

Appendix G

Miscellaneous

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation (ft)
031S04E23L01M	35.2208	117.4484	5/7/1956	2500
031S43E30M02M	35.2061	117.415	3/4/1955	2515.65
032S43E28K01M	35.1158	117.3736	7/1/1968	2267
09N02W06M07S	34.9133	117.1309	4/3/2006	2425.24
09N03Q08J01S	34.8836	117.2078	3/10/1932	2192.6
09N03W01D01S	34.9056	117.1508	1/21/1954	2150.3
09N03W01E01S	34.9019	117.1506	6/17/1958	2115.78
09N03W01E02S	34.9017	117.1506	10/1/1965	2119.8
09N03W01E03S	34.9003	117.1525	1/20/1993	2108.2
09N03W02A01S	34.9056	117.155	7/2/1952	2132
09N03W02C01S	34.9056	117.1639	6/19/1958	2127.27
09N03W02D01S	34.9056	117.1683	6/19/1958	2127.63
09N03W02F01S	34.9019	117.1642	6/18/1958	2142.67
09N03W02G01S	34.9019	117.1595	6/18/1958	2151.87
09N03W02G02S	34.9019	117.1594	6/18/1958	2129.41
09N03W02H01S	34.9019	117.155	6/18/1958	2118.62
09N03W02H02S	34.9019	117.1553	6/18/1958	2116.74
09N03W02K01S	34.8983	117.1595	6/18/1958	1245.14
09N03W02M01S	34.8983	117.1683	6/19/1958	2154.1
09N03W02Q01S	34.8947	117.1595	6/18/1958	2173.45
09N03W02Q03S	34.8947	117.1592	6/18/1958	2155.48
09N03W03A01S	34.9056	117.1728	5/5/1955	2139.6
09N03W03A02S	34.9056	117.1734	6/19/1958	2145.31
09N03W03G01S	34.9019	117.1772	6/19/1958	2150.95
09N03W03H01S	34.9019	117.1728	7/2/1954	2152.5
09N03W03J01S	34.8981	117.1728	7/26/1932	2175.3
09N03W03J02S	34.8975	117.1711	5/21/1996	2150.28
09N03W10A01S	34.8908	117.1728	5/13/1943	2180.77
09N03W10H01S	34.8872	117.1728	3/7/1967	2164.33
09N03W10P01S	34.88	117.1814	11/16/1949	2200.01
09N03W10R01S	34.88	117.1728	6/20/1958	2180.9
09N03W11C01S	34.8925	117.1656	3/22/2006	1958.87
09N03W11D01S	34.8911	117.1684	6/19/1958	2165.71
09N03W11E01S	34.8875	117.1684	12/22/1932	2200
09N03W16M01S	34.8689	117.2033	5/12/1964	2255
10N02W19P01S	34.9392	117.1275	2/4/1959	2132.92
10N02W30D01S	34.9361	117.135	4/23/1996	2101.25
10N02W30N01S	34.9222	117.1317	11/28/1951	2146.5
10N02W30N02S	34.9239	117.1331	2/10/1955	2143
10N02W30N04S	34.9225	117.1348	5/21/1959	2126
10N02W30P01S	34.9239	117.1286	5/21/1959	2131.2
10N02W30Q04S	34.9247	117.1242	5/29/1959	2140
10N02W30Q05S	34.9222	117.1222	5/21/1959	2135
10N02W31C01S	34.92	117.1286	12/2/1958	2139.74
10N02W31D01S	34.9217	117.1342	3/22/2006	2107.69
10N02W31E01S	34.9164	117.1331	12/7/1958	2140
10N02W31E03S	34.9158	117.1331	12/1/1958	2139.45
10N02W31N01S	34.9092	117.1331	3/16/1932	2165.7

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
10N03W02J01S	34.9861	117.155	1/6/1959	2095.8
10N03W02J02S	34.9858	117.155	5/6/1954	2101.8
10N03W02Q01S	34.9822	117.1594	12/6/1959	2095.8
10N03W02Q02S	34.9819	117.1594	2/5/1956	2102
10N03W02R01S	34.9822	117.155	1/6/1959	2090
10N03W04H01S	34.9897	117.1906	5/6/1954	2051.25
10N03W04H02S	34.99	117.1886	3/21/2006	2021.32
10N03W04L01S	34.9861	117.1995	2/25/1931	2079.6
10N03W06B01S	34.9936	117.23	12/21/1956	2038.8
10N03W09H01S	34.975	117.1906	5/5/1954	2081.89
10N03W09J01S	34.9711	117.1906	1/6/1959	2076.18
10N03W09R01S	34.9675	117.1906	1/6/1959	2075
10N03W10J01S	34.9714	117.1728	1/7/1958	2085.66
10N03W10J02S	34.9711	117.1728	1/7/1959	2085.15
10N03W10R01S	34.9578	117.1714	4/14/1971	2069.74
10N03W11L04S	34.9703	117.165	1/19/1993	2071.81
10N03W11L05S	34.9728	117.165	3/22/2000	2065.62
10N03W11M01S	34.9714	117.1684	1/7/1958	2087.22
10N03W11M02S	34.9711	117.1683	1/7/1959	2085
10N03W11M03S	34.9708	117.1683	1/7/1959	2090
10N03W11M04S	34.9711	117.1703	3/22/2006	2066.25
10N03W11N01S	34.9678	117.1683	12/22/1932	2109.1
10N03W14F02S	34.9592	117.1625	1/19/1993	2067.28
10N03W14G01S	34.9603	117.1597	1/8/1959	2086.21
10N03W14N01S	34.9531	117.1683	11/28/2019	2124.3
10N03W15H01S	34.9603	117.1728	1/8/1959	2084.01
10N03W15H02S	34.96	117.1728	1/8/1959	2090.41
10N03W15H03S	34.9597	117.1728	3/22/2006	2069.76
10N03W15J01S	34.9567	117.1728	4/14/1949	2104.1
10N03W15J02S	34.9564	117.1728	1/8/1959	2094.98
10N03W15P01S	34.9531	117.1817	1/8/1959	2126.01
10N03W15Q01S	34.9531	117.1772	1/8/1959	2099.43
10N03W21R01S	34.9383	117.1903	12/3/1953	2126.03
10N03W21R03S	34.9381	117.1903	1/9/1959	2117.58
10N03W22F01S	34.9456	117.1817	1/9/1959	2115
10N03W22F02S	34.9453	117.1817	1/9/1959	2115
10N03W22G01S	34.9456	117.1772	1/9/1959	2098.65
10N03W22L01S	34.9419	117.1817	2/2/1959	2102.02
10N03W22L02S	34.9417	117.1817	2/2/1959	2105.2
10N03W22M01S	34.9419	117.1861	2/2/1959	2106.8
10N03W22M03S	34.9414	117.1864	2/3/1959	2104.03
10N03W22N04S	34.9392	117.1861	2/2/1959	2108.87
10N03W22P01S	34.9383	117.1817	2/2/1959	2111.27
10N03W22P02S	34.9386	117.1817	2/2/1959	2107.65
10N03W22P03S	34.9389	117.1817	2/2/1959	2110.02
10N03W22P04S	349392	117.1817	2/2/1959	2112.58
10N03W23H03S	34.9461	117.1553	1/9/1959	2100.98
10N03W23K01S	34.9436	117.1572	12/20/1983	2078

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
10N03W23M01S	34.9419	117.1684	2/3/1959	2092.6
10N03W23M02S	34.9439	117.1706	1/19/1993	2074.34
10N03W23N01S	34.9383	117.1684	2/3/1959	2091.55
10N03W23N02S	34.9386	117.1684	12/22/1932	2141.5
10N03W23P01S	34.9383	117.1639	2/4/1959	2089.12
10N03W23Q01S	34.9383	117.1598	2/24/1959	2085.15
10N03W23R01S	34.9369	117.1545	3/24/1993	2066.35
10N03W23R02S	34.9386	117.1553	2/4/1959	2098.7
10N03W23R03S	34.9389	117.1553	2/4/1959	2100.58
10N03W24E01S	34.9456	117.1508	1/9/1959	2099.65
10N03W24E02S	34.9458	117.1509	1/9/1959	2100.1
10N03W24N01S	34.9383	117.1508	2/4/1959	2116.35
10N03W24N02S	34.9386	117.1509	2/4/1959	2102.34
10N03W24P03S	34.9369	117.1481	3/23/2006	2089.01
10N03W24R01S	34.9383	117.1375	2/4/1959	2115.09
10N03W24R02S	34.9386	117.1375	2/4/1959	2115.75
10N03W25C01S	34.9347	117.1464	3/20/1959	2104
10N03W25E01S	34.9311	117.1508	3/20/1959	2102
10N03W25E06S	34.9317	117.1525	3/24/2006	2086.56
10N03W225F01S	34.9311	117.1464	3/20/1959	2116
10N03W24L01S	34.9275	117.1464	3/20/1959	2108.85
10N03W25M01S	34.9275	117.1508	3/20/1959	2115
10N03W25P01S	34.9239	117.1464	3/20/1959	2106
10N03W25R01S	34.9239	117.1375	3/20/1959	2115.14
10N03W26A01S	34.9347	117.1553	3/19/1959	2120
10N03W26B02S	34.935	117.1598	2/4/1959	2098.02
10N03W26B04S	34.9356	117.1598	2/4/1959	2049.4
10N03W26F01S	34.9311	117.1639	2/6/1959	2006.05
10N03W26F02S	34.9317	117.1619	12/10/1992	2080.66
10N03W26G01S	34.9311	117.1595	2/6/1959	2099.9
10N03W26H01S	34.9311	117.1553	2/6/1959	2087
10N03W26L01S	34.9275	117.1639	2/6/1959	2088.46
10N03W26L02S	34.9275	117.162	3/22/2006	2088.17
10N03W26M01S	34.9275	117.1684	3/27/1959	2088
10N03W26N01S	34.9239	117.1683	3/18/1959	2084.42
10N03W26P01S	34.9239	117.1639	3/18/1959	2085.72
10N03W26P03S	34.9244	117.1639	3/18/1959	2095
10N03W26P04S	34.9247	117.1639	3/18/1959	2078
10N03W26Q01S	34.9239	117.1595	3/18/1959	2078.4
10N03W26R01S	34.9222	117.1386	11/22/1988	2087.2
10N03W27D01S	34.9344	117.1861	2/3/1959	2118.95
10N03W27F01S	34.9294	117.1803	10/11/2006	2084.09
10N03W27F02S	34.9308	117.1817	2/5/1959	2110.68
10N03W27H01S	34.9308	117.1728	2/3/1959	2097.94
10N03W27H04S	34.9319	117.1717	1/19/1993	2083.87
10N03W27J01S	34.9272	117.1728	3/13/1953	2088.35
10N03W27K01S	34.9272	117.1772	3/17/1959	2101.34
10N03W27K02S	34.9275	117.1772	3/17/1959	2099.47

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
10N03W27K03S	34.9278	117.1772	3/17/1959	2102.8
10N03W27K04S	34.9281	117.1772	3/17/1959	2099.71
10N03W27M01S	34.9272	117.1859	3/17/1959	2115
10N03W27N02S	34.9239	117.1859	3/17/1959	2105.33
10N03W27N03S	34.9242	117.1858	3/17/1959	2109.04
10N03W27N04S	34.9244	117.1859	3/29/1932	2151.9
10N03W27Q01S	34.9236	117.1772	3/18/1959	2096.2
10N03W27Q03S	34.9242	117.1772	3/18/1959	2096.68
10N03W28A01S	34.9344	117.1903	12/31/1958	2122.27
10N03W28C01S	34.9344	117.1992	12/31/1958	2122.05
10N03W28C02S	34.9347	117.1992	12/26/1950	2138
10N03W28C03S	34.935	117.1992	12/30/1958	2124.54
10N03W28F01S	34.9308	117.1991	9/3/1953	2126.6
10N03W28H03S	34.9314	117.1903	12/31/1958	2111.49
10N03W28J02S	34.9275	117.1903	2/5/1959	2116.72
10N03W28J03S	34.9278	117.1903	2/5/1959	2116.04
10N03W28J04S	34.9281	117.1903	2/5/2059	2120.04
10N03W28K01S	34.9275	117.1948	2/5/1959	2118.62
10N03W28K02S	34.9278	117.1948	2/5/1959	2117.17
10N03W28L01S	34.9272	117.1992	12/30/1958	2118.85
10N03W28L02S	34.9275	117.1992	12/30/1958	2127.2
10N03W28L04S	34.9281	117.1992	12/30/1958	2132.13
10N03W28M01S	34.9283	117.2042	4/21/2006	1970.77
10N03W28M06S	34.9275	117.2064	1/19/1993	2123.83
10N03W28N01S	34.9236	117.2036	12/30/1958	2137.96
10N03W28Q01S	34.9236	117.1948	12/30/1958	2126.1
10N03W28Q03S	34.9242	117.1948	2/5/1959	2122
10N03W28Q05S	34.9247	117.1948	2/5/1959	2130
10N03W28R01S	34.9222	117.1886	1/19/1993	2093.71
10N03W29L01S	34.9272	117.2167	12/29/1958	2161.38
10N03W29M01S	34.9272	117.2211	12/5/1958	2152.22
10N03W29P01S	34.9236	117.2342	12/29/1958	2149.76
10N03W30Q03S	34.9242	117.2298	12/30/1958	1962.31
10N03W30R01S	34.9236	117.2298	12/30/1958	2164.36
10N03W30R02S	34.9239	117.2298	12/30/1958	2162.37
10N03W32C03S	34.9194	117.2172	1/19/1993	2138.3
10N03W32G02S	34.9158	117.2122	10/23/1958	2165.59
10N03W32G03S	34.9156	117.2122	10/23/1958	2163.74
10N03W32H01S	34.9161	117.2078	10/23/1958	2158.56
10N03W32H02S	34.9156	117.2078	10/13/1958	2159.83
10N03W32Q01S	34.9089	117.2122	3/10/1932	2178
10N03W33A01S	34.92	117.1903	10/24/1958	2116.1
10N03W33A05S	34.9211	177.1903.	11/18/1958	2124.45
10N03W33C02S	34.9203	117.1992	10/24/1958	2140.22
10N03W33D01S	34.92	117.2036	10/24/1958	2150.64
10N03W33D02S	34.9203	117.2036	10/24/1958	2167.4
10N03W33H01S	34.9164	117.1903	11/18/1958	2134.44
10N03W33H02S	34.9161	117.1903	11/18/1958	2129.07

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
10N03W33J01S	34.9114	117.1898	4/19/1971	2142.34
10N03W34A01S	34.92	117.1728	11/19/1958	2080.05
10N03W34B01S	34.92	117.1772	11/19/1958	2095.65
10N03W34B03S	34.9206	117.1772	11/19/1958	2102.4
10N03W34C01S	34.92	117.1817	11/19/1958	2104.65
10N03W34C02S	34.9203	117.1817	11/19/1958	2100
10N03W34C03S	34.9206	117.1817	11/19/1958	2097.01
10N03W34D01S	34.92	117.1859	11/19/1958	2110.08
10N03W34D02S	34.9203	117.1859	11/19/1958	2109.32
10N03W34D03S	34.9206	117.1859	11/19/1958	2108.59
10N03W34G01S	34.9164	117.1772	11/19/1958	2114.99
10N03W34H01S	34.9147	117.1719	1/20/1993	2090.85
10N03W34J01S	34.9128	117.1728	11/19/1958	2102.62
10N03W34M02S	34.9131	117.1859	11/18/1958	2147.97
10N03W35A01S	34.92	117.1553	11/20/1958	2100
10N03W35A02S	34.9203	117.1553	11/20/1958	2098
10N03W35B01S	34.92	117.1595	11/20/1958	2081.34
10N03W35E01S	34.9164	117.1684	11/20/1958	2096.32
10N03W35F01S	34.9164	117.1639	11/20/1958	2091.78
10N03W15G01S	34.9164	117.1595	11/20/1958	2094.42
10N03W35J01S	34.9128	117.155	11/20/1958	2109.9
10N03W35J02S	34.9125	117.155	11/20/1958	2103.98
10N03W35J08S	34.9225	117.1625	1/20/1993	2101.75
10N03W35N01S	34.9111	117.1703	4/14/1971	2103.97
10N03W35P01S	34.9092	117.1639	11/20/1958	2085.97
10N03W35Q01S	34.9092	117.1595	3/26/1958	2100.12
10N03W35Q02S	34.9094	117.1595	11/20/1958	2093.23
10N03W35Q03S	34.9097	117.1595	11/20/1958	2091.5
10N03W36A01S	34.9203	117.1375	12/1/1958	2143.87
10N03W36B01S	34.9203	117.142	3/26/1958	2116.12
10N03W36C01S	34.9203	117.1464	11/21/1958	2106
10N03W36D02S	34.9206	117.1509	11/20/1958	2110.56
10N03W36F01S	34.9164	117.1464	11/21/1958	2111.74
10N03W36G02S	34.915	117.1431	3/21/2000	2112.92
10N03W36J01S	34.9128	117.1375	11/21/1958	2136.37
10N03W36J02S	34.9131	117.1375	12/1/1958	2128.27
10N03W36J04S	34.9114	117.1356	3/11/2004	2102.73
10N03W36L01S	34.9131	117.1464	11/12/1958	2112.2
10N03W36N02S	34.9092	117.1509	11/21/1958	2109.5
10N03W36P01S	34.9094	117.1464	11/21/1958	2121.63
10N03W36P02S	34.9097	117.1464	11/21/1958	2146.42
10N03W36Q01S	34.9078	117.1422	11/2/1990	2104.69
10N03W36R01S	34.9094	117.1375	12/1/1958	2147.7
10N03W36R05S	34.9083	117.137	1/20/1993	2087.9
10N04W02A01S	34.9939	117.2611	5/20/1959	2018
10N04W02A02S	34.9942	117.2611	5/20/1959	2021.1
10N04W03F01S	34.9903	117.2875	3/11/1958	1994.15
10N04W03Q01S	34.9831	117.2831	11/2/1962	1958

