurance Manuals (Proprietary, excluded from public release)

- D.1: BSK Associates Quality Assurance Manual (QAM)
- D.2: ABC Laboratory Quality Assurance Manual (QAM)
- D.3: PER Laboratory Quality Assurance Manual (QAM)

ELEMENT 3: DISTRIBUTION LIST

Coalition Contacts:

R.L. Schafer
Tule Basin Water Quality Coalition
2904 W. Main Street
Visalia, CA 93291
559-627-2948
rschafer@rlsmap.com

David De Groot
4Creeks, Inc.
324 S. Sante Fe, Suite A
Visalia, CA 93292
(559) 802-3052
davidd@4-creeks.com

Laboratory Contacts:

BSK Associates
Belinda C. Vega
Laboratory Director
1414 Stanislaus
Fresno, CA 93706
559-497-2888 x 133
mvega@bskassociates.com

BSK Associates
Michael Ng
Quality Assurance Manager
1414 Stanislaus
Fresno, CA 93706
559-497-2888 x 118
mng@bskassociates.com

BSK Associates
Stephane Maupas
Project Management Supervisor
1414 Stanislaus
Fresno, CA 93706
559-497-2888 x 212
smaupas@bskassociates.com

QAPP Recipients

Patrick Pulupa
Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Clay Rodgers
Central Valley Regional Water Quality Control Board
Fresno Office
1685 E Street
Fresno, CA 93706

R.L. Schafer
2904 W. Main Street
Visalia, CA 93291

4 Creeks
324 S. Sante Fe, Suite A
Visalia, CA 93292

BSK Associates
1414 Stanislaus Street
Fresno, CA 93706

ELEMENT 4: PROJECT ORGANIZATION

Personnel

R.L. Schafer
Program Lead
Tule Basin Water Quality Coalition

Mr. Schafer graduated from the University of South Dakota, School of Mines and Technology in 1951, attended graduate school in the University of California and is a registered civil engineer in six states. Mr. Schafer specializes in water rights, hydrology, hydraulics & hydrography, water distribution systems, canals, pipelines and related structures; domestic water systems; well construction and equipment; drainage systems and flood control works. Mr. Schafer also directs land development projects, subdivisions of properties, topographic and boundary surveys and mapping thereof. Mr. Schafer has over 55 years of professional civil engineering experience representing private sector clients and numerous public districts in the San Joaquin Valley. Mr. Schafer has served as the Watermaster/Secretary of the Tule River Association since 1962, is a member of the Tulare County Water Commission, the Coordinator of the Tule Basin Water Quality Coalition, and is currently coordinating the formation and implementation of the Sustainable Groundwater Management Act in the Tule Sub-Basin.

David De Groot
Project Manager, Technical Lead
4Creeks, Inc.

Mr. De Groot graduated from Calvin College located in Grand Rapids, Michigan with his B.S. in Civil Engineering and is a registered civil engineer in the State of California. Mr. De Groot specializes in agriculture and water resource engineering, including hydrology, hydraulics, water distribution systems, canals, pipelines, waste management systems, irrigation systems, dairy design, and environmental permitting for agriculture and water related projects. Mr. De Groot has 13 years of professional engineering experience and represents many private clients and public districts within the Central Valley of California. Mr. De Groot is the Assistant Watermaster of the Tule River Association since 2009 and is the Technical Lead of the Tule Basin Water Quality Coalition.

Michelle Parker
QA Manager, Laboratory Coordinator
R.L. Schafer & Associates

Mrs. Parker has served as the Executive Assistant to R. L. Schafer and Office Manager of R. L. Schafer & Associates for 25 years, Treasurer of the Tule River Association with the responsibility for the preparation of all reports for the Tule River, along with preparation of

the Tule River Association Annual Reports. Mrs. Parker also serves as the Treasurer, Enrollment Administrator and Quality Assurance Manager for the Tule Basin Water Quality Coalition. As the QA Manager for the Coalition, Ms. Parker has the responsibility for maintaining and distributing the official approved QAPP.

Belinda C. Vega, Laboratory Director
Program Manager, BSK Associates

Ms. Vega is the Laboratory Director of BSK Associates' (**BSK**) analytical laboratory in Fresno, CA. Ms. Vega received her B.S. in Environmental Resources Engineering from Humboldt State University and has been with BSK Associates since 2018. Prior to working with BSK, Ms. Vega served as the V.P. of Operations for Torrent Laboratory. She has also served as General Manager for Test America and President of EMLab P&K. For the purposes of this QAPP, Ms. Vega will act as the Program Manager for the sampling and analytical services performed in accordance with this QAPP. Ms. Vega's responsibility in this role will be to understand the plan requirements and work in conjunction with the Coalition contacts to ensure those requirements are met by the primary and subcontract laboratories.

Michael Ng, Quality Assurance Manager
QA Manager, BSK Associates

Mr. Ng is the Quality Assurance (**QA**) Manager at BSK's Fresno Analytical Laboratory (BSK Labs). Mr. Ng received his M.S. Chemistry from California State University, Los Angeles, and has over 30 years of experience in environmental laboratory industry. He will be acting in the role of quality assurance to ensure that all data produced by BSK are of a known and documented quality, consistent with standard industry practices and the State's Environmental Laboratory Accreditation Program. Mr. Ng will be the primary point of contact for all matters related to the laboratory quality system and data quality concerns.

Stephane Maupas, Project Management and Acquisition Manager
Project Manager, BSK Associates

Mr. Maupas is the Project Management and Acquisition Manager at BSK's Fresno Analytical Laboratory (BSK Labs). Mr. Maupas received his B.S. Chemistry from California Polytechnic State University, San Luis Obispo, and has over 20 years of experience in environmental laboratory industry. He will be acting in the role of Laboratory Project Manager to ensure that each sampling and analytical event is performed in accordance with program requirements. Mr. Maupas will be the primary point of contact for the Coalition personnel, coordinating the field sampling events and analytical testing required by each monitoring event.

