

**2014 BASELINE MONITORING AND AQUIFER COMPLIANCE REPORT
MONTROSE SUPERFUND SITE
20201 South Normandie Avenue
Los Angeles, California**

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ACRONYMS AND ABBREVIATIONS

Abbreviation	Term
bgs	Below ground surface
°C	Centigrade
Calscience	Eurofins Calscience Environmental Laboratory, Inc.
CD	Consent Decree
CF	Chloroform
DCA	Dichloroethane
DCB	Dichorobenzene
DCE	Dichloroethene
DDT	Dichlorodiphenyltrichloroethane
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
EDD	Electronic Data Deliverable
GAC	Granular Activated Carbon
Gage	Gage Aquifer
gpm	Gallons per minute
ILM	International Light Metals
ISGS	In-Situ Groundwater Standards
JCI	Jones Chemical Incorporated
Lynwood	Lynwood Aquifer
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MACP	Monitoring and Aquifer Compliance Plan
MACR	Monitoring and Aquifer Compliance Report
MBFB	Middle Bellflower B Sand
MBFC	Middle Bellflower C Sand
mg/L	Milligrams per Liter
ml/min	Milliliters per Minute
Montrose	Montrose Chemical Corporation of California
mS/cm	MilliSiemens per Centimeter
MSL	Mean Sea Level
mV	Millivolts
NAVD	North American Vertical Datum
NPDES	National Pollutant Discharge Elimination System
NGVD	National Geodetic Vertical Datum
NPL	National Priorities List
NTUs	Nephelometric Turbidity Units
ORP	Oxygen Reduction Potential
PARCC	Precision, Accuracy, Representativeness, Completeness, Comparability
pCBSA	Para-Chlorobenzene Sulfonic Acid
PCE	Tetrachloroethene
QAO	Quality Assurance Objectives

ACRONYMS AND ABBREVIATIONS

Abbreviation	Term
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
%R	Percent Recovery
ROD	Record of Decision
RPD	Relative Percent Difference
SDG	Sample Delivery Group
Site	Montrose Superfund Site
TCE	Trichloroethene
Test America	Test America Laboratories, Inc.
TGRS	Torrance Groundwater Remediation System
TI	Technical Impracticability
µg/L	Micrograms per liter
USEPA	United States Environmental Protection Agency
UBF	Upper Bellflower Aquitard
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

This report documents the baseline sampling event establishing groundwater conditions prior to the start of the Torrance Groundwater Remediation System in accordance with the USEPA approved Monitoring and Aquifer Compliance Plan. This event was coordinated with the Del Amo Superfund Site, the International Light Metals site, and Boeing C-6 Facility.

Although concentrations have increased or decreased in a small number of wells, the overall extent of MCB and pCBSA in the UBF, MBFC, Gage, and Lynwood Aquifers has not appreciably changed since the prior groundwater monitoring events in 2006, 2009, and 2012.

The horizontal hydraulic gradients have not increased in any of aquifer units since the prior comprehensive monitoring event in 2012. The horizontal hydraulic gradients remain relatively small between 0.0001 and 0.001 ft/ft in all aquifer units. Similarly, the vertical hydraulic gradients between aquifer units have not increased since the prior monitoring event. The vertical hydraulic gradients between the UBF/MBFC and MBFC/Gage remain relatively low between 0.004 and 0.07 ft/ft (i.e., less than 2 feet vertical difference between aquifer units). Consistent with prior monitoring events, the vertical hydraulic gradient between the Gage and Lynwood Aquifers remain approximately 0.14 to 0.20 ft/ft with 11 feet vertical difference between aquifer units.

1 INTRODUCTION

On behalf of Montrose Chemical Corporation of California (Montrose), this Monitoring and Aquifer Compliance Report (MACR) addresses groundwater monitoring activities that were conducted during September 2014 at the Montrose Superfund Site (Site) in Los Angeles, California (**Figure 1**). This MACR is the baseline sampling event is to establish groundwater conditions prior to the start of the Torrance Groundwater Remediation System (TGRS) in accordance with the United States Environmental Protection Agency (USEPA) approved Monitoring and Aquifer Compliance Plan (MACP; AECOM 2014b and USEPA 2014a). This event was coordinated with the Del Amo Superfund, the International Light Metals (ILM), and Boeing C-6 Sites.

A total of 339 wells were gauged during this event in September 2014. Of the 339 wells, 152 wells were gauged by AECOM on behalf of Montrose. The remaining wells were gauged by representatives of the other sites. Between September 3 and 30, 2014, a total of 317 wells were purged and sampled during this event. Of the 317 wells, 83 wells were purged and sampled by AECOM on behalf of Montrose. The remaining wells were purged and sampled by representatives for the other sites. Split groundwater samples were provided from 22 wells to Montrose by the other sites during this event. The report summarizes the methods and procedures utilized during the sampling activities in addition to the analytical results.

1.1 Background

Montrose manufactured technical grade dichlorodiphenyltrichloroethane (DDT) at this location from 1947 to 1982, and the USEPA proposed the Site for the Superfund National Priorities List (NPL) in 1984. Remedial investigations conducted at the Montrose Site have documented chemical impacts to groundwater including chlorobenzene, a volatile organic compound (VOC) and raw material used in the DDT manufacturing process (USEPA, 1998).

The Montrose property is located in an industrialized area within the City of Los Angeles (Harbor Gateway) and is surrounded by other environmental sites including:

- The former Boeing C-6 Facility is located north of the Montrose Property, and the groundwater beneath that facility is impacted with chlorinated VOCs, primarily trichloroethene (TCE).
- The PACCAR and American Polystyrene Sites are located northeast of the Montrose Property, and the groundwater beneath those facilities is impacted with chlorinated VOCs, primarily TCE.
- The former ILM facility is located northwest of the Montrose Property, and although not part of the Dual Site Groundwater Operable Unit, the groundwater beneath that facility is impacted with chlorinated VOCs, primarily TCE.
- The Del Amo Superfund Site is located east of the Montrose Property, and the groundwater beneath that site is impacted with hydrocarbons, primarily benzene and tert-butyl-alcohol (TBA).
- The Jones Chemical, Inc. (JCI) facility is located south of the Montrose Property, and the groundwater beneath that facility is impacted with chlorinated VOCs, primarily tetrachloroethene (PCE) and TCE.

A site vicinity map showing the location of these facilities relative to the Montrose property is provided as **Figure 2**. In 1999, EPA issued a Record of Decision (ROD) for the Dual Site Groundwater Operable Unit encompassing both the Montrose and Del Amo Superfund Sites (USEPA, 1999). The groundwater remedy selected by EPA involved groundwater extraction, treatment, and re-injection (i.e., pump and treat). Following issuance of the 1999 ROD, EPA issued a Unilateral Administrative Order (“UAO”) in 2003 ordering Montrose to complete the remedial design of the groundwater treatment system. A pilot extraction and aquifer test was completed in 2008. EPA issued a second UAO in 2008 for further remedial design work. In August 2012, the Court entered the Construction Partial Consent Decree, which obligated Montrose to construct the groundwater treatment system as specified in the 1999 ROD. EPA approved the Remedial Design Report in September 2012 (USEPA, 2012). Construction began in March 2013 and finished in December 2014.

Due to the presence of dense non-aqueous phase liquid (DNAPL) at the Montrose property, EPA established a Technical Impracticability (TI) Waiver Zone surrounding the Montrose property. The groundwater remedy requires hydraulic containment of dissolved chlorobenzene within the TI Waiver Zone and simultaneous chlorobenzene plume reduction to In-Situ Groundwater Standards (ISGS) outside of the TI Waiver Zone. Construction of the groundwater remedy has been completed and the operation of the system is pending USEPA approval to begin. A Partial Consent Decree (CD) for operation of the groundwater remedy is currently under negotiation with EPA. The MACP was prepared as required under the Partial CD and in accordance with the monitoring requirements established in the ROD.

1.2 Site Hydrology

The hydrologic units associated with the Dual Site Operable Unit are briefly summarized below (from shallowest to deepest):

Upper Bellflower Aquitard (UBF)/Water Table: This water-bearing unit typically occurs from approximately 60 to 105 feet below ground surface (bgs) at the Site. The unit is characterized by interbedded layers of fine-grained sand and silt/clay. The lower portion of the UBF, from approximately 95 to 105 feet bgs, is predominantly composed of silty sand.

The UBF is the uppermost water-bearing unit and is also called the Water Table Unit. The UBF is also hydraulically consistent with the Middle Bellflower B Sand (MBFB) as defined at the ILM, Boeing and Del Amo Superfund Sites.

Middle Bellflower C Sand (MBFC): The MBFC directly underlies the UBF and typically occurs from approximately 105 to 130 feet bgs. The MBFC is predominantly composed of fine-grained sand with increasing grain size towards the bottom of the unit. The MBFC is a confined aquifer with water levels only slightly deeper than in the UBF.

Gage Aquifer (Gage): The Gage is the aquifer unit underlying the MBFC and typically occurs from approximately 140 to 200 feet bgs at the Montrose property. The Lower Bellflower Aquitard separates the two aquifer units. The Gage is predominantly composed of fine-grained sand with decreasing grain size towards the bottom of the unit and is relatively homogeneous at the Site. The Gage is a confined aquifer unit with water levels typically 1 to 2 feet deeper than in the MBFC.

Lynwood Aquifer (Lynwood): The Lynwood is the aquifer unit underlying the Gage and typically occurs beginning at a depth of approximately 230 feet bgs. The Gage-Lynwood Aquitard separates the two aquifer units. The upper portion of the Lynwood is predominantly composed of fine to medium-grained sand, while underlying portions are predominantly composed of well-graded sands, gravelly sands, and sandy gravels. The Lynwood is a confined aquifer with water levels approximately 10 feet deeper than in the Gage.

1.3 Description of Torrance Groundwater Remediation System

Pursuant to the requirements of the ROD, the groundwater remedy for the Dual Site Operable Unit involves pumping, treating, and re-injecting as close as feasible to 700 gallons per minute (gpm) of groundwater from three water-bearing zones. Information on the extraction wells is discussed below.

- Extraction from three Water Table extraction wells including UBA-EW-1, UBA-EW-3, and MBFB-EW-1. Montrose submitted a modeling memorandum to EPA on June 18, 2014 proposing to add well UBA-EW-3 and eliminate UBA-EW-2 from the remedy (AECOM, 2014a). EPA approved this well field in a letter dated December 17, 2014 (USEPA 2014b);
- Extraction from five MBFC extraction wells including BF-EW-1 through BF-EW-5. Montrose proposed to eliminate BF-EW-6 in the June 18, 2014 modeling memorandum; and
- Extraction from four Gage Aquifer extraction wells including G-EW-1 through G-EW-4. A fifth Gage Extraction well, G-EW-5, was installed but found to exhibit unusually low yield and high drawdown. Consequently, Montrose proposed to eliminate well G-EW-5 from the remedy in a memorandum dated April 21, 2014 (SSPA, 2014).

Groundwater extracted from the above-referenced 12 wells will be conveyed through underground pipelines to the Montrose Property for treatment. At the Montrose Property, the groundwater will be treated using a combination of advanced oxidation (HiPOx™), air stripping, and carbon adsorption to remove dissolved VOCs and pCBSA as needed to comply with the re-injection and in situ groundwater standards as established in the ROD. The treated groundwater will be pumped through additional conveyance pipelines to 7 Gage Aquifer injection wells located along the western and eastern flanks of the chlorobenzene plume including G-IW-1 through G-IW-5, G-11 (in lieu of G-IW-6), and G-IW-7. A map depicting the location of the groundwater extraction/injection well network and associated conveyance pipelines is provided as **Figure 3**. An estimated 30 to 50 years of TGRS operations will be required in order to reduce chlorobenzene concentrations to below the ISGS level in all water-bearing units outside the TI Waiver Zone extent.

1.4 Description of Monitoring Well Network

There are 129 Montrose-owned monitoring wells located at and surrounding the Montrose Property including:

- 43 Water Table monitoring wells including 10 DNAPL monitoring wells, 2 DNAPL injection test wells, and 1 DNAPL observation well
- 41 MBFC monitoring wells including two Lower Bellflower Aquitard monitoring wells

- 38 Gage Aquifer monitoring wells including two Lower Gage monitoring wells
- 7 Lynwood Aquifer monitoring wells

Extensive monitoring well networks are additionally present at the Del Amo Superfund Site, Boeing C-6 Facility, and ILM Site. A smaller number of groundwater monitoring wells is present at the JCI, PACCAR, and American Polystyrene sites, although routine groundwater monitoring is not currently conducted at those facilities. Additionally, the remedial investigations at certain sites, including the PACCAR and American Polystyrene sites are not yet complete. The combined monitoring well network from all Responsible Parties and surrounding facilities is extensive and provides a comprehensive set of data for characterizing groundwater impacts and monitoring remedy progress at the Dual Site Groundwater Operable Unit.

The Boeing and ILM sites are located north and northwest of the Montrose Property respectively. The Del Amo Site is located east of the Montrose Property. The dissolved TCE and benzene plumes overlap with the chlorobenzene plumes in some areas, and consequently, some of the monitoring wells serve to delineate more than one plume. For example, Boeing samples wells that define the chlorobenzene plume extent north of the Montrose Property including CMW001 and CMW002. Similarly, ILM samples wells that define the northwestern extent of the chlorobenzene plume including MW-3, MW-8, BF-1, and G-20. Shell samples wells that define the eastern extent of the chlorobenzene plume including PZL0025, SWL0058, and G-17.

Boeing currently conducts semi-annual groundwater sampling. During September 2014, Boeing sampled 68 monitoring wells and is expected to sample 48 monitoring wells during March 2015. ILM conducts annual groundwater sampling. During September 2014, ILM sampled 54 monitoring wells, including 12 wells owned by Montrose. Shell for the Del Amo Superfund Site sampled a total of 91 monitoring wells, including seven wells owned by Montrose, as part of its baseline monitoring event to be conducted under a separate Partial CD. Routine sampling of groundwater for the PACCAR and American Polystyrene facilities will be addressed by those responsible parties. The combined monitoring well network for all the sites is more than 330 wells and serves to provide a comprehensive evaluation of groundwater impacts associated with the Dual Site Operable Unit.

1.5 Monitoring Objectives

The overall objective of the monitoring program is to collect reliable and sufficient groundwater data for monitoring remedy performance and demonstrating compliance with the objectives established in the ROD (USEPA, 1999). The ROD established a series of monitoring program objectives specific to hydraulic containment, plume reduction, and pCBSA monitoring as detailed in the MACP.

2 FIELD AND ANALYTICAL METHODS

Groundwater gauging and sampling activities were performed between September 3 and 30, 2014. Groundwater levels were gauged from a total of 339 wells during the 2014 monitoring event. A total of 317 wells were purged and sampled utilizing low flow purging methods. The field practices and procedures utilized for this groundwater monitoring event were consistent with the MACP. A brief description of the groundwater gauging, sampling, and analyses is provided below.

