



1ST SEMI-ANNUAL 2014 GROUNDWATER MONITORING REPORT

O'NEIL DATA SYSTEMS, INC.
12655 Beatrice Street
Los Angeles, California 90066

July 10, 2014
LARWQCB Case Number 882
Partner Project Number 13-64269

Prepared For

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
320 West 4th Street, Suite 200
Los Angeles, California 90013



On Behalf Of

CITICORP NORTH AMERICA, INC.
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1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) was retained by Citicorp North America, Inc. to prepare for the review of the Los Angeles Regional Water Quality Control Board (LARWQCB) the following 1st Semi-Annual 2014 Groundwater Monitoring Report for the property located at 12655 Beatrice Street in Los Angeles, California.

1.1 Authorization

Citicorp North America, Inc. provided project authorization through Purchase Order Number 10251.

1.2 Purpose

The purpose of this project is to continue characterization of groundwater chlorinated solvent impacts that resulted from a release from former on-site underground storage tanks (USTs) and to evaluate groundwater chlorinated solvent levels after remediation via in-situ chemical oxidation (ISCO).

1.3 Scope

The scope of this project included gauging depth to groundwater and collecting and analyzing groundwater samples from seven on-site monitoring wells and one off-site monitoring well. However, the off-site monitoring well (MW-4) was inaccessible during the course of fieldwork and was not gauged or sampled.

1.4 Quality Assurance/Quality Control

Sampling, analyses, and decontamination procedures were performed in general accordance with U.S. Environmental Protection Agency (EPA) and LARWQCB approved methodology.

Samples were transported under chain-of-custody protocol to Alpha Scientific Corporation (ASC), a state-certified laboratory (California Department of Public Health [CDPH] Environmental Laboratory Accreditation Program [ELAP] certificate number 2633) in Cerritos, California, for analysis. The laboratory ran duplicate samples, surrogate samples, and method blanks as part of the Quality Assurance/Quality Control (QA/QC) program. QA/QC data were within acceptable limits and/or did not affect the data interpretation.

The registered professional in charge, Samantha J. Harris, PG, has at least five (5) years hydrogeologic experience and actually supervised all of the work associated with the 1st Semi-Annual 2014 Groundwater Monitoring Report.

1.5 Limitations

This report presents a summary of work performed by Partner, which includes observations of site conditions encountered and the analytical results provided by independent third-party laboratories of samples collected during the course of the project(s). The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations provided in this report are based on observations, the governing regulations, and/or available information from regulatory agencies, previous field investigations, and/or laboratory testing of soil, soil gas, and/or groundwater samples. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were performed in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

Reports, both verbal and written, as they pertain to the property located at 12655 Beatrice Street in Los Angeles, California, are for the sole use and benefit of the LARWQCB and/or Citicorp North America, Inc. This report has no other purpose and may not be relied upon by another person or entity without the written consent of Partner.

2.0 SITE HISTORY AND BACKGROUND

2.1 Site Description

The subject property is located in a mixed commercial, industrial, and residential area in Los Angeles, California. The site is bordered to the north and northwest by a concrete-lined portion of Centinela Creek and to the east, south, and west by light industrial operations, commercial offices, and residential apartment buildings. Please see Figure 2.1-1 for a site vicinity map.

The facility is currently occupied by O'Neil Data Systems, Inc. (O'Neil), a company that publishes Investor's Business Daily and other commercial documents. The subject property is improved with an office building, a warehouse for storage of reels of newsprint, and a large warehouse/production plant where printing presses are located. Various fenced enclosures are located to the north of the warehouse/production plant to store materials and equipment. A conveyor belt system also terminates to the north of the warehouse/production plant where printed materials are collected for distribution. The remainder of the site consists of asphalt paved parking areas. Please see Figure 2.1-2 for a site plan.

2.2 Project History

ENSR performed a Phase I Environmental Site Assessment (Phase I) for the site in 1999. The Phase I indicated that the site was used for agricultural purposes prior to the construction of on-site buildings in the early 1970s. Bennett Respiration Products occupied the site from approximately 1973 to 1988 for the assembling and manufacturing of respirator products. Quotron subsequently occupied the site from approximately 1988 to 1992 for the assembly of computers. The current tenant, O'Neil Data Systems, has occupied the site since approximately 1992.

The ENSR Phase I identified three on-site USTs (one 2,000-gallon waste oil UST; one 1,000-gallon cutting oil UST; and one 1,000-gallon degreasing solvent UST) through historical blueprints. The Phase I also identified a degreasing pit that was once located in the western end of the warehouse/production plant.

The ENSR Phase I concluded that the three USTs were most likely closed by removal in 1986, though the rationale for the conclusion was not provided. From July 2006 to April 2007, AEI Consultants (AEI) investigated the possibility that USTs remained in place. Through manual excavation, AEI confirmed that the USTs were formerly located beneath the current conveyor belt area and were no longer on-site; however, piping containing product was left in place. Approximately 30 gallons of residual product was recovered from the piping.

Various subsurface soil and groundwater investigations were performed between 1999 and 2006 to investigate the former USTs and to characterize a release of chlorinated solvents resulting from the USTs.

In August 2001, AMEC Earth & Environmental, Incorporated (AMEC) performed a high vacuum dual phase extraction (HVDPE) pilot test. The results of the pilot test reportedly demonstrated that HVDPE could be applied to remediate both underlying soil and groundwater impacts. In September 2001, the LARWQCB approved HVDPE remediation. In February 2004, AEI installed four HVDPE remediation wells. From March 2005 through June 2006, the site was remediated by AEI via HVDPE with LARWQCB oversight under a National Pollutant Discharge Elimination System (NPDES) permit. AEI reported that 2,767,738 gallons of groundwater were extracted and treated and approximately 21.4 pounds of volatile organic compounds (VOCs) had been removed from the subsurface (vapor phase and dissolved in groundwater).

Following HVDPE, Partner requested risk-based case closure from the LARWQCB through submittal of a December 2008 Site Conceptual Model (SCM). During a meeting in July 2009 to discuss the SCM, the LARWQCB outlined the remaining requirements for closure status, which included reductions in concentrations of VOCs in source area soil.

Partner submitted an October 2009 Remedial Action Plan (RAP) to the LARWQCB outlining proposed ISCO remediation to treat residual impacts via injection of potassium permanganate. The LARWQCB approved the RAP in March 2010 and issued the Waste Discharge Requirements (WDR) for the potassium permanganate injection in March 2011. Partner began implementing the RAP and performed the first ISCO injection event in May 2011. Approximately 18,900 gallons of a 2% potassium permanganate solution was injected into the subsurface over a 45-point matrix in the source area and vicinity to a maximum terminal depth of 24 feet below ground surface (bgs).

To evaluate the effectiveness of the ISCO remediation, Partner collected and analyzed confirmation soil samples as outlined in the RAP and an October 21, 2011, LARWQCB approval letter. The results of the confirmation soil sampling were summarized in a January 9, 2012, report, which was submitted to the LARWQCB for review. Overall, the confirmation sampling results indicated that the initial injection reduced concentrations of VOCs in source area soil. However, based on discussions with the LARWQCB in January 2013 regarding the confirmation soil sampling and post-ISCO groundwater sampling results, the LARWQCB concluded that further reduction of subsurface VOCs concentrations would be required before the site would be eligible for closure.

Groundwater monitoring activities have been performed to evaluate groundwater impacts since 1999. To date, a network of eight monitoring wells (MW-1 through MW-8), three test wells (TW-1 through TW-3), and four remediation wells (RW-1 through RW-4) has been installed on-

site and on adjacent properties. In November 2009, the LARWQCB approved the reduction of the groundwater monitoring frequency from quarterly to semi-annually and the suspension of sampling activities for four of the wells (MW-3, TW-1, TW-2, and RW-3). In January 2010, Partner decommissioned three of the monitoring wells (MW-5, MW-7, and MW-8). Please see Figure 2.2-1 for a map indicating well locations and Figure 2.2-2 for a typical well construction diagram. Please see Table 2.2-1 for a list of well construction details.

3.0 GROUNDWATER MONITORING ACTIVITIES

For this semi-annual groundwater monitoring episode, Partner sampled seven of the monitoring wells to evaluate groundwater concentrations of VOCs after the potassium permanganate injection. The off-site well (MW-4) was not accessible during the course of the fieldwork and was not gauged or sampled this quarter. Partner collected groundwater samples for the WDR monitoring concurrently with the semi-annual groundwater monitoring sampling, the results of which are presented as a separate report.

3.1 Field Sampling Activities

On June 26, 2014, Partner subcontracted with Blaine Tech Services, Inc. to provide and operate well sampling equipment. Please see Appendix A for a discussion of general field procedures and Appendix B for the groundwater sampling field sheets. Purge water parameters were measured with a HACH Turbidity Meter, a Myron L Ultrameter II, and a YSI 550. One duplicate sample was collected and analyzed in addition to the seven groundwater samples.

3.2 Groundwater Elevation and Flow Direction

The average depth to groundwater was 20.69 feet bgs and the average groundwater elevation was 0.46 feet above mean sea level (amsl). The groundwater flow (manually calculated graphically using data from MW-1, MW-2, and MW-6) was to the south-southwest at a gradient of 0.0039 foot per foot (ft/ft). Table 2.2-1 summarizes the current depth-to-groundwater and groundwater elevation data and Table 3.2-1 summarizes the cumulative depth-to-groundwater and groundwater elevation data. Please see Figure 3.2-1 for a map showing groundwater contours.

3.3 Groundwater Sample Analysis

Partner collected seven groundwater samples plus a duplicate sample from MW-1 on June 26, 2014, which were transported on June 27, 2014 in an iced cooler under chain-of-custody protocol to ASC for analysis. Each groundwater sample was analyzed for VOCs in accordance with EPA Method 8260B and for 1,4-dioxane in accordance with EPA Method 8260SIM.

4.0 LABORATORY ANALYSIS RESULTS

ASC reported the groundwater sample laboratory analysis results on July 3, 2014. Please see Tables 2.2-1 and 3.2-1 for a summary of current and the cumulative groundwater chlorinated solvent VOCs and 1,4-dioxane laboratory analysis results, respectively. Please see Figure 4.0-1 for a map showing detected concentrations of VOCs in groundwater. Please see Appendix C for the full laboratory analysis report, which includes chain-of-custody and laboratory QA/QC documentation.

5.0 DISCUSSION

As previously discussed, off-site well MW-4 was not accessible during this sampling event due to lack of vehicle access to the adjacent property. No additional difficulties or special field conditions were encountered while sampling.

5.1 Detected Analytes

Multiple chlorinated solvents including tetrachloroethene (PCE); trichloroethene (TCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); 1,1-dichloroethene (1,1-DCE); and/or 1,1-dichloroethane (1,1-DCA) plus 1,4-dioxane were detected in each groundwater sample from on-site monitoring wells. A summary of the detected concentration ranges for each chemical is provided below in micrograms per liter (µg/L):

- PCE: 2.8 µg/L (MW-2) to 107 µg/L (RW-2)
- TCE: 2.1 µg/L (RW-4) to 34.2 µg/L (RW-2)
- cis-1,2-DCE: 5.4 µg/L (MW-2) to 139 µg/L (RW-2)
- trans-1,2-DCE: 4.2 µg/L (RW-1)
- 1,1-DCE: 1.0 µg/L (RW-2) to 5.1 µg/L (TW-3)
- 1,1-DCA: 1.1 µg/L (MW-2) to 11.2 µg/L (RW-2)
- 1,4-dioxane: 3.1 µg/L (RW-2) to 75.0 µg/L (RW-3)

Please see Figures 5.1-1 through 5.1-6 for groundwater concentration contour maps of 1,1-DCA; cis-1,2-DCE; trans-1,2-DCE; TCE; PCE; and 1,4-dioxane, respectively. Please see Graphs 5.1-1 through 5.1-4 for graphs of PCE; TCE; cis-1,2-DCE; and trans-1,2-DCE concentrations detected in source area wells over time, respectively.

Please see Figures 5.1-7 and 5.1-8 for a plan view of cross-section A-A' and geologic cross-section A-A' in the approximate direction of groundwater flow, respectively. Multi-depth groundwater sampling is not currently conducted for the subject property. However, the results of additional site characterization reported by AEI in May 2006 suggested that groundwater impacts are primarily present in the upper 20 feet of the shallowest aquifer (shallower than 40 feet bgs) with little to no vertical migration, mixing within the aquifer, or impacts to deeper aquifers.

5.2 Maximum Contaminant Levels

Maximum Contaminant Levels (MCLs) are primary standards of drinking water enforced by the LARWQCB. MCLs are available for various chemicals and are considered concentrations that are health protective of human exposures over a lifetime through direct-contact exposure pathways (e.g., ingestion). Please see Table 5.2-1 for a comparison of detected groundwater concentrations of VOCs during this investigation and the available MCLs.

Five of the groundwater samples exceeded the MCL for PCE. Six of the groundwater samples exceeded the MCLs for TCE and cis-1,2-DCE. Three of the groundwater samples exceeded the MCL for 1,1-DCA. None of the groundwater samples exceeded the MCL for trans-1,2-DCE or 1,1-DCE.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The calculated groundwater flow was to the south-southwest at a gradient of 0.0039 ft/ft, which was consistent with previous monitoring episodes.

Based on the results of post-ISCO groundwater monitoring, Partner has concluded the following regarding groundwater impacts:

- In source area well MW-1, PCE concentrations decreased by an order of magnitude after ISCO and has remained relatively stable; trans-1,2-DCE concentrations increased by an order of magnitude after ISCO, but has been declining towards pre-ISCO levels; and TCE concentrations increased after ISCO, but subsequently declined and stabilized to pre-ISCO levels;
- Concentrations of VOCs in the remaining source wells pre- and post-ISCO have remained relatively stable.

6.2 Recommendations

Based on discussions with the LARWQCB in January 2013 regarding the post-ISCO confirmation soil sampling and groundwater sampling results, the LARWQCB concluded that further reduction of subsurface VOCs concentrations would be required before the site would be eligible for closure. Partner anticipates performing the second ISCO event during the 3rd quarter 2014 to further reduce the concentrations of VOCs in the source area. Details regarding the proposed ISCO will be provided in a separate correspondence.

The 2nd semi-annual 2014 groundwater monitoring fieldwork will be performed in December 2014 (post-ISCO) concurrently with the 4th quarter 2014 sampling for WDR monitoring.

7.0 SIGNATURES OF PARTICIPATING PROFESSIONALS

Thank you for the opportunity to be of service. If you have any questions regarding this investigation, please contact the undersigned at (310) 615-4500.

Sincerely,



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Tables

Table 2.2-1: Current Groundwater Monitoring Data and Well Information
O'Neil Data Systems, Inc.
12655 Beatrice Street, Los Angeles, California 90066

Well Identification	Date Sampled	Location	Total Well Depth (feet bgs)	Well Casing Diameter (inches)	Screen Length (feet)	Screened Interval (feet bgs)	TOC Elevation (feet amsl)	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
MW-1	6/26/2014	On-Site	39.5	4.0	20	19.5-39.5	21.98	20.85	1.13	ND<1	ND<1	3.9 ^J	40.2	7.2	52.3	ND<1	9.5
MW-2	6/26/2014	On-Site	39.5	4.0	20	19.5-39.5	22.45	21.87	0.58	4.0 ^J	ND<1	1.1 ^J	5.4	7.4	2.8	ND<1	6.4
MW-3	Not Sampled	On-Site	39.5	4.0	20	19.5-39.5	21.50	--	--	--	--	--	--	--	--	--	--
MW-4	Not Sampled	Off-Site	36	4.0	20	16-36	19.76	Inaccessible		--	--	--	--	--	--	--	--
MW-5	Not Sampled	Off-Site	35	4.0	20	15-35	19.64	Decommissioned 1/15/10		--	--	--	--	--	--	--	--
MW-6	6/26/2014	On-Site	34	4.0	20	14-34	17.42	17.75	-0.33	ND<1	ND<1	ND<1	9.2	6.0	6.0	ND<1	8.4
MW-7	Not Sampled	Off-Site	34	4.0	20	14-34	NA	Decommissioned 1/15/10		--	--	--	--	--	--	--	--
MW-8	Not Sampled	On-Site	36.5	4.0	20	16.5-36.5	NA	Decommissioned 1/15/10		--	--	--	--	--	--	--	--
TW-1	Not Sampled	On-Site	40	2.0	30	10-40	NA	--	--	--	--	--	--	--	--	--	--
TW-2	Not Sampled	On-Site	40	2.0	30	10-40	NA	--	--	--	--	--	--	--	--	--	--
TW-3	6/26/2014	On-Site	40	2.0	30	10-40	NA	20.17	--	5.1	ND<1	6.9	76.2	30.8	4.2	ND<1	17.5
RW-1	6/26/2014	On-Site	35	4.0	25	10-35	NA	21.07	--	1.0 ^J	4.2	9.8	139	34.2	83.2	ND<1	3.1
RW-2	6/26/2014	On-Site	35	4.0	25	10-35	NA	21.52	--	3.6 ^J	ND<1	11.2	57.2	11.8	107	ND<1	75.0
RW-3	Not Sampled	On-Site	35	4.0	25	10-35	NA	--	--	--	--	--	--	--	--	--	--
RW-4	6/26/2014	On-Site	35	4.0	25	10-35	NA	21.63	--	ND<1	ND<1	ND<1	7.5	2.1	9.8	ND<1	3.4
DUP-1 (MW-1)	6/26/2014									ND<1	ND<1	3.5 ^J	35	6.5	51.4	ND<1	9.1

Notes:

bgs below ground surface
TOC top of casing
amsl above mean sea level
1,1-DCE 1,1-dichloroethene
µg/L micrograms per liter
trans-1,2-DCE trans-1,2-dichloroethene
1,1-DCA 1,1-dichloroethane
cis-1,2-DCE cis-1,2-dichloroethene

TCE trichloroethene
PCE tetrachloroethene
TCA trichloroethane
NA not available
^J trace level (below the laboratory Practical Quantification Limit)
-- Not gauged or sampled
ND not detected above the indicated laboratory Method Detection Limit