Contracted Laboratories

The **COALITION** has contracted with the following laboratories for chemical testing, toxicity testing, and sampling services. Sub-contracting laboratories are mentioned under each primary laboratory.

BSK Associates (**BSK**)
Fresno Analytical Laboratory
1414 Stanislaus St
Fresno, CA 93706
(559) 497-2888
(559) 485-6935 fax
www.bskassociates.com

BSK provides testing services for the chemistry and microbiology samples for Tule Basin Water Quality Coalition as well as the sampling services at all surface water monitoring sites.

Aquatic Bioassay and Consulting (**ABC**)
29 N. Olive St.
Ventura, CA 93001
(805) 643-5621
(805) 643-2930 fax
www.aquaticbioassay.com

ABC will provide the aquatic toxicity testing for the Coalition. ABC has been providing this service for the COALITION over the last several years either directly or indirectly when the district was part of the former Southern San Joaquin Valley Water Quality Coalition. ABC will serve in a subcontract role (**SUBCONTRACT LABORATORY**) to BSK.

In the event that BSK determines that the service provided by the SUBCONTRACT LABORATORY is inadequate to meet the data quality or scheduling needs of the COALITION, BSK may elect to redirect the aquatic toxicity testing to an alternate provider, namely, Pacific EcoRisk Laboratory. Similar to ABC Laboratory, Pacific EcoRisk is California ELAP certified and can perform aquatic toxicity testing that meets the data quality objectives of this QAPP.

Pacific EcoRisk Environmental Consulting and Testing (**PER**)
2250 Cordelia Road
Fairfield, CA 94534
(707) 207-7760
(707) 207-7916 fax
www.pacificecorisk.com

Should it become necessary to utilize any other subcontract laboratories other than ABC and PER, BSK will inform the COALITION as to the need for the change and provide a

letter for submission to the Regional Board to document the necessary deviation from the QAPP and to identify the new subcontract laboratories.

Laboratories used by the Coalition will be certified at a minimum under the California Environmental Laboratory Accreditation Program (**ELAP**). The laboratories listed in the QAPP will meet all Quality Assurance and Control requirements provided in this document. The selection of sub-contractors by a contracted lab must first be approved by the Coalition, and such sub-contractors must abide by the conditions set forth by the Regional Board and this QAPP document.

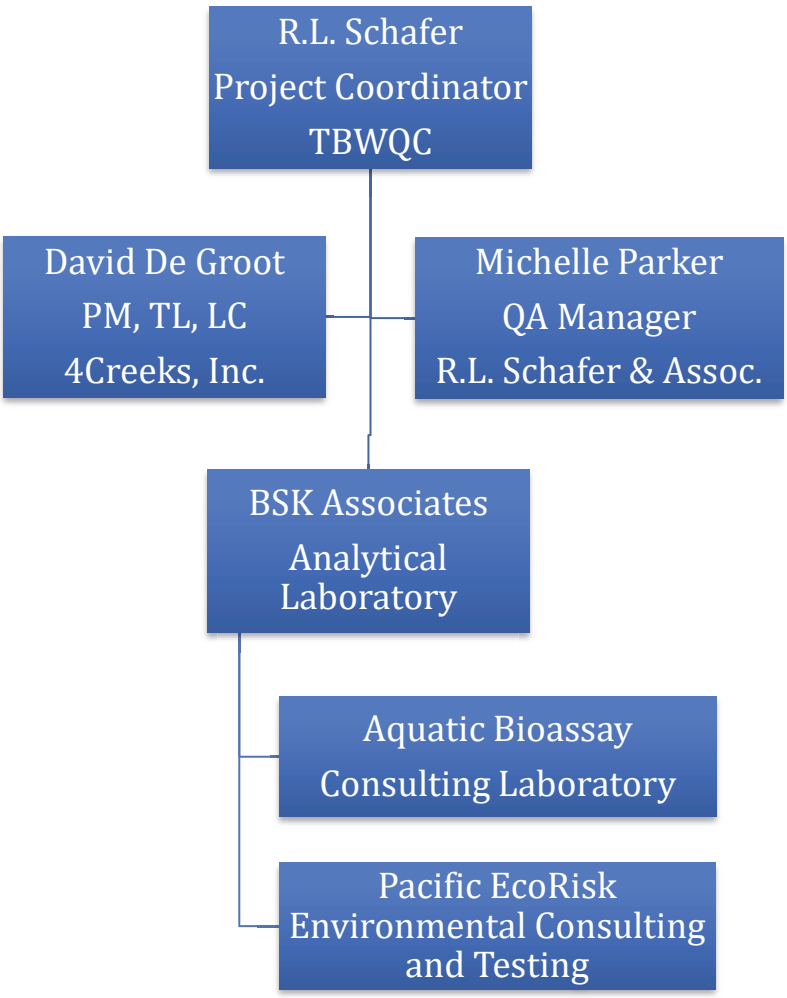


Figure 1. Organizational Chart

ELEMENT 5: PROBLEM DESCRIPTION AND BACKGROUND

Introduction

It is known that some waters of the State are negatively impacted by discharges from agricultural lands. Said discharges are likely to contain applied pesticides or chemical fertilizers that negatively impact the water quality and ecosystems present within the receiving waters. The TBWQC has conducted chemical and physical parameter testing of surface waters since 2004 on representative waterways within its boundaries, initially as part of the now dissolved Southern San Joaquin Valley Water Quality Coalition (SSJVWQC) and are currently under the California Regional Water Quality Control Board General Order R5-2013-0120.

The hydrology of the Coalition is one where surface water supplies are frequently limited, and when available in the case of Tule River, are only released from Success Reservoir to satisfy irrigation demands or flood-control. Groundwater is used by landowners where surface delivery infrastructure does not exist or when the public districts are unable to deliver irrigation water on the farmer's irrigation schedule.

This Plan is designed to monitor the constituents in Waters of the State, determine exceedances (if any), trace the source, under the Surface Water Monitoring Plan and the Groundwater Quality Trend Monitoring Workplan of the TBWQC, alter the Management Practices used to reduce/eliminate the exceedance. The Plan is further designed to provide groundwater quality (constituent) analyses as required by Order R5-2013-0120.