2.1 Groundwater Elevations

Between September 2 and 4, 2014, groundwater levels were collected from a total of 339 wells, with the exception of a few wells that were gauged later in September due to limited access. The number of wells gauged by unit is described below:

- 151 UBF wells, which 46 Montrose wells, 45 Del Amo Superfund monitoring wells, 38 Boeing monitoring wells, and 22 ILM monitoring wells
- 108 MBFC wells, including 51 Montrose wells, 19 Del Amo Superfund monitoring wells, 28 Boeing monitoring wells, and 10 ILM monitoring wells
- 73 Gage Aquifer wells, which includes 48 Montrose wells, 10 Del Amo Superfund monitoring wells, 6 Boeing monitoring wells, and 9 ILM monitoring wells
- 7 Lynwood Aquifer wells

Groundwater levels were gauged using a Solinst Model 102 electronic water level meter. The depth to groundwater was measured from the surveyed top of casing. Groundwater elevations were determined by subtracting the depth to water from the top of casing elevation. Groundwater levels and elevations are provided in Table 1 and are based on the National Geodetic Vertical Datum (NGVD) 29. Groundwater elevation results for each water-bearing unit are discussed in Section 3.0.

All 5 water level meters utilized by representatives of Montrose, Del Amo Superfund Site, ILM, and Boeing were checked prior to the start of gauging on September 2, 2014. All 5 water level meters utilized for the gauging activities were within 0.05 feet of each other (specifically, 4 water level meters measured within 0.01 feet of each other). No corrections were made to the water level measurements collected on September 2, 2014. TGRS extraction wells were not operating within 48-hours of the gauging event, however, seven Boeing extraction wells (EWB003, MW0005, WCC-07S, EWC003, EWC005, EWG001 and EWG002) were operating.

Groundwater elevation gauging results collected by others are mapped in this report, but are not otherwise tabulated or discussed. The surveyed top of casing elevations for the wells owned by Boeing and ILM are based on the North American Vertical Datum (NAVD) 88. The difference in the two survey datums is approximately 2.45 feet. Consequently, the groundwater elevations reported for the Boeing and ILM wells was corrected by subtracting 2.45 feet. The elevations shown in Table 1 and the figures are the corrected values for NGVD 29.

2.2 Groundwater Sampling Methods

In contrast to previous groundwater monitoring events (with exception of the Pre-Baseline event), which used a 3 purge volume or macro purge approach, groundwater samples were collected using low flow

sampling methods per the MACP. Low flow sampling methods were also utilized to sample groundwater at the Del Amo Superfund Site, Boeing C-6 Facility, and ILM Site.

Low flow sampling methods were conducted in compliance with established EPA protocols (USEPA, 1996). A low flow bladder pump, the 1.75-inch QED Environmental Systems Sample Pro, dedicated tubing, and a compressed nitrogen cylinder were used to collect groundwater samples from the middle of the well screen. The pump was positioned in the middle of the well screen, and the well purged at a low flow between 100 and 400 milliliters per minute. The water level in the well was gauged to ensure no or minimal drawdown during purging.

Before and after each well, the stainless steel components were decontaminated utilizing a standard triple rinse method and non-phosphate detergent, and the disposable bladder and tubing were replaced. Only distilled water was utilized during decontamination procedures; Site water was not used during any portion of the field operations. All decontamination and purge water was pumped to the UBA-EW-3 treatment system for processing.

Following purging, groundwater samples were collected directly from the pump tubing using laboratory-supplied sample containers. All groundwater sample containers were filled completely with no void or trapped air space. All sample containers were labeled, packed in coolers, and transferred to a courier to be transported to Eurofins CalScience Environmental Laboratory (CalScience) or Test America Laboratories, Inc. under proper chain-of-custody procedures.

Field parameters were monitored during well purging to ensure stable groundwater conditions prior to sampling. Groundwater quality monitoring instruments were calibrated daily (prior to use) for monitoring the following parameters: temperature, pH, electric conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP), and turbidity. Groundwater was purged until at least one tubing volume was removed and temperature, pH, and electrical conductivity had stabilized within $\pm 10\%$ over three consecutive readings and turbidity was below 20 Nephelometric turbidity units (NTUs). All groundwater data generated during well purging were recorded on a field purge log, which are presented in **Appendix A**.

2.3 Analytical Methods

All groundwater samples collected during the 2014 baseline monitoring event were analyzed for the following:

- VOCs: A total of 83 samples were collected by AECOM and submitted for VOC analysis by EPA Method 8260B. An additional 17 samples were collected from wells by other consultants, which are a part of the Montrose MACP.
- pCBSA: A total of 83 samples were collected by AECOM and submitted for pCBSA analysis by EPA Method 314.0 Modified. An additional 17 samples were collected from wells by other consultants, which are a part of the Montrose MACP.

The majority of groundwater samples were analyzed by Calscience in Garden Grove, California. Groundwater samples collected by Boeing were submitted to Test America Laboratories, Inc. (Test America) in Irvine, California. The groundwater samples collected by AECOM from well SWL0049

were analyzed for VOCs by Test America. Copies of laboratory reports and electronic data deliverables collected by AECOM on behalf of Montrose are provided in **Appendix B**.

2.4 Quality Assurance/Quality Control

Quality assurance quality control (QA/QC) samples were collected to monitor the effectiveness of the decontamination procedures and to identify any field or laboratory conditions that may have affected sample integrity in accordance with MACP. There were a total of 40 QA/QC samples collected, which included the following:

- **Trip Blanks** (TB-20140903, TB-20140904, TB-20140905, TB-20140908, TB20140908-B, TB-20140909, TB20140909-B, TB-20140910, TB20140911, TB-20140915, TB-20140916, TB20140918, and TB-20140919) – One new laboratory-prepared trip blank sample was transported with each cooler containing more than one groundwater sample submitted and analyzed for VOCs by EPA Method 8260B.
- **Equipment Blanks** (EB-20140903, EB-20140904, EB-2040905, EB-20140908, EB-20140909, EB-20140910, EB-20140911, EB-20140915, EB-20140916, EB-20140918 EB-20140919, EB-20150113) – Eleven equipment blanks were collected to test for potential cross-contamination from the sampling equipment, an equipment blank was collected daily when sampling with a non-dedicated pump. Laboratory certified water was poured across the decontaminated sampling pump and collected in laboratory supplied containers. Each equipment blank sample was analyzed for VOCs by EPA Method 8260B and pCBSA by EPA Method 314.0 Modified. The equipment blanks were analyzed by the same analytical methodologies as the primary samples.
- **Duplicate Samples** (MW-900-20140905, BF-100-20140908, BF-1200-20140916, BF-1500-20140904, G-100-20140909, G-1300-20140905, G-1700-20140910, G-2600-20140904, LG-100-20140916, and LW-100-20140910) – Duplicate samples were collected from 10 of the 83 wells sampled. The wells selected for duplicate sample collection were MW-9, BF-1, BF-12, BF-15, G-1, G-13, G-17, G-26, LG-1, and LW-1. For these wells, a duplicate set of sample containers was filled immediately following the collection of the corresponding unique sample. Each duplicate sample was handled and analyzed in an identical fashion as the unique samples.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples** – 10 MS/MSD samples were analyzed. At each of these wells, additional sets of sample containers were filled immediately following collection of the corresponding unique sample and submitted for laboratory QA/QC purposes. Each MS/MSD sample was handled and analyzed in an identical fashion to the unique samples.

A Tier 2 or Level III data validation review was performed on all of the analytical data for accuracy and completeness. A full data package for a Tier 3 or Level IV data validation review was provided that included more than 10% of the samples analyzed for the sampling suite and included the following information: method blank data, surrogate, tuning, and calibration data, chromatographs, and instrument run logs. The laboratory provided analytical data in both hard copy and electronic data deliverable (EDD) format. All analytical results, including QA/QC sample results, are discussed in Section 3.0 of this report. During this event, all results were valid and usable. A copy of the Data Quality Assessment and Data Validation Report is provided in **Appendix C**.

2.5 Waste Management

Purged groundwater and decontamination water generated during sampling activities was treated utilizing the temporary UBA-EW-3 treatment system located on the corner of 204th street and Normandie Avenue across the street from the Montrose Property. During the month of September 2014, treated groundwater was intermittently discharged under National Pollutant Discharge Elimination System (NPDES) Permit No. CAG994004 and Order No. R4-2013-0095 (Compliance File No. CI-8819). This permit was last revised on March 12, 2014 and authorized the discharge of treated groundwater associated with the Montrose Superfund Site to a maximum of fourteen separate outfalls designated as M-001 through M-014. Groundwater was treated prior to discharge using filtration, granular activated carbon (GAC), and resin for metals treatment. More information regarding the operation of this system can be found in the *Third Quarter 2014 Self-Monitoring Report* submitted to the Los Angeles Water Quality Control Board on November 14, 2014 (AECOM, 2014c).

3 GROUNDWATER MONITORING RESULTS

This section summarizes the monitoring results, both hydraulic and laboratory data, from the groundwater monitoring event conducted during September 2014. This section only presents the results of wells sampled as part of the Montrose MACP. **Sections 3.1 through 3.4** discuss groundwater elevations, horizontal groundwater gradients, field parameters, and analytical results for the designated water-bearing units. Vertical groundwater gradients between water-bearing units are discussed in **Section 3.5**. QA/QC results and data validation are discussed in **Sections 3.6 and 3.7**.

During the 2014 groundwater monitoring event, 83 wells were purged and sampled by AECOM on behalf of Montrose. An additional 213 groundwater wells were sampled by representatives on behalf of the Del Amo Superfund (91 wells), ILM (54 wells) and Boeing (68 wells) during this event. Split samples from another 22 wells were collected by representatives of the Del Amo Superfund Site, ILM, and Boeing and provided to AECOM.

A groundwater sampling matrix is provided as **Table 2** and summarizes the wells sampled, the split samples provided to AECOM, the sampling dates, and the requested analyses. The samples from the 83 wells purged by AECOM were analyzed for VOCs and pCBSA. A total of 40 QA/QC samples including equipment blanks, duplicates, MS/MSDs, and trip blanks were also collected. The VOC concentrations detected during this event are summarized in **Table 3**. The pCBSA concentrations detected during this event are summarized in **Table 4**. Groundwater elevation maps, hydrographs, chlorobenzene and pCBSA isoconcentration maps are provided as **Figures 4 through 19**. Sample results collected by the Del Amo Superfund Site, ILM, and Boeing have been mapped in this report, but are not otherwise tabulated or discussed except where appropriate for delineating dissolved contaminants associated with the Montrose Superfund Site. The results are presented by water-bearing unit in the following sections.

3.1 Upper Bellflower Aquitard

On September 2, 2014, a total of 45 UBF wells were gauged by AECOM. Between September 3 and 30, 2014, 17 UBF wells were sampled by AECOM. An additional 3 wells were sampled by ILM and 2 wells by Shell for the Del Amo Superfund Site.

3.1.1 Groundwater Elevations and Horizontal Gradient

The depth to groundwater in the Montrose UBF monitoring wells ranged from 33.00 (MW-24) to 65.11 ft (MW-8). The associated groundwater elevations ranged from -9.39 feet mean sea level (MSL) at PZL0025 to -11.07 ft AMSL at MW-25. Boeing extraction wells EWB003, MW0005 and WCC-07S were in operation during the gauging event and influenced groundwater elevations for wells located on the Boeing property.

At the Montrose property, groundwater elevations were relatively flat and ranged from -10.16 ft MSL at UBI-1 and UBI-2 to -10.48 ft MSL at UBE-3. Groundwater elevations are provided in Table 1 and mapped in Figure 4.

The horizontal hydraulic gradient in the UBF across the Montrose property is relatively small at approximately 0.0002 ft/ft in a generally southerly direction. The horizontal gradient is slightly below the gradient range previously measured in 2012 (i.e., 0.0003 ft/ft).

Groundwater elevations in the UBF have fallen by approximately 0.6-ft since the groundwater event in 2012. A hydrograph of groundwater elevations in the UBF is provided as Figure 5.

3.1.2 Field Parameters

Groundwater parameters monitored during well purging activities included temperature, pH, EC, DO, turbidity, and ORP. All UBF wells were purged utilizing low flow techniques until the parameters stabilized a minimum of three consecutive readings within 10 percent. The stabilized parameters are considered to be representative of groundwater conditions within that water-bearing unit and are summarized as follows:

- Groundwater was purged at rates between 50 and 350 milliliters per minute (ml/min)
- Temperature ranged from 22.30 to 27.39° Centigrade (°C)
- pH ranged from 6.01 to 7.85
- Conductivity ranged from 1.014 to 6.348 milliSiemens per centimeter (mS/cm)
- DO ranged from 0.23 to 3.18 milligrams per liter (mg/L)
- ORP ranged from -74 to +135 millivolts (mV)
- Turbidity ranged from less than 1 to 138 NTUs

3.1.3 Chlorobenzene

A total of 22 groundwater samples were collected and analyzed for VOCs by EPA Method 8260B from wells screened in the UBF as a part of the Montrose MACP. This scope included all monitoring wells located within the chlorobenzene plume extent (8 wells), with the exception of DNAPL-impacted wells, and the majority of the perimeter wells to reliably delineate the extent of chlorobenzene at the site (14 wells), including all six wells downgradient of SWL0049. Monitoring well MW-2, located within the DNAPL impacted area, is included for the purposes of characterizing the dissolved chlorobenzene concentration. AECOM collected 17 samples, Shell collected two samples (PZL0025 and MW-28) and ILM collected three samples (MW-3, MW-8 and MW-31). An additional 116 wells were sampled by others as part of the Boeing, ILM and Del Amo Superfund programs and include Montrose wells MBFB-OW-1, MW-7, MW-17, MW-21, MW-27 and MW-29.

Chlorobenzene concentrations in the UBF varied from <0.50 µg/L at multiple wells to 350,000 µg/L at MW-2. Concentrations exceeding the ISGS of 70 µg/L were detected at six wells sampled as a part of the MACP, (MW-1, MW-2, MW-4, MW-11, MW-12 and SWL0049) and two wells sampled as a part of other investigations (MW-14 and MW-13). Chlorobenzene results are provided in Table 3, and chlorobenzene results for all UBF monitoring wells sampled in 2014 and Baseline TGRS extraction wells are mapped in Figure 5.

Chlorobenzene concentrations in the UBF were generally consistent with historical results with the exception of the following:

- MW-4: Chlorobenzene concentration of 960 µg/L is significantly below the 2006 detection of 18,000 µg/L. The historical range for this well is (58 to 18,000 µg/L).
- MW-5: Chlorobenzene concentration of 19 µg/L is significantly below the 2004 detection of 480 µg/L. The historical range for this well is (8.4 to 200,000 µg/L).