Table 3.2-1: Cumulative Groundwater Monitoring Data O'Neil Data Systems, Inc. 12655 Beatrice Street, Los Angeles, California 90066											
Well Identification	Month Sampled	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
MW-1	4/03	19.92	2.53	ND<5	ND<5	96.7	919	33.2	334	--	--
	1/04	20.25	1.72	14.5	6.2	37	492	18.3	175	--	--
	5/04	20.05	1.31	12.4	ND<5	55.7	552	14.7	151	--	--
	8/04	20.22	1.76	46.5	26	118	2,550	43.2	670	--	--
	11/04	20.05	1.93	127	30	262	4,210	100	806	--	--
	2/05	19.18	2.80	152	44.6	400	12,400	107	815	--	--
	5/05	19.32	2.66	70.4	36	253	4,080	40.1	786	--	--
	8/05	19.68	2.30	ND<5	ND<5	50	509	16.2	203	--	--
	12/05	19.94	2.04	ND<5	ND<5	44.2	692	ND<2	293	--	--
	3/06	19.75	2.23	29	ND<5	74.3	1,060	25.4	441	--	--
	6/06	19.80	2.18	11.9	ND<5	37.7	381	11.7	143	--	ND<2
	9/06	19.87	2.11	21.4 ¹	10.9 ¹	76.6	1,940	66.8	219	--	28
	12/06	20.10	1.88	37	21.5 ¹	133	2,850	303	425	--	59.3
	2/07	20.08	1.90	37.7 ¹	25.8 ¹	112	2,300	210	382	--	73.4
	5/07	20.20	1.78	47.8 ¹	58.0	114	3,040	299	262	--	195
	8/07	20.18	1.80	26.6 ¹	35.8 ¹	71.8 ¹	1,580	186	152	--	176
	11/07	20.15	1.83	31.8 ¹	46.8 ¹	108	2,890	333	346	--	105
	3/08	19.80	2.18	16.8	10.8 ¹	64.4 ¹	1,570	190	517	--	42
	6/08	19.92	2.06	14.2 ¹	13.9 ¹	50.9	1,230	213	390	--	38.4
	6/09	19.85	2.13	13.8 ¹	9.8 ¹	29.2	772	280	398	ND<1	168
	10/09	20.08	1.90	17.2 ¹	21.4 ¹	35.6	1,390	310	239	ND<1	163
	4/10	19.57	2.41	3.2 ¹	6.1 ¹	13.8	358	192	204	ND<1	35.4
	12/10	19.98	2.00	4.4 ¹	27.0	12.6	533	291	198	ND<1	92.4
	5/11	19.81	2.17	3.7 ¹	13.0	9.1	280	287	181	ND<1	23.4
	9/11	20.97	1.77	7.2 ¹	141	19.8	806	407	23.4	ND<1	81.0
	12/11	20.26	1.72	8.2 ¹	223	17.5 ¹	771	546	23.7	ND<1	61.2
	6/12	20.34	1.64	5.0 ¹	104	13.0 ¹	639	357	23.4	ND<1	65.6
	12/12	20.97	1.01	10.6 ¹	112	24.8	531	213	12.9	ND<1	52.7
	6/13	20.61	1.37	ND<1	33.5	6.5	290	133	40	ND<1	21.9
	12/13	20.92	1.06	ND<1	41.1	14.3	334	47.2	51.3	ND<1	16.2
	6/14	20.85	1.13	ND<1	ND<1	3.9 ¹	40.2	7.2	52.3	ND<1	9.5
MW-2	4/03	20.85	1.13	37.1	ND<5	56.4	378	25.7	243	--	--
	1/04	21.20	1.24	24.1	ND<5	32.2	282	18.8	159	--	--
	5/04	21.13	1.31	24.6	ND<5	42.4	329	15.1	143	--	--
	8/04	21.21	1.24	28.5	5.4	47.6	480	16.4	176	--	--
	11/04	21.03	1.42	22.6	ND<5	19.9	177	7.5 ¹	55.2	--	--
	2/05	20.32	2.13	16.6	2.1 ¹	32.1	298	10.9	82.9	--	--
	5/05	20.60	1.85	16	ND<5	26.7	228	4.6	142	--	--
	8/05	20.77	1.68	6.8	ND<5	7.7	58.6	3.4	25.7	--	--
	12/05	20.31	2.14	12.9	ND<5	19.2	128	8.1	82.2	--	--
	3/06	20.87	1.58	17	ND<5	16.5	113	8.7	82.7	--	--
	6/06	21.06	1.39	15.3	ND<5	9.4	77.4	11	94.2	--	2.9
	9/06	20.70	1.75	9.1	ND<5	4.7 ¹	37.8	6.3	46.1	--	ND<2
	12/06	21.06	1.39	6.7	ND<5	4.0 ¹	31.5	8.1	51.5	--	ND<2
	2/07	21.22	1.23	7.5	ND<5	6.2	44.1	7.5	53.4	--	5.9
	5/07	25.35	-2.90	8.1	ND<5	8.3	74.0	6.4	47.1	--	7.6
	8/07	21.35	1.10	9.4	1.0 ¹	9.7	70.6	6.9	46.3	--	6.4
	11/07	21.15	1.30	6.0	ND<5	8.5	72.7	5.4	43.3	--	4.0
	3/08	20.93	1.52	7.5	ND<5	9.6	89.2	6.2	53.0	--	4.5
	6/08	21.09	1.36	7.3	ND<5	13.0	134.0	6.8	50.3	--	4.8
	6/09	20.98	1.47	7.0	ND<1	11.4	113.0	6.5	46.2	ND<1	32.9
	10/09	21.33	1.12	9.9	1.1 ¹	10.2	111.0	4.9	37.8	ND<1	30.5
	4/10	20.78	1.67	5.3	ND<1	8.3	71.8	4.6	40.2	ND<1	12.7
	12/10	21.27	1.18	4.6	1.1 ¹	5.0	66.6	5.3	45.6	ND<1	11.8
	5/11	21.00	1.45	2.5 ¹	ND<1	3.5 ¹	35.6	4.8	36.0	ND<1	10.0
	9/11	21.34	1.11	5.8	1.3 ¹	8.4	77.8	5.3	36.9	ND<1	14.3
	12/11	21.23	1.22	4.4 ¹	ND<1	3.3 ¹	54.1	2.0	24.5	ND<1	21.0
	6/12	21.35	1.10	1.8 ¹	ND<1	3.4 ¹	21.7	2.9	35.4	ND<1	19.7
	12/12	22.01	0.44	4.4 ¹	ND<1	3.2 ¹	31.1	3.4	20.0	ND<1	7.0
	6/13	21.60	0.85	1.8 ¹	ND<1	2.8 ¹	25.3	4.6	26.1	ND<1	4.6
	12/13	22.24	0.21	1.7 ¹	ND<1	ND<1	7.4	6.4	5.2	ND<1	5.4
	6/14	21.87	0.58	4.0 ¹	ND<1	1.1 ¹	5.4	7.4	2.8	ND<1	6.4
MW-3	4/03	20.16	1.34	6.5	ND<5	6.8	40.2	4.4	21.5	--	--
	1/04	20.44	1.06	6.4	ND<5	5.4	45.5	4.7	18.7	--	--
	5/04	20.41	1.08	6.5	ND<5	7.4	55.9	4.5	23.6	--	--
	8/04	20.47	1.03	5.3	ND<5	6.8	50.8	3.5	20.6	--	--
	11/04	20.30	1.20	5.2	ND<5	4.0 ¹	30.3	2.2	8.2	--	--
	2/05	19.59	1.91	5	ND<5	7.4	62.1	3.2	13.6	--	--
	5/05	19.86	1.64	9.9	ND<5	14.5	110	2.8	40.4	--	--
	8/05	19.98	1.52	ND<5	ND<5	ND<5	22.6	1.7	20.6	--	--
	12/05	21.10	0.40	5.7	ND<5	5.4	35.7	2.8	17.3	--	--
	3/06	20.15	1.35	8.4	ND<5	5.1	30.3	3.4	26.1	--	--
	6/06	20.27	1.23	5.2	ND<5	2.8	21.3	4	25.2	--	ND<2
	9/06	20.00	1.50	ND<5	ND<5	ND<5	6	ND<2	6.3	--	ND<2
	12/06	--	--	ND<5	ND<5	ND<5	5.2	1.8 ¹	8.9	--	ND<2
	2/07	20.46	1.04	2.5 ¹	ND<5	2.3 ¹	9	3.2	10.6	--	ND<2
	5/07	20.61	0.89	2.8 ¹	ND<5	2.0 ¹	10.6	3.3	9.3	--	ND<2
	8/07	20.61	0.89	2.3 ¹	ND<5	2.1 ¹	8.6	2.8	8.3	--	2.4
	11/07	20.46	1.04	1.4 ¹	ND<5	1.3 ¹	6.6	2.2	7.4	--	ND<2
	3/08	20.18	1.32	3.2 ¹	ND<5	3.5 ¹	17.1	3.8	14.3	--	ND<2
	6/08	--	--	1.3 ¹	ND<5	1.5 ¹	9.3	2.5	7.0	--	ND<2
	6/09	20.16	1.34	ND<1	ND<1	ND<1	4.7 ¹	2.3	4.6	ND<1	5.3
	10/09	--	--	--	--	--	--	--	--	--	--
	4/10	--	--	--	--	--	--	--	--	--	--
	12/10	--	--	--	--	--	--	--	--	--	--
	5/11	20.30	1.20	ND<1	ND<1	ND<1	4.0 ¹	ND<1	3.3	ND<1	2.9
	9/11	--	--	--	--	--	--	--	--	--	--
	12/11	--	--	--	--	--	--	--	--	--	--
	6/12	--	--	--	--	--	--	--	--	--	--
	12/12	--	--	--	--	--	--	--	--	--	--
	6/13	--	--	--	--	--	--	--	--	--	--
	12/13	--	--	--	--	--	--	--	--	--	--
	6/14	--	--	--	--	--	--	--	--	--	--
MW-4	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	18.64	1.12	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/04	18.60	1.26	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--

Table 3.2-1: Cumulative Groundwater Monitoring Data O'Neil Data Systems, Inc. 12655 Beatrice Street, Los Angeles, California 90066											
Well Identification	Month Sampled	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
Inaccessible Inaccessible Inaccessible	8/04	18.67	1.09	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	11/04	18.49	1.27	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	2/05	17.80	1.96	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/05	18.11	1.65	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/05	18.21	1.55	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	12/05	18.49	1.27	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	3/06	18.33	1.43	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	6/06	18.41	1.35	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	9/06	18.41	1.35	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	12/06	--	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	2/07	18.60	1.16	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	5/07	18.79	0.97	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	8/07	18.76	1.00	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	11/07	18.70	1.06	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	3/08	18.37	1.39	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	6/08	--	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	6/09	18.37	1.39	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	ND<2
	10/09	18.7	1.06	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	4/10	18.17	1.59	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	12/10	18.56	1.20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	8.0
	5/11	18.33	1.43	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	9/11	18.71	1.05	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	12/11	18.69	1.07	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	6/12	18.77	0.99	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	12/12	19.56	0.20	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	6/13	--	--	--	--	--	--	--	--	--	--
	12/13	--	--	--	--	--	--	--	--	--	--
	6/14	--	--	--	--	--	--	--	--	--	--
MW-5	4/03	17.97	1.67	ND<5	ND<5	ND<5	ND<5	ND<2	4.5	--	--
	1/04	18.35	1.29	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/04	18.24	1.40	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/04	18.33	1.31	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	11/04	18.18	1.46	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	2/05	17.52	2.12	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/05	17.74	1.90	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/05	17.88	1.76	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	12/05	18.12	1.52	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	3/06	17.98	1.66	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	6/06	18.10	1.54	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	9/06	18.00	1.64	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	12/06	18.27	1.37	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	2/07	18.27	1.37	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	5/07	18.44	1.20	ND<5	ND<5	ND<5	1.1 ¹	ND<2	ND<2	--	ND<2
	8/07	18.38	1.26	ND<5	ND<5	ND<5	1.0 ¹	ND<2	ND<2	--	ND<2
	11/07	18.32	1.32	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	3/08	17.99	1.65	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	6/08	18.01	1.63	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
Decommissioned	6/09	18.00	1.64	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	1/10	--	--	--	--	--	--	--	--	--	--
MW-6	4/03	16.79	0.63	8.5	ND<5	12.8	68.5	13.2	46.7	--	--
	1/04	18.85	-1.43	4.3 ¹	ND<5	4.7 ¹	28.9	10.5	19	--	--
	5/04	16.91	0.51	4.3 ¹	ND<5	8.8	42.2	10	21.2	--	--
	8/04	17.65	-0.23	6.9	ND<5	12.3	74.7	9.3	41.8	--	--
	11/04	16.77	0.65	3.8 ¹	ND<5	5.8	37	7.7	13.4	--	--
	2/05	15.99	1.43	5.4	ND<5	10.8	91.4	7.6	23	--	--
	5/05	16.17	1.25	5.8	ND<5	10.6	70.4	4.3	32.7	--	--
	8/05	16.44	0.98	5.5	ND<5	9.4	55	7.5	37.5	--	--
	12/05	16.78	0.64	ND<5	ND<5	2.6	44.4	2.4	24	--	--
	3/06	16.61	0.81	6	ND<5	7.5	46.7	6.4	29.5	--	--
	6/06	16.76	0.66	5.6	ND<5	5	38.6	7.7	36.7	--	3
	9/06	16.80	0.62	3.9 ¹	ND<5	4.4 ¹	32.5	5.2	21.6	--	2
	12/06	16.95	0.47	3.2 ¹	ND<5	3.0 ¹	20.9	5.2	25.3	--	2.3
	2/07	17.02	0.40	2.8 ¹	ND<5	2.6 ¹	20.3	6.1	20.1	--	ND<2
	5/07	17.12	0.30	3.5 ¹	ND<5	2.7 ¹	24.0	6.8	16.6	--	ND<2
	8/07	17.12	0.30	2.8 ¹	ND<5	2.8 ¹	19.0	6.1	16.5	--	ND<2
	11/07	16.98	0.44	2.3 ¹	ND<5	2.8 ¹	21.7	6.5	13.7	--	ND<2
	3/08	16.62	0.80	2.4 ¹	ND<5	2.9 ¹	24.0	6.8	17.6	--	2.6
	6/08	17.09	0.33	2.5 ¹	ND<5	2.8 ¹	24.4	5.4	19.8	--	ND<2
	6/09	16.73	0.69	2.0 ¹	ND<1	2.8 ¹	23.9	6.6	10.0	ND<1	12.1
	10/09	17.12	0.30	3.6 ¹	ND<1	3.7 ¹	32.2	6.2	15.3	ND<1	8.3
	4/10	16.70	0.72	1.6 ¹	ND<1	2.1 ¹	19.5	5.0	9.3	ND<1	8.4
	12/10	17.02	0.40	1.6 ¹	ND<1	2.1 ¹	21.4	4.8	17.2	ND<1	17.5
	5/11	18.61	-1.19	1.2 ¹	ND<1	1.9 ¹	18.8	5.6	16.6	ND<1	17.0
	9/11	17.21	0.21	1.4 ¹	ND<1	1.5 ¹	14.8	5.5	7.9	ND<1	8.5
	12/11	17.10	0.32	1.6 ¹	ND<1	ND<1	21.3	5.7	15.3	ND<1	9.2
	6/12	17.44	-0.02	ND<1	ND<1	1.2 ¹	7.8	2.6	6.9	ND<1	7.3
	12/12	17.98	-0.56	1.7 ¹	ND<1	ND<1	16.0	3.5	6.5	ND<1	10.5
	6/13	17.46	-0.04	ND<1	ND<1	ND<1	11.9	5.4	7.0	ND<1	3.8
	12/13	18.24	-0.82	ND<1	ND<1	ND<1	15.2	4.9	7.1	ND<1	4.4
	6/14	17.75	-0.33	ND<1	ND<1	ND<1	9.2	6.0	6.0	ND<1	8.4
MW-7	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	17.90	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/04	17.92	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	11/04	17.91	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	2/05	16.95	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/05	17.23	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/05	17.40	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	12/05	17.86	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	3/06	17.92	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	6/06	17.66	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	9/06	18.00	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	12/06	18.00	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	2/07	18.19	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	5/07	18.28	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	8/07	18.10	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2

Table 3.2-1: Cumulative Groundwater Monitoring Data O'Neil Data Systems, Inc. 12655 Beatrice Street, Los Angeles, California 90066											
Well Identification	Month Sampled	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
Decommissioned	11/07	18.11	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	3/08	17.71	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	6/08	17.84	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	6/09	17.91	--	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	1/10	--	--	--	--	--	--	--	--	--	--
MW-8	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	18.41	--	ND<5	ND<5	ND<5	14.7	ND<2	4.3	--	--
	8/04	18.49	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	11/04	18.27	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	2/05	17.38	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	5/05	17.69	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	8/05	17.90	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	12/05	18.70	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	3/06	17.93	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	--
	6/06	18.00	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	9/06	18.00	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	12/06	18.00	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	2/07	18.29	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	5/07	18.46	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	8/07	18.14	--	ND<5	ND<5	ND<5	ND<5	ND<2	ND<2	--	ND<2
	11/07	18.41	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	3/08	18.05	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	6/08	18.16	--	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5	--	ND<2
	6/09	18.07	--	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2
	1/10	--	--	--	--	--	--	--	--	--	--
TW-1	4/03	--	--	41.9	ND<5	39.5	619	ND<2	106	--	--
	1/04	20.31	--	35.7	11.9	31.4	721	17.1	50.8	--	--
	5/04	20.21	--	17.2	5.9	18.6	331	8.2	31.5	--	--
	8/04	20.28	--	13.1	5.3	18.8	342	4.6	20	--	--
	11/04	20.10	--	4.7 ^j	ND<5	4.1 ^j	81.6	ND<2	6.8	--	--
	2/05	19.23	--	7.4	ND<5	16.1	388	6.7	18.2	--	--
	5/05	18.48	--	7.3	ND<5	17.4	369	3.2	53.1	--	--
	8/05	19.71	--	8.4	ND<5	29.2	496	30.9	64.6	--	--
	12/05	19.99	--	ND<5	ND<5	ND<5	79.9	12.5	13	--	--
	3/06	19.80	--	ND<5	ND<5	ND<5	70.9	11.2	5.8	--	--
	6/06	19.91	--	ND<5	ND<5	ND<5	40.6	6	18.5	--	16.9
	9/06	19.91	--	ND<5	ND<5	ND<5	22.6	2	7.3	--	4
	12/06	19.91	--	ND<5	ND<5	ND<5	15.6	0.9 ^j	5.9	--	ND<2
	2/07	20.12	--	ND<5	ND<5	ND<5	10	1.3 ^j	4.2	--	ND<2
	5/07	20.39	--	ND<5	ND<5	ND<5	14.8	1.3 ^j	4.7	--	ND<2
	8/07	20.27	--	ND<5	ND<5	1.3 ^j	17.1	1.7 ^j	7.2	--	ND<2
	11/07	20.31	--	ND<5	ND<5	1.0 ^j	16.6	1.7 ^j	5.1	--	ND<2
	3/08	19.83	--	8.9	3.9 ^j	16.3	217	12.4	60.9	--	72.8
	6/08	19.97	--	1 ^j	ND<5	2.5 ^j	37.8	1.5 ^j	8.8	--	ND<2
	6/09	19.90	--	ND<1	ND<1	ND<1	13.0	1.1 ^j	5.8	ND<1	19.4
	10/09	--	--	--	--	--	--	--	--	--	--
	4/10	--	--	--	--	--	--	--	--	--	--
	12/10	--	--	--	--	--	--	--	--	--	--
	5/11	19.81	--	ND<1	ND<1	ND<1	8.8	ND<1	1.8 ^j	ND<1	2.4 ^j
	9/11	--	--	--	--	--	--	--	--	--	--
	12/11	--	--	--	--	--	--	--	--	--	--
	6/12	--	--	--	--	--	--	--	--	--	--
	12/12	--	--	--	--	--	--	--	--	--	--
	6/13	--	--	--	--	--	--	--	--	--	--
	12/13	--	--	--	--	--	--	--	--	--	--
	6/14	--	--	--	--	--	--	--	--	--	--
TW-2	4/03	--	--	159	17.6	197	2,280	55.1	530	--	--
	1/04	20.05	--	63.2	6.7	55.2	714	14.4	99.4	--	--
	5/04	19.95	--	58.2	8.6	84.8	780	18.4	127	--	--
	8/04	19.65	--	101	10.8	84.9	913	15.5	146	--	--
	11/04	19.46	--	18.6	ND<5	13	131	1.2 ^j	9.4	--	--
	2/05	18.61	--	67.2	12.8	75.3	576	7.3	18.7	--	--
	5/05	18.87	--	18.6	3.1	21.5	227	6.3	287	--	--
	8/05	19.75	--	51.3	14	71.7	471	15	116	--	--
	12/05	19.35	--	27.9	ND<5	19.8	251	7.4	59.6	--	--
	3/06	19.15	--	8.4	ND<5	5.3	40.2	5.8	66.4	--	--
	6/06	20.31	--	25.7	ND<5	17.7	166	19.1	69.1	--	3.7
	9/06	20.29	--	3.5 ^j	ND<5	4.4 ^j	109	24.9	17.9	--	4
	12/06	20.29	--	11.6	3.2 ^j	11.6	131	26.2	19.5	--	9.9
	2/07	19.47	--	6.6	3.0 ^j	7.4	92.9	16	11.5	--	10.0
	5/07	20.79	--	9.3	2.6 ^j	8.6	123	18.9	15.2	--	20.8
	8/07	20.71	--	14.4	2.5 ^j	22	215	15.7	45.5	--	23.0
	11/07	20.71	--	8.0	ND<5	9.8	110	11.4	17.8	--	6.6
	3/08	19.20	--	12.0	2.3 ^j	17.5	215	15.2	27.1	--	14.9
	6/08	19.32	--	4.3 ^j	ND<5	8.9 ^j	113	7.5	16.6	--	6.0
	6/09	19.27	--	3.4 ^j	ND<1	3.7 ^j	38.6	5.5	5.2	ND<1	22.2
	10/09	--	--	--	--	--	--	--	--	--	--
	4/10	--	--	--	--	--	--	--	--	--	--
	12/10	--	--	--	--	--	--	--	--	--	--
	5/11	19.20	--	2.5 ^j	ND<1	3.4 ^j	25.8	6.1	4.8	ND<1	18.2
	9/11	--	--	--	--	--	--	--	--	--	--
	12/11	--	--	--	--	--	--	--	--	--	--
	6/12	--	--	--	--	--	--	--	--	--	--
	12/12	--	--	--	--	--	--	--	--	--	--
	6/13	--	--	--	--	--	--	--	--	--	--
	12/13	--	--	--	--	--	--	--	--	--	--
	6/14	--	--	--	--	--	--	--	--	--	--
TW-3	4/03	--	--	157	14.6	203	1,660	39.5	284	--	--
	1/04	19.87	--	110	9.6	47.9	410	14	69.6	--	--
	5/04	19.77	--	83.3	7.4	60.5	483	12.7	78.3	--	--
	8/04	19.53	--	67.6	5.5	40.7	308	6.2	45.6	--	--
	11/04	19.32	--	52.4	ND<5	22.8	224	5.4	39.2	--	--
	2/05	18.50	--	47.4	6.8	81.7	770	13.8	56.8	--	--
	5/05	18.78	--	12	ND<5	17	104	ND<2	75	--	--
	8/05	18.98	--	16.9	ND<5	10.8	67.6	17.3	84.7	--	--