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
10N04W04C01S	34.9939	117.3053	5/27/1959	1940
10N04W06A01S	34.9792	117.2786	5/20/1959	1933
10N04W10D01S	34.9808	117.2923	4/21/2006	1903.2
11N03W07D01S	35.0661	117.2395	3/21/2006	1966.93
11N03W07M01S	35.0614	117.2375	5/10/1955	2422.26
11N03W07R01S	35.0547	117.2242	7/1/1968	2014
11N03W07Z02S	35.0592	117.2247	1/1/2019	2030
11N03W07Z03S	35.0542	117.2322	1/1/2019	2021
11N03N08G01S	35.0622	117.2122	7/10/1968	2023.12
11N03W08N01S	35.0544	114.2222	7/1/1968	2023
11N03W15C01S	35.0481	117.1822	1/1/1957	2070
11N03W15D01S	35.0508	117.187	7/1/1968	2026.94
11N03W15E01S	35.0469	117.187	5/11/1955	2032
11N03W15E02S	35.0483	117.187	7/1/1968	2034
11N03W16D01S	35.0522	117.2053	3/21/2006	1993.54
11N03W16Z01S	35.0444	117.1894	1/1/2019	2015
11N03W17J01S	35.0467	117.2072	7/1/1968	2019
11N03W19B01S	35.0361	117.2292	8/19/1969	2022.74
11N03W20J01S	35.03	117.2069	7/1/1968	2030
11N03W20N01S	35.025	117.2219	1/1/2019	2029
11N03W20P01S	35.0258	117.2111	7/3/1968	2027.98
11N03W20R01S	35.0256	117.2067	7/1/1968	2030
11N03W21L01S	35.03	117.2011	1/1/1966	2025.5
11N03W21L02S	35.03	117.1994	1/1/1962	2022.5
11N03W21N02S	35.0264	117.2022	7/1/1968	2023
11N03W21R01S	35.0261	117.1908	7/5/1968	2019.38
11N03W27L01S	35.0156	117.1814	5/11/1955	2038.8
11N03W27N02S	35.0114	117.1867	1/1/2019	2047
11N03W28H01S	35.0189	117.1889	2/9/1934	2036.9
11N03W28H02S	35.0189	117.1889	7/6/1932	2037.7
11N03W28J01S	35.0142	117.1889	1/1/2019	2063.4
11N03W28R01S	35.0122	117.1889	3/23/1960	2043.12
11N03W28R02S	35.0108	117.1898	10/11/2006	1997.29
11N03W30A01S	35.0178	117.2294	4/14/1971	2027.9
11N03W30A02S	35.0175	117.2283	7/14/1978	2025.98
11N03W30G01S	35.0175	117.2292	3/21/2006	2015.77
11N03W30G02S	35.0172	117.2283	11/22/1992	2019.77
11N03W32P01S	34.9972	117.1992	6/25/1953	2041
11N03W32P02S	34.9972	117.1992	6/25/1953	2038.6
11N03W32R01S	34.9972	117.1903	5/18/1959	2040
11N03W33H01S	35.0025	117.1889	7/1/1968	2035
11N03W33H02S	320042	117.192	7/1/1968	2048
11N03W33N01S	35.1006	117.2056	3/11/2004	2010.8
11N03W34F01S	35.0042	117.1842	3/25/1958	2045.4
11N04W01N01S	35.0686	117.2581	10/31/1950	2006.6
11N04W03H01S	35.0764	117.277	7/1/1968	1958
11N04W04J01S	35.0728	117.2978	7/10/1968	1961.44
11N04W04M01S	35.075	117.2956	9/2/1953	1999.76

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
11N04W04R01S	35.0722	117.2956	7/3/1968	1997.9
11N04W06E01S	35.0753	117.3458	7/17/1968	2001.94
11N04W06L01S	35.0756	117.3389	7/1/1968	4005
11N04W12H01S	35.0611	117.2461	7/10/1968	1993.52
11N04W15A01S	35.0511	177.2786	7/1/1968	2005
11N04W18C01S	35.0522	117.3409	6/17/1953	1960.43
11N04W18Z01S	35.0531	117.3461	1/1/2019	2005
11N04W19E01S	35.0331	117.3472	6/12/1953	1881.3
11N04W19G01S	35.0328	117.3364	7/16/1968	1891.74
11N04W19H01S	35.0331	117.3286	4/11/1969	1927.2
11N04W19H02S	35.0328	117.3328	7/1/1968	1900
11N04W19L01S	35.0311	117.3403	11/11/1970	1894.8
11N04W19P01S	35.0258	117.3428	7/1/1968	1875
11N04W19R01S	35.0261	117.3325	6/10/1953	1919
11N04W19Z01S	35.0311	117.3353	1/1/2019	1992
11N04W20E01S	35.0328	117.3289	3/26/1955	1943
11N04W28N01S	35.0111	117.3095	4/15/1969	1926.5
11N04W28N02S	35.0111	117.3095	7/1/1968	2027
11N04W28Q01S	35.0108	117.3192	11/17/1960	1964.42
11N04W29R01S	35.0108	117.3156	4/25/2006	1898.12
11N04W30N01S	35.0139	117.347	4/25/2006	1897
11N04W30N02S	35.0111	117.3472	10/22/1952	1941.1
11N04W30N03S	35.0119	117.3467	1/1/2019	2084
11N04W30P01S	35.0114	117.3411	7/14/1978	190344
11N04W30R01S	35.0131	117.3325	6/10/1953	1935.9
11N04W30Z02S	35.0194	117.3322	1/1/2019	2025
11N04W31A01S	35.0089	117.3486	7/11/1968	1909.36
11N04W31H01S	35.0064	117.3306	3/31/1967	1926.3
11N04W32A01S	35.0106	117.3125	9/25/1967	1909
11N04W32D01S	35.0075	117.3286	4/11/1969	1926.5
11N04W32D02S	35.0103	117.3256	7/11/1968	1913.33
11N04W32F01S	35.0047	117.3242	7/11/1968	1984
11N04W32L01S	35.0017	117.3239	7/11/1968	1924.7
11N04W33Q01S	34.9978	117.2922	3/10/1967	1950.7
11N04W34B01S	35.0092	117.2822	8/1/1968	2022
11N04W34D01S	35.0078	117.2922	1/1/2019	2019
11N04W34D02S	35.0081	117.2919	11/21/1992	2028
11N04W35F01S	35.0036	117.2695	5/10/1955	2017.08
11N04W35G01S	35.0036	117.2678	3/18/1963	2019
11N05W01N01S	35.0703	117.3645	7/1/1968	1987
11N05W02B01S	35.0836	117.3722	7/24/1968	1987.82
11N05W02B02S	35.0836	117.3723	6/17/1953	2003.18
11N05W02D01S	35.0839	117.3828	6/17/1953	1968.9
11N05W12G01S	35.0628	117.3561	7/15/1968	1969.91
11N05W12M01S	35.0617	117.3644	1/1/2019	2022
11N05W12Z01S	35.0603	117.3581	1/1/2019	2030
11N05W13H01S	35.0506	117.3483	4/11/1969	1939.4
11N05W13Q01S	35.0411	117.3556	7/17/1968	1895.99

Source: MWA Database

Domain Area Water Wells

State Well Number	Latitude	Longitude	GW Level Date	GW Level Elevation
11N05W14R01S	35.0414	117.3661	6/18/1953	2038.9
11N05W24A01S	35.0367	117.3481	3/18/1963	1973.9
11N05W24E01S	35.0336	117.3617	6/11/1953	1915
11N05W24F01S	35.0339	117.3569	5/22/1967	1882
11N05W24P01S	35.0265	117.3609	11/15/1950	1920
11N05W24Q01S	35.0264	117.3556	12/15/1950	1912
11N05W24R02S	35.0261	117.35	7/1/1968	1922
12N04W34C01S	35.0964	117.2864	9/2/1953	2013.45

Source: MWA Database

Unique ID #	Master Harper Lake Domain Area Wells	Well Name/#	Latitude	Longitude
1	Shapefile Layer Name in HL BCM Figure 1-2 Map	10N03W10J01S	34.97136794	-117.1736565
2	1 HL Well Completion Reports Obtained from DWR	10N03W02R01S	34.98220095	-117.1558782
3	3 HL Well Completion Reports Obtained from DWR	11N04W32F01S	35.00469936	-117.3250504
4	4 HL Well Completion Reports Obtained from DWR	10N03W03M01S	34.9841	-117.18686
5	5 HL Well Completion Reports Obtained from DWR	10N03W03M02S	34.9841	-117.18686
6	6 HL Well Completion Reports Obtained from DWR	10N03W05G01S	34.99334	-117.21786
7	7 HL Well Completion Reports Obtained from DWR	10N04W06H02S	34.99141	-117.33249
8	8 HL Well Completion Reports Obtained from DWR	11N03W21J02S	35.02984	-117.19125
9	9 HL Well Completion Reports Obtained from DWR	11N05W12D01S	35.06776	-117.36547
10	Ryken Well (Trimble GPS) (AKA Active Irrigation Well)	Ryken Well	35.00998	-117.31293
11	11 Wells 6 27 08 and 7 8 08 Merge	Hay Farm	35.011	-117.31074
12	12 Wells 6 27 08 and 7 8 08 Merge	Well A	35.01482	-117.33207
13	13 Wells 6 27 08 and 7 8 08 Merge	Well B	35.01622	-117.33914
14	14 Wells 6 27 08 and 7 8 08 Merge	Well D	35.01077	-117.31987
15	15 Wells 6 27 08 and 7 8 08 Merge	Well J	35.02549	-117.33913
16	16 Wells 6 27 08 and 7 8 08 Merge	Myrob Well	35.03275	-117.33011
17	17 Wells 6 27 08 and 7 8 08 Merge	Well L	35.01213	-117.34843
18	18 Wells 6 27 08 and 7 8 08 Merge	Well M	35.01843	-117.34843
19	19 Wells 6 27 08 and 7 8 08 Merge	Well N	35.02183	-117.3485
20	20 Wells 6 27 08 and 7 8 08 Merge	Well U	35.01107	-117.32995
21	21 Wells 6 27 08 and 7 8 08 Merge	Well Y	35.01049	-117.32599
22	22 Wells 6 27 08 and 7 8 08 Merge	Well P	34.99668	-117.30342
23	23 Wells 6 27 08 and 7 8 08 Merge	Well Z	34.9829	-117.32974
24	24 Wells 6 27 08 and 7 8 08 Merge	Uli-A	34.99156	-117.33169
25	25 Wells 6 27 08 and 7 8 08 Merge	Uli-B	34.99423	-117.33218
26	26 Field Verified 06/18/08	AA	35.00707	-117.33005
27	27 Field Verified 06/11/08	P	34.99668	-117.30341
28	28 Field Verified 06/11/08	Q	34.9995	-117.30822
29	29 Field Verified 06/11/08	R	35.00319	-117.29939
30	30 Field Verified 06/11/08	S	34.99954	-117.29942
31	31 Field Verified 06/11/08	T	35.01099	-117.33004
32	32 Field Verified 06/11/08	U	35.01106	-117.32996
33	33 Field Verified 06/11/08	V	35.01446	-117.32578
34	34 Field Verified 06/11/08	W	35.00681	-117.30825
35	35 Field Verified 06/11/08	X	35.01049	-117.32591
36	36 Field Verified 06/11/08	Y	35.01051	-117.32598
37	37 Field Verified 06/06/08	A	35.01481	-117.33206
38	38 Field Verified 06/06/08	B	35.01624	-117.33913
39	39 Field Verified 06/06/08	C	35.01606	-117.31277
40	40 Field Verified 06/06/08	D	35.0107	-117.31988
41	41 Field Verified 06/06/08	E	35.01135	-117.32076
42	42 Field Verified 06/06/08	F	35.00978	-117.3024
43	43 Field Verified 06/06/08	G	35.00686	-117.29932
44	44 Field Verified 06/06/08	H	35.00427	-117.30267
45	45 Field Verified 06/06/08	I	35.02357	-117.33484
46	46 Field Verified 06/06/08	J	35.02551	-117.33913
47	47 Field Verified 06/06/08	Myrob	35.03276	-117.33008
48	48 Field Verified 06/06/08	K	35.01129	-117.33696
49	49 Field Verified 06/06/08	L	35.0121	-117.34843
50	50 Field Verified 06/06/08	M	35.01843	-117.34843
51	51 Field Verified 06/06/08	N	35.02183	-117.34853
52	52 Field Verified 06/06/08	O	35.02192	-117.36634

Unique ID #	Master Harper Lake Domain Area Wells	Well Name/#	Latitude	Longitude
53	Field Verified 09/08/06	9	35.0223	-117.329633
54	Field Verified 09/08/06	1	34.99669025	-117.3034237
55	Field Verified 09/08/06	10	35.02357529	-117.334847
56	Field Verified 09/08/06	11	35.02550036	-117.3391189
57	Field Verified 09/08/06	12	35.02429563	-117.3411132
58	Field Verified 09/08/06	13	35.02467231	-117.3430675
59	Field Verified 09/08/06	14	35.02182238	-117.3485159
60	Field Verified 09/08/06	15	35.0184314	-117.3484442
61	Field Verified 09/08/06	16	35.01456834	-117.3485361
62	Field Verified 09/08/06	17	35.01452928	-117.3484629
63	Field Verified 09/08/06	18	35.01213759	-117.3484277
64	Field Verified 09/08/06	2	35.00428484	-117.3027053
65	Field Verified 09/08/06	3	35.01013272	-117.3046101
66	Field Verified 09/08/06	4	35.01066489	-117.3170824
67	Field Verified 09/08/06	5	35.0107617	-117.3198634
68	Field Verified 09/08/06	6	35.01132924	-117.3207797
69	Field Verified 09/08/06	7	35.01048636	-117.3259881
70	Field Verified 09/08/06	8	35.01102213	-117.330031
71	Field Verified 08 24 06 selection 2	014	35.07902887	-117.1986643
72	Field Verified 08 24 06 selection 2	015	35.07902652	-117.1986657
73	Field Verified 08 24 06 selection 2	016	35.05329919	-117.2318458
74	Field Verified 08 24 06 selection 2	HL-1	35.06045407	-117.237464
75	Field Verified 08 24 06 selection 2	HL-2	35.06060008	-117.2375274
76	Field Verified 08 24 06 selection 2	WPT1	35.05053098	-117.3492179
77	Field Verified 08 24 06 selection 2	WPT10	35.08130003	-117.2883
78	Field Verified 08 24 06 selection 2	WPT11	35.07074998	-117.29721
79	Field Verified 08 24 06 selection 2	WPT12	35.06687997	-117.28829
80	Field Verified 08 24 06 selection 2	WPT12-1	35.06818227	-117.288032
81	Field Verified 08 24 06 selection 2	WPT13	35.04182998	-117.33301
82	Field Verified 08 24 06 selection 2	WPT14	35.02777001	-117.38191
83	Field Verified 08 24 06 selection 2	WPT15	35.02213997	-117.37079
84	Field Verified 08 24 06 selection 2	WPT15-1	35.02197443	-117.3663947
85	Field Verified 08 24 06 selection 2	WPT16	35.08827	-117.26183
86	Field Verified 08 24 06 selection 2	WPT2	35.05219764	-117.3417177
87	Field Verified 08 24 06 selection 2	WPT3	35.05303089	-117.3469956
88	Field Verified 08 24 06 selection 2	WPT4	35.06275272	-117.3569959
89	Field Verified 08 24 06 selection 2	WPT5	35.06858652	-117.2589374
90	Field Verified 08 24 06 selection 2	WPT6	35.07025243	-117.3653295
91	Field Verified 08 24 06 selection 2	WPT60	35.05414266	-117.2331032
92	Field Verified 08 24 06 selection 2	WPT60-1	35.05326583	-117.2318691
93	Field Verified 08 24 06 selection 2	WPT61	35.05442052	-117.2231028
94	Field Verified 08 24 06 selection 2	WPT62	35.0546983	-117.2250473
95	Field Verified 08 24 06 selection 2	WPT63	35.05914255	-117.2256029
96	Field Verified 08 24 06 selection 2	WPT64	35.07553018	-117.3397732
97	Field Verified 08 24 06 selection 2	WPT65	35.07835999	-117.34635
98	Field Verified 08 24 06 selection 2	WPT65-1	35.0760605	-117.3481002
99	Field Verified 08 24 06 selection 2	WPT66	35.08045002	-117.1996
100	Field Verified 08 24 06 selection 2	WPT66-1	35.07896114	-117.1993558
101	Field Verified 08 24 06 selection 2	WPT66-2	35.07901889	-117.1987234
102	Field Verified 08 24 06 selection 2	WPT67	35.05721999	-117.23533
103	Field Verified 08 24 06 selection 2	WPT7	35.07219728	-117.2964385
104	Field Verified 08 24 06 selection 2	WPT8	35.07636392	-117.2778269