- MW-11: Chlorobenzene concentration of 320 µg/L is below the historical range (930 to 34,000 µg/L). This well was last sampled in January 2004.
- MW-12: Chlorobenzene concentration of 650 µg/L is below the historical range (2,800 to 8,200 µg/L). This well was last sampled in January 2004.
- SWL0049: During the 2012 event, the chlorobenzene concentration in this well was detected at 2,900 µg/L which was above the historical range (8 to 2,100 µg/L). The prior result from November 2006 (8 µg/L) was anomalously low relative the rest of the historical data for this well (520 to 2,100 µg/L). Chlorobenzene levels in this well continued to rise throughout 2012 and 2013 until beginning to decline in July 2014 as a result of pilot extraction testing activities. The chlorobenzene concentration trend for SWL0049 is included in Appendix D. Beginning in November 2013, a series of pilot extraction test were conducted at the following upgradient wells:
 - MW-13: This well is located north of SWL0049 and is located in the immediate vicinity of proposed TGRS extraction well UBA-EW-2. A pilot extraction test was conducted from November 18 to December 31, 2013 at this location. Due to the presence of TBA from the nearby Del Amo Site, the testing at this well was terminated.
 - MBFB-EW-1 and MW-14: These wells were the closest upgradient wells to SWL0049. From February 20 to March 31, 2014, both were pumped at cumulative rates ranging from 5 to 15 gpm. Due to the presence of benzene and TBA from the nearby Del Amo Site and comparatively low chlorobenzene, the testing at these wells was terminated.
 - UBA-EW-3: Extraction well UBA-EW-3 was drilled and installed in March 2014 and is located approximately 140 ft northwest (upgradient) of SWL0049. A temporary extraction system was constructed and a pilot extraction test was started on May 7, 2014. Groundwater was pumped at rates ranging from 10 to 45 gpm. After two months of operation, chlorobenzene concentrations began to decline in SWL0049. The test was terminated on October 31, 2014 in order to complete TGRS construction. The progress sample collected on October 31, 2014 is posted on Figure 5 instead of the September 30, 2014 result.

With the exception of the above wells, the overall distribution of chlorobenzene in the UBF remains relatively unchanged from the prior groundwater monitoring events. Concentration versus time graphs of the above wells and plume edge wells are presented in Appendix D.

3.1.4 Other VOCs

Other than chlorobenzene, a total of 16 VOCs were detected in the groundwater samples collected from UBF wells during the 2014 monitoring event. VOC results are provided in Table 3. 10 of the 16 detected VOCs exceeded their respective ISGS in at least one sample including (in declining concentration order):

- Chloroform (CF): 17 of 22 samples at concentrations from 0.27 J µg/L at MW-30 to 31,000 µg/L at MW-2, which is consistent with historical results. The chloroform concentration at MW-6 is lower at 710 µg/L than the historical range of 1,500 to 8,300 µg/L. All other CF concentrations are consistent with historical results.

- Tetrachloroethene (PCE): 13 of 22 samples at concentrations to 6,100 µg/L at MW-6. All other PCE concentrations are consistent with historical results.
- Benzene: 5 out of 22 samples at concentrations from 0.66 J µg/L at MW-11 to 2,400 µg/L at MW-1. The benzene concentrations are consistent with historical results.
- Trichloroethene (TCE): 14 of 22 samples at concentrations from 1.1 µg/L at MW-11 to 510 µg/L at MW-4. The TCE concentration of 510 µg/L at MW-4 is above the historical range for this well (<5 to 170 µg/L). All other TCE concentrations are consistent with historical results.
- 1,2-Dichloroethane (1,2-DCA): 5 of 22 samples at concentrations to 140 µg/L at SWL0049. All 1,2-DCA concentrations are consistent with historical results.
- 1,1,2-Trichloroethane (1,1,2-TCA): 1 of 22 samples at a concentration of 68 µg/L at MW-22, which is within the historical range for this well (3 to 170 µg/L).
- 1,1-Dichloroethene (1,1-DCE): 5 of 22 samples at a concentrations from 0.31 J µg/L at MW-22 to 40 µg/L at MW-3, which is consistent with historical results.
- cis-1,2-Dichloroethene (c-1,2-DCE): 2 of 22 samples at concentrations of 0.59J µg/L at MW-3 and 35 µg/L at MW-6, which is consistent with historical results.
- 1,4-Dichlorobenzene (1,4-DCB): 2 of 22 samples at a concentrations of 1.7 J in MW-12 and 19 µg/L at SWL0049, which is consistent with historical results.
- 1,1-Dichloroethane (1,1-DCA): 2 of 22 samples at a concentrations of 1.5 µg/L at MW-3 and 15 J µg/L at MW-6, which is below the historical range for this well (<50 to 130 µg/L).

3.1.5 pCBSA

A total of 22 groundwater samples were collected and analyzed for pCBSA by modified EPA Method 314 from wells screened in the UBF as a part of the Montrose MACP. pCBSA was detected in 15 out of 22 wells in concentrations between 2.6 J (MW-9) and 520,000 µg/L (MW-2). pCBSA results are provided in Table 4 and mapped on Figure 7. pCBSA concentrations in the UBF were generally consistent with historical results with the exception of the following:

- MW-12: pCBSA concentration of 130 µg/L is below the historical range (8,900 to 54,000 µg/L).
- MW-10 and MW-11: pCBSA concentration of 170 and 240 µg/L respectively are above the historical results of <10 and <100 µg/L.

With the exception of the above wells, the overall distribution of pCBSA in the UBF remains relatively unchanged from the prior groundwater monitoring events.

3.2 Middle Bellflower C Sand Aquifer

On September 2, 2014, a total of 55 MBFC wells were gauged by AECOM. Between September 3 and 30, 2014, 18 MBFC wells were sampled by AECOM. An additional 4 wells were sampled by Boeing, 3 wells were sampled by ILM, and 2 wells by Shell for the Del Amo Superfund Site.

3.2.1 Groundwater Elevations and Horizontal Gradient

The depth to groundwater in the MBFC monitoring wells ranged from 30.12 (SWL0058) to 66.01 ft (BF-34). The associated groundwater elevations ranged from -9.76 ft MSL at BF-32A to -14.00 ft MSL at SWL0033. At the Montrose property, groundwater elevations ranged from -10.17 ft MSL at BF-02 to -10.57 ft MSL at BF-03. Groundwater elevations in the MBFC are provided in **Table 1** and mapped in **Figure 8**.

The horizontal hydraulic gradient in the MBFC downgradient from the Montrose property is approximately 0.0003 to 0.0004 ft/ft in a south/southeasterly direction. The hydraulic gradient increases slightly to the southeast (i.e., from 0.0003 to 0.0004 ft/ft). The horizontal gradient is consistent with the gradient previously measured in 2012 (i.e., 0.0003 to 0.0005 ft/ft).

Groundwater elevations in the MBFC have fallen by approximately 0.2-ft since 2012. A hydrograph of groundwater elevations in the BFS is provided as **Figure 9**.

3.2.2 Field Parameters

Groundwater parameters monitored during well purging activities included temperature, pH, EC, DO, turbidity, and ORP. All MBFC wells were purged utilizing low flow techniques until the parameters stabilized a minimum of three consecutive readings within 10 percent. The stabilized parameters are considered to be representative of groundwater conditions within that water-bearing unit and are summarized as follows:

- Groundwater was purged at rates between 50 and 350 ml/min
- Temperature ranged from 21.78 to 25.67°C
- pH ranged from 5.93 to 10.09
- Conductivity ranged from 1.014 to 6.348 mS/cm
- DO ranged from 0.15 to 2.67 mg/L
- ORP ranged from -240 to +113 mV
- Turbidity ranged from 0.41 to 97 NTUs

The MBFC field parameters measured for temperature, DO and ORP during this event are generally consistent with the 2012 groundwater monitoring event. By changing to low flow sampling methods, the remaining field parameters are not consistent for pH, conductivity, and turbidity with the last monitoring event.

3.2.3 Chlorobenzene

A total of 27 groundwater samples were collected from MBFC monitoring wells and analyzed for VOCs by EPA Method 8260B (including 18 samples collected by AECOM, 4 by Boeing, 3 by ILM and 2 by Shell) as part of the Montrose MACP. This sampling scope includes all monitoring wells located within the chlorobenzene plume (19 wells) and nearly all perimeter wells (17 wells) to reliably delineate the extent of the chlorobenzene at the site. Only a few redundant wells were excluded from this event because they are too remote from the chlorobenzene plume and do not contribute to the delineation of chlorobenzene at the site. An additional 45 wells were sampled by others as a part of the Boeing, ILM and Del Amo Superfund programs and include Montrose wells BF-6, BF-13, and BF-34.

Chlorobenzene concentrations in the MBFC varied from <0.5 µg/L at multiple wells to 12,000 µg/L at BF-9. Concentrations exceeding the ISGS of 70 µg/L were detected at 16 wells. Chlorobenzene results are provided in Table 3 and mapped on Figure 10.

Chlorobenzene concentrations in the MBFC were generally consistent with historical results with the exception of the following:

- BF-3: Chlorobenzene concentration of 1,500 µg/L is significantly below the historical range of (6,100 to 23,000 µg/L).
- BF-4: Chlorobenzene concentration of 550 µg/L is significantly below the historical range of (15,000 to 42,000 µg/L). This well was last sampled in 2004.
- BF-11: Chlorobenzene concentration of 6.1 µg/L is significantly below the historical range of (100 to 8,800 µg/L) and the 2012 detection of 5,600 µg/L.
- BF-14: Chlorobenzene concentration of 41 µg/L is below the historical range (1,200 to 2,000 µg/L) and the 2012 detection of 730 µg/L.
- BF-15: Chlorobenzene concentration of 690 µg/L is below the historical range (8,300 to 42,000 µg/L) and the 2012 detection of 10,000 µg/L.
- BF-20: Chlorobenzene concentration of 5,300 µg/L is above the historical range (29 to 2,100 µg/L).
- BF-21: Chlorobenzene concentration of 240 µg/L is below the historical range (1,500 to 8,900 µg/L).

With the exception of the above wells, the overall distribution of MCB in the BFS remains relatively unchanged from the prior groundwater monitoring events with the exception of the 10,000 µg/L contour. Since 2012, the 10,000 µg/L contour has withdrawn approximately 2,750 feet. Concentration versus time graphs of these above wells and plume edge wells are presented in Appendix D.

3.2.4 Other VOCs

Other than MCB, a total of 16 VOCs were detected in the 27 groundwater samples collected. VOC results are provided in Table 3. 9 of the 16 detected VOCs exceeded their respective ISGS in at least one sample including (in declining concentration order):

- CF: 10 of 27 samples at concentrations from 0.31 J µg/L at BF-22 to 2,100 µg/L at CMW002. The CF concentration of 2,100 µg/L at CMW002 is slightly above the historical range for this well (<40 to 930 µg/L).
- TCE: 12 of 27 samples at concentrations from 1.3 µg/L at BF-OW-3 and BF-15 to 1,500 µg/L at BF-35, which is consistent with historical results.
- 1,2-DCA: 8 of 27 samples at concentrations from 0.39 J µg/L at BF-29 to 320 µg/L at BF-24. All detected 1,2-DCA concentrations are consistent with historical results.
- c-1,2-DCE: 6 of 27 samples at a concentration from 0.87 J µg/L at BF-OW-1 to 200 µg/L at MWC017, which is consistent with historical results.

- Benzene: 13 of 27 samples at concentrations from 0.44 J µg/L at BF-OW-1 to 160 µg/L at CMW002. All detected benzene concentrations are consistent with historical results.
- 1,4-DCB: 15 of 27 samples at concentrations from 0.49 J µg/L at BF-21 to 41 J µg/L at CMW002, which is consistent with historical results.
- 1,1-DCE: 4 of 27 samples at concentrations from 0.48 J µg/L at MWC021 to 30 µg/L at MWC017, which is consistent with historical results.
- 1,2-Dichloropropane: 2 of 27 samples at concentrations from 0.50 µg/L at BF-31 to 10 µg/L at BF-24, which is consistent with historical results.
- Vinyl Chloride: 1 of 27 samples at a concentration of 29 µg/L at MWC017, which is consistent with historical results.

3.2.5 pCBSA

A total of 27 groundwater samples were collected from MBFC monitoring wells and analyzed for pCBSA by EPA Method 314.0 Modified. pCBSA concentrations in the MBFC monitoring wells varied from <5 µg/L at multiple wells to 98,000 µg/L at BF-2, which is below the concentrations previously detected at three TGRS extraction wells (100,000 to 140,000 µg/L). pCBSA results are provided in Table 4 and mapped in Figure 11.

pCBSA concentrations in the MBFC were generally consistent with historical results with the exception of the following:

- BF-3: pCBSA concentration of 8,900 µg/L is below the historical range (26,000 to 61,000 µg/L).
- BF-4: pCBSA concentration of 17,000 µg/L is above the historical range (<200 to <1,000 µg/L).
- BF-10: pCBSA concentration of <5.0 µg/L is significantly below the historical range (320 to 3,200 µg/L).
- BF-12: pCBSA concentration of 30,000 µg/L is above the historical range (<1,000 to 24,000 µg/L).
- BF-15: pCBSA concentration of 1,400 BF-12 µg/L is significantly below the historical range (37,000 to 93,000 µg/L).
- BF-20: pCBSA concentration of 52,000 µg/L is above the historical range (<1,000 to 11,000 µg/L).
- BF-22: pCBSA concentration of 14,000 µg/L is above the historical range (3,400 to 7,700 µg/L).
- BF-25: pCBSA concentration of 4.7J µg/L is below the historical range (79 to 8,000 µg/L).
- BF-29: pCBSA concentration of 25 µg/L is significantly below the historical range (790 to 7,400 µg/L).

With the exception of the above wells, the overall distribution of pCBSA in the MBFC remains relatively unchanged from the prior groundwater monitoring events. The highest pCBSA concentrations in the MBFC occur at TGRS extraction wells BF-EW-1, BF-EW-2, and BF-EW-5 located along the center of the dissolved plume extent.

3.3 Gage Aquifer

On September 2, 2014, a total of 51 Gage wells were gauged by AECOM. Between September 3 and 30, 2014, 32 Gage wells were sampled by AECOM. An additional 1 well was sampled by ILM, and 3 wells by Shell for the Del Amo Superfund Site.

3.3.1 Groundwater Elevations and Horizontal Gradient

The depth to groundwater in the Gage monitoring wells ranged from 32.20 to 66.35 feet. The associated groundwater elevations ranged from -10.34 ft MSL at G-OW-1 to -16.89 ft MSL at G-32. At the Montrose property, groundwater elevations ranged from -11.38 ft MSL at G-3 to -11.59 ft MSL at LG-2. Groundwater elevations in the Gage Aquifer are provided in Table 1 and mapped in Figure 12.

The horizontal hydraulic gradient in the Gage Aquifer downgradient from the Montrose property is approximately 0.0004 to 0.001 ft/ft in a southeast/easterly direction. This horizontal gradient is consistent with the gradient previously measured in 2012 (0.0004 ft/ft).