Project Objectives

In accordance with the requirements of the California Water Code, the Irrigated Lands Regulatory Program's Monitoring and Reporting Program Plan (MRP), the General Order objectives are to (1) categorize the current condition of the water of the state within the jurisdictional boundaries of the Coalition, (2) to identify any potential sources of pollutants that may contribute to the degradation of the water of the State, and, if identified, (3) to prevent further degradation (if any) of such water of the State as may be caused by irrigated agriculture through the implementation, where feasible, of management plans that prevent future negative impacts and eventual recovery of the waters to acceptable conditions that are protective of the identified beneficial uses.

Approaches Used

To achieve these objectives, the Coalition has implemented a Surface Water Monitoring Plan (SWMP) and a Groundwater Quality Trend Monitoring Workplan (GQTMW) with selected representative monitoring sites/wells within the TBWQC. Testing is done for physical and chemical constituents related to agricultural practices common to the region surrounding the monitoring site.

Surface water monitoring consists of monthly collection of samples at sites within natural channels that represent the beginning of irrigated agriculture, location of historic gaging stations, downstream of all sources of flow entering the waterway and other general conditions. When water is not present at the surface water sampling sites, monthly photo documentation of the monitoring sites are conducted. To maximize the occasions for surface water samples, Coalition personnel will monitor both the local agricultural irrigation schedules and the regional weather forecasts. During periods of active irrigation, regular stream flows or significant precipitation, the Coalition will conduct its monitoring events, but at the least monthly.

Groundwater monitoring consists of annual collection of samples from wells that are chosen to reflect the quality, as determined by the Coalition's Groundwater Quality Trend Monitoring Workplan (GQTMW) that employs wells in the upper most zone of first encountered groundwater as described in the Irrigated Lands Regulatory Program's MRP. Depth to groundwater measurements wells are conducted twice per year: during the Spring, normally during February for seasonal high data; and during the Fall, normally in October, for seasonal low data.

Regulatory Information

The Coalition covers essentially the center of the Tulare Lake Basin. The State has recognized that the conditions present within this Basin are distinctly different from the conditions found in the San Joaquin or Sacramento River Basins, and that the Tulare Lake Basin is closed and isolated from the San Joaquin-Sacramento River delta under normal hydrologic circumstances. As such, a separate basin plan was developed to address the Tulare Lake Basin.

Table 1 and Table 2 provide the Basin Plan Objectives (BPO) for surface water and groundwater, respectively, of the Tulare Lake Basin, as well as the spectrum of chemistries tested under the current monitoring and reporting program (MRP). Some of the BPO's for water quality are derived from standards in Title 22 of the California Code of Regulation. Many of the constituents listed do not have official numerical limits in place, although the interpretation of the narrative would lead to a zero tolerance.

Table 1: MRP Chemistries Tested for and BPOs for Tulare Lake Basin Surface Waters

CONSTITUENT	BASIN PLAN OBJECTIVE	UNITS	CONSTITUENT	BASIN PLAN OBJECTIVE	UNITS
Field Measurements			**Pesticides and 303(d) Parameters**		
Flow	-	cfs	2,4-D Acids & Salts	0.45	ug/L
EC	700	umhos/cm	Acetamiprid	0.01	ug/L
Temperature	Variable	ºC	Aldicarb	3	ug/L
pH	6.5 – 8.3	pH units	Atrazine	1	ug/L
Dissolved Oxygen	5-7 (W/C)	mg/L	Azinphos-methyl	0.01	ug/L
			Captan	0.01	ug/L
Drinking Water			Carbaryl	2.53	ug/L
E. Coli	235	MPN/100mL	Carbofuran	0.5	ug/L
TOC	NA	mg/L	Chloropicrin	8.5	ug/L
			Chlorothalonil	0.025	ug/L
General Physical			Chlorpyrifos	0.015	ug/L
Hardness	NA	mg/L	Clothianidin	0.01	ug/L
TSS	NA	mg/L	Cyanazine	1	ug/L
Turbidity	Variable	NTU	DDD	0.001	ug/L
			DDE	0.001	ug/L
Metals			DDT	0.001	ug/L
Arsenic	10	ug/L	Demeton-s	NA	ug/L
Arsenic (Dissolved)	150	ug/L	Diazinon	0.1	ug/L
Boron	700	ug/L	Dichlorvos	0.085	ug/L
Cadmium	Variable	ug/L	Dicofol	NA	ug/L
Copper	Variable	ug/L	Dieldrin	0.056	ug/L
Lead	Variable	ug/L	Dimethoate	1	ug/L
Molybdenum	10	ug/L	Disulfoton	0.05	ug/L
Nickel	Variable	ug/L	Diuron	2	ug/L
Selenium	5	ug/L	Endrin	0.036	ug/L
Zinc	Variable	ug/L	Glyphosate	700	ug/L
			Imidacloprid	0.002	ug/L
Nutrients			Linuron	1.4	ug/L
Ammonia-N	0.025	mg/L	Malathion	0.1	ug/L
Nitrate-N	10	mg/L	Mancozeb	1	ug/L
Nitrite-N	1	mg/L	Methamidophos	0.35	ug/L
Orthophosphate-P	NA	mg/L	Methidathion	0.7	ug/L
			Methiocarb	5	ug/L
Water Toxicity			Methomyl	0.52	ug/L
Ceriodaphnia dubia			Methoxychlor	0.03	ug/L
Pimephales promelas			Methyl Parathion	0.08	ug/L
Selenastrum capricornutum			Molinate	13	ug/L
Sediment Toxicity					
Hyalella azteca					