Unique ID #	Master Harper Lake Domain Area Wells	Well Name/#	Latitude	Longitude
105	Field Verified 08/24/06 selection 2	WPT9	35.09636323	-117.2872717
106	Field Verified 08/23/06 selection 2	005	34.99464691	-117.2721166
107	Field Verified 08/23/06 selection 2	WPT11	34.99383688	-117.2619618
108	Field Verified 08/23/06 selection 2	WPT10	34.99139071	-117.3324878
109	Field Verified 08/23/06 selection 2	WPT11	34.99139071	-117.3324878
110	Field Verified 08/23/06 selection 2	WPT12	34.96819496	-117.27511
111	Field Verified 08/23/06 selection 2	WPT13	34.97171402	-117.2529817
112	Field Verified 08/23/06 selection 2	WPT14	34.96810913	-117.2574181
113	Field Verified 08/23/06 selection 2	WPT15	34.98330116	-117.3510111
114	Field Verified 08/23/06 selection 2	WPT16	34.97952461	-117.3640681
115	Field Verified 08/23/06 selection 2	WPT17	35.0011754	-117.2175498
116	Field Verified 08/23/06 selection 2	WPT2	34.99383688	-117.2619618
117	Field Verified 08/23/06 selection 2	WPT3	34.9938798	-117.2707702
118	Field Verified 08/23/06 selection 2	WPT4	34.98658419	-117.2620208
119	Field Verified 08/23/06 selection 2	WPT5	34.9829793	-117.2664625
120	Field Verified 08/23/06 selection 2	WPT6	34.99422312	-117.3327399
121	Field Verified 08/23/06 selection 2	WPT7	34.99422312	-117.3327399
122	Field Verified 08/23/06 selection 2	WPT8	34.99422312	-117.3327399
123	Field Verified 08/23/06 selection 2	WPT9	34.99061823	-117.3327721
124	Field Verified 08/17/06	5	35.068317	-117.25925
125	Field Verified 08/17/06	6	35.0686	-117.365217
126	Field Verified 08/17/06	7	35.072083	-117.296267
127	Field Verified 08/17/06	8	35.07685	-117.2771
128	Field Verified 08/17/06	11	35.072817	-117.298867
129	Field Verified 08/17/06	13	35.043367	-117.33055
130	Field Verified 08/17/06	16	35.087767	-117.2597
131	Field Verified 08/17/06	0	35.050531	-117.349218
132	Field Verified 08/17/06	0	35.052198	-117.341718
133	Field Verified 08/17/06	0	35.053031	-117.346996
134	Field Verified 08/17/06	0	35.062753	-117.356996
135	Field Verified 08/17/06	0	35.096363	-117.287272
136	Field Verified 08/17/06	0	35.0813	-117.2883
137	Field Verified 08/17/06	0	35.06688	-117.28829
138	Field Verified 08/17/06	0	35.02777	-117.38191
139	Field Verified 08/17/06	0	35.02214	-117.37079
140	Field Verified 08/11/06	106	35.02552489	-117.2075279
141	Field Verified 08/11/06	100408	34.96819495	-117.3237079
142	Field Verified 08/11/06	086	35.00913492	-117.2830879
143	Field Verified 08/11/06	USGS2	34.92141661	-117.3108997
144	Field Verified 08/11/06		34.99687571	-117.381223
145	Field Verified 08/11/06		34.99019311	-117.3849184
146	Field Verified 08/11/06		34.98538331	-117.3842533
147	Field Verified 08/11/06		34.98288383	-117.3297385
148	Field Verified 08/11/06		34.98089943	-117.3819561
149	Field Verified 08/11/06		35.00813714	-117.282031
150	Field Verified 08/11/06		35.00754229	-117.2933508
151	Field Verified 08/11/06		35.03736	-117.27083
152	Field Verified 08/11/06		35.0181073	-117.2317807
153	Field Verified 08/11/06		35.01704667	-117.2291451
154	Field Verified 08/11/06		35.01757073	-117.2294463
155	Field Verified 08/11/06		35.02480244	-117.2071817
156	Field Verified 08/11/06		35.03730462	-117.2068066

Unique ID #	Master Harper Lake Domain Area Wells	Well Name/#	Latitude	Longitude
157	Field Verified 08/11/06		35.03734592	-117.2069623
158	Field Verified 08/11/06		35.0405331	-117.2071923
159	Field Verified 08/11/06		35.04531931	-117.2066523
160	Field Verified 08/04/06	W1+2FT	34.98101265	-117.2920412
161	Field Verified 08/04/06	W10DED	35.00354589	-117.2695912
162	Field Verified 08/04/06	W190LL	34.99662965	-117.3034456
163	Field Verified 08/04/06	W208LL	34.98039641	-117.2782808
164	Field Verified 08/04/06	WASH	35.04112825	-117.17941
165	Field Verified 08/04/06	059	35.04240959	-117.1757812
166	Field Verified 08/04/06	060	35.04280077	-117.1779932
167	Field Verified 08/04/06	048	35.01903313	-117.189315
168	Field Verified 08/04/06	031	35.00176256	-117.1508673
169	Field Verified 08/04/06	030	35.0002021	-117.1505008
170	Field Verified 08/04/06	017	35.00336492	-117.2682533
171	Field Verified 08/04/06	002	35.04454723	-117.3654837
172	Field Verified 06/15/06	HL-1	35.016194	-117.339111
173	Field Verified 06/15/06	HL-2	35.00975	-117.302417
174	Field Verified 06/15/06	HL-3	35.015833	-117.31275
175	Field Verified 06/15/06	HL-4	35.003278	-117.299417
176	Field Verified 06/15/06	HL-6	35.010555	-117.3125
177	Field Verified 06/15/06	HL-5	35.010556	-117.3125
178	Field Verified 05/10/06 selection	1	35.06597222	-117.2403611
179	Field Verified 05/10/06 selection	2	35.0605	-117.2375
180	Field Verified 05/10/06 selection	3	35.06144444	-117.247222
181	Field Verified 05/10/06 selection	5	35.08452778	-117.2841389
182	Field Verified 05/10/06 selection	6	35.07283333	-117.2988889
183	Field Verified 05/10/06 selection	7	35.07558333	-117.3467222
184	Field Verified 05/10/06 selection	9	35.08397222	-117.3746667
185	Field Verified 05/10/06 selection	10	35.06858333	-117.3651944
186	Field Verified 05/10/06 selection	11	35.06186111	-117.3659167
187	Field Verified 05/10/06 selection	12	35.04119444	-117.3671667
188	Field Verified 04/20/06	1	35.05041667	-117.1880833
189	Field Verified 04/20/06	2	35.0475	-117.1863056
190	Field Verified 04/20/06	3	35.04741667	-117.1856944
191	Field Verified 04/20/06	4	35.04863889	-117.1864722
192	Field Verified 04/20/06	5	34.98472222	-117.1549167
193	Field Verified 04/20/06	6	34.98463889	-117.1548056
194	Field Verified 04/20/06	7	34.99494444	-117.2158611
195	Field Verified 04/20/06	8	34.99627778	-117.2373056
196	Field Verified 04/20/06	9	34.99894444	-117.2386389
197	Field Verified 04/20/06	10	34.98875	-117.2885
198	Field Verified 04/20/06	11	34.98186111	-117.2824167
199	Field Verified 04/20/06	12	34.98097222	-117.2920556
200	Field Verified 04/20/06	13	34.98036111	-117.2784444
201	Field Verified 04/20/06	14	34.99688889	-117.38125
202	Field Verified 04/20/06	15	34.96683333	-117.3222222
203	Field Verified 08/20/05	001	35.012107	-117.3484297
204	Field Verified 08/20/05	006	34.98113008	-117.2921283
205	Field Verified 08/20/05	015	35.07292483	-117.2989745

Unique ID #	Location	Date Verified or Attempted	Top Measuring Point-Surface Elevation	DTW
1	Unknown			2135
2	Unknown			2145
3	Unknown			2080
4	Hinkley Rd/Burnt Tree Rd			2112
5	Hinkley Rd/Burnt Tree Rd			2112
6	Halstead Rd			2055
7	Unknown			2142
8	Hinkley Rd-S Mustard Seed Rd			2096
9	330 ft E of Hoffman Rd			2066
10	Lockhart Rd	9/25/2008	2048.658	
11		6/27/2008	2041.339	141.6999969
12		6/27/2008	2062.95	155.3099976
13		6/27/2008	2078.291	175.5
14		6/27/2008	2055.865	153.5200043
15		6/27/2008	2059.913	161.9299927
16		6/27/2008	2044.936	135.7400055
17		6/27/2008	2105.533	201.3600006
18		6/27/2008	2095.164	190.7799988
19		6/27/2008	2084.621	183.9199982
20		6/27/2008	2066.833	145.2599945
21		6/27/2008	2062.766	155.6799927
22		6/27/2008	2093.158	188.4299927
23		6/27/2008	2168.967	251.6399994
24		7/8/2008	2137.637	225.2700043
25		7/8/2008	2130.773	216.6399994
26	Near Santa Fe Ave	6/18/2008	2088	
27	North of High voltage power lines.	6/11/2008		
28	North of High voltage power lines. 2,500 ft NW o	6/11/2008	2072	
29	1000 ft E of Well H.	6/11/2008	2053	
30	1000 ft S of Well R	6/11/2008	2072	
31	NE Corner of Lockhart/Harper Lake Rd	6/11/2008	2063	
32	75 ft NE of Well T	6/11/2008	2058	145.15
33	North of Lockhart Rd	6/11/2008	2033	
34	East of active crop circle	6/11/2008	2050	
35	25' south side of Lockhart Dr.	6/11/2008		
36	25 ft west of Well X	6/11/2008	2042	
37	Behind the General Store-Harper Lake Rd	6/6/2008	2055	155
38	Further behind west of General Store	6/6/2008	2050	175
39		6/6/2008	0	0
40	East of General Store	6/6/2008	2063	152
41	North of house assoc w/ Well D	6/6/2008	2069	0
42	East of Well E	6/6/2008	2036	0
43		6/6/2008	2036	0
44		6/6/2008	0	0
45	North of general store, near FP & L facility	6/6/2008	2057	0
46	North of general store, apx 200ft south of south FL&P fence line, center	6/6/2008	2067	159
47	East of East FP&L Unit.	6/6/2008	2057	0
48	West of Harper Lake Rd	6/6/2008	0	0
49		6/6/2008	2120	0
50	West of Harper Lake Rd. Well M is appx 4,000' SW of Well J.	6/6/2008	2073	190
51	West of Harper Lake Rd	6/6/2008	0	0
52	Extreme west of Harper Lake Rd.	6/6/2008	2105	0

Unique ID #	Location	Date Verified or Attempted	Top Measuring Point-Surface Elevation	DTW
53		9/8/2006		0
54		9/8/2006	2085.144367	
55		9/8/2006	2050.452849	
56		9/8/2006	2050.452849	
57		9/8/2006	2059.12733	
58		9/8/2006	2070.16412	
59		9/8/2006	2080.416745	
60		9/8/2006	2079.625971	
61		9/8/2006	2096.184361	
62		9/8/2006	2094.609622	
63		9/8/2006	2096.184361	
64		9/8/2006	2061.492843	
65		9/8/2006	2034.681829	
66		9/8/2006	2041.778167	
67		9/8/2006	2044.14368	
68		9/8/2006	2056.761817	
69		9/8/2006	2050.452849	
70		9/8/2006	2071.742063	
71		8/24/2006	2101.702756	
72		8/24/2006	2106.433781	
73		8/24/2006	2021.279526	
74		8/24/2006	2020.492156	
75		8/24/2006	2030.741377	
76		8/24/2006		
77		8/24/2006		
78		8/24/2006		
79		8/24/2006		
80		8/24/2006	2025.223182	
81		8/24/2006		
82		8/24/2006		
83		8/24/2006		
84		8/24/2006		
85		8/24/2006	2117.473776	
86		8/24/2006		
87		8/24/2006		
88		8/24/2006		
89		8/24/2006		
90		8/24/2006		
91		8/24/2006		
92		8/24/2006	2014.182987	
93		8/24/2006		
94		8/24/2006		
95		8/24/2006		
96		8/24/2006		
97		8/24/2006		
98		8/24/2006	2035.472402	
99		8/24/2006		
100		8/24/2006	2107.224355	
101		8/24/2006	2124.570114	
102		8/24/2006		
103		8/24/2006		
104		8/24/2006		

Unique ID #	Location	Date Verified or Attempted	Top Measuring Point-Surface Elevation	DTW
105		8/24/2006		
106		8/23/2006		
107		8/23/2006		
108		8/23/2006		
109		8/23/2006		
110		8/23/2006		
111		8/23/2006		
112		8/23/2006		
113		8/23/2006		
114		8/23/2006		
115		8/23/2006		
116		8/23/2006		
117		8/23/2006		
118		8/23/2006		
119		8/23/2006		
120		8/23/2006		
121		8/23/2006		
122		8/23/2006		
123		8/23/2006		
124		8/17/2006		
125		8/17/2006		
126		8/17/2006		
127		8/17/2006		
128		8/17/2006		
129		8/17/2006		
130		8/17/2006		
131		8/17/2006		
132		8/17/2006		
133		8/17/2006		
134		8/17/2006		
135		8/17/2006		
136		8/17/2006		
137		8/17/2006		
138		8/17/2006		
139		8/17/2006		
140		8/11/2006	2108.799216	
141		8/11/2006	3004.511159	
142		8/11/2006	2151.377956	
143		8/11/2006		
144		8/11/2006		
145		8/11/2006		
146		8/11/2006		
147		8/11/2006		
148		8/11/2006		
149		8/11/2006		
150		8/11/2006		
151		8/11/2006		
152		8/11/2006		
153		8/11/2006		
154		8/11/2006		
155		8/11/2006		
156		8/11/2006		

Unique ID #	Location	Date Verified or Attempted	Top Measuring Point-Surface Elevation	DTW
157		8/11/2006		
158		8/11/2006		
159		8/11/2006		
160		8/4/2006	2130.088586	
161		8/4/2006	2046.509189	
162		8/4/2006	2085.14436	
163		8/4/2006	2122.992129	
164		8/4/2006	2135.606959	
165		8/4/2006	2171.879925	
166		8/4/2006	2175.032812	
167		8/4/2006	2085.935043	
168		8/4/2006	2190.013127	
169		8/4/2006	2208.937011	
170		8/4/2006	2037.83793	
171		8/4/2006	2090.666014	
172		6/15/2006		
173		6/15/2006		
174		6/15/2006		
175		6/15/2006		
176		6/15/2006		
177		6/15/2006		
178		5/10/2006		
179		5/10/2006		
180		5/10/2006		
181		5/10/2006		
182		5/10/2006		
183		5/10/2006		
184		5/10/2006		
185		5/10/2006		
186		5/10/2006		
187		5/10/2006		
188		4/20/2006		
189		4/20/2006		
190		4/20/2006		
191		4/20/2006		
192		4/20/2006		
193		4/20/2006		
194		4/20/2006		
195		4/20/2006		
196		4/20/2006		
197		4/20/2006		
198		4/20/2006		
199		4/20/2006		
200		4/20/2006		
201		4/20/2006		
202		4/20/2006		
203		8/20/2005	2099.337243	
204		8/20/2005	2128.51377	
205		8/20/2005	2035.472402	

Unique ID #	GW Elevation	Notes
1		
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9		
10		
11	1899.639	
12	1907.64	
13	1902.791	
14	1902.345	
15	1897.983	
16	1909.196	
17	1904.173	
18	1904.384	
19	1900.701	
20	1921.573	
21	1907.086	
22	1904.728	
23	1917.327	
24	1912.367	
25	1914.133	
26		Has not been inspected yet
27		Inactive. No pump. Open well. 7.5" dia ID. Possible power 200' away. Good candidate for transducer.
28		Well is filled in. Obstructed < 5 ft BTOC. Do not use
29		Inactive irrigation well. Pump motor missing. Access tubes filled in. No DTW. Pump shaft won't turn. Have pump tech evaluate to cut access.
30		Inactive 7.5" ID well. No pump. Open well. Filled in, obstructed. Do not use. No DTW.
31		Inactive irrigation well w/ electric pump motor present. No access tube. No DTW.
32		Inactive 6" steel well tilted. No pump. Welded steel cover. Existing cut access hole for electric DTW probe & transducer. Good transducer candidate
33		Inactive 10" dia well w/ standing water in well. Well obstructed 2' bloc. Water in well stagnant, perched. Do not use.
34		Inactive 7.5" dia well. No pump. Well is filled in; obstructed. No DTW. Do not use
35		24" steel plate nearly level with ground. Access holes in plate. Filled in-obstructed. No DTW. Do not use.
36		Inactive irrigation well. Pump motor missing. Pump shaft cut off. Access tube obstructed. Access is available in pump base near shaft.
37		Inactive well, submersible pump w/ electrical connections. No access for transducer. Electrical at road?
38		Inactive irrigation well w/ motor of turbine missing. PVC access tube is open to steel tape
39		No access for DTW. Motor missing. Pump bad. Power within 200ft. Lube oil stain at well head.
40		Abandoned house. Inactive residential well, submersible pump. Function? Good access for DTW electric probe
41		Inactive irrigation well. Access tube blocked. No DTW. Shaft on vertical turbine pump turns easy.
42		Inactive irrigation well. No pump shaft exposed. Pump motor ok. Access tube blocked. No DTW. Power nearby
43		No pump. Well is open. Well is obstructed. No DTW. Do not use this well
44		Inactive irrigation well. Motor missing. Base painted gold. DTW access tube open to 21'; bgs (obstructed). No DTW. Pump shaft won't turn.
45		Inactive irrigation well. Access tube blocked. No DTW. Pump motor missing. Pump shaft won't turn.
46		Inactive irrigation well. No pump. 1.5" round access hole in center of steel well top cover. Well top flush ground.
47		No pump. Steel lid welded to well casing. No access. No DTW. Need to cut 2" hole for transducer access
48		Inactive irrigation well owned b Abengoa. Access for transducer is present.
49		No pump. Well is open for transducer.
50		Inactive irrigation well. No pump. 1.5" round access hole in center of steel well top cover. Well top flush ground. Good candidate for transducer.
51		Pump motor missing. Crack in well base wide enough for DTW probe. DTW not obtained though.
52		Inactive residential well w/ submersible pump. DTW access obstructed. No DTW obtained.