Groundwater elevations in the Gage Aquifer on average have remained stable since the last monitoring event in 2012. A hydrograph of groundwater elevations in the Gage Aquifer is provided as Figure 13.

3.3.2 Field Parameters

Groundwater parameters monitored during well purging activities included temperature, pH, EC, DO, turbidity, and ORP. All Gage wells were purged utilizing low flow techniques until the parameters stabilized a minimum of three consecutive readings within 10 percent. The stabilized parameters are considered to be representative of groundwater conditions within that water-bearing unit and are summarized as follows:

- Groundwater was purged at rates between 50 and 350 ml/min
- Temperature ranged from 21.72 to 26.75°C
- pH ranged from 6.58 to 8.99
- Conductivity ranged from 0.328 to 1.452 mS/cm
- DO ranged from less than 0.01 to 1.66 mg/L
- ORP ranged from -181 to +50 mV
- Turbidity ranged from 0.25 to 59 NTUs, with G-16 at 695 NTUs

The Gage field parameters measured for temperature, pH, conductivity, and DO during this event are generally consistent with the 2012 groundwater monitoring event. By changing to low flow sampling methods, the remaining field parameters are not consistent for ORP and turbidity with the last monitoring event.

3.3.3 Chlorobenzene

A total of 36 groundwater samples were collected from Gage Aquifer monitoring wells and analyzed for VOCs by EPA Method 8260B (including 32 samples collected by AECOM, 3 samples collected by Shell, and 1 sample collected by ILM). MCB concentrations in the Gage Aquifer varied from <0.5 µg/L at

multiple wells to 5,500 µg/L at LG-2. Concentrations exceeding the ISGS of 70 µg/L were detected at 13 wells. MCB results are provided in Table 3 and mapped in Figure 14.

MCB concentrations in the Gage Aquifer were generally consistent with historical results with the exception of the following:

- G-2: MCB concentration of 3,400 µg/L is below the historical range (6,900 to 20,000 µg/L).
- G-1: MCB concentration of 7.9 µg/L is below the historical range (190 to 990 µg/L).
- G-3: MCB concentration of 32 µg/L is below the historical range (240 to 2,200 µg/L).
- LG-2: MCB concentration of 5,500 µg/L is above the historical range (120 to 390 µg/L).
- G-13: MCB concentration of 930 µg/L is below the historical range (1,100 to 4,400 µg/L).
- G-19A: MCB concentration of 110 µg/L is above the historical range (26 to 27 µg/L).

With the exception of the above wells, the overall distribution of MCB in the Gage remains relatively unchanged from the prior groundwater monitoring events. Concentration versus time graphs of these above wells and plume edge wells are presented in Appendix D.

3.3.4 Other VOCs

Other than MCB, a total of 14 VOCs were detected in the 36 groundwater samples collected during the 2012 monitoring event. VOC results are provided in Table 3. Five of the 14 detected VOCs exceeded their respective ISGS in at least one sample including (in declining concentration order):

- TCE: 9 of 36 samples at concentrations from 0.37J µg/L at G-3 to 380 µg/L at G-21, which is below historical results (up to 470 µg/L).
- Benzene: 9 of 36 samples at concentrations from 0.62 µg/L at G-19A to 35 µg/L at SWL0063, which is below historical results (up to 460 µg/L). All other benzene concentrations are consistent with historical results.
- c-1,2-DCE: 5 of 36 samples at concentrations from 0.72 µg/L in G-21 to 65 µg/L at G-14, which is consistent with historical results.
- 1,2-DCA: 8 of 36 samples at concentrations from 0.40 J µg/L in G-33 to 7.1 µg/L at G-25, which are consistent with historical results.
- 1,4-DCB: 5 of 36 samples at concentrations from 0.38 J µg/L to 10 µg/L at G-24, which is consistent with historical results.

Several of the above VOCs were detected at well SWL0063, which is located at the Del Amo Superfund Site and outside the extents of the dissolved MCB plume associated with the Montrose Superfund Site. VOC impacts to groundwater at well SWL0063 are not associated with former Montrose operations.

3.3.5 pCBSA

A total of 36 groundwater samples were collected from Gage Aquifer monitoring wells and analyzed for pCBSA by EPA Method 314.0 Modified. pCBSA concentrations in the Gage Aquifer varied from <5

µg/L at several wells to 38,000 µg/L at G-5, which is consistent with the pCBSA concentrations previously detected at the TGRS extraction wells (3,700 to 21,000 µg/L). pCBSA results are provided in Table 4 and mapped in Figure 15.

pCBSA concentrations in the Gage Aquifer were generally consistent with historical results with the exception of the following:

- G-1: pCBSA concentration of 91 µg/L is below historical range (500 to 6,500 µg/L).
- G-3: pCBSA concentration of 150 µg/L is below historical range (3,700 µg/L).
- LG-2: pCBSA concentration of 27,000 µg/L is above historical range (14,000 µg/L).
- G-9: pCBSA concentration of 29,000 µg/L is above historical range (7,500 to 12,000 µg/L).
- G-19A: pCBSA concentration of 5,700 µg/L is above historical range (1,500 to 1,600 µg/L).
- G-24: pCBSA concentration of 9,200 µg/L is below the historical range (13,000 to 15,000 µg/L).
- G-25: pCBSA concentration of 1,200 µg/L is below the historical range (1,600 to 14,000 µg/L).
- G-26: pCBSA concentration of 730 µg/L is below the historical range (1,200 to 1,300 µg/L).
- G-29: pCBSA concentration of 11,000 µg/L is above the historical range (6,800 to 8,400 µg/L).

With the exception of the above wells, the overall distribution of pCBSA in the Gage remains relatively unchanged from the prior groundwater monitoring events. Gage extraction wells G-EW-1, G-EW-2, and G-EW-4 are located along the plume center where the highest pCBSA concentrations have been detected.

3.4 Lynwood Aquifer

On September 2, 2014, a total of 7 Lynwood wells were gauged by AECOM. Between September 3 and 30, 2014, 6 Lynwood wells were sampled by AECOM using low flow methods. One Lynwood well (LW-4) was resampled on January 13, 2015 using macro-purging methods.

3.4.1 Groundwater Elevations and Horizontal Gradient

The depth to groundwater in the 7 Lynwood monitoring wells ranged from 62.00 to 69.99 ft. The associated groundwater elevations ranged from -21.31 ft MSL at LW-07 to -21.67 ft MSL at LW-03. Groundwater elevations in the Lynwood Aquifer are mapped in Figure 16.

The horizontal hydraulic gradient in the Lynwood Aquifer at the Montrose property is approximately 0.0001 ft/ft in a northeasterly direction, although there are only 7 monitoring wells screened in this aquifer unit, all located at or within 800 feet of the Montrose property. This horizontal hydraulic gradient is identical to the gradient previously measured in 2006 and 2012.

Groundwater elevations in the Lynwood Aquifer have risen by approximately 1.3-ft since the last monitoring event in 2012. A hydrograph of groundwater elevations in the Lynwood Aquifer is provided as Figure 17.

3.4.2 Field Parameters

Groundwater parameters monitored during well purging activities included temperature, pH, EC, DO, turbidity, and ORP. All Lynwood wells were purged utilizing low flow techniques until the parameters stabilized a minimum of three consecutive readings within 10 percent. The stabilized parameters are considered to be representative of groundwater conditions within that water-bearing unit and are summarized as follows:

- Groundwater was purged at rates between 200 and 350 ml/min
- Temperature ranged from 21.53 to 25.40°C
- pH ranged from 5.90 to 8.55
- Conductivity ranged from 0.409 to 1.000 mS/cm
- DO ranged from 0.32 to 1.44 mg/L
- ORP ranged from -120 to -4 mV
- Turbidity ranged from 1.37 to 45 NTUs

3.4.3 Chlorobenzene

MCB was detected in 2 of the 6 Lynwood monitoring wells at a concentration below the ISGS. The detection in well LW-1 is consistent with historic data. However, a MCB detection in well LW-4 (4.4 µg/L) is not consistent with historic data (<1 to <2 µg/L). An obstruction was found in well LW-4 during low flow sampling in September 2014. The obstruction was removed and the well re-developed. LW-4 was subsequently resampled in January 2015 following macro-purging of approximately 4.8 well volumes. Following macro-purging, the MCB concentration at LW-4 remained at 4.4 µg/L. MCB results are provided in Table 3 and mapped in Figure 18.

3.4.4 Other VOCs

No other VOCs were detected in any of the 6 Lynwood monitoring wells, which is consistent with historic data.

3.4.5 pCBSA

A total of 6 groundwater samples were collected from Lynwood Aquifer monitoring wells and analyzed for pCBSA by EPA Method 314.0 Modified. pCBSA concentrations in the Lynwood Aquifer varied from <5 µg/L at 4 wells to 780 µg/L at LW-4, which is above the historical range for this well (<10 to <10,000 µg/L). However, an obstruction was found in well LW-4 during low flow sampling in September 2014. LW-4 was subsequently resampled in January 2015 following macro-purging of approximately 4.8 well volumes. Following macro-purging, the pCBSA concentration at LW-4 declined to 130 µg/L. pCBSA results are provided in Table 4 and mapped in Figure 19. pCBSA concentrations in the Lynwood Aquifer were generally consistent with historical results with the exception of LW-4.

3.5 Vertical Gradients

The vertical hydraulic gradient between aquifer units was calculated by dividing the difference in groundwater elevations with the difference in screened intervals at paired or co-located wells. The

vertical hydraulic gradients between aquifer units at the site are downward and increase with increasing depth as follows:

UBF to MBFC: The vertical hydraulic gradient between the UBF and MBFC is downward and relatively small at approximately 0.004 to 0.02 ft/ft. The vertical head difference between water elevations is approximately 0.1 to 0.6 feet, which is consistent with the head difference reported previously (i.e., 0.1 to 0.6 feet in 2012).

MBFC to Gage Aquifer: The vertical hydraulic gradient between the MBFC and Gage Aquifer is downward at approximately 0.03 to 0.07 ft/ft. The vertical head difference between water elevations is approximately 1.5 to 2.0 feet, which is consistent with the head difference previously reported (i.e., 1.0 to 2.0 feet in 2012).

Gage to Lynwood Aquifer: The vertical hydraulic gradient between the Gage and Lynwood Aquifers is downward at approximately 0.14 to 0.20 ft/ft. The vertical head difference between water elevations is approximately 11 feet, which is consistent with the head difference previously reported (i.e., 10 feet in 2012 and in 2006).

3.6 QA/QC Sample Results

Laboratory results for QA/QC samples are provided in the following sections including trip blanks, equipment blanks, field duplicates and MS/MSD samples.

3.6.1 Trip Blanks

A total of 13 trip blanks (TB-20140903, TB-20140904, TB-20140905, TB-20140908, TB20140908-B, TB-20140909, TB20140909-B, TB-20140910, TB20140911, TB-20140915, TB-20140916, TB20140918, and TB-20140919) were collected by AECOM during September 2014. No VOCs were detected in any of the trip blanks collected, and as a result no data was qualified. Trip blank results are provided in Table 5.

3.6.2 Equipment Blanks

A total of 11 equipment blank samples (EB-20140903, EB-20140904, EB-2040905, EB-20140908, EB-20140909, EB-20140910, EB-20140911, EB-20140915, EB-20140916, EB-20140918, and EB-20140919) were collected by AECOM during the 2014 groundwater sampling event. An additional equipment blank sample, EB-20150113 was collected when LW-4 was re-sampled. Equipment blank results are provided in Table 5 and summarized as follows:

- Methylene chloride was detected at concentrations of 0.41 J to 1.3 µg/L in five equipment blanks. All associated samples were nondetect and none were qualified.
- Acetone and toluene were detected at concentrations of 3.7 and 0.43 J µg/L, respectively in one equipment blank. Acetone was detected at 3.8 µg/L in EB-20150113. All associated samples were nondetect and none were qualified.
- Chloroform was detected at a concentration of 0.28 J and 0.22 J µg/L in two equipment blanks. All associated samples were nondetect and none were qualified.

- Chlorobenzene was detected at a concentration of 0.22 J $\mu\text{g/L}$ in one equipment blank. One associated sample, BF-31-20140910 (14-09-0760), was blank qualified (U) as non-detected at the reported concentration due to this trace detection.
- TBA was detected at a concentration of 8.0 J $\mu\text{g/L}$ in EB-20150113.. One associated sample, LW-4-20150113 (15-01-0665), was blank qualified (U) as non-detected at the reported concentration due to this trace detection. No pCBSA was detected in any of the equipment blank samples.

3.6.3 Field Duplicates

A total of 10 field duplicates (MW-900-20140905, BF-100-20140908, BF-1200-20140916, BF-1500-20140904, G-100-20140909, G-1300-20140905, G-1700-20140910, G-2600-20140904, LG-100-20140916, and LW-100-20140910) were collected during the 2014 groundwater monitoring event, representing approximately 9.0% (for samples analyzed for pCBSA) and 10% (for samples analyzed for VOCs) of the primary samples collected by AECOM (83 samples). Field duplicate results are reported along with the primary sample results in Tables 3 and 4.

The field duplicates were evaluated against the site-specific precision criterion of $\leq 30\%$ relative percent difference (RPD) specified in the site-specific *Quality Assurance Project Plan* (QAPP). Results of the evaluation are shown in Table C-2 of Appendix C and summarized as follows:

- VOCs: None of the results exceeded the 30% RPD criterion.
- pCBSA: None of the results exceeded the 30% RPD criterion.

3.6.4 Matrix Spike/Matrix Spike Duplicates

A total of 10 MS/MSD samples were collected during the 2014 baseline groundwater monitoring event, representing approximately 12% of the primary samples. The analytical laboratories supplemented these 10 samples as necessary to comply with laboratory requirements for MS/MSD analysis (i.e., minimum 1 in 20 samples analyzed). The MS/MSD samples were spiked with known concentrations of target compounds and analyzed along with the primary samples. The MS/MSD results were evaluated against the control limits for detection of the target compounds as shown in the laboratory reports provided in Appendix B, including percent recoveries (%R) for the MS and MSD samples and RPD for the MS/MSD sample pairs. Results of the evaluation are shown in Table C-3 of Appendix C and summarized as follows:

- VOCs: 16 of the 323 MS/MSD results exceeded the %R control limits and/or RPD criterion.
- pCBSA: 2 of 10 results exceeded the %R control limits.

Where MS/MSD results exceeded the acceptance criteria, the primary sample results were qualified as estimated (J) if detected.

3.7 Data Validation

The groundwater data was validated in accordance with the site-specific QAPP, the *National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, 2008), and the *National Functional Guidelines for Inorganic Data Review* (USEPA, 2004), as applicable to the analytical methods used during the project. Data validation qualifiers were assigned to all definitive-level data that did not meet analytical and quality control criteria.