CONSTITUENT	BASIN PLAN OBJECTIVE	UNITS	CONSTITUENT	BASIN PLAN OBJECTIVE	UNITS
Pesticides and 303(d) Parameters			**Pesticides and Sediment Parameters**		
Norflurazon	0.011	ug/L	Bifenthrin	-	ng/g
Oryzalin	0.3	ug/L	Chlorpyrifos	-	ng/g
Oxamyl	50	ug/L	Cyfluthrin	-	ng/g
Oxyfluorfen	0.003	ug/L	Cypermethrin	-	ng/g
Paraquat	3.2	ug/L	Esfenvalerate	-	ng/g
Paraquat Dichloride	0.19	ug/L	Fenpropathrin	-	ng/g
Pendimethalin	0.07	ug/L	Lambda cyhalothrin	-	ng/g
Phorate	0.7	ug/L	Permethrin	-	ng/g
Phosmet	140	ug/L	Piperonyl Butoxide	-	ng/g
Pyraclostrobin	0.0029	ug/L			
Pyrethrins	0.1	ug/L			
Pyridaben	0.01	ug/L			
Simazine	4	ug/L			
Tebuconazole	0.0102	ng/L			
Thiobencarb	3.1	ng/L			
Trifluralin	5	ug/L			
Ziram	1	ug/L			

Table 2: MRP Chemistries Tested for and BPOs for Tulare Lake Basin Ground Waters

CONSTITUENT	BASIN PLAN OBJECTIVE	UNITS
Field Measurements		
EC	900-1,600	umhos/cm
Temperature	Variable	°C
pH	6.5 – 8.3	pH units
Dissolved Oxygen	5-7 (W/C)	mg/L
Inorganic Chemicals		
Nitrate as Nitrogen (N)	10	mg/L
Total Dissolved Solids (TDS)	500-1,000	mg/L
General Minerals		
Anions		
Carbonate (as CaCO3)	NA	mg/L
Bicarbonate (as CaCO3)	NA	mg/L
Chloride	500	mg/L
Sulfate	500	mg/L
Cations		
Boron	NA	ug/L
Calcium	NA	mg/L
Sodium	NA	mg/L
Magnesium	NA	mg/L
Potassium	NA	mg/L

Program Background

Surface Water Monitoring

The requirement for a comprehensive testing program as part of the Agricultural Discharge Waiver (now Irrigated Lands Regulatory Program) was put in place July 2003 with the installation of a new discharge waiver. The program was revised in January 2008 to incorporate additional requirements for the selection of sample sites and the development of management plans, if triggered. Most recently, a new order (R5-2013-0120) adopted by the RWQCB in September 2013 for the Tulare Lake Basin which has led to the dissolution of the SSJWQC and the establishment of numerous coalitions, each focus on those concerns specific to the subbasin of the former combined coalitions.

Limited laboratory testing (water column toxicity) along with physical parameter measurements (dissolved oxygen [DO], electrical conductivity [EC], pH, and temperature)

were started on a systematic schedule in 2004. The water column toxicity tests included an evaluation of algae growth (*Selenastrum capricornutum*), fathead minnow (*Pimephales promelas*), and water flea (*Ceriodaphnia dubia*) survival. Each represents an important step in the aquatic food chain and when combined with the physical parameters, would be indicative of some form of water contamination. The laboratory test results for exceedances were transmitted to the Regional Board as an indicator of whether an exceedance existed in the Waters of the State within the Coalition.

Starting in June 2006, the testing of surface waters was expanded to include general chemistry (dissolved metals), nutrients, and pesticides that the Regional Board felt were important, and were consistent with other testing done under the Surface Water Ambient Monitoring Program (SWAMP). The surface water monitoring program was revised in 2008 to give the Coalitions greater flexibility in selecting the sampling sites, frequency of sampling, and constituents tested for as long as each change from the previous program could be adequately justified. Sampling of surface waters was increased to once per month for all monitoring sites. Reporting requirements under the program were also adjusted to quarterly reports of accumulated data (in a SWAMP compatible format) and one annual report of the data collected instead of two reports per year. The increased frequency of data reporting was to help the Regional Board see trends sooner, and the single report by the Coalitions was to help reduce costs.

The annual testing of surface waters was categorized as either Assessment or Core monitoring, with differing requirements for each. Surface water monitoring assessment sites are those sites that are new to the program and thus have no historical data associated with them.

Surface water monitoring core sites are those with historical data and are used for the monitoring of trends within the waterways of the Coalition. Both type of sites are monitored intensely for a one-year period, then only lightly sampled (lower chemistry test requirements) for the following two years, unless problems are detected during the first year.

A third type of surface water monitoring site to be monitored is a Special Project Monitoring Site, where research into a specific question is undertaken. Once sufficient data has been collected at such a site, it can be discontinued if no issues were identified.

Groundwater Quality Trend Monitoring

Previous to the implementation of the IRLP, monitoring of groundwater quality was performed under two Regional Water Quality Control Board programs: the Dairy General Order R5-2007-0035 adopted in May of 2007, and the individual Waste Discharge Requirements (WDR); along with two State Water Resources Control Board programs for the Division of Drinking Water and the Groundwater Ambient Monitoring and Assessment Program (GAMA), expanded in 2007. With the adoption of the ILRP General Order R5-2013-0120 by the RWQCB in September 2013, monitoring of waters of the State was expanded to include the determination of groundwater quality through the evaluations consisting of 1)

Groundwater Quality Assessment Report (GAR), 2) Management Practice Evaluation Program (MPEP), and 3) Groundwater Quality Trend Monitoring Program (GQTMP).

The purpose of the GAR was to provide a technical basis for the scope and level of effort for implementation of the of the General Order's groundwater monitoring and implementation provisions, accomplished by an assessment of all available, applicable, and relevant data and information to determine the high and low vulnerability areas where discharges from irrigated lands may result in groundwater quality degradation. At a minimum, the GAR is required to be reviewed and updated by the Coalition on a 5-year basis incorporating new information and data. The GAR provides the necessary foundation for design of the MPEP and GQTMP and identifies the areas where a GQTMP must be implemented. In January of 2016 the TBWQC received conditional approval on the Coalition's GAR.