Table 3.2-1: Cumulative Groundwater Monitoring Data O'Neil Data Systems, Inc. 12655 Beatrice Street, Los Angeles, California 90066											
Well Identification	Month Sampled	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
	12/05	19.26	--	22.2	ND<5	9.8	72.6	13.8	57.4	--	--
	3/06	19.60	--	16.3	ND<5	7.2	66.8	11.5	54.8	--	--
	6/06	20.30	--	17	ND<5	7.6	107	21.7	45.9	--	20.2
	9/06	20.31	--	5.6	ND<5	2.4 ¹	44.8	24	32.2	--	ND<2
	12/06	20.31	--	5.7	2.9 ¹	2.9 ¹	72.2	29.7	8.1	--	ND<2
	2/07	19.40	--	6.5	2.4	4.1	67.5	8.0	8.3	--	ND<2
	5/07	20.69	--	8.4	1.2 ¹	4.9 ¹	64.1	6.3	7.2	--	6.6
	8/07	20.69	--	12.4	1.3 ¹	10.9	84.3	12.0	19.7	--	6.9
	11/07	20.62	--	11.9	1.2 ¹	12.1	102.0	13.0	5.9	--	5.1
	3/08	19.11	--	11.6	1.7 ¹	13.4	156	12.5	8.6	--	7.3
	6/08	19.24	--	9.2	1.1 ¹	11.6	134	10.7	18.8	--	ND<2
	6/09	19.18	--	11.7	2.7 ¹	13.5	153	21.5	19.9	ND<1	33.6
	10/09	19.42	--	15.3	1.3 ¹	11.3	114	14.5	13.9	ND<1	30.5
	4/10	18.87	--	8.2	ND<1	9.8	102	7.5	27.5	ND<1	31.3
	12/10	19.52	--	9.1	1.7 ¹	8.4	102	17.2	11.4	ND<1	18.3
	5/11	19.04	--	14.8	1.4 ¹	13.2	148	27.2	28.7	ND<1	50.3
	9/11	19.45	--	20.0	1.7 ¹	17.5	164	15.8	47.3	ND<1	79.7
	12/11	19.49	--	5.2	ND<1	5.1	42	7.0	9.8	ND<1	12.1
	6/12	19.62	--	23.8	1.4 ¹	27.3	168	33.0	67.1	ND<1	74.4
	12/12	20.65	--	39.7	4.9 ¹	34.3	249	85.8	26.5	ND<1	53.6
	6/13	19.98	--	21.9	3.8 ¹	21.0	236	56.2	41.9	ND<1	39.6
	12/13	20.35	--	15.7	1.6 ¹	17.5	195	40.4	47.1	ND<1	35.3
	6/14	20.17	--	5.1	ND<1	6.9	76.2	30.8	4.2	ND<1	17.5
RW-1	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	--	--	--	--	--	--	--	--	--	--
	8/04	--	--	--	--	--	--	--	--	--	--
	11/04	--	--	--	--	--	--	--	--	--	--
	2/05	19.30	--	71.9	51.5	228	3,860	58.3	650	--	--
	5/05	19.57	--	60	46.6	259	5,150	42.9	1,170	--	--
	8/05	19.77	--	30.3	ND<5	65.3	1,240	38.8	327	--	--
	12/05	20.40	--	ND<5	ND<5	43	894	ND<2	220	--	--
	3/06	19.85	--	12.8	ND<5	27.4	352	18.4	108	--	--
	6/06	20.85	--	18.8	ND<5	38.5	483	33.4	202	--	56.8
	9/06	20.25	--	ND<5	ND<5	31.6	639	24	88.3	--	34
	12/06	20.25	--	9.0 ¹	7.5 ¹	18.8	367	39.8	68.8	--	63.6
	2/07	20.13	--	7.8	9.1	18.8	294	40	55.1	--	104
	5/07	21.21	--	12.1	17.9	19.0	380	73.2	80.8	--	105
	8/07	21.12	--	4.5 ¹	9.6 ¹	10.3	179	38.4	28.9	--	58.6
	11/07	21.03	--	11.4	22.6	28.4	457	86.0	148	--	31
	3/08	19.92	--	3.4 ¹	4.8 ¹	11.8	186	42.0	119	--	21.2
	6/08	20.08	--	5.7	8.5	12.6	228	57.5	111	--	15.2
	6/09	19.95	--	3.5 ¹	10.4	11.7	188	38.9	91.5	ND<1	48.8
	10/09	20.60	--	8.4	20.8	19.6	333	39.8	62.9	ND<1	34.8
	4/10	19.68	--	1.4 ¹	2.9 ¹	5.0	75.0	16.9	98.8	ND<1	21.3
	12/10	20.12	--	2.2 ¹	10.0	7.0	175	20.9	49.2	1.2 ¹	17.5
	5/11	20.12	--	1.9 ¹	5.5	5.1	92.6	15.8	92.7	2.4 ¹	24.3
	9/11	20.20	--	2.3 ¹	12.9	9.4	200	34.0	88.1	ND<1	31.7
	12/11	21.15	--	ND<1	4.5 ¹	5.2	113	30.2	81.6	ND<1	9.2
	6/12	20.45	--	1.0 ¹	3.6 ¹	7.1	58.7	33.3	126	1.3 ¹	16.6
	12/12	21.29	--	1.0 ¹	7.1	6.8	101.0	35.9	80.1	ND<1	12.1
	6/13	20.63	--	1.0 ¹	6.5	11.0	166	51.4	143	ND<1	7.0
	12/13	20.94	--	2.3 ¹	7.4	11.6	122	34.9	136	ND<1	12.6
	6/14	21.07	--	1.0 ¹	4.2	9.8	139	34.2	83.2	ND<1	3.1
RW-2	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	--	--	--	--	--	--	--	--	--	--
	8/04	--	--	--	--	--	--	--	--	--	--
	11/04	--	--	--	--	--	--	--	--	--	--
	2/05	19.68	--	5.4	ND<5	5.3	47.4	7.8	250	--	--
	5/05	19.98	--	2.5	ND<5	5.9	59.5	3.7	356	--	--
	8/05	20.17	--	2.7 ¹	ND<5	8.2	144	9.4	245	--	--
	12/05	20.45	--	ND<5	ND<5	3.9 ¹	17.8	ND<2	148	--	--
	3/06	20.23	--	ND<5	ND<5	2.7 ¹	15.7	5.6	83.9	--	--
	6/06	19.82	--	27.2	ND<5	21.3	145	11.5	116	--	7.5
	9/06	19.85	--	ND<5	ND<5	10.3	62.9	14.5	103	--	3
	12/06	19.85	--	2.1 ¹	ND<5	8.1	47.7	16	132	--	9.1
	2/07	25.55	--	1.8 ¹	ND<5	5.7	46.8	18.2	216	--	ND<2
	5/07	20.26	--	4.7 ¹	ND<5	12.0	108	19.8	185	--	5.9
	8/07	20.22	--	2.8 ¹	ND<5	9.6	108	21.8	157	--	4.8
	11/07	20.20	--	2.7 ¹	ND<5	9.9	102	20.1	210	--	3.9
	3/08	20.33	--	1.2 ¹	ND<5	3.7 ¹	45.7	13.7	260	--	3.4
	6/08	19.45	--	2.6 ¹	ND<5	7.8 ¹	131	15.9	229	--	3.9
	6/09	20.38	--	3.2 ¹	ND<1	7.9 ¹	154	20.2	268	12.0	15.9
	10/09	20.19	--	6.2 ¹	ND<1	12.7	190	19.2	196	12.0	12
	4/10	20.15	--	2.8 ¹	ND<1	4.7 ¹	63.2	12.2	222	8.8 ¹	28.7
	12/10	20.55	--	5.2 ¹	ND<1	7.0 ¹	109	22.2	290	9.0 ¹	48.8
	5/11	20.78	--	3.2 ¹	ND<1	3.8 ¹	51.8	15.6	268	7.2 ¹	20.0
	9/11	20.97	--	4.2 ¹	ND<1	10.1 ¹	125	49.2	270	5.1 ¹	15.2
	12/11	20.71	--	ND<1	ND<1	4.1 ¹	98.6	34.6	260	ND<1	27.4
	6/12	20.80	--	1.1 ¹	ND<1	8.3 ¹	50.9	20.2	226	ND<1	63.1
	12/12	21.55	--	8.0 ¹	ND<1	10.4	132	46.2	276	ND<1	48.5
	6/13	21.14	--	2.6 ¹	ND<1	8.1 ¹	99.2	34.8	256	ND<1	49.0
	12/13	21.55	--	3.0 ¹	ND<1	13.3	109	42.2	272	ND<1	63.5
	6/14	21.52	--	3.6 ¹	ND<1	11.2	57.2	11.8	107	ND<1	75.0
RW-3	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	--	--	--	--	--	--	--	--	--	--
	8/04	--	--	--	--	--	--	--	--	--	--
	11/04	--	--	--	--	--	--	--	--	--	--
	2/05	19.65	--	17.5 ¹	ND<5	49.1	352	9.8	108	--	--
	5/05	19.93	--	5	ND<5	6.4	71.6	3.8	53.2	--	--
	8/05	20.18	--	ND<5	ND<5	ND<5	19.5	ND<2	21.5	--	--
	12/05	20.45	--	ND<5	ND<5	ND<5	7.7	ND<2	9.2	--	--
	3/06	20.09	--	ND<5	ND<5	ND<5	13.7	ND<2	16	--	--
	6/06	19.21	--	ND<5	ND<5	ND<5	14.2	3.8	13.7	ND<5	ND<2

Table 3.2-1: Cumulative Groundwater Monitoring Data
O'Neil Data Systems, Inc.
12655 Beatrice Street, Los Angeles, California 90066

Well Identification	Month Sampled	Depth to Water (feet bgs)	Groundwater Elevation (feet amsl)	1,1-DCE (µg/L)	trans-1,2-DCE (µg/L)	1,1-DCA (µg/L)	cis-1,2-DCE (µg/L)	TCE (µg/L)	PCE (µg/L)	1,1,1-TCA (µg/L)	1,4-Dioxane (µg/L)
	9/06	19.14	--	10.3	ND<5	18.2	167	19.8	33.4	ND<5	8
	12/06	19.14	--	8.4	1.4 ^j	15.0	113	21.5	39.1	ND<5	3.3
	2/07	20.58	--	12.3	2.5 ^j	22.4	207	25.9	108	ND<5	21.8
	5/07	19.62	--	7.7 ^j	1.5 ^j	12.1	130	23.7	50.7	--	6.3
	8/07	19.59	--	4.8 ^j	1.0 ^j	11.5	85.6	14.5	47.5	--	7.2
	11/07	19.56	--	7.0	0.9 ^j	12.1	115	25.1	72.4	--	7.3
	3/08	20.24	--	5.4	ND<5	12.2	112	13.7	142	--	13.2
	6/08	20.41	--	2.5 ^j	ND<5	10.0	87.7	14.2	64.8	ND<5	5.3
	6/09	20.34	--	6.9	4.5 ^j	16.8	158	43.4	103	ND<1	54.5
	10/09	--	--	--	--	--	--	--	--	--	--
	4/10	--	--	--	--	--	--	--	--	--	--
	12/10	--	--	--	--	--	--	--	--	--	--
	5/11	20.33	--	1.1 ^j	ND<1	2.7 ^j	25.4	10.0	31.7	ND<1	13.70
	9/11	--	--	--	--	--	--	--	--	--	--
	12/11	--	--	--	--	--	--	--	--	--	--
	6/12	--	--	--	--	--	--	--	--	--	--
	12/12	--	--	--	--	--	--	--	--	--	--
	6/13	--	--	--	--	--	--	--	--	--	--
	12/13	--	--	--	--	--	--	--	--	--	--
	6/14	--	--	--	--	--	--	--	--	--	--
RW-4	4/03	--	--	--	--	--	--	--	--	--	--
	1/04	--	--	--	--	--	--	--	--	--	--
	5/04	--	--	--	--	--	--	--	--	--	--
	8/04	--	--	--	--	--	--	--	--	--	--
	11/04	--	--	--	--	--	--	--	--	--	--
	2/05	20.25	--	40.7	ND<5	78	606	17	142	--	--
	5/05	20.46	--	28.9	ND<5	35.1	276	7.3	258	--	--
	8/05	20.64	--	18.2	ND<5	17.9	110	8.4	127	--	--
	12/05	20.94	--	24	ND<5	17.3	129	6.3	124	--	--
	3/06	20.79	--	26.8	ND<5	25.1	147	9.6	101	--	--
	6/06	19.11	--	3.6	ND<5	8.6	55.9	10	119	ND<5	20.5
	9/06	19.06	--	42.8	ND<5	48.3	331	16.4	136	ND<5	7
	12/06	19.06	--	33.4	4.1 ^j	34.8	245	23.2	104	ND<5	9.2
	2/07	21.00	--	23	3.6 ^j	29.7	227	21.7	92.8	ND<5	11.8
	5/07	19.53	--	27.4	3.9 ^j	27.3	276	19.3	79.7	--	22.2
	8/07	19.49	--	17	2.8 ^j	23.6	197	25.4	58.8	--	24.7
	11/07	19.43	--	15.9	1.1 ^j	18.7	161	12.1	66.4	--	7.4
	3/08	20.76	--	13.8	1.8 ^j	18.8	171	16.9	58.7	--	7.6
	6/08	20.85	--	16.0	2.0 ^j	26.6	200	21.4	101	ND<5	10.4
	6/09	20.77	--	11.4	2.5 ^j	20.0	195	14.9	71.3	ND<1	21.9
	10/09	21.14	--	21.2	2.6 ^j	24.8	244	15.5	66.3	ND<1	22.4
	4/10	20.49	--	1.9 ^j	ND<1	2.8 ^j	22.3	4.0 ^j	15.5	ND<1	3.9
	12/10	20.49	--	1.8 ^j	ND<1	2.5 ^j	24.1	4.6	21.3	ND<1	6.1
	5/11	20.91	--	4.7 ^j	ND<1	7.2	63.4	7.0	46.9	ND<1	22.9
	9/11	21.10	--	5.8	ND<1	8.7	82.1	7.8	47.7	ND<1	18.4
	12/11	20.89	--	3.2 ^j	ND<1	4.9 ^j	40.9	3.6	16.2	ND<1	7.4
	6/12	21.21	--	5.5	ND<1	12.2	75.4	9.4	73.7	ND<1	43.3
	12/12	21.80	--	8.6	ND<1	7.8	81.2	6.6	41.7	ND<1	19.4
	6/13	21.32	--	4.3 ^j	1.0 ^j	6.2	58.1	8.0	36.1	ND<1	8.5
	12/13	21.64	--	6.7	1.27 ^j	8.5	75.2	9.7	42.3	ND<1	9.1
	6/14	21.63	--	ND<1	ND<1	ND<1	7.5	2.1	9.8	ND<1	3.4

Notes:

bgs

below ground surface

amsl

above mean sea level

1,1-DCE

1,1-dichloroethene

µg/L

micrograms per liter

trans-1,2-DCE

trans-1,2-dichloroethene

1,1-DCA

1,1-dichloroethane

cis-1,2-DCE

cis-1,2-dichloroethene

TCE

trichloroethene

PCE

tetrachloroethene

1,1,1-TCA

1,1,1-trichloroethane

^j

trace level (below the laboratory Practical Quantification Limit)

--

Not gauged, sampled, or available

ND

not detected above the indicated laboratory Method Detection Limit

Table 5.2-1: MCLs and Detected Groundwater Chemical Concentrations (µg/L)

O'Neil Data Systems, Inc.