The groundwater data subjected to validation included 16 sample delivery groups (SDGs) from Calscience and 1 SDG from Test America. Full raw data packages were provided for 100% of the groundwater samples. Level III or Tier 2 validation review was performed on 100% of the 2014 groundwater samples. Level IV or Tier 3 validation review was performed on a minimum of 10% of the groundwater samples. The validation level associated with each groundwater sample and SDG is provided in Table C-1 of Appendix C. None of the analytical data collected by the Del Amo Superfund Site, Boeing, or ILM was validated by AECOM (i.e., validated separately).

A technical completeness of 100 percent for the data was achieved for this project. None of the data were qualified as rejected (R), three sample results were blank-qualified as non-detected (U), and 342 results (approximately 4.0 percent of the data) were qualified as estimated (J/UJ) in data validation for exceeding quality assurance objectives (QAOs) specified for precision, accuracy, representativeness, comparability, and completeness (PARCC) in the QAPP. Of the 4.0 percent that were qualified as estimated, 0.2 percent were due to matrix-related issues and 3.8 percent were due to exceeded laboratory accuracy and precision criteria. The data validation and data usability assessment results indicate the overall acceptable quality, accuracy, and precision of the definitive-level data for this project. Copies of the Data Quality Assessment and Data Validation Report are provided in Appendix C.

4 CONCLUSIONS

Changes in the hydraulic gradients and distribution of dissolved-phase chemicals were evaluated by the 2014 groundwater monitoring event. Although concentrations have increased or decreased in a small number of wells, the overall extent of MCB and pCBSA in the UBF, MBFC, Gage, and Lynwod Aquifers has not appreciably changed as compared to previous monitoring events. The dissolved MCB and pCBSA plumes have not grown in extent. This groundwater monitoring event will serve as the baseline for comparison against future events conducted following the start of TGRS operations. However, it should be noted that this was the first comprehensive monitoring event where all wells were sampled using low-flow methods. Macro-purge sampling methods were used in the past, and as noted in Section 3, some sampling results were inconsistent with the historical range.

The horizontal hydraulic gradients have not increased in any of aquifer units since the prior comprehensive monitoring event. The horizontal hydraulic gradients remain relatively small between 0.0002 and 0.0005 ft/ft in all aquifer units. Similarly, the vertical hydraulic gradients between aquifer units have not increased since the prior monitoring event.

5 RECOMMENDATIONS

A few of the results were inconsistent with historical range and five monitoring wells (three MBFC, two Gage) have been selected to be re-sampled to verify these results. No wells have been selected from the UBF or Lynwood Aquifers. Well LW-4 exhibited anomalous results, however this well was re-sampled in January 2014. The selected wells for re-sampling are as follows;

MBFC wells

- BF-11: Decreased from 5,600 µg/L to 6 µg/L MCB. This data is anomalous with surrounding well data.
- BF-15: Decreased from 9,900 µg/L to 690 µg/L MCB. This data is anomalous with surrounding well data.
- BF-20: Increased from 44 µg/L in 2012 to 1,400 µg/L in 2013 to 5,300 µg/L in 2014. This well is apart of the annual groundwater monitoring program for ILM.

Gage wells

- SWL0034: Decreased from 6,600 µg/L to 67 µg/L. This data is anomalous with surrounding well data.
- LG-02: Increased from 120 µg/L to 5,500 µg/L. This data is anomalous with the surrounding well data.

These wells will be sampling following the protocols used during the September 2014 Baseline Event and in accordance with the MACP. This event is tentatively scheduled to be conducted in late March 2015.

The first semi-annual groundwater sampling event was originally scheduled to occur in March 2015 but assumed that TGRS operations would be initiated by prior to the end of 2014. TGRS operations have not yet begun, and therefore, it is recommended that the first semi-annual groundwater sampling event be re-scheduled to occur in March 2016. Providing that TGRS operations are initiated by March 2015, this schedule will allow approximately six months of operations prior to the first annual sampling event. Accordingly, the first semi-annual sampling event would be re-scheduled for March 2016.

6 REFERENCES

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- USEPA, 2012 Letter to Joseph Kelly, Montrose Chemical Corporation of California, EPA Approval of the Remedial Design Report, Dual Site Groundwater Operable Unit, September 19.
- USEPA, 2014a Approval of Montrose Portion of Monitoring and Aquifer Compliance Plan letter, Montrose and Del Amo Superfund Sites, August 19.
- USEPA, 2014b Approval of Montrose Proposed Change in Remedial Design Well Field letter, Montrose and Del Amo Superfund Sites, December 17.

TABLES

TABLE 1
Groundwater Level Measurements and Elevations
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Northing	Easting	Screened Interval (feet bgs)	Depth to Groundwater from Reference Elevation (feet bgs)	Reference Elevation (feet bgs)	Water Level Elevation (feet msl)
UBF/Water Table Montrose-Owned Wells						
MW-1	1767001.0	6470666.0	63 - 73	53.05	42.77	-10.28
MW-2	1767431.0	6470241.0	66.7 - 76.7	59.02	48.73	-10.29
MW-3	1767425.0	6469733.0	64.4 - 74.4	57.80	47.41	-10.39
MW-4	1767689.0	6470127.0	64.9 - 74.9	57.00	46.69	-10.31
MW-5	1767602.0	6470682.0	61.5 - 72.5	55.24	44.95	-10.29
MW-6	1766917.0	6470220.0	65 - 80	55.94	45.68	-10.26
MW-7	1766911.0	6469647.0	65 - 80	57.48	47.42	-10.06
MW-8	1767946.0	6469440.0	65 - 80	65.11	55.29	-9.82
MW-9	1767929.0	6470407.0	66 - 81	60.75	50.47	-10.28
MW-10	1768042.0	6470937.0	62 - 77	53.43	43.20	-10.23
MW-11	1767320.0	6470889.0	62 - 77	52.98	42.69	-10.29
MW-12	1767319.0	6471289.0	61 - 76	50.46	40.17	-10.29
MW-13	1766908.0	6471218.0	62 - 77	52.82	42.34	-10.48
MW-14	1766629.0	6470964.0	58 - 73	53.41	43.12	-10.29
MW-16	1765848.0	6469761.0	59 - 76	51.39	41.31	-10.08
MW-17	1766685.0	6469336.0	65 - 81	58.10	48.18	-9.92
MW-19	1768538.0	6470722.0	63 - 79	56.76	46.65	-10.11
MW-20	1768459.0	6471636.0	57 - 73	NM	43.06	NM
MW-21	1767907.0	6471985.0	54 - 70	46.09	36.56	-10.26
MW-22	1765594.0	6470230.0	57 - 73	52.16	41.85	-10.31
MW-23	1765783.0	6472078.0	60 - 75	46.81	36.35	-10.46
MW-24	1765641.0	6471430.0	49 - 64	33.00	22.40	-10.60
MW-25	1764840.0	6471681.0	56 - 71	43.05	31.98	-11.07
MW-26	1765603.0	6470880.0	59 - 74	49.38	39.17	-10.21
MW-27	1768047.0	6471344.0	59 - 75	50.80	40.50	-10.30
MW-28	1767659.0	6471854.0	54-71	50.27	39.70	-10.57
MW-29	1766922.0	6471830.0	57 - 73	49.31	38.87	-10.44
MW-30	1766267.0	6471695.0	54 - 70	47.75	37.59	-10.16
MW-31	1767149.0	6469128.0	64.5 - 79.5	64.58	54.67	-9.91
UBE-1	1767467.0	6470255.0	60.7 - 90.7	59.71	49.35	-10.36
UBE-2	1767535.0	6470398.0	72 - 82	55.99	45.78	-10.21
UBE-3	1767304.0	6470373.0	68 - 88	55.34	44.86	-10.48
UBE-4	1767629.0	6470371.0	62 - 92	56.83	46.56	-10.27
UBE-5	1767347.0	6470514.0	75 - 85	57.89	47.42	-10.47
UBT-1	1767444.0	6470232.0	60 - 91	59.45	49.05	-10.40
UBT-2	1767437.0	6470246.0	50 - 91	59.61	49.19	-10.42
UBT-3	1767473.0	6470262.0	60 - 91	59.71	49.31	-10.40
UBI-1	1767598.0	6470093.0	45 - 90	56.63	46.47	-10.16
UBI-2	1767666.0	6470165.0	45 - 90	56.85	46.69	-10.16
UBA-EW-1	1767031.5	6470466.3	53-93	48.30	38.07	-10.23
UBA-EW-3	1766342.3	6470864.3	50-80	49.06	38.59	-10.47
MBFB-EW-1	1766640.5	6470927.1	62-77	48.20	37.75	-10.45
MBFB-OW-1	1767110.0	6468135.0	80 - 96	64.10	54.71	-9.39
UBF/Water Table Del Amo-Owned Wells						
SWL0049	1766313.8	6470999.2	42 - 62	43.00	32.50	-10.50
PZL0025	1766637.2	6472096.3	43.5 - 63.5	47.08	38.68	-8.40

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MBFC Montrose-Owned Wells						
BF-1	1767593.7	6469829.4	113.5 - 124	58.85	48.33	-10.52
BF-2	1767168.5	6470195.0	114 - 124.5	59.67	49.50	-10.17
BF-3	1767474.6	6470477.0	113.5 - 124	58.84	48.27	-10.57
BF-4	1767209.5	6470494.1	112 - 123	57.95	47.64	-10.31
BF-5	1767330.9	6471297.6	122 - 132	50.00	39.37	-10.63
BF-6	1766907.2	6471204.2	115 - 125	52.23	41.70	-10.53
BF-7	1766629.0	6470946.2	106 - 116	53.2	42.59	-10.61
BF-9	1767440.4	6470241.9	107 - 128	59.10	48.69	-10.41
BF-10	1765561.9	6473090.8	120 - 130	40.17	28.67	-11.50
BF-11	1763515.1	6472386.0	104 - 124	45.64	33.66	-11.98
BF-12	1764101.9	6473358.0	110 - 120	34.49	22.20	-12.29
BF-13	1766578.6	6473187.2	117 - 137	40.61	29.52	-11.09
BF-14	1765763.3	6472054.4	111 - 121	47.3	36.30	-11.00
BF-15	1765641.3	6471441.0	98 - 113	33.69	22.82	-10.87
BF-16	1763461.8	6471860.8	103 - 124	46.89	35.31	-11.58
BF-17	1763817.0	6473002.0	100 - 120	34.75	22.67	-12.08
BF-19	1768046.8	6471330.9	128 - 133	51.05	40.44	-10.61
BF-20	1766707.3	6469336.4	110 - 129	58.61	48.33	-10.28
BF-21	1764784.8	6470681.1	96 - 121	50.43	39.67	-10.76
BF-22	1763265.1	6471470.1	87 - 117	45.78	34.29	-11.49
BF-23	1766107.0	6472439.6	101 - 116	36.69	25.93	-10.76
BF-24	1764492.8	6472165.2	96 - 121	42.62	31.18	-11.44
BF-25	1762675.8	6473358.3	94 - 104	35.98	23.70	-12.28
BF-26	1762187.8	6473650.7	90 - 105	48.1	35.48	-12.62
BF-27	1762195.6	6473093.7	101 - 121	36.54	24.18	-12.36
BF-28	1762866.4	6474076.9	92 - 110	46.41	33.84	-12.57
BF-29	1764267.9	6470038.4	100 - 120	50.72	39.62	-11.10
BF-30	1762874.7	6470961.8	82 - 113	35.86	24.58	-11.28
BF-31	1763812.0	6469369.8	105 - 135	48.33	37.55	-10.78
BF-32A**	1765704.0	6468400.0	65 - 115	60.57	50.81	-9.76
BF-33**	1763047.0	6468187.0	60 - 100	46.50	35.98	-10.52
BF-34	1767699.0	6469469.0	106 - 126	66.01	55.54	-10.47
BF-35	1768012.0	6470273.0	105.5 - 126	60.92	50.34	-10.58
BF-36	1762458.0	6475580.0	111 - 126	48.09	34.65	-13.44
BF-IW-1	1767145.0	6468136.0	106.9 - 125	65.17	55.13	-10.04
BF-IW-2	1765087.0	6473751.0	61.5 - 144	33.68	21.43	-12.25
BF-EW-1	1766650.0	6470901.7	85 - 128	46.79	36.14	-10.65
BF-EW-2	1764201.3	6472152.8	69.1 - 125	34.89	23.27	-11.62
BF-EW-3	1764981.9	6471337.3	60-120	30.29	19.12	-11.17
BF-EW-4	1763305.7	6472464.8	66-126	40.33	28.42	-11.91
BF-EW-5	1767019.2	6470443.1	108-128	48.43	38.24	-10.19
BF-OW-1	1767110.0	6468135.0	110 - 122	64.41	54.63	-9.78
BF-OW-3	1764310.0	6472153.0	70 - 120	40.64	29.32	-11.32
BF-OW-4	1764290.0	6470639.0	138 - 173	52.21	41.20	-11.01
BF-OW-3	1764310.0	6472153.0	70 - 120	40.26	29.32	-10.94
BF-OW-4	1764290.0	6470639.0	138 - 173	52.05	41.20	-10.85
LBF-OW-2 #	1766656.0	6470924.0	135 - 137	52.97	41.80	-11.17
LBF-OW-3 #	1764310.0	6472153.0	134 - 136	42.11	29.34	-12.77
PZ-1	1763312.0	6471533.0	75 - 115	46.48	34.95	-11.53
PZ-2	1762195.0	6473139.0	65 - 115	37.02	24.72	-12.30
PZ-3	1762924.0	6474023.0	40 - 70	46.45	33.93	-12.52
MBFC Del Amo Owned Wells						
SWL0027	1765075.7	6473730.2	119.3 - 135	33.98	22.07	-11.91
SWL0033#	1766277.4	6472042.1	124.3 - 140	47.75	33.75	-14.00
SWL0058	1767036.5	6472006.6	118.1 - 127.7	30.12	40.67	-10.55
G-O2WC	1766325.0	6473073.3	80 - 90	37.91	26.85	-11.06