The purpose for developing the MPEP was to evaluate the effectiveness of current agricultural management practices for protection of groundwater quality, consistent with the General Order requirements. The TBWQC elected to participate in the group option for developing the Management Practice Evaluation Workplan required under the General Order. The participants of the group plan include all of the Coalitions within the Tulare Lake Basin.

The GAR's initial groundwater assessment is the basis for development of the GQTMP. With the findings and data gaps identified in the GAR the TBWQC developed their Groundwater Quality Trend Monitoring Workplan (GQTMW) to further investigate the conditions of the existing groundwater quality and develop a plan for determining trends in groundwater quality for evaluation of the effects of irrigated agriculture on groundwater quality. The TBWQC received conditional approval from the Regional Board on their Groundwater Quality Trend Workplan in September 2018.

Beginning in the Fall of 2018, the TBWQC was required to begin collecting groundwater quality samples from the monitoring network included in the GQTMW and annually in the summer thereafter. Constituents required to be sampled for annually by the MRP consist of field-tested physical parameters (electrical conductivity [EC], pH, dissolved oxygen [DO], temperature) and laboratory tested inorganic chemicals (nitrate as nitrogen). In addition to the annually tested constituents, the MRP requires laboratory tested constituent of total dissolved solids [TDS], general mineral anions (carbonate, bicarbonate, chloride and sulfate) and cations (boron, calcium, sodium, magnesium and potassium) be tested initially and once every 5 years thereafter.

Decisions Made with Information Obtained from Monitoring

The purpose of any testing program is to detect a constituent exceedance in the waters of the State as the first step. The second step is to evaluate the seriousness of the detection. Once detection has been made, the approach of the Coalition is to trace the constituent exceedance to its potential source. This includes a physical survey of the

waterway for possible points of entry of applied irrigation waters (pipes, culverts, canal gates), evaluation and documentation of cropping patterns, and the eventual tracking of the application with the local agricultural commissioner. Once the likely source of the constituent exceedance has been identified, contact with the suspected grower(s) would begin so as to prevent future occurrences. A wide range of options are available, including improved irrigation waters management, changes in chemicals applied, changes in application methods, or any other procedure that would prevent the offsite movement of the detected constituent.

The data from the individual surface water and groundwater sampling points will be assessed according to the following beneficial use criteria:

Table 3: Coalition Sampling Points – Data Evaluation Criteria

Site name	Beneficial Use
Deer Creek at Road 120	Freshwater Habitat
Deer Creek at Road 176	Freshwater Habitat
Deer Creek at Road 248	Freshwater Habitat
Porter Slough near Road 192	Freshwater Habitat
Tule River at North Fork Road 144	Freshwater Habitat
Tule River at Road 92	Freshwater Habitat
White River at Road 208	Freshwater Habitat
GQTMP Supply Wells	Municipal & Domestic Supply

ELEMENT 6: PROJECT DESCRIPTION

Surface Water Sample Sites Description

The Coalition has identified seven natural channel locations where surface monitoring will be conducted under the monitoring program. The locations and schedule were identified as being the most representative of the surface waters within the Coalition boundaries. For additional details concerning the choice of the individual monitoring locations and schedule, please refer to the TBWQC Surface Water Monitoring Plan (8/4/14) and the associated addendum (2/9/15).

The monitoring locations are as follows:

1. **Deer Creek At Road 120 – Pixley, CA Site Description**

The Deer Creek at Road 120 station is located approximately 3.5 miles southwest of Pixley, CA. The land use surrounding this location is predominantly irrigated agriculture, ranging between different row crops and permanent crops. The station is located within the Pixley Irrigation District.

2. **Deer Creek At Road 176 – Pixley, CA Site Description**

The Deer Creek at Road 176 station, a stream gaging station, located approximately 6 miles southeast of Pixley, CA. The land use surrounding this station is predominantly irrigated agriculture, consisting of permanent crops and limited row crops. This station is located within the Saucelito Irrigation District.

3. **Deer Creek At Road 248 – Terra Bella, CA Site Description**

The Deer Creek at Road 248 station is located where the foothills of the Sierra Nevada Mountains meet the flat lands of the basin, approximately 2.5 miles northeast of Terra Bella, CA. At this location, the land use is primarily range land for cattle grazing. This location is not within an Irrigation District boundary.

4. **Porter Slough Near Road 192 – Porterville, CA Site Description**

The Porter Slough Near Road 192 monitoring station is located approximately 4.5 miles northwest of the City of Porterville. Porter Slough is a natural distributary of the Tule River with the head works approximately 2.5 miles downstream of Success Dam. The Porter Slough channel traverses 12 miles through the City of Porterville and Porterville Irrigation District prior to terminating into a Lower Tule River Irrigation District (LTRID) canal. The sampling point is located within Porter Slough upstream of the discharge into the LTRID canal. This monitoring station is located within the Porterville Irrigation District.

5. **Tule River At Road 144 (North Fork) – Woodville, CA Site Description**

The Tule River at Road 144 station is located approximately 3.5 northwest of Woodville, CA. The Tule River bifurcates at Road 192 into North and South Fork channels.

Downstream on the South Fork at Road 168, the South Fork further bifurcates into a Middle Fork and South Fork. At Road 144, the South Fork and Middle Fork rejoin as the South Fork and at Road 104 the South Fork and North Fork rejoin back into one main Tule River channel that continues to the Tulare Lake Bed. The Tule River at Road 144 monitoring site is located along the North Fork of the Tule River, just downstream of where a LTRID canal discharges CVP water from the Friant-Kern Canal into the Tule River. The land uses surrounding this station are predominantly agriculture, ranging from row crops to different permanent crops and is located in the northern central portion of Lower Tule River Irrigation District (LTRID).

6. Tule River At Road 92 – Tipton, CA Site Description

The Tule River at Road 92 station is located approximately 4 miles northwest of Tipton, CA. The Tule River at Road 92 station is located downstream of where the North Fork, Middle Fork, and South Fork all merge together forming a single Tule River Channel to the Tulare Lake Bed. This station is surrounded by irrigated agriculture of row crops and several permanent crops within the LTRID.