12655 Beatrice Street, Los Angeles, California 90066

Detected Contaminants	Number of Samples with Detectable Concentrations	Sample with Peak Concentration	Peak Concentration	MCL	Number of Samples Exceeding MCLs
1,1-DCA	5 of 7	TW-3-GW	11.2	5	3
1,1-DCE	4 of 7	TW-3-GW	5.1	6	0
trans-1,2-DCE	1 of 7	RW-1-GW	4.2	10	0
cis-1,2-DCE	7 of 7	RW-1-GW	139	6	6
TCE	7 of 7	RW-1-GW	34.2	5	6
PCE	7 of 7	RW-2-GW	107	5	5

Notes:

MCL Maximum Contaminant Level

µg/L micrograms per liter

DCA dichloroethane

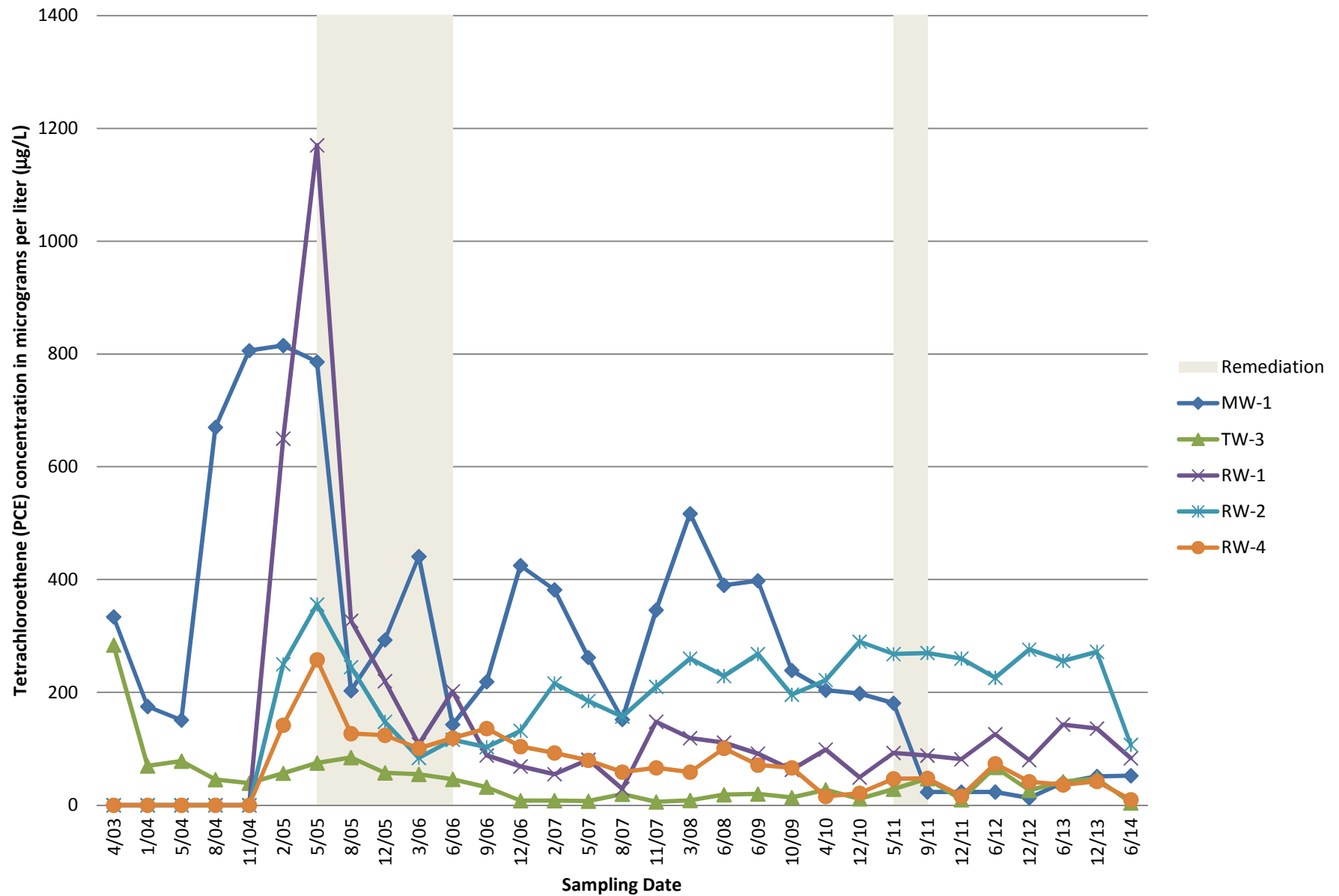
DCE dichloroethene

TCE trichloroethene

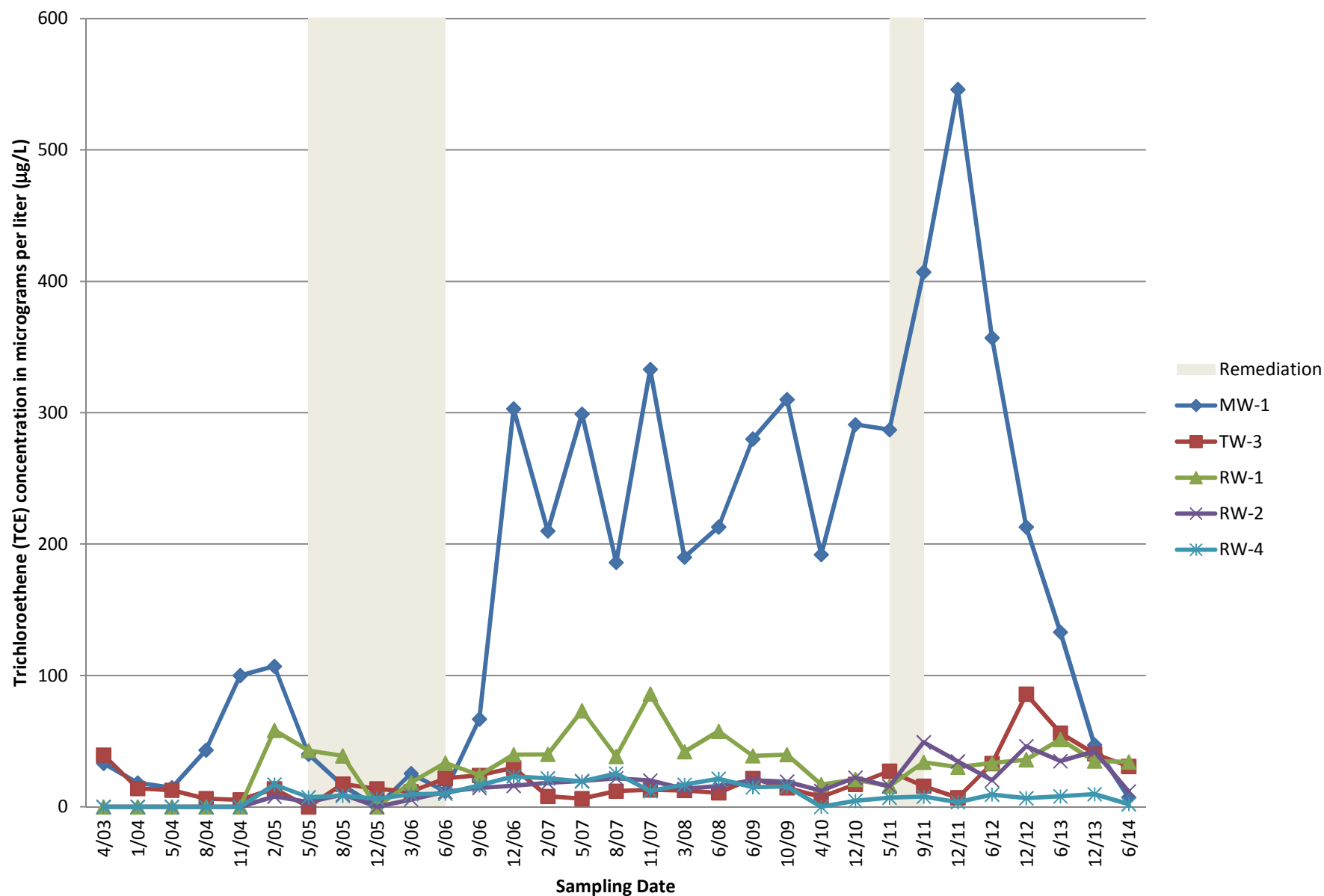
PCE tetrachloroethene

Graphs

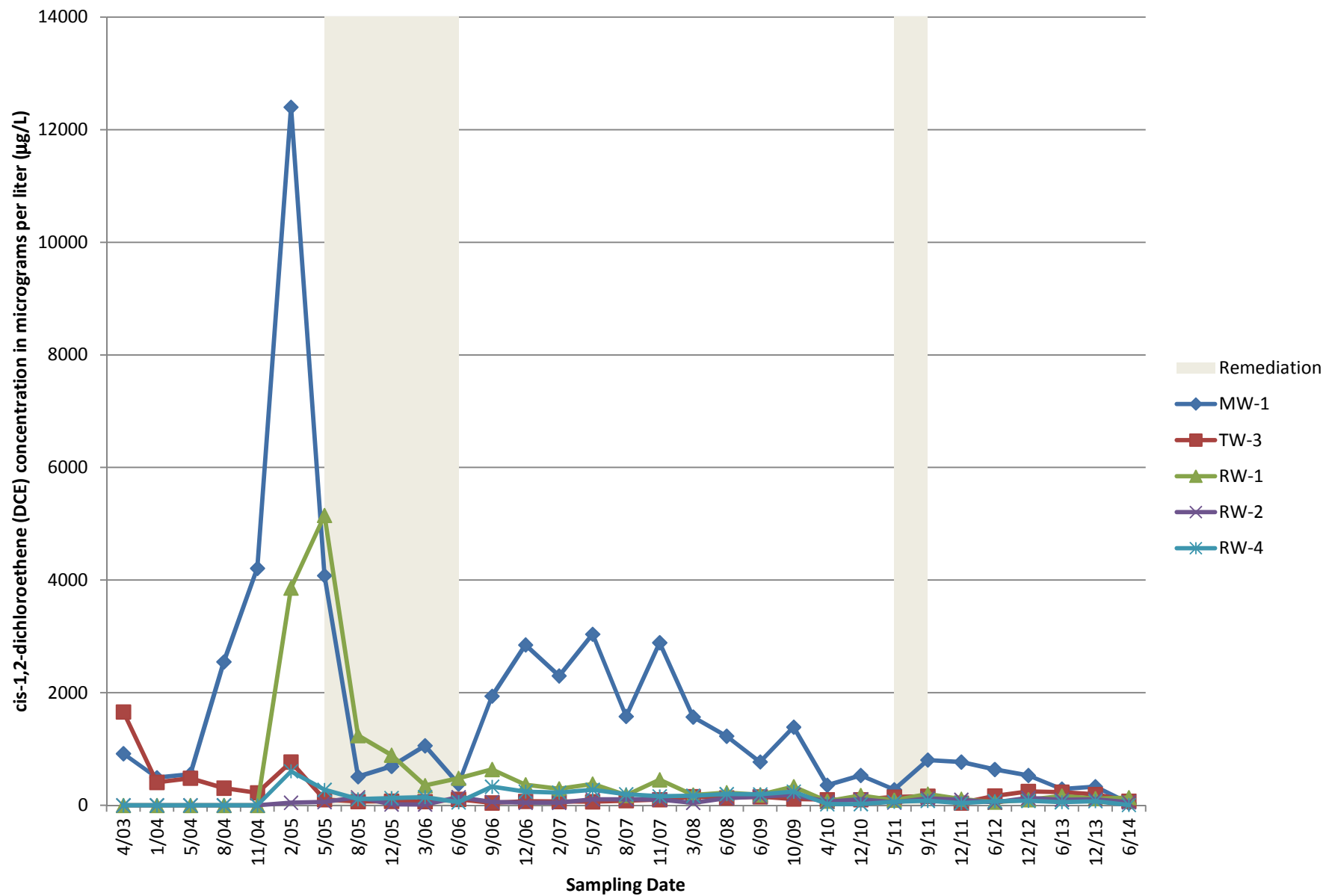
Graph 5.1-1: PCE Concentrations in Source Area Wells Over Time



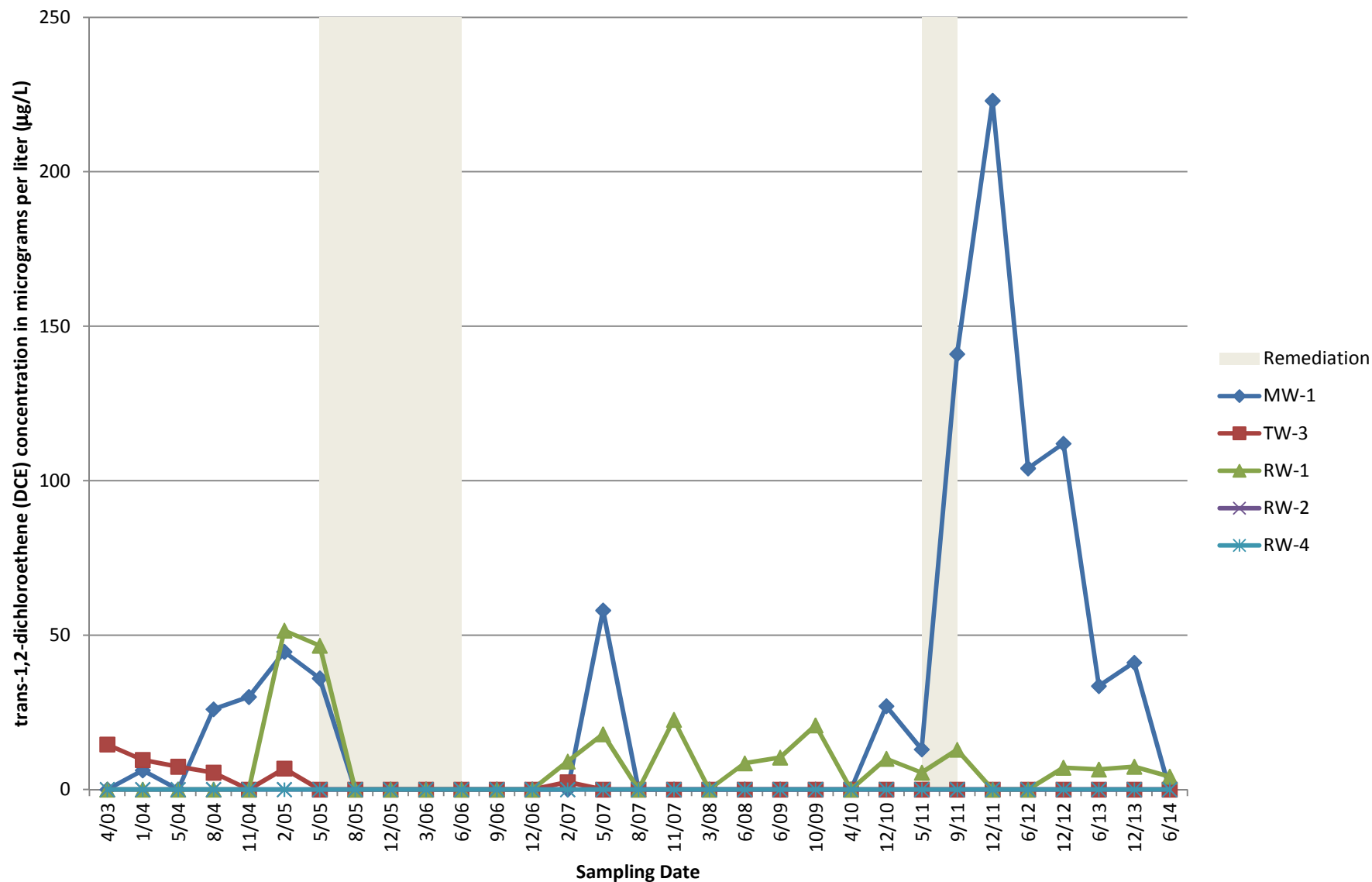
Graph 5.1-2: TCE Concentrations in Source Area Wells Over Time



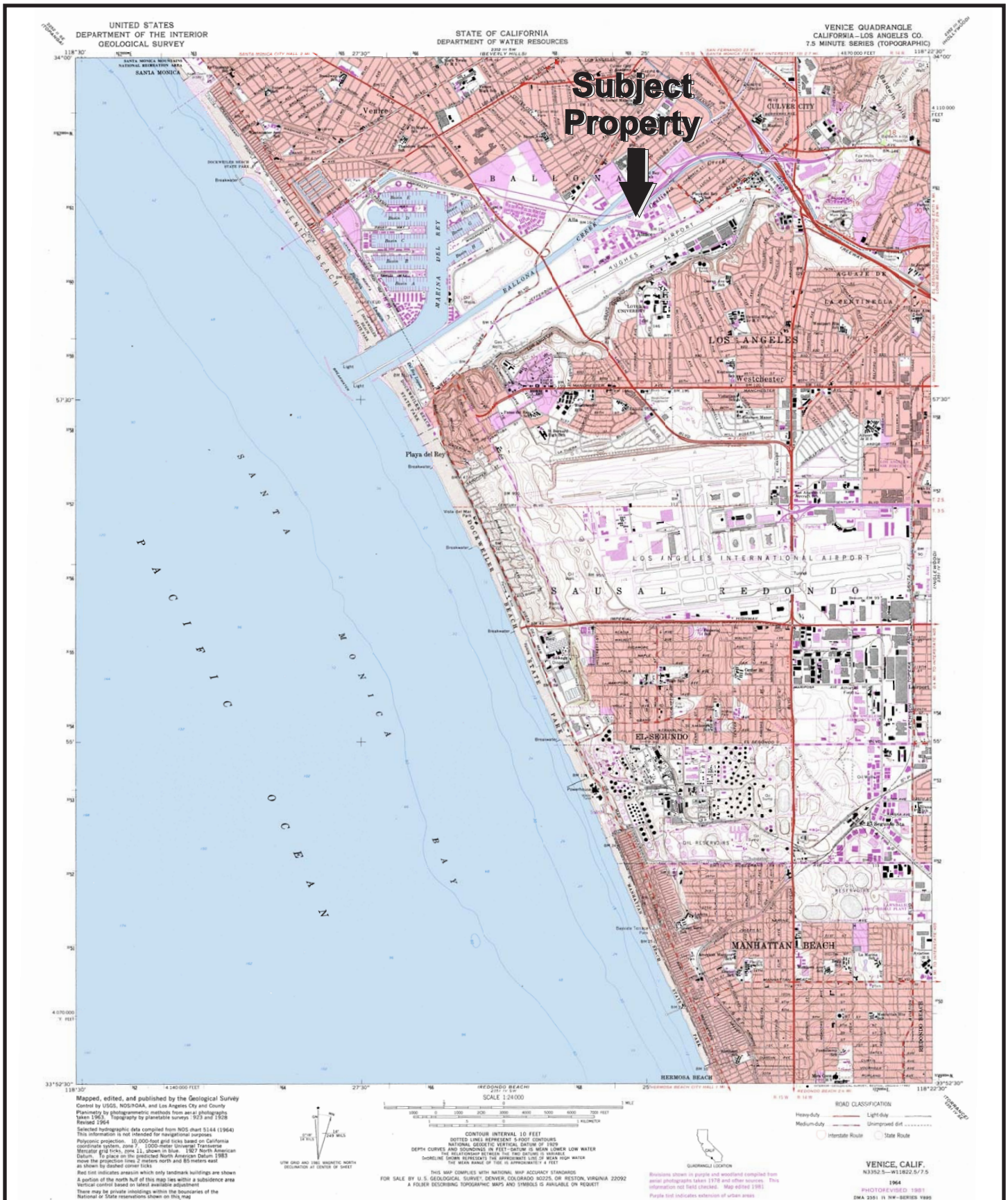
Graph 5.1-3: cis-1,2-DCE Concentrations in Source Area Wells Over Time