Unique ID #	GW Elevation	Notes
53		Irrigation, pump in well, rough
54		8" steel 1/4" wall, WL=189.5', irrigation, good acce
55		Irrigation, pump in well, good access, drilled 1978
56		Irrigation, DRY, 14" casing, good access
57		Domestic, 8" steel, pump in well, good access (1976?
58		Domestic, pump in well, 8" steel, good access, 1976
59		Irrigation, pump in well, 16" steel, good access
60		Irrigation, DRY, good access
61		Irrigation, pump in well, good access
62		Irrigation, pump in well, good access
63		Irrigation, DRY, good access
64		Irrigation, pump in well, idle for 10-15 years
65		Irrigation, pump in well, good access, WL=136'
66		17" Steel, dry, good access, Irrigation
67		Domestic, 8"x3/8" steel, pump in well, good access
68		Pump in well, 16" steel, irrigation, good access
69		Irrigation, pump in well shaft cut off, good access
70		Irrigation, pump in well, good access
71		
72		
73		
74		Destroyed, 39inch concrete
75		Destroyed, 7ftx8ft concrete and lava rock
76		
77		
78		
79		
80		Destroyed
81		Not Found
82		
83		
84		Pump in well, 8inch Casing, Good Access
85		
86		Destroyed
87		
88		
89		
90		
91		
92		Destroyed
93		Private Property
94		Private Property
95		Destroyed
96		Not Found
97		
98		Destroyed
99		
100		Destroyed, 2 holding tanks
101		
102		Not Found
103		
104		

Unique ID #	GW Elevation	Notes
105		
106		
107		Not Found
108		Private Property
109		Private Property
110		Dry Hole, TD 68.6FT, 12inch Casing
111		Private Property
112		Private Property
113		Not Found
114		Dry Hole, 11inch Casing
115		Capped
116		Not Found
117		Open Hole, WL 54.3FT BGS, 8inch Casing
118		Not Found
119		Not Found
120		Private Property
121		Private Property
122		Private Property
123		Not Found
124		Plugged, 14" Casing
125		Dry Hole, 11" Casing
126		Blocked at 9ft, 10" Casing
127		Pump in well, 10" outlet
128		Open Hole, WL126.5'BGS, 15" Casing
129		Pump in well, 8" outlet
130		Hand dug, 40" Concrete, plugged
131		Not Found
132		Not Found
133		Not Found
134		Not Found
135		Not Found
136		Not Found
137		Not Found
138		Not Looked For
139		Not Looked For
140		NOT FOUND
141		NOT FOUND
142		NOT FOUND
143		CAPPED WELL W/ACCESS, WL 276'8", 8"CASING
144		COLLAPSED WELL, PICTURE TAKEN
145		10N05W03H01S, DRY HOLE, PICTURE 3
146		10N05W03J01S, WL 243', 12"CASING, PICTURE 4
147		10N04W05N02S, WL 252'4", 8"CASING, PICTURE 7
148		3 HAND DUG WELLS, DRY HOLES, 3"CASING, PICTURE 5,6
149		LARGE SQUARE OPENING SURROUNDED BY GRAVEL
150		11N04W34D02S, OPEN DRY HOLE, 6"CASING
151		NOT FOUND
152		PUMP/CAP WELL, WL 13'8" BGS, 16"CASING, PICTURE
153		WELL, WL 14', 16" CASING, PICTURE
154		SEE NICK'S NOTES
155		OPEN DRY HOLE, PICTURE
156		CAPPED WELL, 8"CASING, PICTURES

Unique ID #	GW Elevation	Notes
157		OPEN WELL, WL 63'8". 8" CASING, PICTURES
158		OPEN HOLE, WL 66', 8" CASING, PICTURE
159		CAPPED WELL, WL 75', PICTURE
160		Well, 1.2Ft Casing
161		Collapsed Well, 10inch Casing
162		Well on Property, WL 190'. 6-8Ft Casing
163		Well in Wash, WL 208', 10inch Casing
164		Shoreline Search, Wash
165		Shoreline Search, Not Found
166		Shoreline Search, Not Found
167		Plugged Well
168		Shoreline Search, Not Found
169		Shoreline Search, Maybe
170		Might be plugged well
171		Shoreline Search, Maybe
172		
173		
174		
175		
176		
177		
178		ACTIVE
179		DESTROYED
180		DESTROYED
181		DESTROYED
182		BROCK'S WELL
183		ID 58
184		TO DESTROY
185		CASING W/CAP
186		TO DESTROY
187		DESTROYED
188		
189		
190		
191		
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194		
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198		
199		
200		
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202		
203		USGS WELL
204		USGS WELL
205		WELL NEAR ABANDONED HOMESTEAD

Unique ID #	Photo	CA DWR Well Log #	Borehole Depth	Well Depth
1		Unknown	252	252
2		27303	151	151
3		33517	300	300
4		158484	150	150
5		09030	126	126
6		282136	152	152
7		106000	300	300
8		440749	200	200
9		48591	89	89
10				
11				
12				
13				
14				
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Unique ID #	Photo	CA DWR Well Log #	Borehole Depth	Well Depth
53	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL9.JPG			
54	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL1.JPG			
55	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL10.JPG			
56	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL11.JPG			
57	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL12.JPG			
58	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL13.JPG			
59	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL14.JPG			
60	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL15.JPG			
61	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL16.JPG			
62	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL17.JPG			
63	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL18.JPG			
64	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL2.JPG			
65	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL3.JPG			
66	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL4.JPG			
67	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL5.JPG			
68	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL6.JPG			
69	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL7.JPG			
70	G:\HARPER BACKUP\DIRECT BACKUP 101606\HarperLake\Field\Sept0806\WELL8.JPG			
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Unique ID #	Photo	CA DWR Well Log #	Borehole Depth	Well Depth
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Unique ID #	Photo	CA DWR Well Log #	Borehole Depth	Well Depth
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177				
178	Pictures 0257			
179	Picture 0258, 0259, 0260			
180	Picture 0261			
181	Picture 0263			
182	Picture None			
183	Picture 0264			
184	Picture 0268			
185	Picture 0271			
186	Picture 0272, 0273			
187	Picture 0274, 0275			
188	Pictures 1&2			
189	Picture 3, Domestic			
190	Picture 4			
191	Picture 5			
192	Picture 6			
193	Picture 7			
194	Picture 8			
195	Picture 9, Water level 36' 8"			
196	Picture 10			
197	Picture 11			
198	Picture 12			
199	Picture 13, Shoe well			
200	Picture 14			
201	No Picture, Collapsed well			
202	Picture 16, Water table 2' 3", TD=20'			
203				
204				
205				

Unique ID #	Well Completion Reports Obtained File Location
1	P:\Well Completion Reports\NEWENTERED\Hunknown ephraim harrin well 10N 03W 10j01.pdf
2	P:\Well Completion Reports\NEWENTERED\A27303 juan valdez well 10-3 2r1.pdf
3	P:\Well Completion Reports\NEWENTERED\K33517 roger james kalk well 11N 4W 32.pdf
4	P:\Well Completion Reports\NEWENTERED\W158484 donald walker well 10N 03W 03m01.pdf
5	P:\Well Completion Reports\NEWENTERED\I09030 julius drone well 10N03W03M02.pdf
6	P:\Well Completion Reports\NEWENTERED\I282136 heriberto medina well 10N 03W 05 c 01.pdf
7	P:\Well Completion Reports\NEWENTERED\I106000 george morris well 10N 06 h-2.pdf
8	P:\Well Completion Reports\NEWENTERED\I440749 fermin murillo centeras well unknown.pdf
9	P:\Well Completion Reports\NEWENTERED\H48591 V.R. hutchinson well 11N 5W 12D1.pdf
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Unique ID #	Well Completion Reports Obtained File Location
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Unique ID #	Well Completion Reports Obtained File Location
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June 6, 2008

Harper Lake Site Visit

MC and VJ

Field Notes:

1. **Well A**, Behind the General Store (off Harper Lake Rd)

Inactive well w/ submersible pump – w/ electrical connections, maybe functional. No access to hang transducer. Probably electrical power available at the road.

N 35.01481

W 117.33206

Elev ~ 2,055 ft amsl

DTW: 154.77 ft BTOC

2. **Well B**, further behind (west) of the General Store

Inactive irrigation well w/ motor of the turbine pump missing. PVC access tube is open to steel tape. Looks like the pump was formerly diesel powered.

N 35.01624

W 117.33913

Elev ~ 2050 ft amsl

DTW: 175.27 ft b bottom of the PVC horizontal access tube

3. **Well C**

No access for DTW. Motor is missing. Lube oil staining observed at well head. Pump looks to be in bad shape. Live power pole w/ 3 transformers within 200 ft of Well C.

N 35.01606

W 117.31277

4. **Well D**, east of General Store

Abandoned house. Inactive residential well with submersible pump. Maybe functional. Good access for DTW electric probe.

N 35.01070

W 117.31988

Elev: ~ 2063 ft amsl

DTW: 152.36 ft BTOC

5. **Well E**, north of house assoc w/ Well D

Inactive irrigation well. There is an access tube; it is blocked. No DTW. Shaft on vertical turbine pump turns easily.

N 35.01135
W117.32076
Elev ~ 2069 ft amsl

6. **Well F**, east of Well E

Inactive irrigation well. No pump shaft exposed. Pump motor looks ok. Access tube is blocked. No DTW. Good power control box nearby.

N 35.00978
W 117.30240
Elev ~ 2036 ft amsl

7. **Well G**

No pump. Well is open. The well itself is obstructed. No DTW. Do not use this well.

N 35.00686
W 117.29932
Elev ~ 2036 ft amsl

8. **Well H**

Inactive irrigation well. Motor is missing. Pump base is painted goldish-yellow. DTW access tube is open to 21 ft bgs (obstructed). No DTW. Pump shaft will not turn using 36" wrench. Electrical power pole with 3 transformers is within 200 ft of Well H.

N 35.00427
W 117.30267

9. **Well I**, north of the General Store, near FP&L facility

Inactive irrigation well. Access tube blocked by wood, can't reach to remove wood. No DTW. Pump motor missing. Pump shaft won't turn using 36" wrench.

N 35.02357
W 117.33484
Elev ~ 2057 ft amsl

10. **Well J**, north of General Store, approximately 200 ft south of south FL&P fence line, center of east unit.

Inactive irrigation well. No pump is present. There's an existing 1.5" round access hole in the center of the steel well top cover. Well top is nearly flush with the ground surface.

N 35.02551
W 117.33913
Elev: 2067 ft amsl

DTW: 159.00 ft bgs

FL&P production well is located about 200 ft north of Well J. Well J is a good candidate for transducer.

Solinist F100, M30 pressure transducer installed in Well J.
Transducer serial no.: 1025669

Begin recording data: 17:00; June 6, 2008
Sample frequency: 3 hrs

Transducer positioned 200 ft bgs

11. **Myrob Well**, east of east FP&L unit

No pump present. Steel lid welded to the well casing. No access. No DTW. Need to cut 2" hole for transducer access.

N 35.03276
W 117.33008
Elev: ~ 2057 ft amsl

12. **Well K**, west of Harper Lake Rd

Inactive irrigation well owned by Abengoa. Access for transducer is present.

N 35.01129
W 117.33696

13. **Well L**

No pump. Well is open for transducer.

N 35.01210
W 117.34843

Elev: ~ 2120 ft amsl

14. Well M, west of Harper Lake Road

Inactive irrigation well. No pump is present. There's an existing 1.5" round access hole in the center of the steel well top cover. Well top is nearly flush with the ground surface. Well M is a good for a transducer.

N 35.01843

W 117.34843

Elev: 2073 ft amsl

DTW: 189.94 ft bgs

Well M is approximately 4,000 ft southwest of Well J.

Solinist F100, M30 pressure transducer installed in Well M.

Transducer serial no.: not recorded

Begin recording data: 18:00; June 6, 2008

Sample frequency: 3 hrs

Transducer positioned 240 ft bgs

15. Well N, west of Harper Lake Rd.

Inactive irrigation well. Pump motor is missing. There's a crack in the well base wide enough for a DTW probe. DTW not obtained on this visit.

N 35.02183

W 117.34853

16. Well O, extreme west of Harper Lake Rd.

Inactive residential well with submersible pump. DTW access is obstructed. No DTW obtained.

N 35.02192

W 117.36634

Elev ~ 2105 ft amsl

June 10, 2008

Well Canvass Field Notes:

Personnel: Vic Jackowich (V.J.)

Location: Harper Lake Area, near Hinkley, CA (San Bernardino County)

WPT 2 (Well Z) Refer to GPS coordinates w/ J. Kennedy (Well originally canvassed on ~ April 2006)

Well Specs:

Abandoned, Inactive Well (Old Domestic Well)

7.5" Diameter well

No Pump attached

Well Capped and Sealed (Small opening in casing for water level measurement)

DTW (TOC) 254.35'

GPS Coordinates:

N 34.98290 W 117.32972 Elevation: 2,184'

Coordinates obtained w/ Garmin etrex gps unit

Well Location:

4.2 miles North of HWY 58 on Harper Lake Rd.; ~ 250' East of Harper Lake Rd.

Well located on concrete slab.

Misc.:

Additional Wells located along Harper Lake Rd. (*West side of Road ~5 miles North of Hwy 58*) within fenced property, unable to get to well locations. Fenced property appears occupied, need to determine if Abengoa owns property. V.J. did not make contact with people on property.

Visited Barstow Office to locate potential transducers (Unsuccessful); spoke w/ Tom Hetzel (Operations Manager) regarding use of a Pump Technician to accompany V.J. to study area to look at possible wells to pump, existing flow-meters, and torch access in existing well to hang Pressure Transducer.

V.J. will Email Tom & Ron Grace (Production Manager) *out of office at time of visit* next week (06/16) to set-up work.

June 11, 2008

Harper Lake Site Visit
MC and VJ

Field Notes:

1. **Well P**, north of high voltage power line

Inactive. No pump. Open well. 7.5" dia ID. Possible power at pole about 200 feet from Well P.. Good candidate for transducer.

Transd. OK

34.99668??? I think the latitude that was provided was incorrect because its 70 miles North of site.

N 35.99668
W 117.30341
Elev ~ 2,086 ft amsl

DTW: 188.30 ft BTOC

2. **Well Q**, north of high voltage power line, about 2500 ft NW of Well P

Well is filled in – obstructed < 5 ft BTOC. **Do not use.**

N 34.99950
W 117.30822
Elev ~ 2072 ft amsl

3. **Well R**, ~ 1000 ft E of Well H

Inactive irrigation well. Pump motor is missing. Access tubes are filled in. No DTW. Pump shaft won't turn by hand.

No DTW access

Have Barstow pump technician evaluate to cut an access hole for transducer.

N 35.00319
W 117.29939
Elev: ~ 2053 ft amsl

4. **Well S**, ~ 1000 ft south of Well R

Inactive 7.5" ID well. No pump. Open well. Filled in, obstructed. **Do not use.** No DTW.

N 34.99954
W 117.29942
Elev: ~ 2072 ft amsl

5. **Well T**, NE corner of Lockhart/Harper Lake Rd

Inactive irrigation well with electric pump motor present. No access tube. No DTW.

Do not use

N 35.01099
W 117.33004
Elev: 2063 ft amsl

6. **Well U**, ~ 75 ft NE of Well T.

Inactive 6" steel well (tilted). No pump. Welded steel well cover. There's an existing cut access hole for an electric DTW probe and transducer. Good candidate for transducer.

Transd. OK

N 35.01106
W 117.32996
Elev: ~ 2058 ft amsl

DTW: 145.15 ft from bottom of cut access hole.

7. **Well V**, north of Lockhart Rd

Inactive 10" dia well w/ standing water in the well. The well is obstructed about 2 ft btoc. Water in the well is stagnant, perched water.

Do not use.

N 35.01446
W 117.32578

Elev: ~ 2033

8. **Well W**, east of active crop circle.

Inactive 7.5" dia well. No pump. Well is filled in – obstructed. No DTW. Do not use.

Do not use

N 35.00681

W 117.30825

Elev: ~ 2050 ft amsl

9. **Well X**, ~ 25 ft south side of Lockhart Dr.

24" steel plate nearly level with ground surface; access holes in the plate. Filled in – obstructed. No DTW. Do not use.

Do not use

N 35.01049

W 117.32591

10. **Well Y**, ~ 25 ft west of Well X

Inactive irrigation well. Pump motor is missing; pump shaft is cut off. Access tube is obstructed. Access is available in pump base near pump shaft. Probably access is sufficient for transducer.

Transd. OK

N 35.01051

W 117.32598

Elev: ~ 2042 sft amsl

DTW: 154.79 ft below top of vertical access (center of pump housing)

June 18, 2008

COMPLETED Task list for Barstow Pump Technician (Glenn Rob)

1. Well K, west of Harper Lake Rd (Inspect / Evaluate existing pump*)
N 35.01129
W 117.33696

Motor Shot, Oiler Full of Dirt, Possible Dirt Down Well (Windblown), Pump/Motor must be pulled; Casing pump sits on no good. Per Glenn would not want to pull pump due to condition of well casing. Pump appears to have shifted, based on discharge pipes not lining up.

2. Well F, north of Well E, North of abandoned house on Lockhart Dr. Access Tube is blocked (Inspect / Evaluate existing pump*).
N 35.00978
W 117.30240

Motor Attached, Maybe OK, will need Generator onsite for power, Can't read flow meter (condensation inside glass or flow-meter) Motor looks good, Drive shaft full of windblown sand, possible down-well too. Won't know condition of bearings until possible start-up .

3. Well E, north of abandoned house on Lockhart Dr. Pump shaft turns easily. Access tube is blocked (Inspect / Evaluate existing pump*) see items 4 & 7.
N 35.01135
W 117.32076

Gear Drive Shot, Pull Apart and Inspect Motor (Right Angle Drive) Oil Pot Missing, Shaft Bad. Pull Pump and Service.