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Gage Aquifer Montrose-Owned Wells						
G-1	1767682.9	6470099.7	140.5 - 161	58.14	46.66	-11.48
G-2	1767087.9	6470673.7	155 - 175.5	55.11	43.26	-11.85
G-3	1767168.6	6470158.0	145.5 - 166	61.08	49.70	-11.38
G-4	1767331.8	6471310.6	154 - 194	51.72	39.70	-12.02
G-5	1766906.2	6471186.2	151 - 190	53.59	41.71	-11.88
G-6	1766628.9	6470964.2	149 - 190	54.36	42.53	-11.83
G-8	1765641.3	6471451.0	140 - 180	34.80	22.52	-12.28
G-9	1765575.9	6473090.9	171 - 213	41.70	28.58	-13.12
G-11	1766578.6	6473197.2	177 - 217	38.53	25.17	-13.36
G-12	1766143.1	6472427.7	158 - 198	38.62	25.85	-12.77
G-13	1765787.3	6472054.5	157 - 197	48.65	36.09	-12.56
G-14	1768040.9	6471292.9	155 - 195	52.65	40.62	-12.03
G-15	1766763.1	6469998.6	142 - 182	59.89	48.71	-11.18
G-16	1765629.6	6471049.9	145 - 185	49.20	37.10	-12.10
G-17	1766922.5	6472314.3	172 - 212	48.25	35.99	-12.26
G-18	1764836.3	6473238.4	161 - 201	34.85	21.70	-13.15
G-19A	1764749.0	6472438.1	160 - 200	48.11	35.23	-12.88
G-20	1767698.0	6469488.0	155 - 175	66.35	55.33	-11.02
G-21	1768012.0	6470519.0	149 - 169	59.46	47.67	-11.79
G-22	1763886.0	6473268.0	152 - 192	36.95	24.22	-12.73
G-23	1763657.0	6472398.0	148 - 178	47.41	34.83	-12.58
G-24	1764757.0	6470681.0	138.3 - 178.3	51.98	40.40	-11.58
G-25	1765603.0	6469340.0	124 - 164	56.67	46.06	-10.61
G-26	1763544.0	6470301.0	132 - 172	46.75	35.72	-11.03
G-27	1762885.0	6471795.0	124 - 164	36.51	24.52	-11.99
G-28	1762189.0	6473638.0	148 - 188	48.88	35.54	-13.34
G-29	1762931.0	6474905.0	157 - 197	49.97	35.42	-14.55
G-30	1763761.0	6468585.0	135 - 165	55.55	44.96	-10.59
G-31	1760760.0	6476041.0	145 - 175	52.92	36.60	-16.32
G-32	1762108.0	6476388.0	160 - 190	49.57	32.68	-16.89
G-33	1765698.0	6468401.0	143 - 173	60.65	50.14	-10.51
G-34	1760638.0	6473574.0	147 - 187	52.65	39.44	-13.21
G-35	1763463.0	6473727.9	150 - 190	44.62	32.07	-12.55
G-EW-1	1766669.0	6470895.0	144 - 198	47.74	35.89	-11.85
G-EW-2	1763875.0	6473281.0	146 - 176	32.20	19.42	-12.78
G-EW-3	1764290.0	6470596.0	135 - 173	47.87	36.30	-11.57
G-EW-4	1765619.7	6472157.3	160-200	46.02	33.19	-12.83
G-IW-1	1767186.0	6468136.0	138 - 163	60.35	49.80	-10.55
G-IW-2	1766760.0	6473365.0	173 - 214	41.75	28.18	-13.57
G-IW-3	1767693.7	6468014.8	144-194	57.25	46.76	-10.49
G-IW-4	1766816.9	6473296.6	175-215	41.96	28.60	-13.36
G-IW-5	1766643.3	6473398.5	170-210	40.61	27.24	-13.37
G-IW-7	1767503.5	6468137.5	140-195	60.15	49.61	-10.54
G-OW-1	1767110.0	6468135.0	140 - 185	65.14	54.80	-10.34
G-OW-3	1764310.0	6472153.0	145 - 155	41.98	29.32	-12.66
G-OW-4	1764290.0	6470639.0	138 - 173	52.84	41.20	-11.64
LG-1	1767038.0	6470673.0	188.5 - 209	54.94	43.26	-11.68
LG-2	1767319.0	6470380.0	185 - 205	56.20	44.61	-11.59

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Gage Del Almo-Owned Wells						
SWL0034	1766291.0	6472041.0	160-176	46.38	36.02	-10.36
SWL0026	1765084.7	6473735.3	195 - 210.8	35.75	22.47	-13.28
SWL0063	1767683.3	6472309.2	172.7 - 187.7	38.23	50.80	-12.57
Lynwood Aquifer Montrose-Owned Wells						
LW-01	1767335.0	6470378.0	230 - 250	66.49	45.02	-21.47
LW-02	1766910.0	6471266.0	232 - 252	63.55	42.07	-21.48
LW-03	1768041.0	6471311.0	238 - 259	62.00	40.33	-21.67
LW-04	1766629.0	6470913.0	225 - 245	64.10	42.64	-21.46
LW-05	1767675.0	6470116.0	230 - 250	67.68	46.25	-21.43
LW-06	1767580.0	6470682.0	235 - 255	65.65	44.25	-21.40
LW-07	1767188.0	6470176.0	230 - 250	69.99	48.68	-21.31

Notes:

*corrected for LNAPL

** Wells screened across more than one aquifer

well is screened in the Lower Bellflower

Only wells gauged as part of the Montrose MACP are shown.

bgs below ground surface

msl mean sea level

TOC = Top of Casing

Horizontal Datum: North American Datum of 1983 (NAD83)

Vertical Datum: National Geodetic Vertical Datum of 1929 (NGVD29)

**Table 2 Sampling Matrix
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California**

Well and Sample Information						Laboratory Analysis Information	
Schedule	Well	Sample Type	Field Sample	MS/MSD	Location	VOCs + FO	pCBSA
						8260B	Mod. 314.0
Day 1 Wednesday 9/3/2014 Lab SDG: 14-09-0173	--	TB	TB-20140903	--	--	X	--
	--	EB	EB-20140903	--	--	X	X
	G-28	N	G-28-20140903	--	214th, E of Vermont	X	X
	BF-28	N	BF-28-20140903	--	W Clarion, E of Vermont	X	X
	BF-27	N	BF-27-20140903	X	214th, W of Vermont	X	X
	SWL0027	N	SWL0027-20140903	--	AlpineVillage; Torr Blvd/Vermont	X	X
	G-18	N	G-18-20140903	--	Brody Ave, S of Torr Blvd	X	X
	SWL0026	N	SWL0026-20140903	--	AlpineVillage; Torr Blvd/Vermont	X	X
	G-19A	N	G-19A-20140903	--	Catalina, S of Torr Blvd	X	X
BF-22	N	BF-22-20140903	--	212th, W of Royal	X	X	
Day 2 Thursday 9/4/2014 Lab SDG: 14-09-0312	--	TB	TB-20140904	--	--	X	--
	--	EB	EB-20140904	--	--	X	X
	G-32	N	G-32-20140904	--	Nicolle, S of W 214th	X	X
	G-27	N	G-27-20140904	X	Clarion Dr, W of Budlong	X	X
	BF-25	N	BF-25-20140904	--	Doble & Clarion	X	X
	G-35	N	G-35-20140904	--	S Van Deene, S of Javelin	X	X
	G-29	N	G-29-20140904	--	Peace Apostlic Church	X	X
	MW-26	N	MW-26-20140904	X	Milton, E of Normandie	X	X
	BF-10	N	BF-10-20140904	--	New Hampshire, S of Milton	X	X
	G-9	N	G-9-20140904	--	New Hampshire, S of Milton	X	X
	G-26	N	G-26-20140904	--	211th, W of Brighton	X	X
		FD	G-2600-20140904	--		X	X
	G-24	N	G-24-20140904	--	Normandie IN - S of Tor Blvd	X	X
	BF-21	N	BF-21-20140904	--	Normandie IN - S of Tor Blvd	X	X
	BF-17	N	BF-17-20140904	--	New Hampshire, W of Javelin	X	X
BF-15	N	BF-15-20140904	--	Milton, E of Kenwood	X	X	
	FD	BF-1500-20140904	--		X	X	
Day 3 Friday 9/5/2014 Lab SDG 14-09-0448	--	TB	TB-20140905	--	--	X	--
	--	EB	EB-20140905	--	--	X	X
	G-23	N	G-23-20140905	--	Berendo, N of 212th	X	X
	MW-23	N	MW-23-20140905	--	Budlong, N of Milton	X	X
	MW-24	N	MW-24-20140905	--	Milton, E of Kenwood	X	X
	MW-30	N	MW-30-20140905	--	Raymond, S of 204th	X	X
		N	MW-9-20140905	--		X	X
	MW-9	FD	MW-900-20140905	--	GLJ	X	X
		N	BF-14-20140905	--		Budlong, N of Milton	X
	G-OW-3	N	G-OW-3-20140905	--	Royal, N of 210th	X	X
	G-13	N	G-13-20140905	--	Budlong, N of Milton	X	X
		FD	G-1300-20140905	--		X	X
	BF-16	N	BF-16-20140905	--	Budlong, N of 212th	X	X
	SWL0033	N	SWL0033-20140905	--	Budlong, S of 204th	X	X
	SWL0034	N	SWL0034-20140905	--	Budlong & 204th	X	X
BF-24	N	BF-24-20140905	--	209th, E of Royal	X	X	

Table 2 Sampling Matrix
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well and Sample Information						Laboratory Analysis Information	
Schedule	Well	Sample Type	Field Sample	MS/MSD	Location	VOCs + FO	pCBSA
						8260B	Mod. 314.0
Day 4 Monday 9/8/2014 Lab SDG: 14-09-0556	--	TB	TB-20140908	--	--	X	--
	--	EB	EB-20140908	--	--	X	X
	BF-30	N	BF-30-20140908	--	Clarion Dr, E of Normandie	X	X
	MW-10	N	MW-10-20140908	--	Francisco, E of Normandie	X	X
	BF-23	N	BF-23-20140908	--	Catalina, N of Milton	X	X
	MW-5	N	MW-5-20140908	--	Montrose	X	X
	G-12	N	G-12-20140908	--	Catalina, N of Milton	X	X
Lab SDG: 14-09-0555	BF-3	N	BF-3-20140908	--	Montrose	X	X
	MWC021 ^B	N	MWC021-20140908	--	FMR Boeing Property	--	X
	PZL0025 ^A	N	PZL0025-20140908	--	WM	--	X
	MWC017 ^B	N	MWC017-20140908	--	FMR Boeing Property	--	X
	CMW001 ^B	N	CMW001-20140908	--	SunRider	--	X
Lab SDG: 14-09-0554	CMW002 ^B	N	CMW002-20140908	--	GLJ	--	X
	--	TB	TB-20140908-B	--	--	X	--
	MW-3 ^C	N	MW-3-20140908	--	Montrose	FO only	X
	BF-1 ^C	N	BF-1-20140908	--	Montrose	FO only	X
		FD	BF-100-20140908	--	Montrose	FO only	X
	G-20 ^C	N	G-20-20140908	--	Frito Lay	FO only	X
	BF-34 ^{C,D}	N	BF-34-20140908	--	Frito Lay	FO only	--
	G-OW-1 ^{C,D}	N	G-OW-3-20140908	--	MMB	FO only	--
	BF-OW-1 ^C	N	BF-OW-1-20140908	--	MMB	FO only	X
	MBFB-OW-1 ^{C,D}	N	MBFB-OW-1-20140908	--	MMB	FO only	--
MW-8 ^C	N	MW-8-20140908	--	Verizon	FO only	X	
MW-31 ^C	N	MW-31-20140908	--	Frito Lay	FO only	X	
BL-13C ^C	N	BL-13C-20140908	--	Frito Lay	FO only	X	
Day 5 Tuesday 9/9/2014 Lab SDG: 14-09-0658	--	TB	TB-20140909	--	--	X	--
	--	EB	EB-20140909	--	--	X	X
	MW-19	N	MW-19-20140909	--	SunRider	X	X
	MW-22	N	MW-22-20140909	--	Prologis II,	X	X
	MW-16	N	MW16-20140909	--	RockTenn	X	X
	G-25	N	G-25-20140909	--	Denker, S of 206th	X	X
	BF-5	N	BF-5-20140909	--	Jon St, E of Normandie	X	X
	MW-6	N	MW-6-20140909	--	LADWP-W	X	X
	G-4	N	G-4-20140909	--	Jon St, E of Normandie	X	X
	G-8	N	G-8-20140909	--	Milton, E of Kenwood	X	X
	G-3	N	G-3-20140909	--	Montrose	X	X
	MW-11	N	MW-11-20140909	--	Jon St, E of Normandie	X	X
	G-1	N	G-1-20140909	--	Montrose	X	X
		FD	G-100-20140909	--		X	X
	G-02WC ^A	N	G-02WC-20140909	--	Catalina, N of Milton	--	X
	MW-12	N	MW-12-20140909	--	Jon St, E of Normandie	X	X
	BF-11	N	BF-11-20140909	--	Berendo, N of 212th	X	X
MW-4	N	MW-4-20140909	--	Montrose	X	X	
BF-4	N	BF-4-20140909	--	Montrose	X	X	
Lab SDG: 14-09-0659	--	TB	TB-20140909-B	--	--	FO only	--
	MW-17 ^{C,D}	N	MW-17-20140909	--	Denker; S of Del Amo	FO only	--
	BF-20 ^C	N	BF-20-20140909	--	Denker; S of Del Amo	FO only	X
	MW-7 ^{C,D}	N	MW-7-20140909	--	LADWP-W	FO only	--

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2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
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Well and Sample Information						Laboratory Analysis Information	
Schedule	Well	Sample Type	Field Sample	MS/MSD	Location	VOCs + FO	pCBSA
						8260B	Mod. 314.0
Day 6 Wednesday 9/10/2014 Lab SDG: 14-09-0760	--	TB	TB-20140910	--		X	--
	--	EB	EB-20140910	--		X	X
	SWL0063 ^A	N	SWL0063-20140910	--	Del Amo Superfund	--	X
	LW-2	N	LW-2-20140910	X	LADWP-E	X	X
	LW-1	N	LW-1-20140910	--	Montrose	X	X
		FD	LW-100-20140910	--		X	X
	BF-31	N	BF-31-20140910	X	Denker, S of 209th	X	X
	G-17	N	G-17-20140910	--	LADWP-E	X	X
		FD	G-1700-20140910	--		X	X
	G-5	N	G-5-20140910	--	LADWP-E	X	X
	G-2	N	G-2-20140910	--	Montrose	X	X
	BF-9	N	BF-9-20140910	--	Montrose	X	X
	BF-2	N	BF-2-20140910	--	Montrose	X	X
MW-1	N	MW-1-20140910	--	Montrose	X	X	
MW-2	N	MW-2-20140910	--	Montrose	X	X	
Day 7 Thursday 9/11/2014 Lab SDG: 14-09-0943	--	TB	TB-20140911	--	--	X	--
	--	EB	EB-20140911	--	--	X	X
	LW-5	N	LW-5-20140911	--	Montrose	X	X
	G-33	N	G-33-20140911	--	206th, E of Western	X	X
	G-30	N	G-30-20140911	--	Harvard, N of 213th	X	X
	G-21	N	G-21-20140911	X	Francisco, W of Normandie	X	X
	MW-28 ^A	N	MW-28-20140911	--	Prologis	--	X
	SWL0058 ^A	N	SWL0058-20140911	--	Prologis	--	X
BF-35	N	BF-35-20140911	--	Francisco, W of Normandie	X	X	
Day 8 Monday 9/15/2014 Lab SDG: 14-09-1187	--	TB	TB-20140915	--	--	X	--
	--	EB	EB-20140915	--	--	X	X
	LW-7	N	LW-7-20140915	--	Montrose	X	X
	BF-32A	N	BF-32A-20140915	--	206th, E of Western	X	X
	BF-19	N	BF-19-20140915	--	Francisco, E of Normandie	X	X
	G-14	N	G-14-20140915	--	Francisco, E of Normandie	X	X
	G-11	N	G-11-20140915	--	Del Amo, W of Vermont	X	X
Day 9 Tuesday 9/16/2014 Lab SDG: 14-09-1264	--	TB	TB-20140916	--	--	X	--
	--	EB	EB-20140916	--	--	X	X
	G-16	N	G-16-20140916	--	Milton, E of Normandie	X	X
	LG-1	N	LG-1-20140916	--	Montrose	X	X
		FD	LG-100-20140916	--		X	X
	G-15	N	G-15-20140916	--	Farmer Brothers	X	X
	LG-2	N	LG-2-20140916	--	Montrose	X	X
	BF-29	N	BF-29-20140916	--	Haldale, N of 209th	X	X
	BF-12	N	BF-12-20140916	--	Linley, E of Doble	X	X
FD		BF-1200-20140916	--	X		X	