7. White River At Road 208 – Earlimart, CA Site Description

The White River at Road 208 station is located approximately 4 miles southwest of Ducor, CA. The monitoring station is located above the beginning of irrigated agriculture with the land use below this station planted predominantly with various permanent crops. The station is located within the Delano Earlimart Irrigation District (DEID).

Maps and coordinates of the sample site locations are included in Element 10 (Sampling Process Design / Monitoring Points).

Groundwater Sample Sites Description

An initial goal of the selection of groundwater sampling sites was to identify existing irrigation/domestic wells of first encountered groundwater that have adequate physical information to ensure the trends analyzed over time are reliable. The spatial coverage for the selection from existing groundwater wells of the monitoring well network is proposed to be four wells per township with one well for each nine square miles of the Township. In addition, for each "selected" well, a back-up or "secondary" well will be identified and utilized in case the selected well is damaged or is no longer in production. During the initial field verification and monitoring, the selected well will be included in the program to establish baseline groundwater depth and quality data. After the initial monitoring, only the selected well will be sampled annually. If the selected well is damaged permanently or is no longer in use, a replacement for the selected or secondary well will be identified at that time. The TBWQC covers in whole or in part twenty-nine (29) townships, identified as follows:

1. Township 21 South, Range 25 East
2. Township 22 South, Range 25 East
3. Township 23 South, Range 25 East

4. Township 23 South Range 23 East; those four townships include the communities of Tipton, Pixley, Earlimart and Alpaugh
5. Township 20 South, Range 27 East
6. Township 21 South, Range 27 East
7. Township 23 South, Range 27 East
8. Township 24 South, Range 27 East; those four townships cover the City of Porterville and the communities of Strathmore, Terra Bella, Ducor and Richgrove
9. Township 21 South, Range 26 East; covers the communities of Woodville and Poplar
10. Township 24 South, Range 24 East; covers the small community of Allensworth
11. Township 24 South, Range 25 East; covers urban sprawl of the community of Earlimart
12. Township 24 South, Range 26 East
13. Township 21 South, Range 28 East
14. Township 21 South, Range 29 East
15. Township 22 South, Range 28 East
16. Township 22 South, Range 27 East
17. The portion of the Tule Basin in Township 20 South, Range 26 East
18. Township 22 South, Range 26 East
19. Township 23 South, Range 26 East
20. The portion of Township 25 South, Range 26 East; covered by the Delano-Earlimart Irrigation District in Kern County
21. The portion of Township 21 South, Range 23 East
22. Township 22 South, Range 23 East
23. Township 24 South, Range 23 East
24. Township 21 South, Range 24 East
25. Township 22 South, Range 24 East
26. Township 23 South, Range 24 East
27. Township 23 South, Range 28 East
28. Township 24 South, Range 28 East
29. The portion of Township 22 South, Range 29 East

Map of the Tule Basin Water Quality Coalition Boundary is included in Element 10.

Summary of Work Performed for Surface Water and Groundwater Sampling

Sampling Procedures for Surface Water

The following is a description of the surface water sampling techniques to be used under this QAPP. The basic processes used to collect samples will remain unchanged from the previous MRP/QAPP although incorporation of the frequency of monitoring will require a more real-time determination of the sampling windows. Sampling, site photographs and reports will continue on a monthly basis for each surface water monitoring site.

Prior to the sampling event, physical parameter equipment will be recalibrated using known laboratory standards and according to the manufacturer's instructions. This equipment includes pH meters, EC meters, and DO meters. Known standards are brought to the field to recheck the calibration (pH, EC) at each site prior to sample collection.

Field samples of the water are collected in bottles provided by the laboratory (chemistry) or in one-gallon amber jugs specially purchased for the sampling event (water column toxicity). The containers are marked with site identification description, date and time of collection along with any preservative added by the lab on water resistant labels. Photo documentation is performed at each surface monitoring site each month.

Glass bottles are wrapped to prevent breakage during transport to the collection sites, and after collection, "blue" or gel ice packs are placed with the samples to reduce the sample temperature as low as possible in the field. Once all sampling points are collected, the samples will be transported to a location where they will be repacked for transportation to the laboratory. Samples will then be packed in "wet" ice and delivered to the laboratory on the same day of collection. The samples are packed with sufficient ice to lower the sample temperature to ≤6°C but not frozen.

Chains of custody are filled out with matching information (sample ID, sample date and time, site, and tests required) and are given to either the courier or the lab representative when the samples change hands.

The hold time for the water column toxicity samples is 36 hours, and the samples are shipped no later than the morning after collection. Ice levels are rechecked prior to shipment.

Sampling Procedures for Groundwater

The physical parameter equipment shall be calibrated at the beginning and once during each sampling day in accordance with the equipment manufacturer's specifications, as outlined in the instruction manual for the EC meter used. This equipment includes pH meter, EC meter, and DO meter.

Water supply wells shall be sampled by purging the well for a period of time adequate to purge the pump riser pipe. If the well is currently pumping, the sample may be taken

without purging the well. Water samples shall then be collected from the discharge point nearest the well head. Samples shall be collected directly into laboratory-prepared bottles. Samples may not be taken from any location after any treatment of the water for domestic use, such as from a faucet within the house.

Field measurements of temperature, pH, dissolved oxygen (DO), Electrical Conductivity (EC), will be conducted and recorded of aliquots of groundwater and not determined in the laboratory. Field water quality measurements and instrument calibration details will be recorded on the Well Sampling Record.

Efforts will be made to handle, store, and transport supplies and samples safely. Exposure to dust, direct sunlight, high temperature, adverse weather conditions, and possible contamination shall be avoided. Immediately following collection, samples shall be placed in a clean chest that contains ice or "blue" ice, and transported to the subcontracted laboratory as soon as practical. Samples should be chilled at 4°C to prevent degradation.

After samples have been collected and labeled, they shall be maintained under chain-of-custody procedures. These procedures document the transfer of custody of samples from the field to the laboratory. Each sample sent to the laboratory for analysis shall be recorded on a Chain of Custody record, which will include instructions to the laboratory for analytical services.