Graph 5.1-4: trans-1,2-DCE Concentrations in Source Area Wells Over Time



Figures

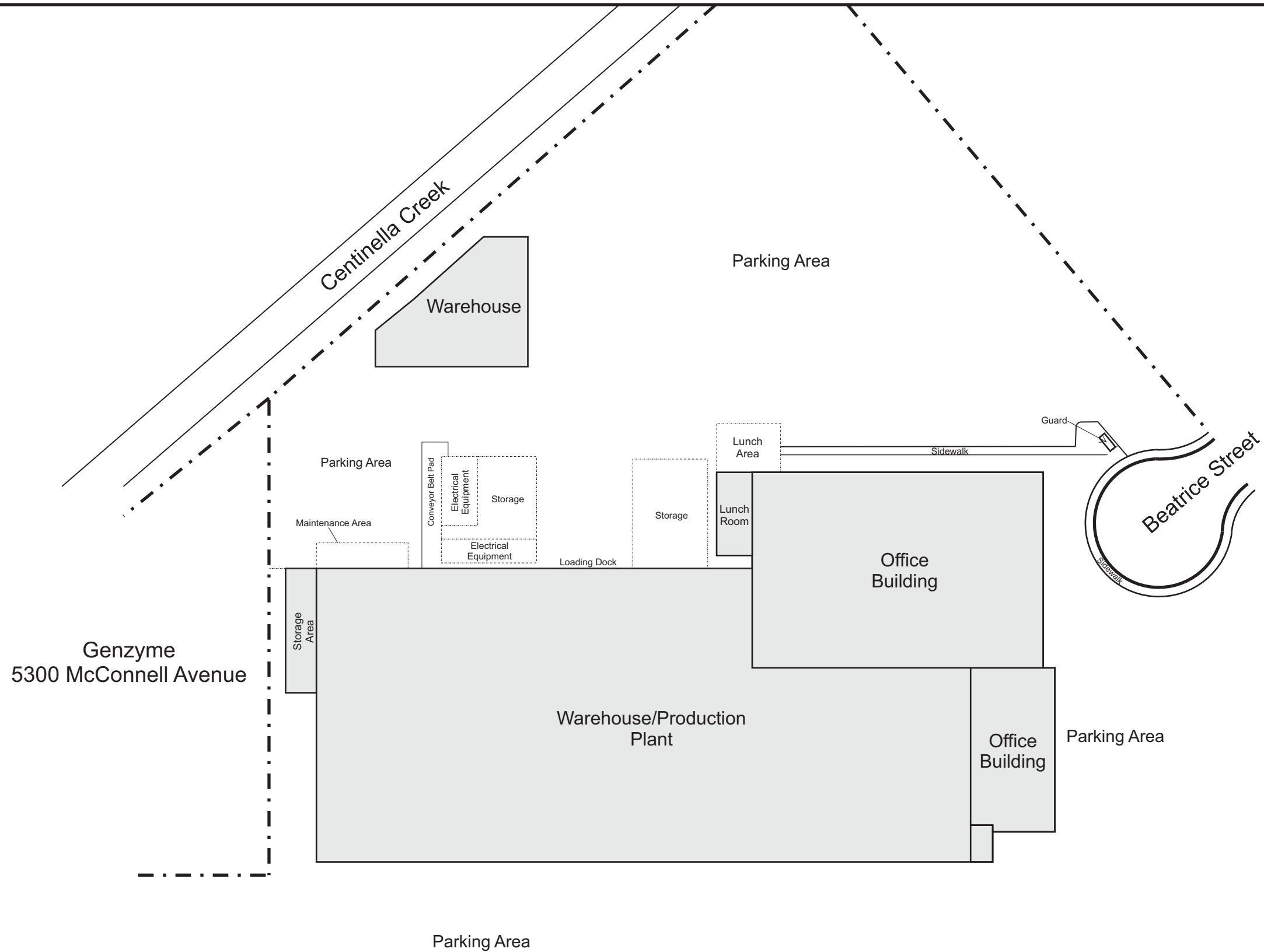


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USGS Venice Quadrangle
Version: 1964 Current as of: 1981

Site Vicinity Map		
Figure	Prepared By	Date
2.1-1	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		



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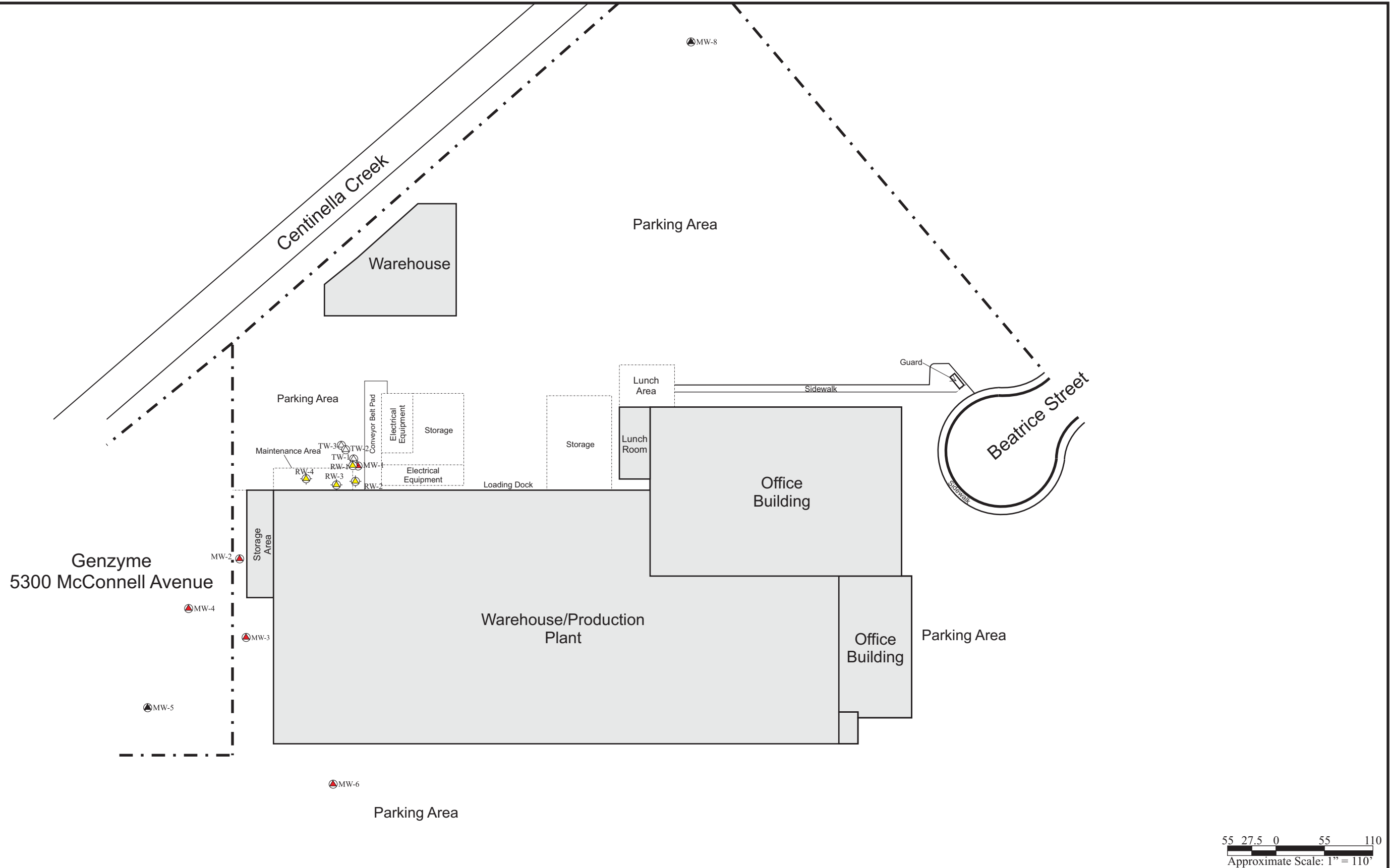


Fence/Wall

Legend



Site Plan		
Figure	Prepared By	Date
2.1-2	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

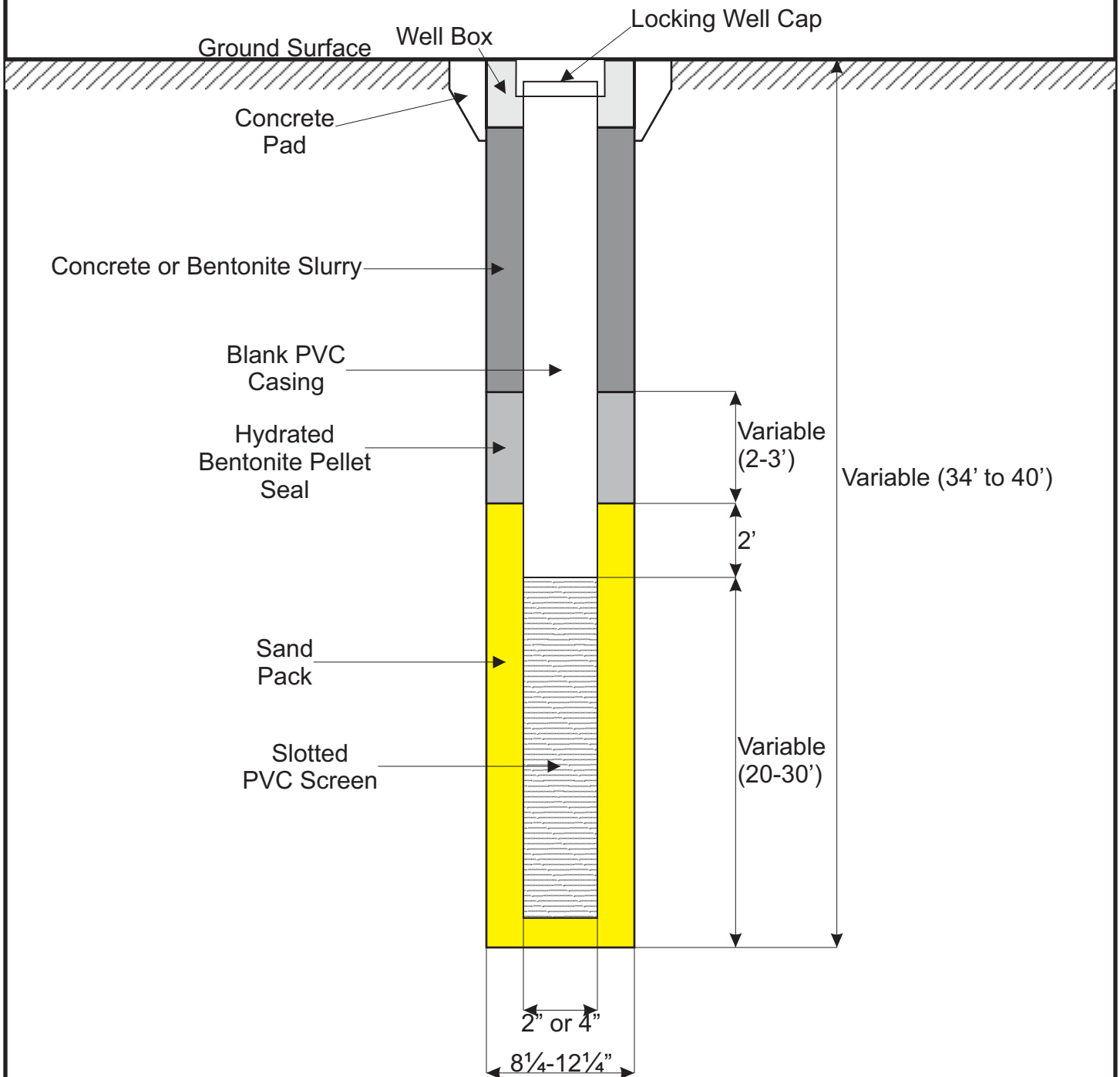


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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		

Well Locations		
Figure	Prepared By	Date
2.2-1	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Not to scale



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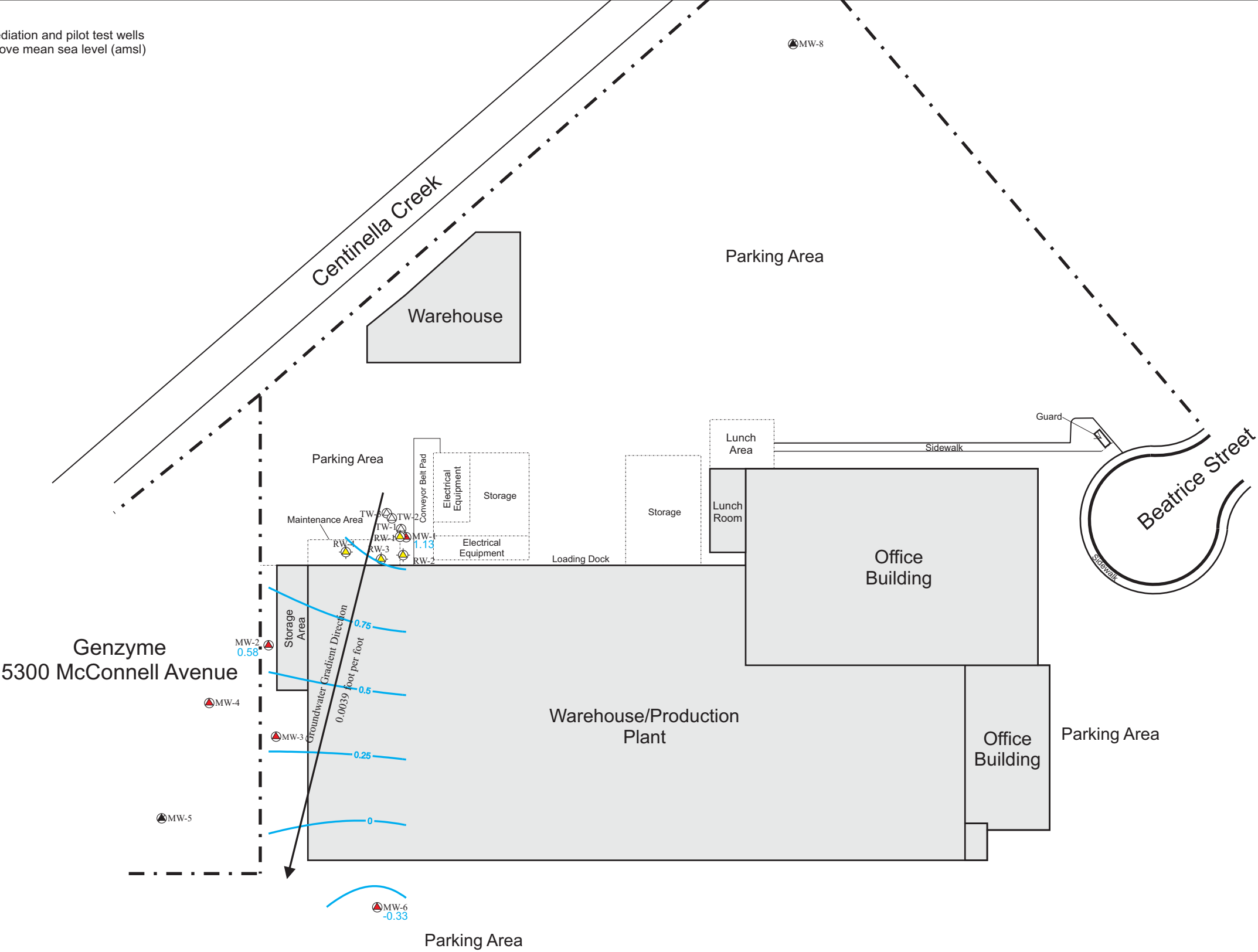
Project Number: 13-64269

Typical Well Construction

Figure	Prepared By	Date
2.2-2	S. Harris	July 2014

12655 Beatrice Street
Los Angeles, California 90066

Notes:
-Wells gauged on June 26, 2014
-Survey data not available for remediation and pilot test wells
-Elevations and contours in feet above mean sea level (amsl)
-Contour interval = 0.25 feet amsl



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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		Groundwater Elevation Contour

Groundwater Elevation Contour Map		
Figure	Prepared By	Date
3.2-1	S. Harris	April 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations measured in micrograms per liter (µg/L)
-VOCs = volatile organic compounds
-DCE = dichloroethene
-DCA = dichloroethane
-TCE = trichloroethene
-PCE = tetrachloroethene
-ND = not detected above the indicated laboratory Method Detection Limit
-^lTrace level (below the laboratory Practical Quantification Limit)

RV/-1	
Contaminant	Concentration
1,1-DCE	1.0 ^l
trans-1,2-DCE	4.2
1,1-DCA	9.8
cis-1,2-DCE	139
TCE	34.2
PCE	83.2
1,4-Dioxane	3.1

TW/-3	
Contaminant	Concentration
1,1-DCE	5.1
trans-1,2-DCE	ND<1
1,1-DCA	6.9
cis-1,2-DCE	76.2
TCE	30.8
PCE	4.2
1,4-Dioxane	17.5

MW/-2	
Contaminant	Concentration
1,1-DCE	4.0 ^l
trans-1,2-DCE	ND<1
1,1-DCA	1.1 ^l
cis-1,2-DCE	5.4
TCE	7.4
PCE	2.8
1,4-Dioxane	6.4

Parking Area

Warehouse

MW/-1	
Contaminant	Concentration
1,1-DCE	ND<1
trans-1,2-DCE	ND<1
1,1-DCA	3.9 ^l
cis-1,2-DCE	40.2
TCE	7.2
PCE	52.3
1,4-Dioxane	9.5

Guard

Sidewalk

Beatrice Street

Sidewalk

Genzyme
5300 McConnell Avenue

MW-4

MW-3

MW-5

RV/-4	
Contaminant	Concentration
1,1-DCE	ND<1
trans-1,2-DCA	ND<1
1,1-DCA	ND<1
cis-1,2-DCE	7.5
TCE	2.1
PCE	9.8
1,4-Dioxane	3.4

RV/-2	
Contaminant	Concentration
1,1-DCE	3.6 ^l
trans-1,2-DCA	ND<1
1,1-DCA	11.2
cis-1,2-DCE	57.2
TCE	11.8
PCE	107
1,4-Dioxane	75.0

ction

Office Building

Parking Area

MW/-6	
Contaminant	Concentration
1,1-DCE	ND<1
trans-1,2-DCE	ND<1
1,1-DCA	ND<1
cis-1,2-DCE	9.2
TCE	6.0
PCE	6.0
1,4-Dioxane	8.4

Parking Area

MW-7



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Project Number: 13-64269

Legend

Fence/Wall

Monitoring Well

Pilot Test Well

Remediation Well

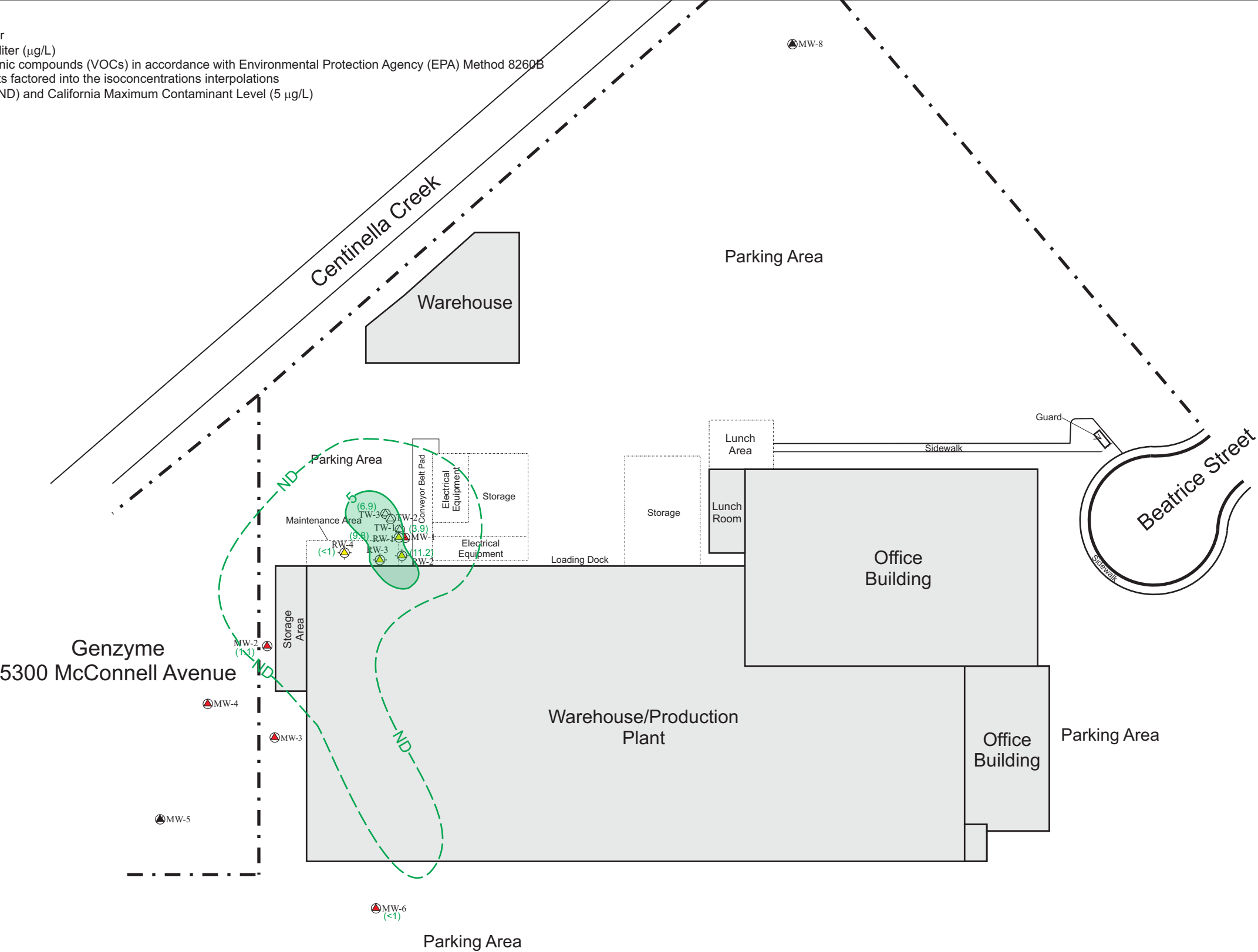
Decommissioned
Monitoring Well

Groundwater Concentrations of VOCs

Figure	Prepared By	Date
4.0-1	S. Harris	July 2014

12655 Beatrice Street
Los Angeles, California 90066

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260B
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval: Non-Detectable (ND) and California Maximum Contaminant Level (5 µg/L)
-1,1-DCA = 1,1-dichloroethane