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20201 S. Normandie Avenue, Los Angeles, California

Well and Sample Information						Laboratory Analysis Information	
Schedule	Well	Sample Type	Field Sample	MS/MSD	Location	VOCs + FO	pCBSA
						8260B	Mod. 314.0
Day 10	--	TB	TB-20140918	--	--	X	--
9/18/2014	--	EB	EB-20140918	--	--	X	X
Lab SDG: 14-09-1462	LW-6	N	LW-6-20140918	--	Montrose	X	X
Day 11	--	TB	TB-20140919	--	--	X	--
9/19/2014	--	EB	EB-20140919	--	--	X	X
Lab SDG 14-09-1606	LW-4	N	LW-4-20140919	--	WM Triangle	X	X
Day 12	--	TB	TB-20140929	--	--	X	--
9/29/2014 Lab SDGs: 440-89327-1 14-09-2424	SWL0049	N	SWL0049-20140929	--	204th, E of Normandie	X	X

Notes:

- A Sample collected by URS on behalf of Shell, split sample collected for pCBSA only
- B Sample collected by Avocet on behalf of Boeing, split sample collected for pCBSA only
- C Sample collected by Tetra Tech on behalf of ILM, split sample collected for pCBSA and Fuel Oxygenates
- D Montrose well sampled by Tetra Tech, not apart of Montrose MACP. Split sample collected for FO only
- EB equipment blank
- FD field duplicate
- FO Fuel Oxygenates
- MCB chlorobenzene
- MS matrix spike
- MSD matrix spike duplicate
- N normal environmental sample
- SDG Sample Data Group
- VOCs Volatile Organic Compounds
- TB trip blank

TABLE 3
Summary of VOC Laboratory Results
2014 Baseline Monitoring and Aquifer Compliance Report
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20201 S. Normandie Avenue, Los Angeles, California

Well	Date	chlorobenzene	tetrachloroethene (PCE)	trichloroethene (TCE)	1,4-dichlorobenzene	benzene	bromodichloromethane	chloroform	trifluoromethanes, total	methylene chloride	tert-butanol (TBA)	1,2-dichlorobenzene	1,3-dichlorobenzene	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	cis-1,2-dichloroethene	1,2-dichloropropane	ethylbenzene	naphthalene	toluene	1,1,2-trichloroethane	1,2,3-trichloropropane	1,2,4-trimethylbenzene	vinyl chloride	xylenes, total	
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		ISGS	70	5	5	5	1	NP	100	NP	5 ^(M)	NP	600	17	5	0.5	6	6	5	700	6.2	150	5	NP	12	0.5	1750
UBF/Water Table Montrose-Owned Wells																											
MW-1	9/10/2014	100,000	1,300	180 J	<250	2,400	<250	13,000	13,000	<500	<5,000	<250	<250	<250	120 J	<250	<250	<250	<250	<500 (UJ)	<250	<250	<500	<250	<250	<250	<250
MW-2	9/10/2014	350,000	<1,000	<1,000	<1,000	<1,000	<1,000	31,000	31,000	<2,000	<20,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<2,000 (UJ)	<1,000	<1,000	<2,000	<1,000	<1,000	<1,000	<1,000
MW-3	9/8/2014	<0.17	110	140	<0.43	<0.14	<0.21	350	350	<0.64	--	<0.46	<0.40	1.5	<0.24	40	0.59 J	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
MW-3	9/8/2014	--	--	--	--	--	--	--	--	--	<20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/9/2014	960	94	510	<10	<10	<10	3,200	3,200	<20	<200	<10	<10	<10	<10	17	<10	<10	<10	<20 (UJ)	<10	<10	<20	<10	<10	<10	
MW-5	9/8/2014	19	170	3.3	<2.5	<2.5	<2.5	1,100	1,100	<5.0	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0 (UJ)	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	
MW-6	9/9/2014	<20	6,100	200	<20	<20	<20	710	710	<40	<400	<20	<20	15 J	<20	36	35	<20	<20	<40 (UJ)	<20	<20	<40	<20	<20	<20	
MW-8	9/8/2014	<0.17	<0.39	2.8	<0.43	<0.14	<0.21	1.3	1.3	<0.64	--	<0.46	<0.40	<0.28	<0.24	<0.43	<0.48	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
MW-8	9/8/2014	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/5/2014	<10	43	5.4 J	<10	<10	<10	3,000	3,000	<20	<200	<10	<10	<10	<10	<10	<10	<10	<10	<20 (UJ)	<10	<10	<20	<10	<10	<10	
MW-9	09/05/2014 ^(M)	<10	43	6.2 J	<10	<10	<10	3,000	3,000	<20	<200	<10	<10	<10	<10	<10	<10	<10	<10	<20 (UJ)	<10	<10	<20	<10	<10	<10	
MW-10	9/8/2014	<0.50	2.8	10	<0.50	<0.50	<0.50	11	11	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-11	9/9/2014	320	14	1.1	<1.0	0.66 J	<1.0	0.46 J	0.46 J	<2.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0 (UJ)	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
MW-12	9/9/2014	650	<2.0	<2.0	1.7 J	4.7	<2.0	<2.0	<2.0	<4.0	<40	<2.0	<2.0	<2.0	15	<2.0	<2.0	<2.0	<2.0	<4.0 (UJ)	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	
MW-16	9/9/2014	<0.50	13	300	<0.50	<0.50	<0.50	5.2	5.2	<1.0	<10	<0.50	<0.50	<0.50	<0.50	0.35 J	17	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-17	9/9/2014	--	--	--	--	--	--	--	--	--	8.2 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-19	9/9/2014	<0.50	0.30 J	3.9	<0.50	<0.50	<0.50	21 (J)	21 (J)	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-22	9/9/2014	<0.50	0.32 J	2.0	<0.50	<0.50	<0.50	18	18	<1.0	<10	<0.50	<0.50	<0.50	<0.50	0.31 J	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	68	0.75 J	<0.50	<0.50	<0.50	
MW-23	9/5/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.76	0.76	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-24	9/5/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	0.55	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-26	9/4/2014	<0.50	0.26 J	1.1	<0.50	<0.50	<0.50	0.32 J	0.32 J	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-30	9/5/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.27 J	0.27 J	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
MW-31	9/8/2014	3.7	1.8	<0.37	<0.43	2.0	<0.21	3.4	3.4	<0.64	--	<0.46	<0.40	<0.28	1.4	<0.43	<0.48	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
MW-31	9/8/2014	--	--	--	--	--	--	--	--	--	4.7 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
UBF/Water Table Del Amo-Owned Wells																											
PZL0025	9/8/2014	<1.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<10	--	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0	<1.0	<0.50	<1.0	
SWL0049	9/30/2014	8,700	250	140	28	100	<10	<10	<10	<40	<200	12	<10	<10	140	<10	<10	<10	7.6 J	<10	<10	<10	<40	<10	<10	<20	
SWL0049	10/31/2014	6,200	150	120	19	63	<5.0	<5.0	<5.0	<20	52 J	<5.0	<5.0	<5.0	270	<5.0	5.2	<5.0	7.2	<5.0	2.5 J	<5.0	<20	<5.0	<5.0	<10	
MBFC Montrose-Owned Wells																											
BF-1	9/8/2014	4.1	<0.39	<0.37	<0.43	<0.14	<0.21	<0.46	<0.46	1.1 J	--	<0.46	<0.40	<0.28	<0.24	<0.43	2.6	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
BF-1	9/8/2014	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BF-1	09/08/2014 ^(M)	--	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BF-2	9/10/2014	10,000	<25	<25	24 J	<25	<25	12 J	12 J	<50	<500	<25	<25	<25	<25	<25	<25	<25	<25	<50 (UJ)	<25	<25	<50	<25	<25	<25	
BF-3	9/8/2014	1,500	<4.0	650	<4.0	6.6	<4.0	<4.0	<4.0	<8.0	<80	<4.0	<4.0	<4.0	<4.0	3.0 J	<4.0	<4.0	<4.0	<8.0 (UJ)	<4.0	<4.0	<8.0	<4.0	<4.0	<4.0	
BF-4	9/9/2014	550	0.47 J	2.5	0.81 J	1.1	<1.0	1.4	1.4	<20	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0 (UJ)	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
BF-5	9/9/2014	0.19 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-9	9/10/2014	12,000	<40	36 J	<40	<40	<40	930	930	<80	<800	<40	<40	<40	<40	<40	<40	<40	<40	<80 (UJ)	<40	<40	<80	<40	<40	<40	

TABLE 3
Summary of VOC Laboratory Results
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	chlorobenzene	tetrachloroethene (PCE)	trichloroethene (TCE)	1,4-dichlorobenzene	benzene	bromodichloromethane	chloroform	trihalomethanes, total	methylene chloride	tert-butanol (TBA)	1,2-dichlorobenzene	1,3-dichlorobenzene	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	cis-1,2-dichloroethene	1,2-dichloropropane	ethylbenzene	naphthalene	toluene	1,1,2-trichloroethane	1,2,3-trichloropropane	1,2,4-trimethylbenzene	vinyl chloride	xylenes, total	
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		ISGS	70	5	5	5	1	NP	100	NP	5 ^(M)	NP	600	17	5	0.5	6	6	5	700	6.2	150	5	NP	12	0.5	1750
BF-10	9/4/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-11	9/9/2014	6.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-12	9/16/2014	2,300	<5.0	<5.0	4.3 J	3.3 J	<5.0	<5.0	<5.0	<10	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10 (UJ)	<5.0	<5.0	<10	<5.0	<5.0	<5.0	
	09/16/2014 ^(a)	2,300	<5.0	<5.0	4.4 J	<5.0	<5.0	<5.0	<5.0	<10	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10 (UJ)	<5.0	<5.0	<10	<5.0	<5.0	<5.0	
BF-14	9/5/2014	41	0.34 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-15	9/4/2014	690	<2.0	1.3 J	2.4	1.3 J	<2.0	<2.0	<2.0	<4.0	<40	<2.0	<2.0	<2.0	1.6 J	<2.0	<2.0	<2.0	<2.0	<4.0 (UJ)	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	
BF-16	9/5/2014	320	<1.0	<1.0	0.79 J	<1.0	<1.0	0.73 J	0.73 J	<2.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0 (UJ)	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
BF-17	9/4/2014	4,900	<12	<12	14	13	<12	<12	<12	<25	<250	<12	<12	<12	220	<12	<12	<12	<12	<25 (UJ)	<12	<12	<25	<12	<12	<12	
BF-19	9/15/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-20	9/9/2014	5,300	<7.7	16 J	15 J	3.6 J	<4.1	<9.2	<9.2	<13	--	<9.1	<8.0	<5.6	<4.8	<8.6	<9.5	<8.5	<2.8	<50	<4.7	<7.7	<13	<7.2	<6.0	<6.0	
	09/09/2014 ^(a)	5,000	<7.7	19 J	14 J	4.3 J	<4.1	<9.2	<9.2	<13	--	<9.1	<8.0	<5.6	<4.8	<8.6	<9.5	<8.5	<2.8	<50	<4.7	<7.7	<13	<7.2	<6.0	<6.0	
BF-20	9/9/2014	--	--	--	--	--	--	--	--	<400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BF-21	9/4/2014	240	<0.50	<0.50	0.49 J	0.68	<0.50	0.59	0.59	<1.0	<10	<0.50	<0.50	<0.50	1.3	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-22	9/3/2014	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	0.31 J	0.31 J	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-23	9/8/2014	0.16 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-24	9/5/2014	2,200	<5.0	<5.0	4.4 J	38	<5.0	<5.0	<5.0	<10	<100	<5.0	<5.0	<5.0	320	<5.0	<5.0	10	32	<10 (UJ)	<5.0	<5.0	<10	3.8 J	<5.0	<5.0	
BF-25	9/4/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-27	9/3/2014	0.66	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-28	9/3/2014	0.48 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-29	9/16/2014	0.62	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.39 J	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-30	9/8/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-31	9/10/2014	<0.50 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	1.8	<0.50	<0.50	0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-32A	9/15/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	0.56	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
BF-35	9/11/2014	1,200	<4.0	1,500	4.0 J	<4.0	<4.0	<4.0	<4.0	<8.0	<80	<4.0	<4.0	<4.0	<4.0	12	22	<4.0	<4.0	<8.0 (UJ)	<4.0	<4.0	<8.0	<4.0	<4.0	<4.0	
BF-OW-1	9/8/2014	20	<0.39	1.3	<0.43	0.44 J	<0.21	<0.46	<0.46	<0.64	--	<0.46	<0.40	<0.28	<0.24	<0.43	0.87 J	<0.42	<0.14	<2.5	0.46 J	<0.38	<0.64	<0.36	<0.30	<0.30	
BF-OW-1	9/8/2014	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MBFC Del Amo-Owned Wells																											
SWL0027	9/3/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	
SWL0033	9/5/2014	6,300	<20	<20	17 J	33	<20	<20	<20	<40	<400	<20	<20	<20	8.3 J	<20	<20	<20	<20	<40 (UJ)	<20	<20	<40	<20	<20	<20	
SWL0058	9/5/2014	21	3.5	21 (J)	0.55 J	<0.50	<1.0	<1.0	<1.0	<10	--	<1.0	<1.0	<1.0	5.9	0.73 J	0.85 J	<1.0	<1.0	<10	0.38 J	<1.0	<5.0	<1.0	<0.50	<1.0	
G-02WC	9/4/2014	180	<1.0	<1.0	0.68 J	0.39 J	<1.0	<1.0	<1.0	<10	--	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<1.0	<1.0	<10	0.80 J	<1.0	<5.0	<1.0	<0.50	<1.0	
MBFC Boeing-Owned Wells																											
CMW001	9/8/2014	7,800	<5.0	8.0 J	12 J	40	<5.0	<5.0	<5.0	<18	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	
CMW002	9/8/2014	48,000	<25	82 J	41 J	160	<25	2,100	2,100	<88	<500	<50	<25	<25	<25	<25	<25	<25	<25	--	<25	<25	<25	<25	<25	<50	
MWC017	9/8/2014	5.0	<0.25	110	<0.25	<0.25	<0.25	0.28 J	0.28 J	<0.88	<5.0	<0.50	<0.25	<0.25	<0.25	30	200	<0.25	<0.25	--	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	
MWC021	9/8/2014	<0.25	0.71 J	15	<0.25	<0.25	<0.25	0.76 J	0.76 J	<0.88	<5.0	<0.50	<0.25	<0.25	0.87 J	<0.25	0.48 J	6.0	<0.25	<0.25	--	<0.25	<0.25	<0.25	<0.25	<0.50	