4. Inspect the flow meter on Well E. Can it be transferred to the active crop circle well [for the pumping test]?

Can't Read Display through Glass, may not be usable, will have to pull and check condition of impellers.

5. Cut a 2" hole in the steel cover plate of the Myrob well.
N 35.03276
W 117.33008

Torched 2" access hole and welded threaded fitting, Hung Transducer down well. Transducer S/N: 1032511

**Readings every 1 hour / Started Data Collection @ 12:00 pm
200' Down well**

DTW: 138.59' TOC

FPLE Well SW of MYROB Well Currently Pumping

For the following wells evaluate if there's a way to create access for measuring dtw and installation of a transducer (such as cutting a hole in the pump housing?):

- 6 Well R
N 35.00319
W 117.29939

Unable to Torch Opening in well, would have to torch through base of pump housing, very thick steel.

- 7 Well E
N 35.01135
W 117.32076

Unable to Torch Opening in well, would have to torch through base of pump housing, very thick steel.

MISC.:

WELL H:

- 1. Flow-meter attached to well appears to be in good/usable Condition. Won't know for sure until we pull meter and check/inspect the impellers.**
- 2. Hay Farm Property appears empty, appears tenants moved off of property. Per Fred, Abengoa was in negotiation to purchase property. Property has Domestic well with power supply. VJ didn't fully inspect property to ascertain if property had any other wells.**

June 24, 2008

Harper Lake
Well Elevation Task A

Well A
Well B
Well D
Well J (transducer)
Myrob well (transducer)
Well K (need DTW)
Well L (need DTW)
Well M (transducer)
Well N (need DTW)
Well P
Well U
Well Y (access near pump base – need DTW)
Well Z (aka WPT 2; need DTW)
Accessible Hay Farm Wells (need DTW and coordinates)
Active Ag well (need DTW and coordinates)
Surface water of Harper Lake Marsh (i.e., at the intersection of the water and the shoreline)

Need elevation accurate to the nearest 0.01 foot at these DTW reference measuring points and at the nearby ground surface

Suggest obtaining a complete round of DTW for the available and accessible wells listed above (including the indicated needed or missing DTW) next week – all measured on the same day. Note the time of day the DTW measurements are obtained.

June 27, 2008

Harper Lake

Well Elevations and Water Level Measurements

- ❖ *Well Elevations acquired using Trimble GPS Unit (GPS Survey Point at Water Level Access).*
- ❖ *All Depth to Water Measurements from Bottom of Access Point*
- ❖ *Time DTW Measurement Taken in (Parenthesis)*
- ❖ *(T) Denotes: Transducer at Well Location*

Well A DTW: (0918) 155.31'

Well B DTW: (0930) 175.50'

Well D DTW: (0943) 153.52'

Well J (T) DTW: (0955) 161.93'

Myrob Well DTW: (1005) 135.74'

Well K DTW: (1015) Unable to obtain W.L. @ Pump Base, Casing, etc. **OBST**

Well L DTW: (1030) 201.36'

Well M (T) DTW: (1040) 190.78'

Well N DTW: (1050) 183.92'

Well P DTW: (1150) 188.43'

Well U DTW: (1125) 145.26'

Well Y DTW: (1130) 155.68'

Well Z DTW: (1210) 251.64'

Hay Farm (T) DTW: (0905) 141.70'

- ❖ 10" Diameter Casing w/ Submersible Attached, power to well appears intact.
- ❖ Water Level access N.E. side of Casing ~2" opening in casing. Larger opening in Casing at S.E. side. VJ, duct taped openings in casing. Transducer hung in ~2" opening (side) of Casing

Misc:

Marsh / Wetland (DRY), unable to GPS; VJ walked entire perimeter no visible water present.

June 30, 2008

Harper Lake

Hay Farm Well Transducer Install
Paul Ryken Production Well SCE Pump Efficiency Test

Hay Farm Well (0905)

- ❖ DTW: 139.48'
- ❖ Transducer S/N: 1032500
Reading: 1/hr. Started: 1000

Well H: Flow-meter, meter was removed (Vandalized); Discharge Pipe Torched / Cut

Paul Ryken Production Well: SCE Pump Efficiency Test

100hp Motor with 75hp Booster Pump to move water to Main Irrigation Pivot

Per SCE Technician: 1,542 gpm, initial Water Level: 143.00' ran pump for ~ ½ hour
drawdown Water Level at End of Test: 168.40'

VJ was given copies of preliminary Test Results.

Misc: Flow-meter located at Irrigation Pivot: 885310 acre-ft x .001 (Reads in GPM)
No Check Valve on Well.

Paul Ryken
37501 Mountain View Road
Hinkley, CA
Cell: (760) 954-1742

John (Dairy Foreman)
Cell: (760) 964-6023

July 1, 2008

Harper Lake

Transducer(s) Data Download retrieval and DTW Measurements

Myrob Well:

- ❖ (0800) DTW: 138.74' (FLP Production Well Pumping)
- ❖ Transducer S/N: 1032511
- ❖ Start Time: 0900 (07/01/08)
- ❖ Reading: 1/hr.
- ❖ Reference: W.L. 138.74'

Well J:

- ❖ (0815) DTW: 160.71' (FLP Production Well NOT Pumping)
- ❖ Transducer S/N: 1026588 (BAROLOGGER)
- ❖ Start Time: 0900 (07/01/08)
- ❖ Reading: 1/hr.
- ❖ Reference: 2,031' (elevation)

- ❖ Transducer S/N: 1025669 (PRESSURE)
- ❖ Start Time: 0900 (07/01/08)
- ❖ Reading: 1/hr.
- ❖ Reference: W.L. 160.71'

Well M:

- ❖ (0836) DTW: 190.80'
- ❖ Transducer S/N: 1025684
- ❖ Start Time: 0900 (07/01/08)
- ❖ Reading: 1/hr.
- ❖ Reference: W.L. 190.80'

Hay Farm Well

- ❖ (0855) DTW: 141.50'
- ❖ Transducer S/N: 1032500
- ❖ Start Time: 0900 (07/01/08)
- ❖ Reading: 1/hr.
- ❖ Reference: W.L. 141.50'
- ❖ Misc: Active Production Well (Ryken Well) PUMPING

July 7, 2008

Harper Lake

Constantino Uli
40668 Harper Lake Rd, Hinkely, CA
Cell: (760) 617-0985

Transducer Installation on Uli Residence:

1210: Spoke with Mr. Uli regarding property access to install (2) two pressure transducers inside wells on his property. Mr. Uli gave V. Jackowich permission to install transducers.

Well ID: ULI-A (located near/closest to Old Batch Plant)

- ❖ 11" O.D. Steel Casing not Capped or Sealed, No Pump Attached
Inside of Steel Casing is a 6" O.D. PVC Casing, ~ 1.5' below Steel Casing
- ❖ DTW @ Top of Steel Casing: 225.27' @ 1300 hrs.

Transducer M-100 / F-300 S/N 1024835

Reference: DTW: 225.27'

Started @ 1400 hrs on 07/07/08

Reading: Every ½ hr.

Transducer Hung Depth: ~250.00'

Well ID: ULI-B (Located behind several old SFR(s) near White Water Storage Tank)

- ❖ ~12" O.D. Steel Casing not Capped or Sealed, No Pump Attached, Well on Concrete pad.
- ❖ DTW @ Top of Steel Casing: 216.64' @ 1340 hrs.

Transducer M-30 / F-100 S/N 1032488

Reference: DTW: 216.64'

Started @ 1400 hrs on 07/07/08

Reading: Every ½ hr.

Transducer Hung Depth: ~250.00'

July 8, 2008

Harper Lake

GPS w/ Timble Unit ULI Wells: A & B, Re-program Barologger, DTW (Ryken Well)

0800: Arrive on Uli Property; GPS Wells: GPS as ULI-A and ULI-B

0840: Re-program Barologger at Well J to Read/Record in Feet.

- ❖ Reference: Elevation 2,031'
- ❖ Start Recording @ 0900
- ❖ Reading: 1/hr.

0850: Ryken Production Well: Well Currently Pumping

- ❖ DTW @ Top of Access Tube: 224.00'

Military Time

2400 = 12:00 AM
0005 = 12:05 AM
0100 = 1:00 AM
0200 = 2:00 AM
0300 = 3:00 AM
0400 = 4:00 AM
0500 = 5:00 AM
0600 = 6:00 AM
0700 = 7:00 AM
0800 = 8:00 AM
0900 = 9:00 AM
1000 = 10:00 AM
1100 = 11:00 AM
1200 = 12:00 PM
1300 = 1:00 PM
1400 = 2:00 PM
1500 = 3:00 PM
1600 = 4:00 PM
1700 = 5:00 PM
1800 = 6:00 PM
1900 = 7:00 PM
2000 = 8:00 PM
2100 = 9:00 PM
2200 = 10:00 PM
2300 = 11:00 PM

(Bob's Shoulder Subtract: 2400)

Harper Lake Aquifer TEST 8/11

0720: V. Jackowich arrives on-site

- Ryker well: well pump kicks on.

- See Paul & John @ Pivot

Came over to talk w/ U.J.

Paul says he has problems w/ Pivot @ Field, Hope to fix

Problem by Monday or Tues morning.

~0800: Cary & Tom on-site.