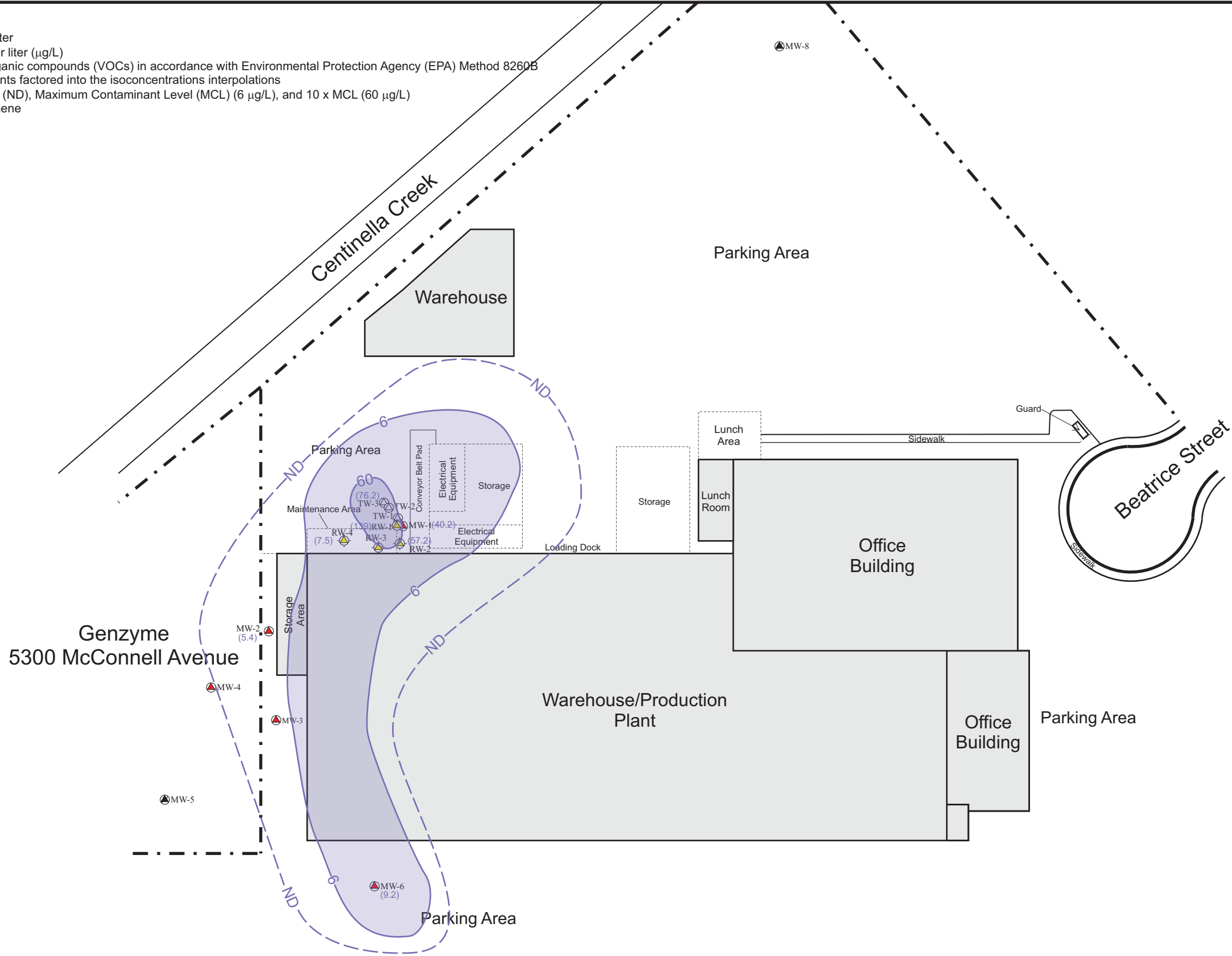


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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		1,1-DCA Contour

1,1-DCA Concentration Contour Map		
Figure	Prepared By	Date
5.1-1	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260B
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval: Non-Detectable (ND), Maximum Contaminant Level (MCL) (6 µg/L), and 10 x MCL (60 µg/L)
-cis-1,2-DCE = cis-1,2-dichloroethene



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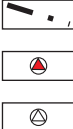
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Project Number: 13-64269



Fence/Wall
Monitoring Well
Pilot Test Well

Legend

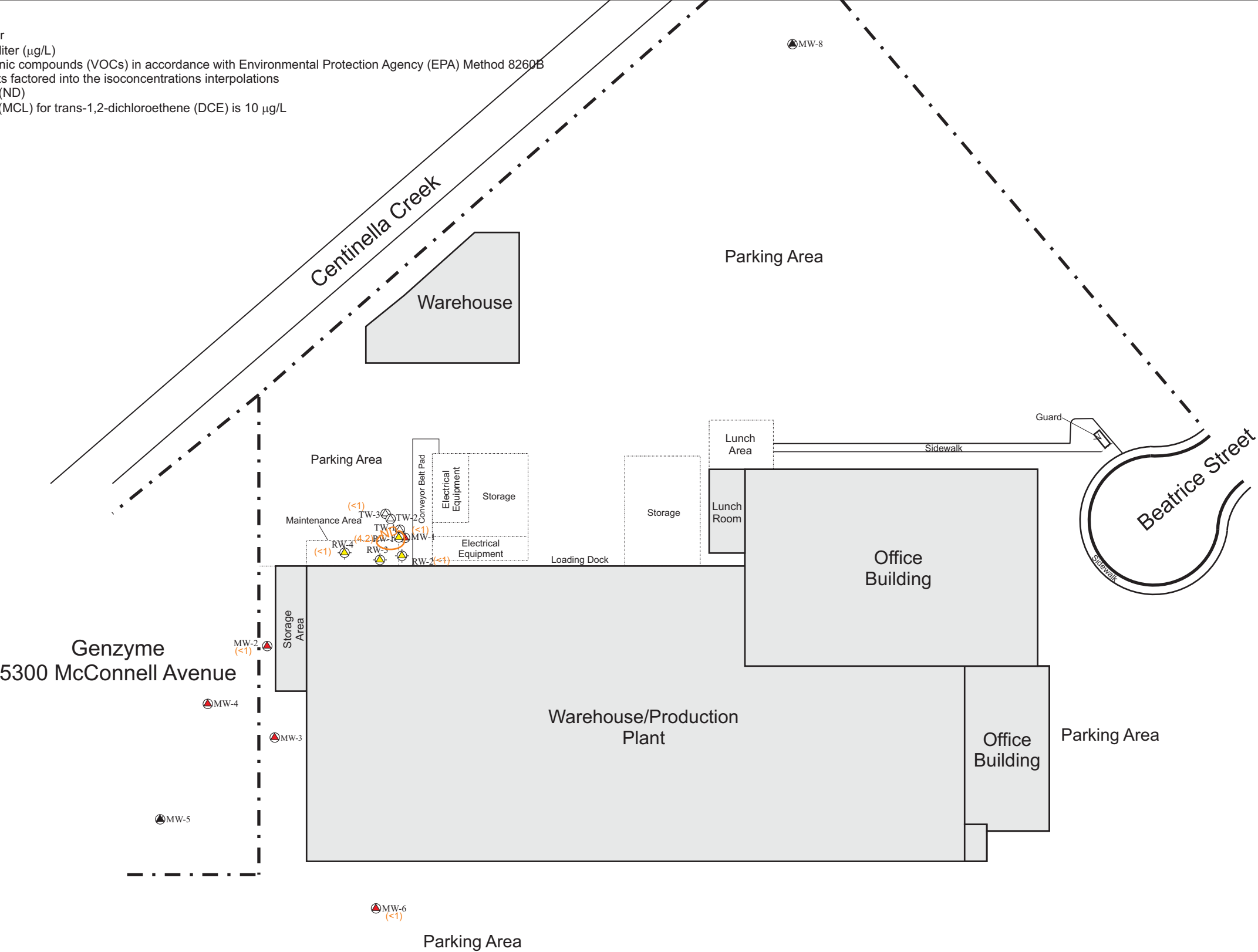


Remediation Well
Decommissioned
Monitoring Well
cis-1,2-DCE Contour

cis-1,2-DCE Concentration Contour Map

Figure	Prepared By	Date
5.1-2	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260B
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval = Non-detectable (ND)
-The Maximum Contaminant Level (MCL) for trans-1,2-dichloroethene (DCE) is 10 µg/L

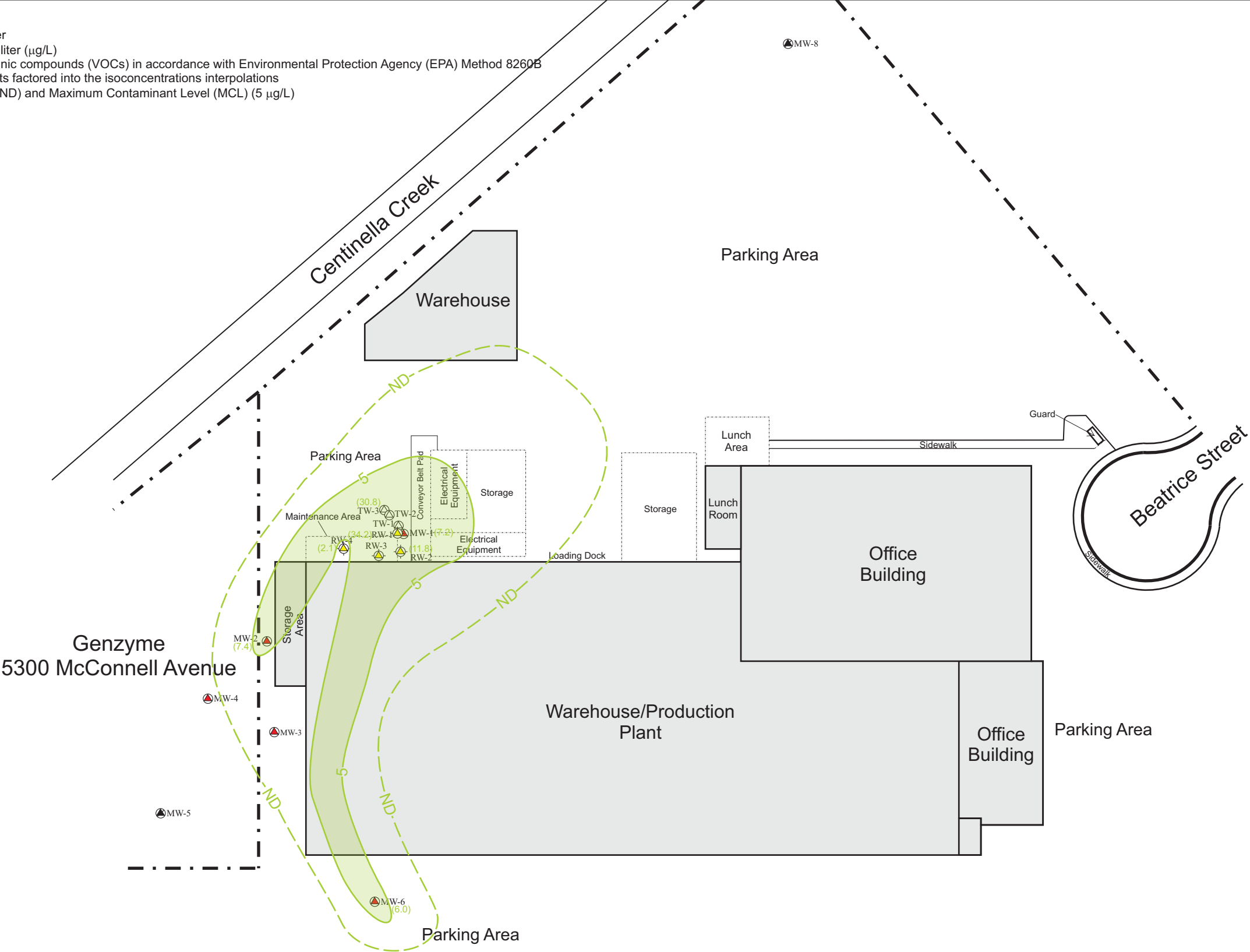


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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		trans-1,2-DCE Contour

trans-1,2-DCE Concentration Contour Map		
Figure	Prepared By	Date
5.1-3	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260B
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval: Non-Detectable (ND) and Maximum Contaminant Level (MCL) (5 µg/L)
-TCE = trichloroethene

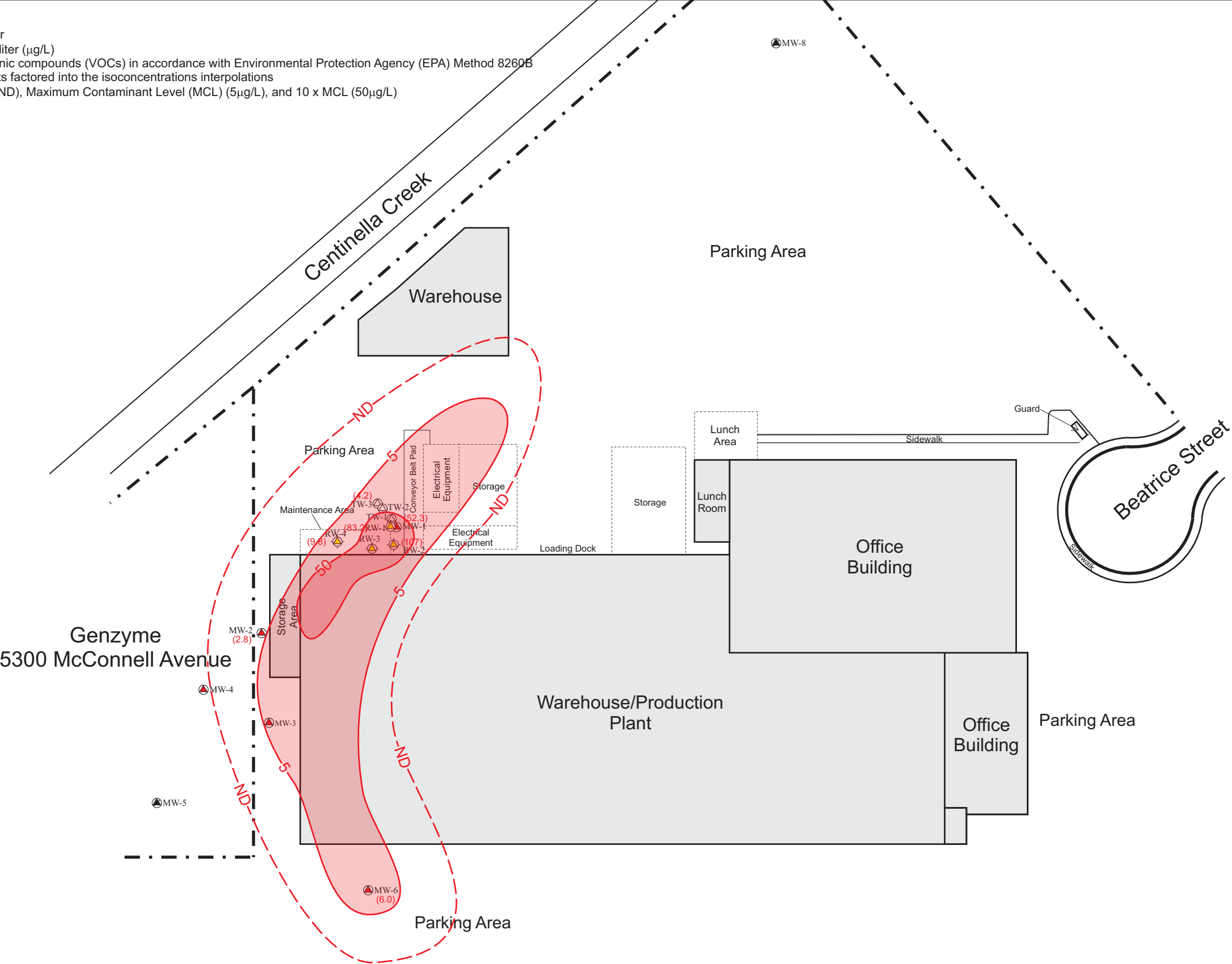


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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		TCE Contour

TCE Concentration Contour Map		
Figure	Prepared By	Date
5.1-4	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for volatile organic compounds (VOCs) in accordance with Environmental Protection Agency (EPA) Method 8260B
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval: Non-Detectable (ND), Maximum Contaminant Level (MCL) (5µg/L), and 10 x MCL (50µg/L)
-PCE = tetrachloroethene

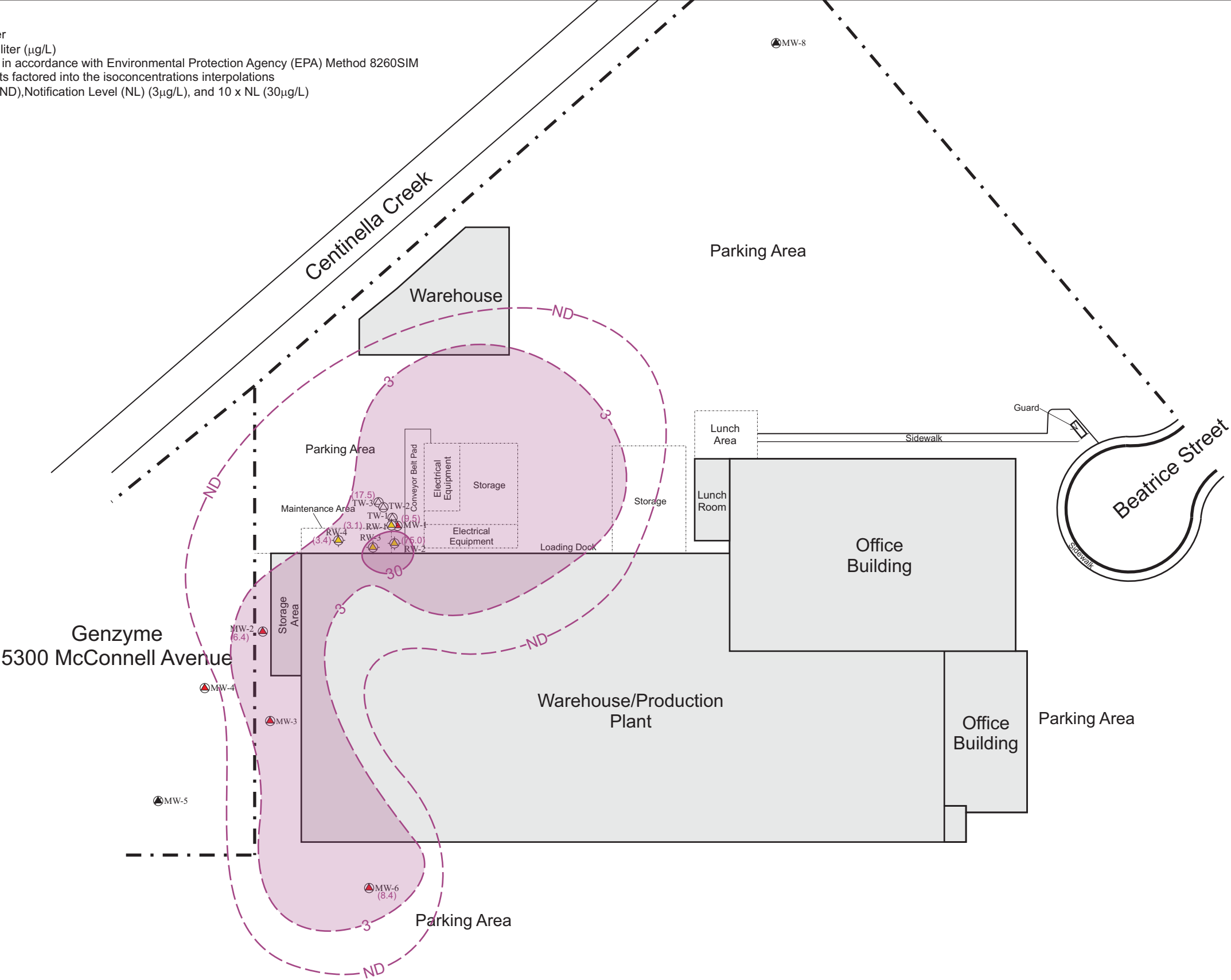


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Legend		
Fence/Wall		Remediation Well
Monitoring Well		Decommissioned Monitoring Well
Pilot Test Well		PCE Contour