If the samples are to be left at a BSK sample drop-off location, the original chain-of-custody shall be sealed inside a plastic bag within the ice chest, and the chest shall be sealed with custody tape which has been signed and dated by the last person listed on the chain-of-custody. The laboratory shall sign as a receiver once samples are received.

Analytical Procedures

Once received by the laboratory, the samples will be checked for temperature and preservation requirements. Bottles will be inspected for integrity and any deviations noted as part of the sample conditions on receipt documentation. Any anomalies will be communicated to the Project Coordinator and corrective actions taken as required. At a minimum, the discrepancies will be noted as part of the Case Narrative included with the laboratory results.

Samples will be processed according to the test methods required by the General Order. All laboratory data will undergo a tertiary review process to ensure that the data meets the requirements of the method and the data quality objectives of the Order. The Laboratory Project Manager will create the Certificate of Analysis (Report). A case narrative will be written to identify any anomalies, QC failures or other material issues that do not meet the quality objectives of the Order.

A preliminary report will be provided to the Coalition within ten (10) business days of sample collection, and will include all partial laboratory results that are reviewed and

completed by then. The preliminary and final reports will be sent via email to the Project Coordinator and QA Manager.

Finally, the laboratory will prepare the required electronic data deliverables (EDD) as required by the MRP of the Order. Prior to delivery to the Project Coordinator, the laboratory personnel will evaluate the EDD using the SWAMP data integrity validation program as provided by the California Environmental Data Exchange Network (CEDEN) for surface water analysis results or the GeoTracker Electronic Submittal of Information (ESI) "Check EDD" tool for groundwater analysis results. Any critical failures observed will be addressed and the EDD will be reevaluated. Once complete with no critical errors, the EDD will be sent to the Project Lead along with a copy of the error log returned by the CEDEN or GeoTracker validation program.

Resource and Time Constraints

There are no significant resource constraints associated with the Surface Water Monitoring Plan (SWMP) or the Groundwater Quality Trend Monitoring Workplan (GQTMW). Both the Coalition and the laboratories have adequate resources to effectively perform the tasks required under the Plan and the General Order.

The responsibility of surface water sampling will be that of the primary laboratory, BSK. BSK has offices in the Fresno and Bakersfield areas. The Fresno location will be the primary respondent and operate as the base for crew and the sample receiving location. Multiple personnel will be trained on the sample collection procedures to ensure that BSK can respond to the sampling events with a minimal amount of notification. In the event of a scheduling conflict, staff from BSK's Bakersfield location will be dispatched to collect samples for the Coalition.

Coalition staff is responsible for collecting groundwater samples and have multiple staff members stationed in Visalia trained to use field instruments and procedures required for sample collection. The Fresno-based laboratory has extensive equipment and personnel to accommodate the water quality analysis workload generated under the SWMP and GQTMW.

Time represents the most significant restraint for both surface water and groundwater monitoring. The sample collection will require the close coordination of both Coalition and Laboratory personnel. Coalition personnel will closely monitor both the scheduled irrigation program and the regional weather forecast as well as sample date coordination with well owners to ensure a timely notification of sampling requirements. Laboratory and Coalition personnel will have the required water sampling equipment and materials (e.g. field instruments, sample containers, ice chests, etc.) on hand as a matter of practice to minimize the time requirements for the commencement of field sampling. The primary laboratory, BSK has a sample drop-off location in Visalia that facilitates the transportation of samples.

ELEMENT 7: QUALITY OBJECTIVES AND CRITERIA

The primary goal of any sampling and analyses program is to produce data that is of known and documented quality and is suitable for its intended use. The data generated under the TBWQC's SWMP and GQTMP will be used to make decisions regarding water quality in the Coalition, ensuring the preservation of the environment and the protection of human health. To that end, the data quality objectives set forth in the SWMP and GQTMW are established to ensure that (1) the collection of samples are representative of the environmental conditions associated with agricultural activities, that (2) the samples are handled and processed in a manner consistent with the requirements of the methods used and the practices set forth in this QAPP, and that (3) the data generated from the project are of sufficient quality to make sound decisions regarding the impact of agricultural activities on the waters of the State.

Performance Criteria Goals

The success of any given monitoring event will be determined based on the characteristic of completeness. The quality of completeness is a function of the number of successful checks or evaluations made on a project versus the total number of observations made. The overall completeness goal for each monitoring event is 90%. A discussion of completeness for both the sampling and the analytical portions of the SWMP and the GQTMW will follow below.

Quantitation Limits

The data generated as part of the SWMP and the GQTMW must be at a level of sensitivity low enough to detect and quantify constituents of concern at levels needed for preservation of the environment and human health. With that, the majority of the chemical testing is done to the parts-per-billion level.

Chemistry

The laboratory will establish reporting limits (RLs) at a level at or below the requirements of the General Order. These RLs will be based on a calibration point at or below the equivalent sample concentration. The laboratory will not report any value below the RL without qualification as an estimated value. All reported results will be bracketed by a calibration point.

To determine the low value at which the laboratory can detect the presence of a target analyte, the laboratory will conduct a Method Detection Limit (MDL) study in accordance with the procedure set forth in 40 CFR Part 136 Appendix B. This value is the lowest concentration at which the lab can state the compound is present with 99% confidence that it is truly non-zero.

Some methods are not amenable to conducting method detection limits studies. These methods are identified in Table 8 with a "-" in the column labeled MDL. This table reflects the MDLs in existence at the time this QAPP is approved. As per the requirements of the Order, the MDLs will be regenerated or verified by the laboratory at least every two years or when a material change is made in the method or equipment used to generate the original MDL study.

To provide the program with the most sensitive data possible but with the statistical confidence that a result is not a false positive, the laboratory will report results that exist between the MDL and the RL. As these values are outside of the calibration range of the equipment used, there exists some uncertainty as to the accuracy of the result return. For values reported between the MDL and RL, the laboratory will identify these as estimated values by applying a qualifier to indicate the uncertainty of the measurement (e.g. "J-Flagged").