~0825: Kate (Biologist) on-site

~0830: M. Cyrucki on-site

↳ Franck Cien on-site.

~~~0500~~ ~0500: Pump cut off.

~0530: DTW 143.63' Ryker well.

↳

~1200: Security on-site

Jesus

- Harper Lake. AQUIFER TEST 8/11/08

1045: DTW: 142.00'  
Ryker Well

1050: Well Sack on (pumpings)

1300: Westlands well DTW: 135.85'  
↳ Ryker Well pump turned off @ 1300

1320: DTW Ryker Well 144.00'

1330: Tom & Cary off-site

1340: Gumpertus: off-site (Barstow Glen, Tule)

~1345: Katie off-site.

1445: Barstow Crew off-site.

↳ Vic talks w/ Jesus Sec. Gilas  
Cell #

1500: US off-site

~~1500~~  
8/11/08

UPP  
Black  
US

WED  
8/13/08  
-Harper Lake-Aquifer Test.

8:30 AM Biologist JERRY ONSITE

9:10 AM Wetlands Well DTW 135.72

10:47 AM RYKEN WELL DTW 142.67

1241 Wetlands Well DTW 135.50

1303 ABANDONED WELL @ GREEN

HOUSE W/O (RYKEN) DTW 153.28

WELL @ TOL

\*1315: OFF-SITE ALL LAYER CORN(S)

-TURNOUT SITE HAND TO SECURITY  
FIRM

-V.S, C.N, T.S. TO PLOT SERVICE TO

\*1400: FUEL UP LIGHTS TRUCK.

~~ARRIVAL TIME 1400 HRS~~

x0800

V >

8/14/08

LEFT

BLANK  
VS

THURS

Harper Lake Aquifer TEST 8/14/08

(0800 Onsite Cary & Tom)  
JERRY Biologist ONSITE

0815 Bob on site

0830 Wetland well DTW 135.35

0840 abandoned well at green house west  
of Ryker. DTW 153.25

0850 Ryker well DTW 143.15 (NP)

0903 Air Line Length 193.4  
Static pressure 21.75 } Ryker  
Well

0925 Pump turned on

0930 started Pump test

1030 Took water quality samples

1130 Victor, Cary, & Bob off site

1230 Victor on site

1754 Security Change over

2000 Victor & Tom OFFSITE

2030 Victor & Cary ONSITE

8/14/08 CN

CERT  
Blank  
VJ

FRI

Harper Lake Aquifer Test 8/15/08

\*0640 Security Shift Change

\*0820 JERRY Biologist onSite

\*0836 WET LAND supply well 136.38 DTW

\*0840 FUEL truck for generator on site

(190 GALLONS OF DIESEL FUEL OFF SITE 0848)

\*0850 ABANDONED GREEN HOUSE w/ (Ryken) (153.58) (well) (DTW)

\*0916 Victor onSite

~0930: Cary OFF SITE (Sh. Fr Change)

- Cary to Hotel (Barstow) to pickup Tom.

0950: Jerry (Biologist) back on site.

1030: Jerry OFF SITE, will return e P.M.

1040 Tom on Site

1100 Victor off Site

1300 Victor on Site

1400 Victor off Site

1501 Green house well west of Ryken

DTW 153.50

Note: I was unable to take Readings OFF of wet lands well due to No key for The Pad Lock.

1833 Green house well west of Ryken DTW:

153.49

Left Blank

C.N.

Sat.

Harper Lake Aquifer Test 8-16-08

8-16-08

0800 Back oil onsite to Fuel generator

0830 Tom on Site

0845 Jerry does Rounds

1000 Abandoned green house well west of

Ryken DTW 153.63

1100 Jerry off site

1506 abandoned green house west of Ryken DTW

153.63

1614 - white smoke coming out of

Pump (Added more oil)

1630 Advised to Shut Down

Pressure at 20.2

PL-146.738

1800' Water level 146.73' (pressure: 20.2)

1730 Tom off site ~~to~~ Pick up Cary

(Change over)

End Tom's Shift

~~N.E. C.N.~~

Begin Cary's shift

\*2030 Cary onsite to

begin 12 hr shift

\*0600 onsite biologist & security shift change

(0630 Wetland supply well)

136.50 DTW

\*0640 Abandoned green house

w/o Ryken well 153.41 DTW

\*0730 CARY off site to pick up

Tom END CARY'S Shift

C.N.

~~N.E.  
C.N.~~

~~JP~~  
8/16/08

Harpai Lake

Sun  
8-17-08

0740 20.6 pressure DTW: 145.81'

- ↳ US Called Beck oil to cancel
- Delivery of Diesel Fuel.
- Spoke w/ Russ Scholta
- \*Made Sunday 8/17 delivery prior to U.S. arrival on-site.

~~111~~  
~~222~~

LEFT

Blank

8/18/08

\$2000 Cary ONSITE TO

Resume Night Shift

8 pm to Midnight

Aquifer Test Checking

Air guage EVERY HR

~~also security guard shift~~

~~change~~

TUES 8/19/08

\*0001 Cary Continuing  
Night Shift 12 hr

Shift Aquifer TEST

HARPER LAKE 27-1643.02, 20

\*Checking airline EVERY HR,

0600 Security guard shift

change & JERRY the biologist

\*ONSITE

0648 Green abandoned house well

w/6 Tyken well 153.55 DTW

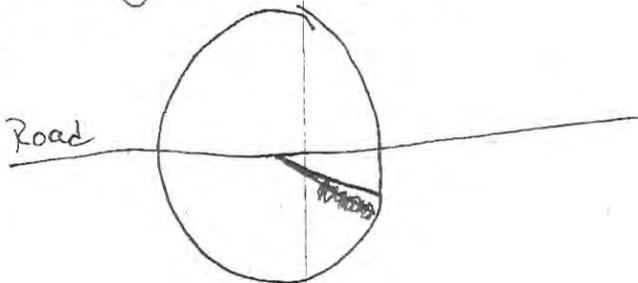
\*0700 Wetland supply well (136.51)  
DTW

End Cary Shift

0845 Tom on site

Late Entry 0719 Portable Flow meter

Reading 1050 GPM



Flow from portable meter 1040

Flow from River 1050 Road



1050 Flow from portable meter

1045 GPM

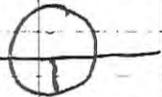
Road



1150 Flow from portable meter

1045 GPM

Road



1250 Flow from portable meter 1045 GPM

Road



1325 wet Land well DTW 136.62

1333 green house west of Ryken

DTW 153.61

1350

Flow from portable meter 1045 GPM

Road



1447 Flow from portable meter 1045 GPM

Road



1506 John slowed down pivot speed.

1807 Flow from portable meter 1050 GPM

Road



1730 wet Land well DTW 136.64

1738 green house west of Ryken DTW 153.74

1758 Security Change over

1850 Flow from portable meter 1045 GPM

Road



1900 Tom off site

8/19/08

2000 Begin Cary's Shift

Cary onsite

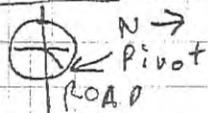
8/20/08

Cary Shift continues

0230 N →  (pivot flow meter)  
1050

\*0422 Biologist Jerry onsite

\*0530 Pivot Flow meter 1050



\*0600 Security shift change

\*0630 136.60 DTW wetland  
supply well

\*0645 153.89 DTW Abandoned green  
house well w/o Ryken well pump  
test

\*0730 Cary OFFsite to  
give truck to Tom to start  
his shift

---

C.N.

8/24/08 Sunday  
CARY ON SITE  
AT 11:30 PM  
RECEIVED BREITING  
FROM BOB

---

Cary

8/25/08 MONDAY  
CARY STARTS SHIFT  
AT 12 MIDNIGHT  
PUMP LEVEL RECORDED  
AT 3 AM Wetland well  
DTW 136.96

6 AM security shift change RD  
7 AM pump level recorded  
Wetland well DTW 136.96

0705 Victor onsite

0745 Tom onsite

0830 Bob onsite



6/30 7:30 AM

Hay Farm built

DTW @ -0.0, 139.48'

REFERENCE L.L. → 139.48'

Transfer S/W 1032505

1030 505 on ...

~150' Long ...

General

Result

- Time 2 days
- ↳ Fuel Tank
- expensive to ...
- Fuel ... (Data)
- Labour
- ... ..
- ... ..
- ... ..
- ... ..

4/50

100 hp. motor

1500 gpm

1542

3500 / 2" ACCESS  
TUBE

200 kw. Generator

1150 sq. ft. tank

200 ft. dia. tank

1145 end test

168.45' e

of R. J. ...

Volume

v

1000 gal. Option  
off T.O.V.

200'

\$3,000 existing

7/1 Harper Lake 27-1643

- Tennessee Dept. Land

0800: FLP Production Well S.W. of  
Myros Well pumping.

- DTW @ T.O.C. Myros 138.74'

- Transducer S/N 1022550

Start Time: 0900

Reading 1/4"

Reference: W.L. 138.74'

0815: Well J. (FLP Prod well Not Pumping)

Transducer S/N 1022550 (Same as above)

Start Time: 0900

Reading 1/4"

Reference: 2021' elevation

- DTW @ T.O.C. Well J 160.71'

Transducer S/N 1025669

Start Time: 0900

Reading 1/4"

Reference: Same 160.71'

D

7/1 H.P. Trans. Co.

0836: Well M

-DTW @ Top: 190.80'

Trans. s/n 10251284

Start @ 0730

Ref. Well A 150.83'

0900: New Well (Name Rec. We. Rec. S)

-DTW @ 141.50'

Trans. s/n 1032122

Start @ 0900

Reading @

Ref. Well A 141.50'

7/7/08

Harper Lake

1210: ULI Residence

Spoke w/ Mr. ULI gave us OK  
to access Property & Hang P.T.

-Well on Residence by Back Plant  
Well ULI-A closest to back plant

-11" O.D. Steel casing not capped or  
sealed, no pump.  
Inside steel casing 6" PVC casing  
=DTW @ Top of Steel casing: 225.27'

→ DTW 216.64' (Well ULI-B)

Well ULI-A

Transducer M-100 s/n 1024835

Ref. DTW 225.27'

Start @ 1400 Read every 1/2 hr

Well ULI-B

Trans M-30 s/n 1032488

Ref. 216.64'

Start @ 1400 1/2 hr Readings

7/8/08 Harper Lake

~0800: GPS Trimble ULI Wells (2)  
- GPS AS ULI-A (by Beach Place)  
ULI-B (Near to Lake Tanks)

0840: Re programmed Base-logger @  
Well 5 (?) to read in FT.  
Ref. elevation: 2,031'  
Start Recording @ 0800.

~0850: Ryker Well (Pumping)  
DTW: ~224.00' @ 1300  
Not Pumping

---

7/9/08  
0730: DTW 153.00'

7/16 Hansen Ltc

~0900: DTW e Ryken Well 197.00'  
Well Pumping.  
↓

Elevations

Hay Farm - 2,041.309

Well S - 2,059.913

My Job - 2,044.936

ULI-A - 2,137.657

ULI-B - 2,130.773

Well K -

Harper Lake - Transducer/WL 7-28-08

Personnel: V. Jackwood, C. Nichols, Tom  
Schultheisz

Tasks: U.C. & Transducer Download

\*All Transducer set & elevations.

0910: Arrive @ Hay Farm Well

~~0910~~ vs

~0915: Transducer to surface / out of water  
(- Start readings @ 1200)

0925: DTW 139.94' @ M.P. (T.O.C.)

~1140: DTW @ Wetlands Supply Well

+ 17135.90' @ T.O.C.

-> Barston pulled well & pump.

~1200: DTW @ Ryker Well

NOT PUMPING. 143.35'

1220: Well S (Start: Trans. @ 1466)

-> DTW: 190.84' @ G.S. (T.O.C.)

1245: Well S  
DTW: 163.50'

Trans data started @ 1400  
Both Barloggs & Passlog

1305: 137.56' DTW Nearby Pumping

Start Trans data @ 1400

~1305: FLP Security @ Axis Well

- Saw US @ FLP Pumping Well

US told security w/ EDOW Dams

GW Monitoring looking @ FLP

Well to see if pumping

1315: ULI-A DTW @ TOC 225.00'

MA ULI on site

Start Trans @ 1400

1340: ULI-B DTW @ TOC 216.69'

Start Trans @ 1400

~~1400 DTW @ TOC 216.69'~~

1430: ULI-A

Transducer hung-up on well  
& bottom of well below W.T.

Harper Lake Pump Test 8/7/08

~0930: V. D., C.M., T.S. arrive  
ON-SITE. Bob Porter  
(Barstow OFC) Already ON-SITE.  
\* Per Bob upon arrival @ 0845  
will be running shut-off @  
~0915.

\* DTW @ 0940: 146.15" T.O.C @ well  
ACCESS point.

~1115: John (Ryker Foreman) on-site  
Told V.D. will work till  
Saturday A.M. then shut-off.  
will (doing this to also align  
pivot @ ~~well~~ cut a little  
point of crop circle.  
- Told John of Pump Test schedule.  
- John Manifolded water pivot  
@ end @ center of pivot &  
Tire tracks on pivot.

1215: Barstow Techs leave site.

8/7 cont.

(Transducers H.L.)

8-29-05

- Hay Farm Well -

~1230: Downloaded Transducer Data.

Set data log interval @ 10 min

Start time @ 1300 hrs

~0700: Hay Farm Well

alt. 2041

static @ 1000

using 1 L  
Reading

\* DTW @ 148.55' @ T.O.C. access

~0715: 174805.

- Hung Trans depth @ 200'

1300: DTW @ Rykan Well 142.10'



Military Time

2400 = 12:00 AM  
0005 = 12:05 AM  
0100 = 1:00 AM  
0200 = 2:00 AM  
0300 = 3:00 AM  
0400 = 4:00 AM  
0500 = 5:00 AM  
0600 = 6:00 AM  
0700 = 7:00 AM  
0800 = 8:00 AM  
0900 = 9:00 AM  
1000 = 10:00 AM  
1100 = 11:00 AM  
1200 = 12:00 AM  
1300 = 1:00 PM  
1400 = 2:00 PM  
1500 = 3:00 PM  
1600 = 4:00 PM  
1700 = 5:00 PM  
1800 = 6:00 PM  
1900 = 7:00 PM  
2000 = 8:00 PM  
2100 = 9:00 PM  
2200 = 10:00 PM  
2300 = 11:00 PM

8/17/08

4 HRS

(#2000 START OF 12 HR  
SHIFT JOB# 27-164302.20  
HARPER LAKE AQUIFER)

TEST

#2030 Flow meter Reading  
at Pivot 1145

#2230 Flow meter Reading  
at Pivot 1145

#2330 Flow METER 1145

START OF NEXT DAY  
ON NEXT CN Page

8hrs JOB 27-164302.20

8/18/08 Aquifer test

\*0530 Flow meter reading  
at pivot 1145

(\*0545 Abandoned greenhouse well  
w/o Ryken well 153.75 DTW)

\*0555 Security shift change  
Jesus replaced Shawn

(\*0605 Wetland supply well 136.45  
DTW)

\*0630 Jerry Biologist onsite

\*0730 Flow meter reading at pivot

End of 12 hr SHIFT CARY  
OFFSITE To Go Pick up Tom  
for shift change

Cary Nichol

\*2000 Cary onsite to resume  
12 hr Night shift  
checked in w/ security  
8pm to midnight

C N

TOTAL  
12 HRS 8/18/08

LEFT  
Blank

8 HRS HARVEY LAKE 8/19/08  
(checking gauge early)  
Cary

0001 Continuing night

shift midnight to

\* 8 AM Job # 27-1643-02.20

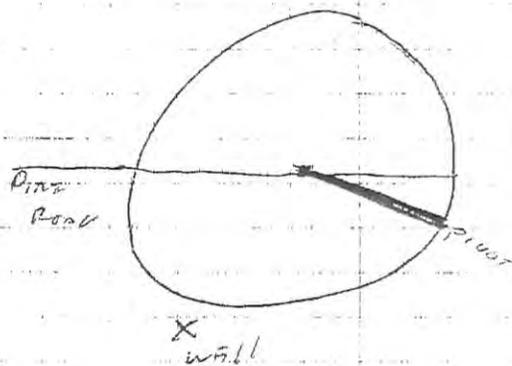
\* 0600 Security guard shift  
change & Jerry the biologist  
onsite

\* 0648 Abandoned green house well

\* W/O Ryken well 153.55 DTW

\* 0700 Wetland supply well 136.51 DTW

0719: Poot Fluorometer ~1050 SPH  
Poot Location



\* 2000 Cary onsite to  
start night 12 hr shift  
Tire on personal vehicle is  
FIAT I put fix a Flat in tire &  
Returned to motel to get Co. truck

# #27-1643.02.20 Aquifer TEST

~~2100~~ continued 8/19/08

Logged 72 miles on  
personal vehicle 68¢ a mile  
is \$48.96

8/20/08

0230 →

PIVOT FLOW  
METER 1050

0422 Biologist

\* ON SITE

0530 →

PIVOT  
FLOW meter  
1050

\*0630 136.60 DTW WETLAND

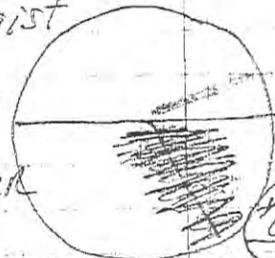
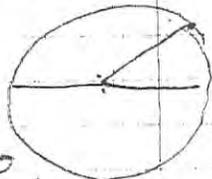
supply well

\*0645 Abandoned green house well

w/o Ryken pump test well (153.89)

\*0730 Cary offsite to pick  
up Tom 8 hrs 8/20/08

Cary ~~nicked~~ →



N →

\*0600 security  
shift change

# 27-1643.02.02  
HARPER LAKE  
\* 8/21/08  
\* 0700 START TIME  
530 + 600 LUNCH 10.5

10 HR Mon. 8/25/08

8 HRS Tuesday 8/26/08

WED  
8/27/08

8/24/08 Sunday

7 PM left Fontana

Mileage 157484

<sup>rip meter</sup>  
156 MILES ~~157557~~

From Home ~~157557~~

TO MOTEL TO JOBSIE

& BACK TO MOTEL 156

& 2 HRS DRIVETIME MILES

8/25/08 MONDAY Midnight

CARY  
ONSITE AT Midnight

TO Relieve Bob & TAKE

OVER shift

3 AM WETLAND well

DTW 136.97 ~~136.97~~ N →



0600 Security shift change

0700 wet land well 136.96

0705 Victor onsite

0745 Tom onsite

0830 Bob onsite

0930 CARY OFF SITE

10 HRS FROM 12 Midnight to 10 AM

CARY

MILES 8/22/08  
15726°

TUESDAY 8/26/08  
8AM TO 5PM 8HRS  
HARPER LAKE

8/27/08 WED

HARPER LAKE

0700 START TIME <sup>BASE</sup> STATION

0830 POINT 106

0930 POINT 107

1045 POINT 108

1200 POINT 109

3 PM 110

~~4:00~~ BASE STAT.

~~GRAVITY~~



Harper Lake Wed 08/13/08  
0600 - Left Fontana office (Tom & Cary)  
0800 - Arrived at Ryken well (met w/Vic)  
1315 - Tom, Vic, & Cary off site  
1430 Arr Tom & Cary Arrive At Hotel  
Late Entry 1330 Lunch  
0600 - 1430 w/ lunch  
8 Hours

~~UPE~~

Harper Lake

Thu

08/14/08

Project: Ryken Well Auguafor Test

Personel: Tom, Victor, Cary (Layne)  
Jery (Biologist)

0800 - Tom & Cary on site / Vic on Site

0805 Biologist Jery on Site

0815 Bob on Site (Barstow Layne)

0925 Ryken well pump cut on

0930 Started test

1030 Vic / Tom took WQ Samples

1130 Vic / Cary / Bob off site

1230 Vic on Site

1754 Security Change over

2000 Vic / Tom off site Change over

0700 - 2000 w/o lunch

13 Hours w/ drive Time

UFE

UFE

Harper Lake Fri 08-15-08

Project: Ryken Well Aquifer Test

Personel: Tom, Vic, Cary ~~Ray~~ (Layne)

~~Jery (Biologist) Capt. Monroe (WakenHuf Sec)~~

0930 Shift Change

1040 Tom on site

1100 Vic off site

1300 Vic on site

1400 Vic off site

Note: Need Key to access Wetland-  
well.

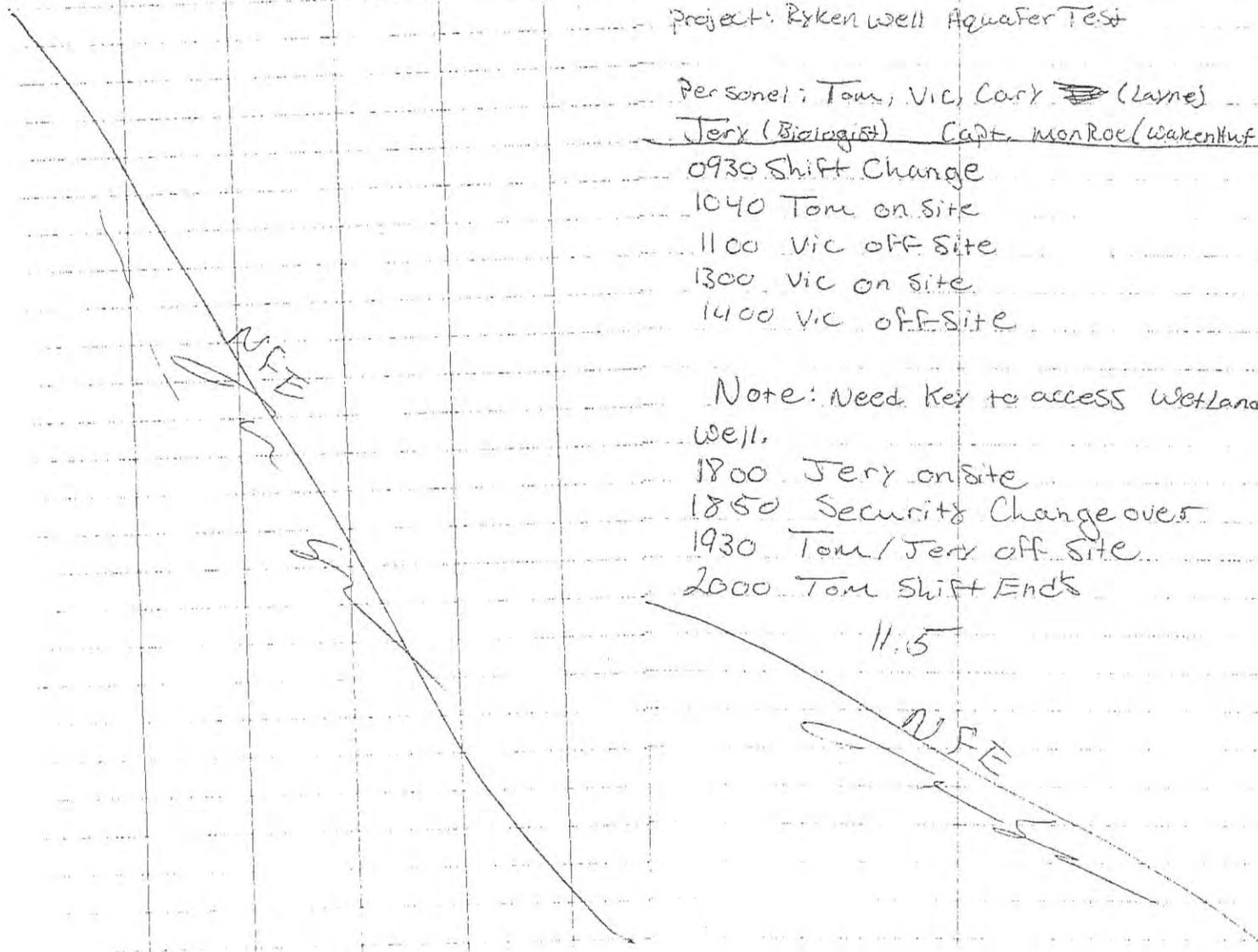
1800 Jery on site

1850 Security Change over

1930 Tom/Jery off site

2000 Tom Shift Ends

11.5



Harper Lake Sat 08/16/08

Project: Ryken well Aquifer test

Personnel: Tom (Larner) Jerry (Biologist)

Capt Monroe (Warden Hut Security)

0800 Leave Hotel 2 HR. Shift Start.

0830 Tom on site

1100 Leave site to check green house well DTW

1100 Jerry off site

1506 Leave to check greenhouse well DTW

1615 White Smoke Coming From Pump

1630 Shut dow

1745 Vic on site

1810 Jerry on site

1905 Tom, Jerry, vic off site

2000 Tom Back at Hotel

08-2000

12 HRS

NFE

HarPer lak Sun. 8-17-08

Project: Ryken Well Pump test ~~6:00-12:00~~  
Re Start

Mike Cronk & Vic & Bob

Personel: Tom, Cory (Lame)

Waken Hut Security guard

Start 0800

Lunch 1130-1200

1320 Check Flow From Pivot 1150

1330 wetland well DTW 136.05

1335 green House Abandoned well west of  
Ryken DTW 153.21

1525 Jerry on Site

1535 Check Flow From Pivot 1150

1627 Jerry off Site will Return 1900

1714 Check Flow From Pivot 1145

1723 wetland Suppl well DTW 136.14

0800 - 2000

Lunch 1130-1200 11.5 Hrs

1730 abandoned green. Hous well west of  
Ryken DTW 153.48

1743 Security Change over

~~1900~~ Check Flow From Pivot 1145

1920 Tom off Site Change over w/  
Cory ~~0800-2000~~

NFE End 2000

NFE

~~Aug~~ Aquifer Test

Harder Lake Mon 8-18-08  
Project: Ryken well Aquifer Test

Personel: Tom (Layne) Jerry (Biologist)  
~~Ch + Monroe (Lurken Hut Security)~~

Start 0800

0850 Jerry off site

0855 Pat from Beckoil on site to  
Fuel Generator

0912 Pat from Beckoil off site

0915 Check Flow from pivot 1145

0920 wetland supply well DTW 136.65

0937 abandoned green house well west of  
Ryken DTW 153.76

1025 Heard a click pop The generator  
bogged down, The pump & booster  
stopped running (called vic)

1100 Turned off generator

1215 Bob & vic on site

1245 Jerry on site

1445 Pump re-started

1550 Portable flow meter read  
1050 gpm

1553 Flow from pivot 1000 - 1100

Road



WFE

1656 Flow From portable meter

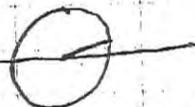
APRX. 1050gpm

1759 Security Change over

1822 Flow From portable meter

APRX 1050

Road



1900 Flow Frm meter

APRX 1050

Road



1915 Tom Jerry off site

2000 End @ Hotel

0800 - 2000

12 HRS

NFE



Harder Lake

Tues 8-19-08

Project: Ricken well Aquifer test

Personel: Tom (Harne) Jerry (Biologist)

Waken Hut Security

0800 Start

0845 Tom on site

1050 Flow 1045 gpm

1506 John slowed down the pivot

1507 Flow Change 1080gpm

1730 wetland DTW 136.64

1738 green House DTW 153.74

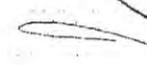
1900 Tom off site

2000 End

0800 - 2000

12 HRS

NFE



Harper Lake wed 8-20-08

~~Start~~ 0730

~~0800~~ on site (Jerry, milce, Bob, Tom)

~~0840~~ vic on site / Daren

~~0900~~ Katie on site

~~0920~~ ~~0930~~ Tom, vic, Daren, Katie To

Conduct GeoPhysics work.

~~1030~~ First Point

~~1245~~ Point 2

~~1340~~ Daren, Katie to Station Grav. Reading.

~~1420~~ Return

~~1800~~ End 0730 - 1800

11.5

NFE  
on site

NFE  
on site

Harper Lake Thur 8-21-08

Project: HL Geophysics

Personel: Tom, Cary, Danel, vic (carnel)  
Katie (Biologist)

---

Start 0700

0730 Tom, Cary, vic, Daren onsite

0800 Check gravit @ Station

1200 Check gravit @ Station

1330 Point ~~off~~ ~~of~~ ~~the~~ ~~ore?~~

1643 To was Station Final Grav Reading

1730 - 1800 Lunch

10.5 Hrs

~~WFE~~

Harper Lake Fri 8-22-08

Start 0700

0730 Tom, Cory, Daren, Vic, Katy, Jess

on site

0745 1<sup>st</sup> gravity Reading @ Station

1100 2<sup>nd</sup> gravity Reading @ Station

1350 Final gravity Reading @ Station

1630 End

~~0730 161~~

~~9 Hrs~~

0700 - 1630

9.5 Hrs

NS-E  
Sun

Harper Lake Mon - 8-25-08

0600 Start

0700 on Site Tom, vic, Carr

0830 WQ Samples

0855 Finnish WQ

0915 Pump shut off / generator

0950 Tom off site to  
deliver WQ Samples

1145 Drop off Samples

1213 @ Shop

1230 End day

0600 - 1230

6.5 Hrs

Harper Lake

Tues 8-26-04

Start 0600

0900 Tom, Cary, & Darren, & Jerry on  
Site.

0930 ~~1st~~ grav. Reading @ station

1205 2<sup>nd</sup> point 97

1630 End

0600 - 1630  
10.5 HRS

NSE

Harper Lake Wed 8-27-08

Start 0700

0730 1<sup>st</sup> grav Reading @ Station

0830 1<sup>st</sup> Point 106

0930 on dry lake 2<sup>nd</sup> Point 107

1045 3<sup>rd</sup> Point Point 108