PCE Concentration Contour Map		
Figure	Prepared By	Date
5.1-5	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		

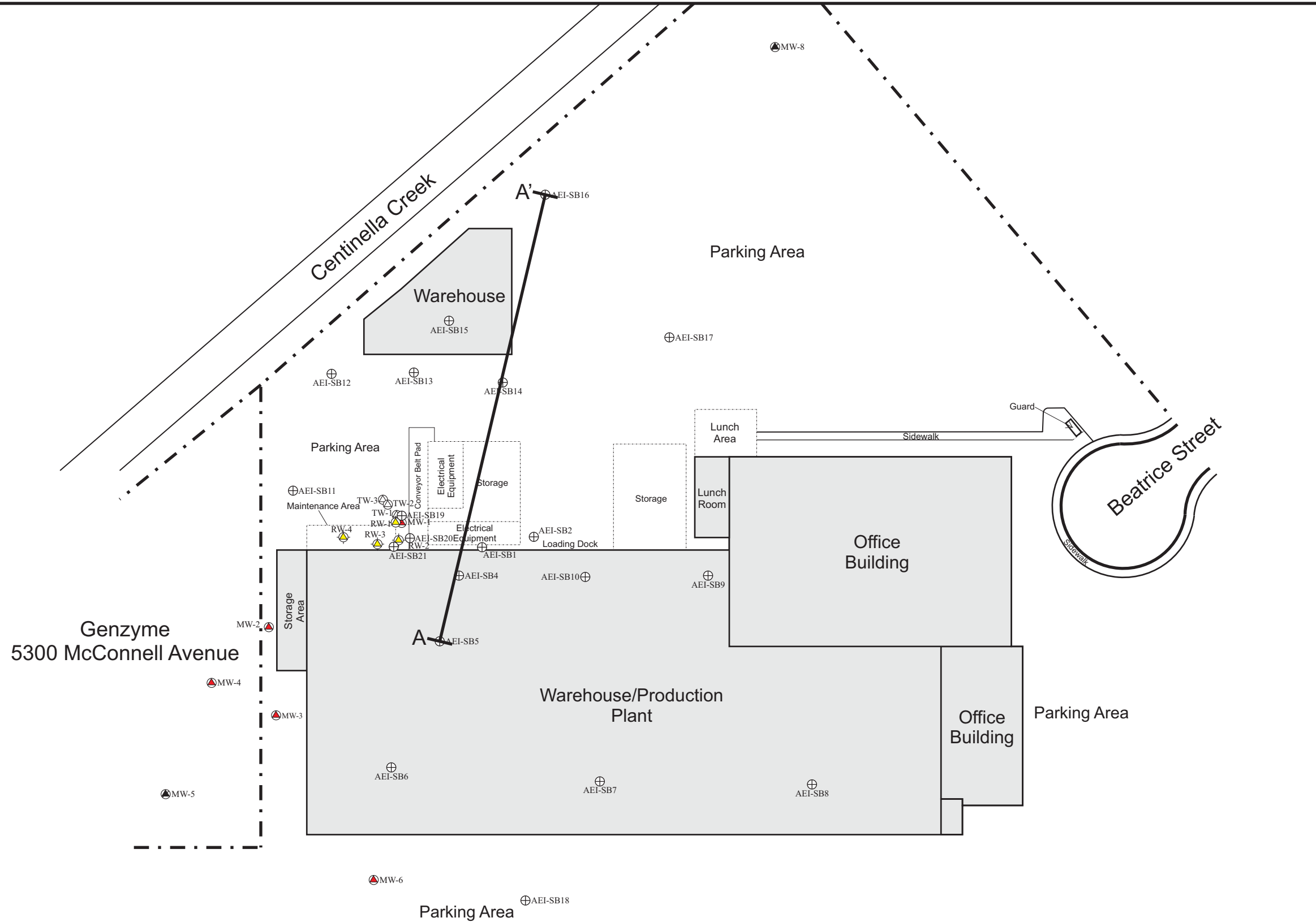
Notes:
-Wells sampled on June 26, 2014
-MW-4 was inaccessible this quarter
-Concentrations in micrograms per liter (µg/L)
-Samples analyzed for 1,4-dioxane in accordance with Environmental Protection Agency (EPA) Method 8260SIM
-Data from previous sampling events factored into the isoconcentrations interpolations
-Contour interval: Non-Detectable (ND),Notification Level (NL) (3µg/L), and 10 x NL (30µg/L)



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Legend			
Fence/Wall		Remediation Well	
Monitoring Well		Decommissioned Monitoring Well	
Pilot Test Well		1,4-Dioxane Contour	

1,4-Dioxane Concentration Contour Map		
Figure	Prepared By	Date
5.1.6	S. Harris	July 2014
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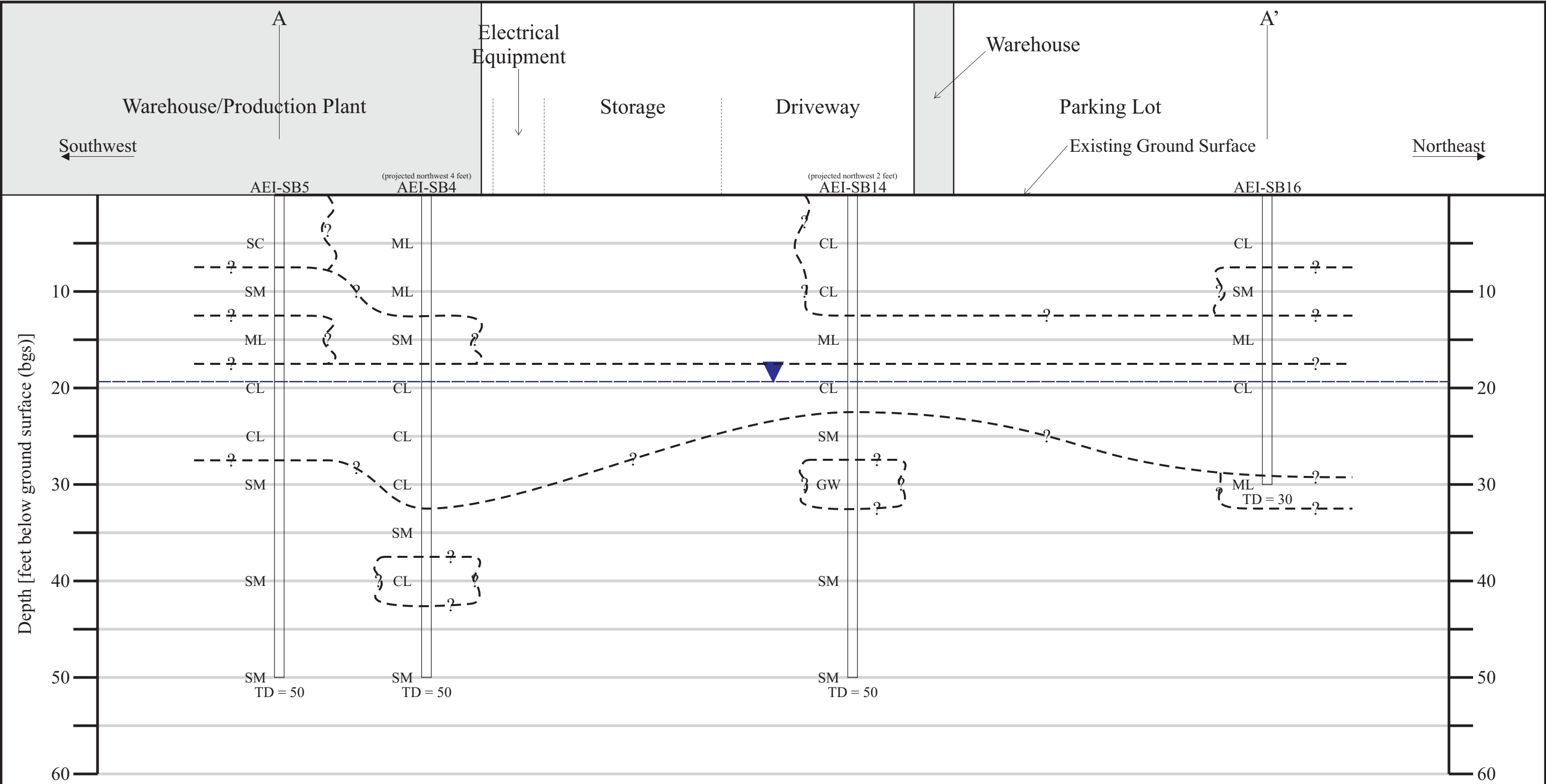
Project Number: 13-64269

Legend

Fence/Wall		Remediation Well	
Monitoring Well		Decommissioned Monitoring Well	
Pilot Test Well		Previous Soil Boring	

Cross-Section Plan View

Figure	Prepared By	Date
5.1-7	S. Harris	July 2014
12655 Beatrice Street Los Angeles, California 90066		



Notes:
-Vertical Exaggeration: 4.5X
-Geologic section shown at location in Figure 5.1-7
-TD = total depth in feet below ground surface (bgs)
-Sample soil classification to the left of the sampling point
-Soil information from March 2008 AEI Consultants Additional Site Characterization
-Inferred lithologic contacts queried where uncertain
-Ground surface elevation varies between approximately 13 and 16 feet above mean sea level (amsl)

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Inferred Lithologic Contact

Inferred Water Table

Legend

Recent Alluvium

- SC = sandy clay
- SM = silty sand
- CL = silty clay
- ML = clayey silt
- GW = well graded gravel

Geologic Cross-Section A-A'

Figure	Prepared By	Date
5.1-8	S. Harris	July 2014

12655 Beatrice Street
Los Angeles, California 90066

Appendix A:

General Field Procedures

General Field Procedures For Well Purging and Groundwater Sampling

These general guidelines will be followed unless additional directives are provided by the Client and/or regulatory agency and/or are warranted based on previous on-site experience. Deviations will be noted in the associated groundwater monitoring report.

The sequence of the monitoring activities will be followed as specified by the project manager. In general, gauging, purging, and sampling activities will be conducted in order from the least to the most impacted wells, whenever feasible, as based on previous on-site experience and/or historical information.

Decontamination

Nitrile gloves will be worn during gauging, purging, and sampling activities. Gloves will be changed at least after each well or more often as required.

Equipment that could come into contact with fluids and/or residue from wells will be dedicated to specific wells, decontaminated between uses, and/or discarded following a single use. Equipment decontamination will consist of a wash in a solution of Liquinox detergent and water followed by a double water rinse, each of which will be performed in a separate container. Care will be taken to decontaminate equipment prior to use on the first well, before use in a subsequent well, and prior to demobilizing from the site. Generated decontamination water will be collected in properly labeled 55-gallon steel drums and sealed. Drums will remain on-site in a secure location until transportation to an appropriate off-site facility for disposal can be arranged.

Groundwater Elevation Measurements

Each well to be monitored will be located based on the provided site map. Well boxes will be opened and debris and/or fluids present in the well box will be removed prior to removal of the well cap. If identified, damages to the well box and/or top of casing (TOC) will be recorded in the field sheets.

Measurements will be recorded to within 0.01 foot using a water level indicator or an oil/water interface meter if the presence of light non-aqueous phase liquid (LNAPL, e.g., free product) is known or suspected. A permanent survey mark on the TOC will be used as a constant reference point or the north side of the TOC if a survey mark is not available. The depth to LNAPL (if encountered) and to groundwater and the total well length will be recorded for each well in the field sheets.

If LNAPL is not present (<0.02 foot), the well will be purged and sampled as discussed in the proceeding sections. If LNAPL is encountered (>0.02 foot), the total well length will not be measured and the well will not be purged or sampled, though LNAPL will be removed as practical and time permitting with a bailer and placed in a separate, grounded container for proper disposal.

Groundwater Purging

The purge volume of each well will be calculated based on the depth to groundwater, well diameter, and total well length. A purge volume equivalent to three well column volumes of groundwater will be removed from the well by vacuum truck, submersible pump, or bailer. Purging may be discontinued prior to removing the calculated purge volume if the well is pumped dry (i.e., slow aquifer recharge rate). Deviations from the method described above (e.g., no purge sampling, low-flow purging) will be noted in the associated groundwater monitoring report.

The groundwater parameters color, pH, conductivity, turbidity, dissolved oxygen, temperature, and/or salinity will be periodically recorded at a rate no less than one reading per well column volume while purging. Purging may cease once groundwater parameters stabilize or after removal of three well column volumes of groundwater, whichever is more. Groundwater parameter stabilization is considered to be fluctuations of less than 1 degree Celsius; 10% in conductivity, turbidity, and dissolved oxygen; and 0.2 in pH between consecutive readings.

Purge water will be collected in properly labeled 55-gallon steel drums and sealed. Drums will remain on-site in a secure location until transportation to an appropriate off-site facility for disposal can be arranged.

Sample Collection

A sample will be collected once the well has properly recovered (at least 80% recovery of the pre-purge groundwater level) by lowering a new, disposable bailer beneath the groundwater surface to allow water to enter the bailer (bailers used to sample wells for volatile organics analysis will not be fully submerged). The bailer will be retrieved from the well and the sample will be conveyed into laboratory-supplied containers that have been preserved with appropriate chemicals (e.g., hydrochloric acid) as necessary based on the analyses to be conducted. The type and number of sample containers to be collected will be based on the analyses to be conducted. Care will be taken while conveying the sample into the containers to avoid excessive turbulence and/or aeration. Containers for analysis of volatile compounds will be filled with no observable headspace or air bubbles to minimize the potential for volatilization. The sample containers will be sealed, labeled for identification, placed into a plastic bag, and stored in an iced cooler. The samples will be transported in an iced cooler (if necessary based on the target analyte[s]) under proper chain-of-custody protocol to the laboratory for analysis.

Each well cap and well box lid will be securely replaced prior to demobilizing from the site.

Trip Blanks and Duplicate Samples

Trip blanks can be used to identify systematic sources of cross-contamination and will be provided by the laboratory, if required for the project. The trip blank containers, which will be filled with deionized water, will be stored in the iced cooler for the duration of the monitoring episode and submitted to the laboratory for analysis along with the collected samples.

Duplicate samples can be used to assess the precision of the laboratory analyses and can be collected, if required for the project. The duplicate samples will be collected consecutively to minimize variations between the samples. Sample collection will be performed as described in the previous section and the sample will be labeled with a unique identification to disassociate the two samples.

Appendix B:

Groundwater Sampling Field Sheets

WELL GAUGING DATA

Project # 40626-EVI Date _____ Client Partner

Site 12655 Beatrice St Los Angeles

[illegible]

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: MW-1	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E. Vail</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): 21.98 feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 38.90 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>20.85</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>24.46</u>	

Purge Method: Submersible Pump Disposable Bailer Extraction System/Vac Truck Peristaltic Pump Other: _____	Sampling Method: Disposable Bailer Dedicated Bailer Extraction Port Dedicated Tubing Other: _____
---	--

$\frac{38.90 - 20.85}{1605} \times 0.65 \times 3 = 35.4 \text{ Gal.}$ TD 1605 DTW 20.85 Multiplier 0.65 Specified Volume 3 Calculated Purge Volume 35.4	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier										
2"	0.16	6"	1.47										
4"	0.65	Other	radius ² X 0.163										

29pm @ 1242

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1248	12	clear	trace	6.95	1.946	27	0.65	21.4	0.97	-105.5
1251	18	clear	trace	6.92	1.952	12	0.60	21.0	0.99	-119.7
1254	24	clear	trace	6.92	1.954	13	0.64	21.1	1.00	-121.3
1257	30	clear	trace	6.90	1.954	12	0.61	21.1	1.00	-122.9
1300	36	clear	trace	6.90	1.956	12	0.62	21.0	1.03	-123.4

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☐ No ☒	Total Gallons Purged: <u>36</u>
Purge Date: <u>6/26/14</u>	Sample Date: <u>6/26/14</u>
Purge Time: _____	Sample Time: <u>6:21:30</u>
Sample ID: MW-1-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: 1,4-Dioxane	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: <u>AVP</u> Sample Time: <u>1320</u>
Additional Notes / Comments: <u>DTW @ Sample = 24.58</u>	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: MW-2	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E.V.A.</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): 22.45 feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 39.15 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>21.87</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>25.32</u>	

Purge Method: Submersible Pump	Sampling Method: Disposable Bailer
Disposable Bailer	Dedicated Bailer
Extraction System/Vac Truck	Extraction Port
Peristaltic Pump	Dedicated Tubing
Other: _____	Other: _____

2 Gpm @ 1016

$\frac{39.15 - 21.87}{1728} \times 0.65 \times 11.3 = 33.9 \text{ Gal.}$					<table border="1"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																	
2"	0.16	6"	1.47																	
4"	0.65	Other	radius ² X 0.163																	
TD	DTW	Multiplier	Specified Volume	Calculated Purge Volume																
1728																				

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1022	12	clear	trace	6.66	7.448	10	0.61	21.1	4.15	39.2
1025	18	clear	trace	6.65	7.469	7	0.47	21.1	4.19	34.5
1028	24	clear	trace	6.65	7.501	7	0.52	21.2	4.18	33.1
1031	30	clear	trace	6.65	7.528	8	0.56	21.2	4.16	35.4
1034	36	clear	trace	6.65	7.539	8	0.47	21.2	4.16	34.7

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☒ No ☐	Total Gallons Purged: <u>36.0</u>
Purge Date: <u>6/26/14</u>	Sample Date: <u>6/26/14</u>
Purge Time: _____	Sample Time: <u>1040</u>
Sample ID: MW-2-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs <u>4</u> 40 mL unpreserved VOAs	
_____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic	
Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs)	
8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: _____ Sample Time: _____
Additional Notes / Comments: <u>DTW @ Sample = 21.93</u>	

O'Neil Data Systems, Inc.
 12655 Beatrice Street
 Los Angeles, California 90066
 Partner Project Number 13-64269 25
 2Q14 WDR Sampling/1SA14 GW Sampling