Toxicity

Water toxicity tests will be considered significant at the 95% level of significance. TIEs will not be initiated until 50% survival or below is reported. Phase I TIE testing, along with a retest of the failed test, will begin as quickly as practical by the laboratory.

Table 8 summarizes the analytes, ILRP PQLs, method detection limits and reporting limits for this project.

Quality Control Measurements

Every effort will be made to provide quality from both the field sampling activities and from the fixed facility laboratory activities. Field and laboratory personnel are trained on proper sampling and analysis techniques appropriate to the tasks performed. All activities will be performed in accordance with established standard operating procedures (SOPs). See the Table 6 for listing of the applicable SOPs.

The results of the field and analytical activities will be gauged on a number of characteristics. Those characteristics are:

1. Representativeness. The monitoring sites selected for the SWMP and GQTMP by the Coalition will be indicative of the water quality within the Tule Basin. The surface water monitoring sites selected by the Coalition reflect the quality of the flows into and out of the Coalition. Samples will be collected based on real-time assessments of water flows, including those associated with storm events. Samples will be handled to ensure they maintain the conditions at they exist in the field and will be released to the laboratory in a timely manner to ensure that hold times are met.

   The monitoring sites selected for the GQTMW by the Coalition must be consistent with and indicative of the water quality relevant to irrigated agriculture. The groundwater

monitoring wells selected by the Coalition represent both high and low vulnerability areas, as well as areas contributing significant recharge to urban and rural communities where groundwater serves as a significant source of supply. Groundwater sampling will be collected on an annual basis. Samples will be handled to ensure they maintain the conditions at they exist in the field and will be released to the laboratory in a timely manner to ensure that hold times are met.

2. Comparability. All samples are to be collected in the same manner, from approximately the same location at each monitoring site. All conditions will be maintained as consistent as possible to ensure that testing performed across multiple monitoring events is comparable with variation only due to field conditions. Furthermore, tests used by the laboratory will be in accordance with the General Order requirements to ensure comparability to historical data generated for each of the sampling locations.

3. Sensitivity, Contamination, Accuracy, Recovery and Precision is determined based on the performance of the method on one or more quality control indicators.

   Sensitivity is an assessment of the ability of the method to detect the analytes of interest at levels that are significant to the Plan. Numerous factors can affect sample results such that the reporting limits would need to be elevated. These factors include dilutions due to target or non-target interferences, insufficient sample volumes, internal standard suppression, etc. Sensitivity will be assessed by comparing the Order required reporting limits to those actually observed for all samples.

   Contamination is an assessment of the field and laboratory background by the examination of a blank matrix known to be free of contaminants. The blank matrix (Method Blank) is carried through the entire analytical process and then assessed for the presence of the target constituent. The presence of such constituents in the blank indicates that the field conditions or laboratory background may be responsible for the presence of a target constituent in the sample.

   Accuracy is the ability of the method to generate a result within a prescribed range of its actual true value. For the test methods employed in this Plan, accuracy will be determined based on the use of a standard reference material (SRM) or Laboratory Control Sample (e.g. LCS, Blank Spike) that is free of interferences.

   Recovery is the ability of the method to produce an accurate result given the potential interferences of a sample matrix. This is accomplished by fortifying a sample matrix with a small amount of the target compounds. The fortified matrix (or matrix spike [MS]) is carried through the analytical process to determine if the sample matrix somehow interferes with the method itself, either via suppression or enhancement of the matrix spike result.

   Precision is the ability of the method to reproduce the same result within a prescribed acceptance range. For the test methods employed, precision will be assessed by the

analysis of a Laboratory Control Spike Duplicate, a Matrix Spike Duplicate or a Laboratory Sample Duplicate. The laboratory duplicate differs from a field duplicate in that the lab duplicate will be a secondary aliquot taken from the same container as the parent sample. A field duplicate is a second sample collected from the source and is treated as a separate unique sample that is "blind" to the laboratory.

4. Completeness. Completeness will be determined based on the measurement of the amount of valid data obtained per monitoring event (by site) versus the amount planned. The target of the Plan is to achieve 90 percent completeness at each event. Efforts to prevent sample loss include careful packaging of the sample for transport, and collection of adequate volumes for analysis, laboratory losses (errors, QC failures, and equipment failure). The laboratory shall determine the volumes required for the tests requested, and it is assumed that this final volume contains sufficient surplus to account for laboratory issues. As such, they have specified or provided the necessary containers for the sampling collection process.

   Completeness will be determined at two levels: Field and Transport, and Laboratory with levels reported within each quarterly report. As BSK does the surface water sampling for the Coalition, the calculation of completeness will be performed by them. The following describes the Completeness calculation to be used.

   Field and Transport completeness will include: completion of the site inspection report elements as specified on the Field Data Sheet, results of field instrument calibration checks, actual test results for physical parameters, completion of the Chain of Custody with the requested analyte list with no broken sample containers, and all samples received within temperature requirements. Chain of Custody forms (Appendix A.1) are provided by the lab and are pre-populated to include the analyses requested as determined by the Core vs. Assessment sampling schedule. The samples are inspected prior to packing with ice for breakage. Bottle counts are done when the labels are affixed to the containers. The Field and Transport evaluation program ends with the signed Chain of Custody, the reporting of the conditions of the samples as they are unpacked by the lab. Laboratory failures (e.g. breakage of sample container, samples received out of hold time, temperature exceedance, etc.) will be documented. All other measures beyond this point are associated with the Laboratory Completeness assessment.

   Photo documentation shall constitute 100 percent Completeness for those times when no sample water is available at surface water monitoring sites.

   The logbook sheets used for documentation of the Field and Transport portion of the monitoring event is included in Appendix A.2. An example of the spreadsheet used for the determination of the Field and Transport completeness is provided in Appendix A.4.

   Completeness for the Field and Transport activities will be determined based on the number of assessment points satisfying the expected criteria versus the total number assessed per sample site (22 individual assessment criteria per location).