1200 4<sup>th</sup> Point 109 / ~~Point 110~~

~~2<sup>nd</sup> grav Reading~~

1215 Parento Station 2<sup>nd</sup> grav. Reading

1430 5<sup>th</sup> Point 110

1530 Final grav Reading @ Station

1630 End

0700-1630

9.5 HRS

Mon. - Wed = 38.5 HRS

48.5

1

59.5

NSE

Harper Lake

Thur 8-28-08

Start 0700

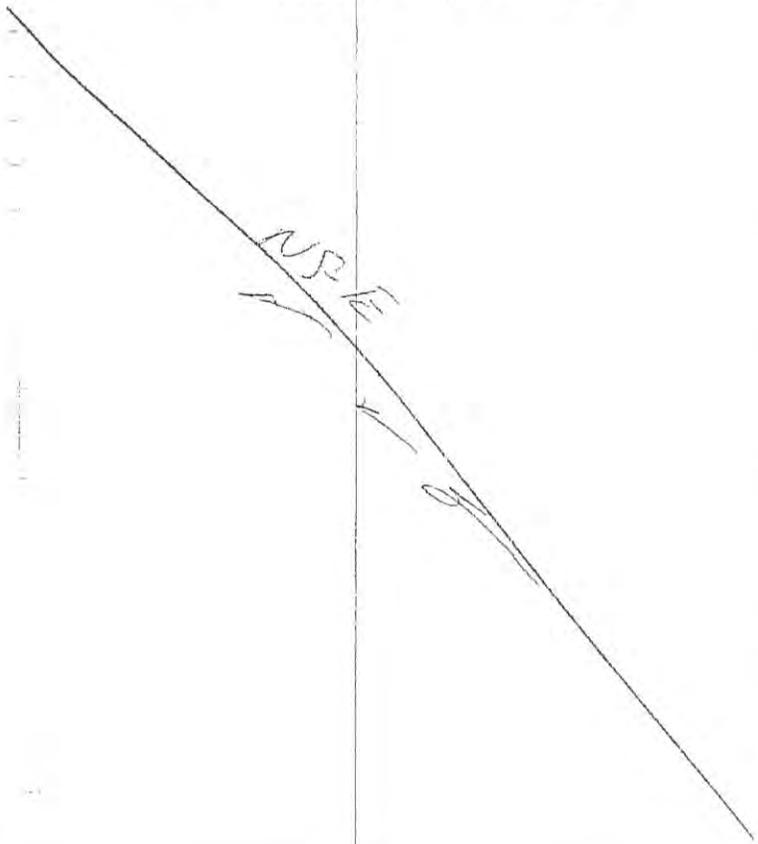
0730 1<sup>st</sup> grav. Reading @ Station

1730 2<sup>nd</sup> grav @ Station

1700 final grav. Reading @ Station

End 1800 11 HRS

~~11 HRS~~



Harper Lake

Fri 8-29-08

0700 - 1700

10 HRS

Mon - FRI HRS 59.5

~~59.5~~



# Harper Lake Pump Test Data at Ryken Well

| Date      | Clock Time  | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status | Remarks                        |
|-----------|-------------|---------------|----------|-------------|-------------------|-------------|--------------------------------|
| 8/14/2008 | 9:29:00 AM  |               |          | 143.15      |                   |             | Start of Aquifer Test 1        |
| 8/14/2008 | 9:36:00 AM  | 172.30        | 29.15    | 143.15      | 1160              | Pumping     |                                |
| 8/14/2008 | 9:38:00 AM  | 172.60        | 29.45    | 143.15      | 1160              | Pumping     |                                |
| 8/14/2008 | 9:40:00 AM  | 172.80        | 29.65    | 143.15      | 1160              | Pumping     |                                |
| 8/14/2008 | 9:42:00 AM  | 172.90        | 29.75    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 9:45:00 AM  | 172.95        | 29.80    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 9:50:00 AM  | 173.40        | 30.25    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 10:00:00 AM | 173.64        | 30.49    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 10:05:00 AM | 173.64        | 30.49    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 10:10:00 AM | 173.76        | 30.61    | 143.15      | 1155              | Pumping     |                                |
| 8/14/2008 | 10:15:00AM  | 173.88        | 30.73    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 10:30:00AM  | 173.99        | 30.84    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 10:40:00AM  | 174.11        | 30.96    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 10:50:00AM  | 174.11        | 30.96    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 11:00:00AM  | 174.11        | 30.96    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 11:10:00AM  | 174.11        | 30.96    | 143.15      | 1150              | Pumping     |                                |
| 8/14/2008 | 11:20:00AM  | 174.11        | 30.96    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 11:30:00AM  | 174.11        | 30.96    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 12:00:00PM  | 174.11        | 30.96    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 12:30:00PM  | 174.11        | 30.96    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 13:00:00PM  | 175.38        | 32.23    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.8             |
| 8/14/2008 | 13:30:00PM  | 175.38        | 32.23    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 14:00:00PM  | 175.38        | 32.23    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 14:30:00PM  | 175.38        | 32.23    | 143.15      | 1145              | Pumping     | END 5TH HR. BEGIN HRLY. CHECK  |
| 8/14/2008 | 15:00:30PM  | 175.84        | 32.69    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.6             |
| 8/14/2008 | 16:30:00PM  | 175.84        | 32.69    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 17:30:00PM  | 175.84        | 32.69    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 18:30:00PM  | 176.30        | 33.15    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.4             |
| 8/14/2008 | 19:30:00PM  | 177.23        | 34.08    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.0             |
| 8/14/2008 | 20:30:00PM  | 177.23        | 34.08    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 22:30:00PM  | 177.23        | 34.08    | 143.15      | 1145              | Pumping     |                                |
| 8/14/2008 | 23:30:00PM  | 177.23        | 34.08    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 00:30:00AM  | 176.77        | 33.69    | 143.15      | 1145              | Pumping     | DATE CHANGE 8/15/2008          |
| 8/15/2008 | 01:30:00AM  | 176.30        | 33.15    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 02:30:00AM  | 177.25        | 34.10    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 03:30:00AM  | 177.25        | 34.10    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 04:30:00AM  | 177.48        | 34.33    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 05:30:00AM  | 177.48        | 34.33    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 06:30:00AM  | 177.48        | 34.33    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 07:30:00AM  | 177.59        | 34.44    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 08:30:00AM  | 177.59        | 34.44    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 09:30:00AM  | 177.59        | 34.44    | 143.15      | 1145              | Pumping     | HR. 24 BEGIN CHECK EVERY 2 HRS |
| 8/15/2008 | 11:30:00AM  | 177.69        | 34.54    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 6.8             |
| 8/15/2008 | 13:30:00PM  | 177.69        | 34.54    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 15:30:00PM  | 177.69        | 34.54    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 17:30:00PM  | 177.69        | 34.54    | 143.15      | 1145              | Pumping     |                                |
| 8/15/2008 | 19:30:00PM  | 178.15        | 35.00    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 6.6             |
| 8/15/2008 | 21:30:00PM  | 178.15        | 35.00    | 143.15      | 1145              | Pumping     |                                |

| Date       | Clock Time  | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status   | Remarks                         |
|------------|-------------|---------------|----------|-------------|-------------------|---------------|---------------------------------|
| 8/15/2008  | 23:30:00PM  | 178.15        | 35.00    | 143.15      | 1145              | Pumping       |                                 |
| 8/16/2008  | 01:30:00AM  | 178.15        | 35.00    | 143.15      | 1145              | Pumping       | DATE CHANGE 8/16/2008           |
| 8/16/2008  | 03:30:00AM  | 178.61        | 35.46    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 6.4              |
| 8/16/2008  | 05:30:00AM  | 178.61        | 35.46    | 143.15      | 1145              | Pumping       |                                 |
| 8/16/2008  | 07:30:00AM  | 179.07        | 35.92    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 6.2              |
| 8/16/2008  | 09:30:00AM  | 179.07        | 35.92    | 143.15      | 1145              | Pumping       | HR. 48 BEGIN CHECK EVERY 4 HRS. |
| 8/16/2008  | 13:30:00PM  | 179.07        | 35.92    | 143.15      | 1145              | Pumping       |                                 |
| 8/16/2008  | 17:30:00PM  | 145.81        |          | 143.15      | 1145              | PUMP OFF      | PUMP OFF BURNED WIRE            |
| 8/17/2008  | 09:30:00AM  |               |          | 143.15      |                   | PUMP OFF      | 8/17/2008 NON PUMPING           |
| 8/17/2008  | 09:50:00AM  | 163.83        | 20.68    | 143.15      | 1145              | Start Pumping | TEST #2 GAUGE PRESSURE 12.8     |
| 8/17/2008  | 09:52:00AM  | 166.14        | 22.99    | 143.15      | 1145              | Pumping       | Gauge PRESSURE 11.8             |
| 8/17/2008  | 09:52:30AM  | 166.83        | 23.68    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 11.5             |
| 8/17/2008  | 09:53:00AM  | 169.37        | 26.22    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 10.4             |
| 8/17/2008  | 09:53:30AM  | 169.83        | 26.68    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 10.2             |
| 8/17/2008  | 09:54:00AM  | 172.61        | 29.46    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 9.0              |
| 8/17/2008  | 09:54:30AM  | 173.02        | 29.87    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.8              |
| 8/17/2008  | 09:55:00AM  | 173.53        | 32.38    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.6              |
| 8/17/2008  | 09:55:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:56:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:56:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:57:00AM  | 175.53        | 32.38    | 143.14      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:57:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:58:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:58:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:59:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 09:59:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:00:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:00:30AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008/ | 10:01:00AM  | 175.13        | 32.38    | 143.15      | 1154              | Pumping       |                                 |
| 8/17/2008  | 10:02:00AM  | 175.13        | 32.38    | 143.15      | 1145              | Pumping       | START 1 MIN. INTERVAL CHECK     |
| 8/17/2008  | 10:03:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:04:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:05:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:06:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:07:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:08:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:09:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:10:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:11:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:12:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:13:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:14:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:15:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:20:00AM  | 175.53        | 32.38    | 143.15      | 1145              | Pumping       | START 5 MIN. INTERVAL CHECK     |
| 8/17/2008  | 10:25:00AM  | 173.88        | 30.37    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.45             |
| 8/17/2008  | 10:30:00AM  | 173.99        | 30.84    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.4              |
| 8/17/2008  | 10:35:00AM  | 174.11        | 30.96    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.35             |
| 8/17/2008  | 10:40:00AM  | 174.34        | 31.19    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.25             |
| 8/17/2008  | 10:45:00AM  | 174.92        | 31.77    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.0              |
| 8/17/2008  | 10:50:00AM  | 174.92        | 31.97    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 10:55:00AM  | 174.92        | 31.97    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 11:00:00 AM | 174.92        | 31.97    | 143.15      | 1145              | Pumping       |                                 |
| 8/17/2008  | 11:05:00AM  | 174.92        | 31.97    | 143.15      | 1145              | Pumping       |                                 |

| Date      | Clock Time | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status   | Remarks                       |
|-----------|------------|---------------|----------|-------------|-------------------|---------------|-------------------------------|
| 8/17/2008 | 11:10:00AM | 175.03        | 31.88    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.95           |
| 8/17/2008 | 11:15:00AM | 175.03        | 31.88    | 143.15      | 1145              | Pumping       |                               |
| 8/17/2008 | 11:45:00AM | 175.03        | 31.88    | 143.15      | 1145              | Pumping       | START 1/2 INTERVAL CHECK      |
| 8/17/2008 | 12:15:00PM | 175.72        | 32.57    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.65           |
| 8/17/2008 | 12:45:00PM | 175.72        | 32.57    | 143.15      | 1145              | Pumping       |                               |
| 8/17/2008 | 13:15:00PM | 175.84        | 32.69    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.6            |
| 8/17/2008 | 13:45:00PM | 176.19        | 33.04    | 143.15      | 1150              | Pumping       | GAUGE PRESSURE 7.45           |
| 8/17/2008 | 14:15:00PM | 176.19        | 33.04    | 143.15      | 1150              | Pumping       | START 1 HR. INTERVAL CHECK    |
| 8/17/2008 | 14:30:00PM | 176.19        | 33.04    | 143.15      | 1150              | Pumping       | GAUGE PRESSURE 7.3            |
| 8/17/2008 | 15:30:00PM | 176.53        | 33.38    | 143.15      | 1150              | Pumping       | GAUGE PRESSURE 7.25           |
| 8/17/2008 | 16:30:00PM | 176.65        | 33.50    | 143.15      | 1150              | Pumping       |                               |
| 8/17/2008 | 17:30:00PM | 176.65        | 33.50    | 143.15      | 1150              | Pumping       |                               |
| 8/17/2008 | 18:30:00PM | 176.76        | 33.61    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.2            |
| 8/17/2008 | 19:30:00PM | 176.76        | 33.61    | 143.15      | 1145              | Pumping       |                               |
| 8/17/2008 | 20:30:00PM | 176.76        | 33.61    | 143.15      | 1145              | Pumping       |                               |
| 8/17/2008 | 21:30:00PM | 176.88        | 33.73    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.15           |
| 8/17/2008 | 22:30:00PM | 176.99        | 33.84    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.1            |
| 8/17/2008 | 23:30:00PM | 176.99        | 33.84    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 00:30:00AM | 177.11        | 33.96    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.05           |
| 8/18/2008 | 01:30:00AM | 177.11        | 33.96    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 02:30:00AM | 177.23        | 34.08    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 7.0            |
| 8/18/2008 | 03:30:00AM | 177.23        | 34.08    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 04:30:00AM | 177.23        | 34.08    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 05:30:00AM | 177.23        | 34.08    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 6.95           |
| 8/18/2008 | 06:30:00AM | 177.34        | 34.19    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 07:30:00AM | 177.34        | 34.19    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 08:30:00AM | 177.69        | 34.54    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 6.8            |
| 8/18/2008 | 09:30:00AM | 177.69        | 34.54    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 11:07:00AM | 148.12        |          |             |                   | PUMP OFF      | PUMP OFF DUE TO PIVOT TIMER   |
| 8/18/2008 | 14:45:00PM | 145.35        | 2.2      | 143.15      | 1145              | PUMP OFF      | TEST # 3 STATIC PRESSURE 20.8 |
| 8/18/2008 | 14:49:00PM | 169.83        | 26.68    | 143.15      | 1145              | Start Pumping | WELL ON GAUGE PRESSURE 10.2   |
| 8/18/2008 | 14:49:30PM | 170.76        | 27.61    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 9.8            |
| 8/18/2008 | 14:50:00PM | 172.48        | 29.33    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 9.2            |
| 8/18/2008 | 14:50:30PM | 173.41        | 30.26    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.65           |
| 8/18/2008 | 14:51:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.60           |
| 8/18/2008 | 14:51:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       | START STATIC LEVEL 143.15     |
| 8/18/2008 | 14:52:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:52:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:53:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:53:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:54:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:54:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:55:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:55:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:56:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:56:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:57:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:57:30PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:58:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 14:59:00PM | 173.53        | 30.38    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 15:00:00PM | 173.99        | 30.84    | 143.15      | 1145              | Pumping       | GAUGE PRESSURE 8.4            |
| 8/18/2008 | 15:01:00PM | 173.99        | 30.84    | 143.15      | 1145              | Pumping       |                               |
| 8/18/2008 | 15:02:00PM | 173.99        | 30.84    | 143.15      | 1145              | Pumping       |                               |

| Date      | Clock Time | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status | Remarks                   |
|-----------|------------|---------------|----------|-------------|-------------------|-------------|---------------------------|
| 8/18/2008 | 15:03:00PM | 174.11        | 30.96    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 8.35       |
| 8/18/2008 | 15:04:00PM | 174.34        | 31.19    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 8.25       |
| 8/18/2008 | 15:05:00PM | 174.45        | 31.00    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 8.2        |