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: MW-4	Project Manager: Rodolfo Nadres
Fieldwork Date:	PM Phone Number: (310) 617-8948
Personnel On-site:	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): 19.76 feet amsl	Depth to Free Product:
Total Well Depth (TD): 34.95 feet	Thickness of Free Product (feet):
Depth to Water (DTW):	GW Elevation (TOC-DTW):
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]:	

Purge Method: Submersible Pump Disposable Bailer Extraction System/Vac Truck Peristaltic Pump Other: _____	Sampling Method: Disposable Bailer Dedicated Bailer Extraction Port Dedicated Tubing Other: _____
---	--

$\frac{\text{TD} - \text{DTW}}{\text{Multiplier}} \times \text{Specified Volume} = \text{Calculated Purge Volume}$	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier										
2"	0.16	6"	1.47										
4"	0.65	Other	radius ² X 0.163										

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
— unable to access well —										
— No sample taken —										

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes No	Total Gallons Purged:
Purge Date:	Sample Date:
Purge Time:	Sample Time:
Sample ID: MW-4-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: 1,4-Dioxane	
Field QC Sample collected from this well? Yes No	QC Sample ID: Sample Time: _____
Additional Notes / Comments:	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: MW-6	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E. Nal</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): 17.42 feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 33.47 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>17.75</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>20.29</u>	

Purge Method: Submersible Pump	Sampling Method: Disposable Bailer
Disposable Bailer	Dedicated Bailer
Extraction System/Vac Truck	Extraction Port
Peristaltic Pump	Dedicated Tubing
Other: _____	Other: _____

$\frac{33.47 - 17.75}{\text{TD} \quad \text{DTW}} \times \frac{0.65}{\text{Multiplier}} \times \frac{10.3}{\text{Specified Volume}} = \frac{30.9}{\text{Calculated Purge Volume}} \text{ Gal.}$					<table border="1"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>		Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier															
2"	0.16	6"	1.47															
4"	0.65	Other	radius ² X 0.163															

2.5 gpm @ 0913

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
0917	10.5	clear	trace	6.53	4.154	7	1.03	21.6	2.27	564
0921	14.0	clear	trace	6.56	5.017	17	0.84	21.5	2.73	277
0923	31.0	clear	trace	6.57	5.197	9	0.71	21.5	2.80	-48.1
0923	26.0	clear	trace	6.59	5.239	10	0.74	21.4	2.84	-54.2
0929	31.0	clear	trace	6.59	5.250	9	0.70	21.4	2.85	-57.3

*(Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☒ No ☐	Total Gallons Purged: <u>31.0</u>
Purge Date: <u>6/26/14</u>	Sample Date: <u>6/26/14</u>
Purge Time: _____	Sample Time: <u>0953</u>
Sample ID: MW-6-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: _____ Sample Time: _____
Additional Notes / Comments: <u>DTW @ Sample 220.08</u>	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: RW-1	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E. Neri</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): TBD feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 31.41 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>21.07</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: _____	

Purge Method: Submersible Pump	Sampling Method: Disposable Bailer
Disposable Bailer	Dedicated Bailer
Extraction System/Vac Truck	Extraction Port
Peristaltic Pump	Dedicated Tubing
Other: _____	Other: _____

$\frac{31.41 - 21.07}{10.34} \times 0.65 \times 3 = 20.4 \text{ Gal.}$				<table border="1"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																
2"	0.16	6"	1.47																
4"	0.65	Other	radius ² X 0.163																
TD	DTW	Multiplier	Specified Volume	Calculated	Purge Volume														

29pm @ 1347

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1350	6	clear	trace	6.62	1414	28	1.51	21.3	0.71	-61.8
1352	10	clear	trace	6.54	1417	16	1.13	21.2	0.74	-49.7
1354	14	clear	trace	6.52	1417	10	0.98	21.0	0.73	-40.7
1356	18	clear	trace	6.52	1420	9	0.94	21.0	0.72	-41.5
1358	22	clear	trace	6.51	1421	9	0.94	21.0	0.73	-42.8

*(Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☐ No ☒	Total Gallons Purged: <u>42.6</u>
Purge Date: <u>6/26/14</u>	Sample Date: <u>6/25/14</u>
Purge Time: _____	Sample Time: <u>1410</u>
Sample ID: RW-1-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: _____ Sample Time: _____
Additional Notes / Comments: <u>DTW @ Sample = 21.34</u>	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: RW-2	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E.N.A.</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): TBD feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 32.21 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>21.52</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>23.65</u>	

Purge Method: Submersible Pump	Sampling Method: Disposable Bailer
Disposable Bailer	Dedicated Bailer
Extraction System/Vac Truck	Extraction Port
Peristaltic Pump	Dedicated Tubing
Other: _____	Other: _____

$\frac{32.21 - 21.52}{1.069} \times 0.65 \times 7.0 = 21 \text{ Gal.}$					<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </tbody> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																	
2"	0.16	6"	1.47																	
4"	0.65	Other	radius ² X 0.163																	
TD	DTW	Multiplier	Specified Volume	Calculated Purge Volume																

2 Gpm @ 1117

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1121	8	clear	Trace	6.72	1.687	27	0.96	21.0	0.86	-45.1
1123	12	clear	Trace	6.72	1.709	21	0.70	21.0	0.87	-49.6
1125	16	clear	Trace	6.73	1.724	18	0.62	21.1	0.87	-39.5
1127	20	clear	Trace	6.73	1.730	18	0.58	21.0	0.88	-35.4
1129	24	clear	Trace	6.74	1.733	17	0.56	21.1	0.88	-37.1

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes No	Total Gallons Purged: <u>24</u>
Purge Date:	Sample Date: <u>6/26/14</u>
Purge Time:	Sample Time: <u>1140</u>
Sample ID: RW-2-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs	
_____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic	
Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs)	
8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes No	QC Sample ID: Sample Time: _____
Additional Notes / Comments: <u>DTW @ Sample = 1140</u>	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: RW-4	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/14</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E. Neri</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): TBD feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 31.91 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>21.63</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>23.68</u>	

Purge Method: Submersible Pump Disposable Bailer Extraction System/Vac Truck Peristaltic Pump Other: _____	Sampling Method: Disposable Bailer Dedicated Bailer Extraction Port Dedicated Tubing Other: _____
---	--

$\frac{31.91 - 21.63}{10.78} \times 0.65 \times 10.3 = 30.9 \text{ Gal.}$					<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> <th style="text-align: left;">Well Diameter</th> <th style="text-align: left;">Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																	
2"	0.16	6"	1.47																	
4"	0.65	Other	radius ² X 0.163																	
TD	DTW	Multiplier	Specified Volume	Calculated Purge Volume																

2.5 gpm @ 1201

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1207	12	light brown	light	6.97	1.932	30	0.72	22.5	0.98	-84.9
1209	17	clear	trace	6.93	1.955	15	0.86	22.5	0.96	-101.4
1211	22	clear	trace	6.93	1.967	13	0.33	22.4	0.97	-107.3
1213	27	clear	trace	6.94	1.974	12	0.30	22.3	0.97	-110.9
1215	32	clear	trace	6.94	1.982	12	0.28	22.4	0.96	-111.3

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☐ No ☒	Total Gallons Purged: <u>32</u>
Purge Date: <u>6/26/14</u>	Sample Date: <u>6/26/14</u>
Purge Time: _____	Sample Time: <u>1225</u>
Sample ID: RW-4-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: _____ Sample Time: _____
Additional Notes / Comments: <u>DTW @ sample = 21.86</u>	

GROUNDWATER SAMPLE FIELD DATA SHEET

Monitoring Well: TW-3	Project Manager: Rodolfo Nadres
Fieldwork Date: <u>6/26/17</u>	PM Phone Number: (310) 617-8948
Personnel On-site: <u>E.N.O.</u>	Well Diameter: 2" 4" 6" 8" _____
TOC Survey Elevation (TOC): TBD feet amsl	Depth to Free Product: _____
Total Well Depth (TD): 34.15 feet	Thickness of Free Product (feet): _____
Depth to Water (DTW): <u>20.17</u>	GW Elevation (TOC-DTW): _____
DTW with 80% Recharge [(Height of Water Column X 0.20) + DTW]: <u>22.36</u>	

Purge Method: Submersible Pump	Sampling Method: Disposable Bailer
Disposable Bailer	Dedicated Bailer
Extraction System/Vac Truck	Extraction Port
Peristaltic Pump	Dedicated Tubing
Other: _____	Other: _____

$\frac{34.15 - 20.17}{13.92} \times 0.16 \times 3 = 7.0 \text{ Gal.}$				<table border="1"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>4"</td> <td>0.65</td> <td>Other</td> <td>radius² X 0.163</td> </tr> </table>				Well Diameter	Multiplier	Well Diameter	Multiplier	2"	0.16	6"	1.47	4"	0.65	Other	radius ² X 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																
2"	0.16	6"	1.47																
4"	0.65	Other	radius ² X 0.163																
TD	DTW	Multiplier	Specified Volume	Calculated Purge Volume															

0.5 gpm @ 1435

Time	Volume (gallons)	Color (visual)*	Turbidity (visual)**	pH (units)	Cond. (mS/cm)	Turbidity	D.O. (mg/L)	Temp. (deg. C)	Salinity (%)	ORP
1440	2.5	cloudy	moderate	6.81	1.888	222	1.29	21.6	0.96	-83.6
1442	3.5	cloudy	light	6.86	1.893	158	0.88	21.7	0.96	-90.9
1444	4.5	cloudy	light	6.87	1.897	149	0.94	21.4	0.99	-91.1
1446	5.5	clear	light	6.89	1.899	144	0.90	21.3	0.99	-91.3
1448	7.0	clear	light	6.89	1.895	142	0.86	21.5	0.99	-92.7
				6.90	1.895	140	0.82	21.6	0.99	-92.4

* (Color) Clear, Cloudy, Yellow, Brown, Gray

** (Turbidity) Heavy, Moderate, Light, Trace

Did Well Dewater? Yes ☒ No ☐	Total Gallons Purged: <u>7.0</u>
Purge Date: <u>6/26/17</u>	Sample Date: <u>6/26/17</u>
Purge Time: _____	Sample Time: <u>1800</u>
Sample ID: TW-3-GW	Laboratory: ASC Other: _____
Sample Containers: <u>3</u> 40 mL HCL VOAs _____ 40 mL unpreserved VOAs _____ 1 L unpreserved Amber _____ 1 L unpreserved Plastic Other: _____	
Analyzed for: 8015M (TPH-g TPH-d TPH-o TPH-cc) 8260B (BTEX/MTBE VOCs) 8270C (SVOCs) 8082 (PCBs) 6010B/7471 (Metals) Other: <u>1,4-Dioxane</u>	
Field QC Sample collected from this well? Yes ☐ No ☒	QC Sample ID: _____ Sample Time: _____
Additional Notes / Comments: <u>DTW @ Sample = 20.27</u>	

Page 1 of 1

Job Number 140626-EVI Technician E. Na. I

[illegible]

NOTES:

NOTES: $\frac{RW-2}{RW-2}$ 2/2 tabs stripped, RW-4 1/2 bolts missing
RW-2 4/4 bolts missing RW-1, RW-1, TW-3 4/4 bolts missing.

[illegible]

Appendix C:

Laboratory Report



Alpha Scientific Corporation

Environmental Laboratories

07-03-2014

Ms. Samantha Harris
Partner Engineering & Science
2154 Torrance Boulevard
Torrance, CA 90501

Project: O'Neil/64269.25
Project Site: 12655 Beatrice Street, Los Angeles, CA 90066
Sample Date: 06-26-2014
Lab Job No.: PA406094

Dear Ms. Harris:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 06-27-2014 and analyzed by the following EPA methods:

EPA 8260B (VOCs by GC/MS)
EPA 8260SIM (1,4-Dioxane by GC/MS)

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.



Alpha Scientific Corporation

Environmental Laboratories

Client: Partner Engineering & Science
Project: O'Neil/64269.25

Lab Job No.: PA406094
Matrix: Water

Date Reported: 07-03-2014
Date Sampled: 06-26-2014

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

Date ANALYZED				06-27-14	06-27-14	06-27-14	06-27-14	06-27-14
DILUTION FACTOR				1	1	1	1	1
LAB SAMPLE I.D.					PA406094-1	PA406094-2	PA406094-3	PA406094-4
CLIENT SAMPLE I.D.					MW-1-GW	MW-2-GW	MW-6-GW	TW-3-GW
COMPOUND	MDL	POL	MB					
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	ND	4.0J	ND	5.1	ND
Iodomethane	1	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	5	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1	5	ND	3.9J	1.1J	ND	6.9	ND
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	40.2	5.4	9.2	76.2	ND
Bromochloromethane	1	5	ND	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	ND	ND	ND
Trichloroethene	1	2	ND	7.2	7.4	6.0	30.8	ND
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	5	ND	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	ND	ND	ND	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND	ND



Alpha Scientific Corporation

Environmental Laboratories

Client: Partner Engineering & Science
Project: O'Neil/64269.25

Lab Job No.: PA406094
Matrix: Water

Date Reported: 07-03-2014
Date Sampled: 06-26-2014

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	MW-1-GW	MW-2-GW	MW-6-GW	TW-3-GW
Toluene	0.5	1	ND	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	52.3	2.8	6.0	4.2
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	ND	ND	ND	ND
Total Xylenes	1	2	ND	ND	ND	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	ND	ND	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND
Carbon disulfide	25	50	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	50	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND
Vinyl Acetate	25	50	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	ND	ND
ETBE	1	2	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND
t-Butyl Alcohol	10	20	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.



Alpha Scientific Corporation

Environmental Laboratories

Client: Partner Engineering & Science
Project: O'Neil/64269.25

Lab Job No.: PA406094
Matrix: Water

Date Reported: 07-03-2014
Date Sampled: 06-26-2014

EPA 8260B (VOCs by GC/MS, Page 1 of 2)

Reporting Unit: µg/L (ppb)

Date ANALYZED			03-24-14	03-24-14	03-24-14	03-24-14	03-24-14
DILUTION FACTOR			1	1	1	1	1
LAB SAMPLE I.D.				PA406094-5	PA406094-6	PA406094-7	PA406094-8
CLIENT SAMPLE I.D.				RW-1-GW	RW-2-GW	RW-4-GW	Dup
COMPOUND	MDL	POL	MB				
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	1.0J	3.6J	ND	ND
Iodomethane	1	5	ND	ND	ND	ND	ND
Methylene Chloride	2	5	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	4.2J	ND	ND	ND
1,1-Dichloroethane	1	5	ND	9.8	11.2	ND	3.5J
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	139	57.2	7.5	35.4
Bromochloromethane	1	5	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	ND	ND
Trichloroethene	1	2	ND	34.2	11.8	2.1	6.5
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	5	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	ND	ND	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND



Alpha Scientific Corporation

Environmental Laboratories

Client: Partner Engineering & Science
Project: O'Neil/64269.25

Lab Job No.: PA406094
Matrix: Water

Date Reported: 07-03-2014
Date Sampled: 06-26-2014

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	RW-1-GW	RW-2-GW	RW-4-GW	Dup
Toluene	0.5	1	ND	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	83.2	107	9.8	51.4
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	ND	ND	ND	ND
Total Xylenes	1	2	ND	ND	ND	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	ND	ND	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND
Carbon disulfide	25	50	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	50	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND
Vinyl Acetate	25	50	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	ND	ND
ETBE	1	2	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND
t-Butyl Alcohol	10	20	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.



Alpha Scientific Corporation

Environmental Laboratories

07-03-2014

Client: Partner Engineering & Science
Project: O'Neil/64269.25
Project Site: 12655 Beatrice Street, Los Angeles, CA 90066
Matrix: Water
Batch No.: E0630-VSIMW1

Lab Job No.: PA406094
Date Sampled: 06-26-2014
Date Received: 06-27-2014
Date Analyzed: 06-30-2014

8260SIM (1,4-Dioxane by GC/MS)
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	1,4-Dioxane	MDL	PQL
Method Blank		ND	2	3.0
MW-1-GW	PA406094-1	9.5	2	3.0
MW-2-GW	PA406094-2	6.4	2	3.0
MW-6-GW	PA406094-3	8.4	2	3.0
TW-3-GW	PA406094-4	17.5	2	3.0
RW-1-GW	PA406094-5	3.1	2	3.0
RW-2-GW	PA406094-6	75.0	2	3.0
RW-4-GW	PA406094-7	3.4	2	3.0
Dup	PA406094-8	9.1	2	3.0

MDL: Method Detection Limit;
PQL: Practical Quantitation Limit;
ND: Not Detected (at the specified limit)



Alpha Scientific Corporation

Environmental Laboratories

07-03-2014

EPA 8260B Batch QA/QC Report

Client: Partner Engineering & Science
Project: O'Neil/64269.25
Matrix: Water
Batch No: 0627-VOEW1

Lab Job No.: PA406094
Lab Sample ID: SW406027-1
Date Analyzed: 06-28-2014

I. MS/MSD Report Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	15.8	16.1	79.0	80.5	1.9	30	70-130
Benzene	ND	20	18.8	18.4	94.0	92.0	2.2	30	70-130
Trichloro-ethene	ND	20	17.2	18.0	86.0	90.0	4.5	30	70-130
Toluene	ND	20	18.2	17.2	91.0	86.0	5.6	30	70-130
Chlorobenzene	ND	20	16.4	16.8	82.0	84.0	2.4	30	70-130

II. LCS Result Unit: ppb

Analyte	LCS Value	True Value	Rec. %	Accept. Limit
1,1-Dichloroethene	16.6	20.0	83.0	80-120
Benzene	18.9	20.0	94.5	80-120
Trichloro-ethene	17.1	20.0	85.5	80-120
Toluene	17.1	20.0	85.5	80-120
Chlorobenzene	16.3	20.0	81.5	80-120

ND: Not Detected (at the specified limit).



07-03-2014

8260 SIM (1,4-Dioxane by GC/MS)
Batch QA/QC Report

Client: Partner Engineering & Science
Project: O'Neil/64269.25
Matrix: Water
Batch No.: E0630-VSIMW1

Lab Job No.: PA406094
Lab Sample ID: PA406094-7
Date Analyzed: 06-30-2014

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,4-Dioxane	3.4	10	11.7	11.4	87.3	85.1	2.6	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
1,4-Dioxane	10.1	10	101.0	80-120

ND: Not Detected (at the specified limit)

16760 Gridley Road
Cerritos, CA 90703

Tel: (562) 809-8880
Fax: (562) 809-8801

CHAIN OF CUSTODY RECORD

Lab Job Number PA406094

Client

Partner Engineering & Science, Inc.

Address

2154 Torrance Boulevard, Suite 200, Torrance, California 90501

Report Attention	Phone	Fax	Sampled by
S. Harris	310-615-4500	310-615-4544	S. Harris

Project Name/No.	Project Site
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64269 25
12655 Beatrice Street, Los Angeles, California 90066

[illegible]

Appendix D:

Perjury Statement

CALIFORNIA WATER CODE § 13267 PERJURY STATEMENT

O'NEIL DATA SYSTEMS, INC., 12655 BEATRICE STREET, LOS ANGELES, CA 90066

I, Kenneth VanEngen, do hereby declare under penalty of perjury under the laws of California, that I am the Vice President for *Citicorp North America, Inc.* ("CITICORP"), that I am authorized to attest to the veracity of the information contained in the reports described herein, and that the information contained in the report entitled "1st Semi-Annual 2014 Groundwater Monitoring Report" for O'Neil Data Systems, Inc., 12655 Beatrice Street, Los Angeles, California 90066 dated July 10, 2014, is true and correct, and that this declaration was executed at 11500 Ambassador Drive in Kansas City, MO, on July 12, 2014.

Kenneth VanEngen

Signature