| 8/18/2008 | 15:06:00PM | 174.45        | 31.00    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:07:00PM | 174.45        | 31.00    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:08:00PM | 174.45        | 31.00    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:09:00PM | 174.45        | 31.00    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:10:00PM | 174.57        | 31.42    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 8.15       |
| 8/18/2008 | 15:11:00PM | 174.57        | 31.42    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:12:00PM | 174.92        | 31.77    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 8.0        |
| 8/18/2008 | 15:13:00PM | 174.92        | 31.77    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:14:00PM | 174.92        | 31.77    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:15:00PM | 174.92        | 31.77    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:20:00PM | 174.92        | 31.77    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:25:00PM | 175.26        | 32.11    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.85       |
| 8/18/2008 | 15:30:00PM | 175.26        | 32.11    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.8        |
| 8/18/2008 | 15:35:00PM | 175.38        | 32.23    | 143.15      | 1145              | Pumping     |                           |
| 8/18/2008 | 15:40:00PM | 175.72        | 32.57    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.65       |
| 8/18/2008 | 15:45:00PM | 175.84        | 32.69    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.6        |
| 8/18/2008 | 16:15:00PM | 176.30        | 33.15    | 143.15      | 1145              | Pumping     | GAUGE PRESSURE 7.4        |
| 8/18/2008 | 16:45:00PM | 176.65        | 33.50    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 7.25       |
| 8/18/2008 | 17:15:00PM | 176.76        | 33.61    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 7.2        |
| 8/18/2008 | 17:45:00PM | 176.88        | 33.73    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 7.15       |
| 8/18/2008 | 18:15:00PM | 177.23        | 34.08    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 7.0        |
| 8/18/2008 | 18:45:00PM | 177.57        | 34.42    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 6.85       |
| 8/18/2008 | 19:15:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 6.8        |
| 8/18/2008 | 19:45:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/18/2008 | 20:15:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/18/2008 | 20:45:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     | START 1HR.INTERVAL CHECK  |
| 8/18/2008 | 21:45:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/18/2008 | 22:45:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/18/2008 | 23:45:00PM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 00:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     | DATE CHANGE 8/19/2008     |
| 8/19/2008 | 01:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 02:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 03:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 04:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 05:45:00AM | 177.69        | 34.54    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 06:45:00AM | 177.80        | 34.65    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 6.7        |
| 8/19/2008 | 07:45:00AM | 177.92        | 34.77    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 09:45:00AM | 178.26        | 35.11    | 143.15      | 1040              | Pumping     | GAUGE PRESSURE 6.55       |
| 8/19/2008 | 09:45:00AM | 178.61        | 35.46    | 143.15      | 1045              | Pumping     | GAUGE PRESSURE 6.4        |
| 8/19/2008 | 10:45:00AM | 178.73        | 35.58    | 143.15      | 1045              | Pumping     | GAUGE PRESSURE 6.35       |
| 8/19/2008 | 11:45:00AM | 178.84        | 35.69    | 143.15      | 1045              | Pumping     | GAUGE PRESSURE 6.30       |
| 8/19/2008 | 12:45:00PM | 178.96        | 35.81    | 143.15      | 1045              | Pumping     | GAUGE PRESSURE 6.25       |
| 8/19/2008 | 13:45:00PM | 178.96        | 35.81    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 14:45:00PM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     | GAUGE PRESSURE 6.2        |
| 8/19/2008 | 16:45:00PM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     | START 2HR. INTERVAL CHECK |
| 8/19/2008 | 18:45:00PM | 179.07        | 35.92    | 143.15      | 1045              | Pumping     |                           |
| 8/19/2008 | 20:45:00PM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     |                           |
| 8/19/2008 | 22:45:00PM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     |                           |
| 8/20/2008 | 00:45:00AM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     | DATE CHANGE 8/20/2008     |
| 8/20/2008 | 02:45:00AM | 179.07        | 35.92    | 143.15      | 1050              | Pumping     |                           |

| Date      | Clock Time  | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status | Remarks                    |
|-----------|-------------|---------------|----------|-------------|-------------------|-------------|----------------------------|
| 8/20/2008 | 04:45:00AM  | 179.07        | 35.92    | 143.15      | 1050              | Pumping     |                            |
| 8/20/2008 | 06:45:00AM  | 179.07        | 35.92    | 143.15      | 1050              | Pumping     |                            |
| 8/20/2008 | 07:30:00AM  | 179.00        | 35.85    | 143.15      | 1050              | Pumping     |                            |
| 8/20/2008 | 09:30:00AM  | 179.00        | 35.85    | 143.15      | 1050              | Pumping     |                            |
| 8/20/2008 | 10:45:00AM  | 179.00        | 35.85    | 143.15      | 1050              | Pumping     |                            |
| 8/20/2008 | 11:30:00AM  | 179.00        | 35.85    | 143.15      | 1140              | Pumping     |                            |
| 8/20/2008 | 13:30:00PM  | 179.00        | 35.85    | 143.15      | 1139              | Pumping     |                            |
| 8/20/2008 | 15:30:00PM  | 179.00        | 35.85    | 143.15      | 1138              | Pumping     | GAUGE PRESSURE 6.14        |
| 8/20/2008 | 17:30:00PM  | 179.00        | 35.85    | 143.15      | 1137              | Pumping     |                            |
| 8/20/2008 | 19:30:00PM  | 179.00        | 35.85    | 143.15      | 1137              | Pumping     | GAUGE PRESSURE 6.0         |
| 8/20/2008 | 23:30:00PM  | 179.00        | 35.85    | 143.15      | 1136              | Pumping     | START 4 HR. INTERVAL CHECK |
| 8/21/2008 | 03:30:00AM  | 179.00        | 35.85    | 143.15      | 1134              | Pumping     | DATE CHANGE 8/21/2008      |
| 8/21/2008 | 07:30:00AM  | 179.00        | 35.85    | 143.15      | 1132              | Pumping     |                            |
| 8/21/2008 | 11:30:00AM  | 179.00        | 35.85    | 143.15      | 1130              | Pumping     |                            |
| 8/21/2008 | 12:32:00PM  | 179.00        | 35.85    | 143.15      | 1128              | Pumping     |                            |
| 8/21/2008 | 14:30:00PM  | 179.00        | 35.85    | 143.15      | 1127              | Pumping     |                            |
| 8/21/2008 | 17:30:00:PM | 179.03        | 35.88    | 143.15      | 1120              | Pumping     |                            |
| 8/21/2008 | 19:30:00PM  | 179.02        | 35.87    | 143.15      | 1119              | Pumping     |                            |
| 8/21/2008 | 21:30:00PM  | 172.02        | 35.86    | 143.15      | 1117              | Pumping     |                            |
| 8/22/2008 | 01:30:00AM  | 179.10        | 35.95    | 143.15      | 1115              | Pumping     | DATE CHANGE 8/22/2008      |
| 8/22/2008 | 05:30:00AM  | 179.07        | 35.92    | 143.15      | 1126              | Pumping     | GAUGE PRESSURE 5.9         |
| 8/22/2008 | 09:30:00AM  | 179.19        | 36.04    | 143.15      | 1123              | Pumping     |                            |
| 8/22/2008 | 13:30:00PM  | 179.19        | 36.04    | 143.15      | 1127              | Pumping     |                            |
| 8/22/2008 | 19:30:00PM  | 179.5         | 36.36    | 143.15      | 1131              | Pumping     | START 6 HR. INTERVAL CHECK |
| 8/23/2008 | 05:30:00AM  | 179.77        | 36.62    | 143.15      | 1136              | Pumping     | DATE CHANGE 8/23/2008      |
| 8/23/2008 | 09:30:00AM  | 180.00        | 36.85    | 143.15      | 1140              | Pumping     | GAUGE PRESSURE 5.8         |
| 8/23/2008 | 13:30:00PM  | 180.15        | 37.00    | 143.15      | 1143              | Pumping     |                            |
| 8/23/2008 | 15:00:00PM  | 180.20        | 37.05    | 143.15      | 1142              | Pumping     |                            |
| 8/23/2008 | 19:00:00PM  | 180.21        | 37.06    | 143.15      | 1142              | Pumping     |                            |
| 8/23/2008 | 23:00:00PM  | 180.20        | 37.05    | 143.15      | 1138              | Pumping     |                            |
| 8/24/2008 | 03:00:00AM  | 180.18        | 37.03    | 143.15      | 1136              | Pumping     | DATE CHANGE 8/24/2008      |
| 8/24/2008 | 07:00:00AM  | 180.16        | 37.01    | 143.15      | 1134              | Pumping     |                            |
| 8/24/2008 | 11:00:00AM  | 180.06        | 36.91    | 143.15      | 1130              | Pumping     |                            |
| 8/24/2008 | 13:33:00PM  | 179.94        | 36.79    | 143.15      | 1126              | Pumping     |                            |
| 8/24/2008 | 17:02:00PM  | 179.50        | 36.35    | 143.15      | 1126              | Pumping     |                            |
| 8/24/2008 | 19:30:00PM  | 179.51        | 36.36    | 143.15      | 1124              | Pumping     |                            |
| 8/25/2008 | 03:00:00AM  | 179.3         | 36.15    | 143.15      | 1119              | Pumping     | DATE CHANGE 8/25/2008      |
| 8/25/2008 | 07:00:00AM  | 179.3         | 36.15    | 143.15      | 1118              | Pumping     |                            |
| 8/25/2008 | 08:33:00AM  | 179.23        | 36.08    | 143.15      | 1116              | Pumping     |                            |
| 8/25/2008 | 09:15:00AM  | 179.23        | 36.08    | 143.15      | 1116              | Pumping     | PUMP SHUT OFF FOR RECOVERY |
| 8/25/2008 | 09:16:00AM  | 149.90        | 18.80    |             |                   | Not Pumping | WATER LEVEL RECOVERY       |
| 8/25/2008 | 09:17:00AM  | 150.66        | 18.50    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:18:00AM  | 150.30        | 18.65    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:19:00AM  | 149.85        | 18.85    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:20:00AM  | 149.50        | 19.00    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:21:00AM  | 149.33        | 19.07    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:22:00AM  | 149.31        | 19.08    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:23:00AM  | 149.30        | 19.09    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:24:00AM  | 149.23        | 19.12    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:25:00AM  | 149.07        | 19.19    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:26:00AM  | 149.00        | 19.21    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:27:00AM  | 148.70        | 19.35    |             |                   | Not Pumping |                            |
| 8/25/2008 | 09:29:00AM  | 148.35        | 19.50    |             |                   | Not Pumping |                            |

| Date      | Clock Time | DTW (Airline) | Drawdown | Static W.L. | Flowmeter Reading | Well Status | Remarks |
|-----------|------------|---------------|----------|-------------|-------------------|-------------|---------|
| 8/25/2008 | 09:31:00AM | 148.12        | 19.60    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:33:00AM | 148.00        | 19.65    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:35:00AM | 147.36        | 19.71    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:37:00AM | 147.75        | 19.76    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:39:00AM | 147.66        | 19.80    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:41:00AM | 147.54        | 19.85    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:43:00AM | 147.45        | 19.89    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:45:00AM | 147.31        | 19.95    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:47:00AM | 147.20        | 20.00    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:49:00AM | 147.13        | 20.03    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:51:00AM | 147.08        | 20.05    |             |                   | Not Pumping |         |
| 8/25/2008 | 09:55:00AM | 147.06        | 20.06    |             |                   | Not Pumping |         |
| 8/25/2008 | 10:03:00AM | 147.01        | 20.08    |             |                   | Not Pumping |         |
| 8/25/2008 | 10:11:00AM | 146.92        | 20.12    |             |                   | Not Pumping |         |
| 8/25/2008 | 10:23:00AM | 146.71        | 20.21    |             |                   | Not Pumping |         |
| 8/25/2008 | 10:35:00AM | 146.69        | 20.22    |             |                   | Not Pumping |         |
| 8/25/2008 | 10:53:00AM | 144.66        | 20.23    |             |                   | Not Pumping |         |
| 8/25/2008 | 11:05:00AM | 146.64        | 22.25    |             |                   | Not Pumping |         |
| 8/25/2008 | 13:05:00PM | 145.90        | 23.55    |             |                   | Not Pumping |         |
| 8/25/2008 | 16:05:00PM | 144.89        | 21.00    |             |                   | Not Pumping |         |
| 8/25/2008 | 19:05:00PM | 144.08        | 21.35    |             |                   | Not Pumping |         |
| 8/25/2008 | 22:05:00PM | 143.75        | 21.50    |             |                   | Not Pumping |         |
| 8/26/2008 | 03:05:00AM | 143.15        | 21.75    | STABLE      |                   | Not Pumping |         |
| 8/26/2008 | 05:05:00AM | 143.15        | 21.75    | STABLE      |                   | Not Pumping |         |
| 8/26/2008 | 09:30:00AM | 143.15        | 21.75    | STABLE      |                   | Not Pumping |         |

End of 24 hr. Recovery monitoring of Water Levels Ryken Well turned over to owner for continued irrigation of crops.



Tuesday, November 11, 2008

MC and DB visited the following areas associated with the HVB:

1. The notch area above Water Valley (northeast of HL) in the vicinity of the contact between Superior Basin and the HVB was visited. Observed significant volcanic deposits of fractured basalt, basalt rubble, volcanic ash, clay derived from volcanic ash, and possibly pyroclastic deposits. Access for drill rigs is good. Underflow from Superior Basin to the HVB through the notch area into Water Valley of the HVB, based on surface observations, may be possible. Photographs were taken (see I-drive photo folder).
2. The “renegade” alfalfa farm on the east side of Harper Valley was visited. This is the farm where 4 crop circles are grouped together as shown on historical air photos. It appeared to me that irrigation to those four crop circles had not occurred for, maybe, 2 years, or so. Requested Fred (Nov 12, 2008 email) to obtain confirmation from the MWA water master or another reliable source, that irrigation at this farm has stopped; and what year irrigation terminated?
3. Visited Lynx-Cat and Iron Mnt Gap area. Observed no surface indications of 0 ft depth to rock as mapped by Subsurface Surveys (Crosby 1990). Recommend confirmation of shallow bedrock in this gap by acquisition of relevant lithology logs, obtaining subsurface information by drilling holes, and reprocessing of historical gravity data.



Ryken Well

Time of Arrival: 0850

Nobody onsite, but John drove up almost immediately after I arrived and turned the pump on.

Note: Well has not been running for about 3 days.

Pump turned on at 0855.

Flow rate at about 1,300 gpm (as per John.)

Collected 7 water samples at 0908.

Placed time, sealed in bags, and placed on ice.

pH = 7.35

Temp. = 24.9°C

Chlorine (Free) test = 0.05 mg/L

Silt Density Index test at 0954.

See SDI data sheet for results.

Notes: After about 1 hour onsite, John talked to Mr. Ryken over the phone and was told to turn off the pump.

I was only able to perform 1 Silt Density Index test.

Time of Departure: 1017

Wetlands Supply Well

Time of Arrival: 1021

I spent about 20 minutes searching for the key to the lock on the power box. Then, I called Mike Cyrocki to discuss the problem.

I finally found the key to the power box.

Turned on oil valve at 1051, started to back up at 1100, then oil was reduced to about 12 drops per minute at 1102.

Opened power box, turned switch to "Hand," and turned pump on at 1104.

Flow rate at 1,150 gpm.

Note: Water leaked out at the Flow Meter Pipe Coupling.

pH = 7.27

Temp. = 23.5°C

Chlorine (Free) test = 0.01 mg/L

No pressure to perform the Silt Density Index test. Unable to perform test!

I spent a lot of time calling for help to see if pressure could be set higher in order to perform SDI test. I called Victor Jackowich, Todd Howard, Brant Israelson, and Mike Cyrocki.

I was told to leave the site without performing the SDI test by Mike Cyrocki.

Wetlands Supply Well continued:

Turned off power to the well at 1159.

Locked the power box.

Note: The Lock Hole-Ring has been broken (bent free) or cut before.

(Someone has been in the box without the key!)

Oil valve shut off and oil reservoir refilled to  $\frac{3}{4}$  full.

Placed the power box key under the sand on the inside northwest corner.

Locked gate.

Time of Departure: 1209

Drove the Ryken Well water samples to Test America

Time of Arrival: 1359

Time of Departure: 1407

Drove to Layne Fontana by about 1430