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Well	Date	chlorobenzene	tetrachloroethene (PCE)	trichloroethene (TCE)	1,4-dichlorobenzene	benzene	bromodichloromethane	chloroform	trihalomethanes, total	methylene chloride	tert-butanol (TBA)	1,2-dichlorobenzene	1,3-dichlorobenzene	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	cis-1,2-dichloroethene	1,2-dichloropropane	ethylbenzene	naphthalene	toluene	1,1,2-trichloroethane	1,2,3-trichloropropane	1,2,4-trimethylbenzene	vinyl chloride	xylenes, total	
		Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		ISGS	70	5	5	5	1	NP	100	NP	5 ^(M)	NP	600	17	5	0.5	6	6	5	700	6.2	150	5	NP	12	0.5	1750
Gage Aquifer Montrose-Owned Wells																											
G-1	9/9/2014	7.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	09/09/2014 ^(a)	7.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-2	9/10/2014	3,400	<10	<10	<10	7.7 J	<10	<10	<10	<20	<200	<10	<10	<10	<10	<10	<10	<10	<10	<20 (UJ)	<10	<10	<20	<10	<10	<10	<10
G-3	9/9/2014	32	1.2	0.37 J	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	9.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-4	9/9/2014	39	<0.50	11	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	9.4	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-5	9/10/2014	3,000	<10	<10	<10	11	<10	<10	<10	<20	<200	<10	<10	<10	<10	<10	<10	<10	<10	<20 (UJ)	<10	<10	<20	<10	<10	<10	<10
G-8	9/9/2014	100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-9	9/4/2014	360	<0.50	<0.50	<0.50	2.1	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-11	9/15/2014	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	13	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-12	9/8/2014	2,600	<5.0	3.8 J	<5.0	25	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	3.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<10 (UJ)	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
G-13	9/5/2014	900	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0 (UJ)	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5
	09/05/2014 ^(a)	930	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0 (UJ)	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5
G-14	9/15/2014	<0.50	<0.50	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	0.33 J	65	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-15	9/16/2014	5.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-16	9/16/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-17	9/10/2014	150	0.24 J	20	<0.50	1.3	<0.50	<0.50	<0.50	<1.0	6.8 J	<0.50	<0.50	<0.50	5.2	0.84	5.3	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	0.29 J	<0.50	<0.50
	09/10/2014 ^(a)	160	0.22 J	19	<0.50	1.2	<0.50	<0.50	<0.50	<1.0	4.6 J	<0.50	<0.50	<0.50	5.3	0.88	5.2	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	0.27 J	<0.50	<0.50
G-18	9/3/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-19A	9/3/2014	110	<0.50	<0.50	<0.50	0.62	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-20	9/8/2014	1.7	<0.39	<0.37	<0.43	<0.14	<0.21	<0.46	<0.46	0.89 J	--	<0.46	<0.40	<0.28	<0.24	<0.43	<0.48	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
G-20	9/8/2014	--	--	--	--	--	--	--	--	<10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-21	9/11/2014	18	<0.50	380	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	2.2	0.72	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-23	9/5/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-24	9/4/2014	1,100	<2.5	<2.5	10	1.7 J	<2.5	<2.5	<2.5	<5.0	<50	1.7 J	<2.5	<2.5	4.4	<2.5	<2.5	<2.5	<2.5	<5.0 (UJ)	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5
G-25	9/9/2014	40	<0.50	0.69	0.38 J	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	7.1	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-26	9/4/2014	84	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	09/04/2014 ^(a)	87	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-27	9/4/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-28	9/3/2014	0.94	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-29	9/4/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-30	9/11/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.34 J	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-32	9/4/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-33	9/11/2014	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.40 J	<0.50	<0.50	<0.50	3.3	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-35	9/4/2014	0.31 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	3.5	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
G-OW-3	9/5/2014	320	<1.0	<1.0	<1.0	5.4	<1.0	<1.0	<1.0	<2.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0 (UJ)	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
LG-1																											

TABLE 3
Summary of VOC Laboratory Results
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	chlorobenzene	tetrachloroethene (PCE)	trichloroethene (TCE)	1,4-dichlorobenzene	benzene	bromodichloromethane	chloroform	trihalomethanes, total	methylene chloride	tert-butanol (TBA)	1,2-dichlorobenzene	1,3-dichlorobenzene	1,1-dichloroethane	1,2-dichloroethane	1,1-dichloroethene	cis-1,2-dichloroethene	1,2-dichloropropane	ethylbenzene	naphthalene	toluene	1,1,2-trichloroethane	1,2,3-trichloropropane	1,2,4-trimethylbenzene	vinyl chloride	xylenes, total	
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
	ISGS	70	5	5	5	1	NP	100	NP	5 ^(b)	NP	600	17	5	0.5	6	6	5	700	6.2	150	5	NP	12	0.5	1750	
Gage Aquifer Del Amo-Owned Wells																											
SWL0026	9/3/2014	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
SWL0034	9/5/2014	67	<0.50	1.4	0.52	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	0.28 J	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
SWL0063	9/10/2014	<1.0	0.58 J	92	<1.0	35	<1.0	<1.0	<1.0	<10	--	<1.0	<1.0	0.32 J	<0.50	2.7	11	<1.0	<1.0	<1.0	0.57 J	<1.0	<5.0	<1.0	0.44 J	<1.0	
Gage Aquifer ILM-Owned Well																											
BL-13C	9/8/2014	270	<0.39	<0.37	0.65 J	0.24 J	<0.21	<0.46	<0.46	0.98 J	--	<0.46	<0.40	<0.28	<0.24	<0.43	<0.48	<0.42	<0.14	<2.5	<0.24	<0.38	<0.64	<0.36	<0.30	<0.30	
BL-13C	9/8/2014	--	--	--	--	--	--	--	--	--	<20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Lynwood Aquifer Montrose-Owned Wells																											
LW-1	9/10/2014	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	09/10/2014 ^(a)	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
LW-2	9/10/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
LW-4	9/19/2014	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
	1/13/2015	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	14 U	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
LW-5	9/11/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
LW-6	9/18/2014	<0.50	<0.50 (UJ)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50
LW-7	9/15/2014	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 (UJ)	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50

Notes:
Analytes not shown here were not detected in wells at concentrations greater than laboratory reporting limits unless noted below.
Samples were analyzed using EPA Method 8260B.

^(a) Duplicate Sample

^(b) Confirmation Sample

^(c) LW-4 was re-sampled on 1-13-2015 using macro-purging sampling methods.

J = Exceeds ISGS

Total Trihalomethanes are Bromoform, Chloroform, Dibromochloromethane, and Bromodichloromethane.

< less than

µg/L micrograms per liter

CDPH California Department of Public Health

ISGS In Situ Groundwater Standard as listed as Table 9-1 in the Record of Decision for the Dual Groundwater Operable Unit, Montrose and Del Amo Superfund Sites (EPA, 1999)

MDL method detection limit

NP none promulgated

RL reporting limit

EPA United States Environmental Protection Agency

Laboratory-Assigned Qualifier

J Estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.

Data Validation Qualifiers

(J) Estimated value.

(U) Estimated value. Blank contamination: indicates possible high bias and/or false positives.

(UJ) Reporting limit estimated.

Table 4
Summary of pCBSA Laboratory Results
2014 Groundwater Monitoring Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	pCBSA
	Units	µg/L
UFB/Water Table Montrose-Owned Wells		
MW-1	9/10/2014	500,000
MW-2	9/10/2014	520,000
MW-3	9/8/2014	21
MW-4	9/9/2014	1,200
MW-5	9/8/2014	53
MW-6	9/9/2014	3.2 J
MW-8	9/8/2014	75
MW-9	9/5/2014	2.6 J
	09/05/2014 ^(a)	<5.0
MW-10	9/8/2014	170
MW-11	9/9/2014	240
MW-12	9/9/2014	130
MW-16	9/9/2014	<5.0
MW-19	9/9/2014	40
MW-22	9/9/2014	<5.0
MW-23	9/5/2014	5.7
MW-24	9/5/2014	11
MW-26	9/4/2014	<5.0
MW-28	9/11/2014	<5.0
MW-30	9/5/2014	<5.0
MW-31	9/8/2014	<5.0
UFB/Water Table Del Amo-Owned Wells		
SWL0049	9/30/2014	25,000
PZL0025	9/8/2014	<5.0

Table 4
Summary of pCBSA Laboratory Results
2014 Groundwater Monitoring Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	pCBSA
	Units	µg/L
MBFC Montrose-Owned Wells		
BF-1	9/8/2014	29
	09/08/2014 ^(a)	31
BF-2	9/10/2014	98,000
BF-3	9/8/2014	8,900
BF-4	9/9/2014	17,000
BF-5	9/9/2014	<5.0
BF-9	9/10/2014	82,000
BF-10	9/4/2014	<5.0
BF-11	9/9/2014	7.0
BF-12	9/16/2014	30,000
	09/16/2014 ^(a)	29,000
BF-14	9/5/2014	1,000
BF-15	9/4/2014	1,400
BF-16	9/5/2014	7,100
BF-17	9/4/2014	33,000
BF-19	9/15/2014	<5.0
BF-20	9/9/2014	52,000
BF-21	9/4/2014	27,000
BF-22	9/3/2014	14,000
BF-23	9/8/2014	5.2
BF-24	9/5/2014	19,000
BF-25	9/4/2014	4.7 J
BF-27	9/3/2014	<5.0
BF-28	9/3/2014	390
BF-29	9/16/2014	25
BF-30	9/8/2014	13
BF-31	9/10/2014	350
BF-32A	9/15/2014	9.9
BF-35	9/11/2014	9,800
BF-OW-1	9/8/2014	350
MBFC Del Amo-Owned Wells		
SWL0027	9/3/2014	77
SWL0033	9/5/2014	39,000
SWL0058	9/11/2014	1,100
G-02WC	9/9/2014	1,900

Table 4
Summary of pCBA Laboratory Results
2014 Groundwater Monitoring Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	pCBA
	Units	µg/L
MBFC Boeing-Owned Wells		
CMW001	9/8/2014	32,000
CMW002	9/8/2014	57,000
MWC017	9/8/2014	77
MWC021	9/8/2014	<5.0
Gage Aquifer Montrose-Owned Wells		
G-1	9/9/2014	79
	09/09/2014 ^(a)	91
G-2	9/10/2014	29,000
G-3	9/9/2014	150
G-4	9/9/2014	820
G-5	9/10/2014	38,000
G-8	9/9/2014	4,200
G-9	9/4/2014	21,000
G-11	9/15/2014	1,900
G-12	9/8/2014	36,000
G-13	9/5/2014	21,000
	9/05/2014 ^(a)	23,000
G-14	9/15/2014	<5.0
G-15	9/16/2014	<5.0
G-16	9/16/2014	<5.0
G-17	9/10/2014	3,400
	9/10/2014 ^(a)	3,600
G-18	9/3/2014	2,000
G-19A	9/3/2014	5,700
G-20	9/8/2014	<5.0
G-21	9/11/2014	130
G-23	9/5/2014	84
G-24	9/4/2014	9,200
G-25	9/9/2014	1,200
G-26	9/4/2014	720
	9/04/2014 ^(a)	730
G-27	9/4/2014	<5.0

Table 4
Summary of pCBSA Laboratory Results
2014 Groundwater Monitoring Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Well	Date	pCBSA
	Units	µg/L
G-28	9/3/2014	2,000
G-29	9/4/2014	11,000
G-30	9/11/2014	<5.0
G-32	9/4/2014	<5.0
G-33	9/11/2014	140
G-35	9/4/2014	4,200
G-OW-3	9/5/2014	6,900
LG-1	9/16/2014	26,000
	9/16/2014 ^(a)	26,000
LG-2	9/16/2014	27,000
Gage Del Amo-Owned Wells		
SWL0026	9/3/2014	110
SWL0034	9/5/2014	17
SWL0063	9/10/2014	<5.0
Gage ILM-Owned Wells		
BL-13C	9/8/2014	4,200
Lynwood Aquifer Montrose-Owned Wells		
LW-1	9/10/2014	9.5
	9/10/2014 ^(a)	8.2
LW-2	9/10/2014	<5.0
LW-4	9/19/2014	780
	1/13/2015 ^(c)	130
LW-5	9/11/2014	<5.0
LW-6	9/18/2014	<5.0
LW-7	9/15/2014	<5.0

Notes:

^(a) Duplicate Sample

^(b) Confirmation Sample

^(c) LW-4 was re-sampled on 1/13/15 using macro-purge sampling methods.

pCBSA = 4-chlorobenzenesulfonic acid

No Upper Bellflower Aquitard wells were sampled for pCBSA.

Samples were analyzed using EPA Method 314.0 Modified.

µg/L micrograms per liter

Laboratory-Assigned Qualifier

J Estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.

TABLE 5
Summary of QA/QC Sample Laboratory Results
2014 Baseline Monitoring and Aquifer Compliance Report
Montrose Superfund Site
20201 S. Normandie Avenue, Los Angeles, California

Field Sample	Laboratory Sample	Sampling Date	VOCs	pCBSAs
Laboratory Method			(EPA 8260B)	(EPA 314.0 Modified)
Units			(µg/L)	(µg/L)
TRIP BLANKS				
TB-20140903	14-09-0173-01	9/3/2014	ND	--
TB-20140904	14-09-0312-01	9/4/2014	ND	--
TB-20140905	14-09-0448-01	9/5/2014	ND	--
TB-20140908	14-09-0556-01	9/8/2014	ND	--
TB20140908-B	14-09-0554-01	9/8/2014	ND	--
TB-20140909	14-09-0658-01	9/9/2014	ND	--
TB20140909-B	14-09-0659-01	9/9/2014	ND	--
TB-20140910	14-09-0760-01	9/10/2014	ND	--
TB-20140911	14-09-0943-02	9/11/2014	ND	--
TB-20140915	14-09-1187-01	9/15/2014	ND	--
TB-20140916	14-09-1264-01	9/16/2014	ND	--
TB-20140918	14-09-1462-01	9/18/2014	ND	--
TB-20140919	14-09-1606-02	9/19/2014	ND	--
EQUIPMENT BLANKS				
EB-20140903	14-09-0173-02	9/3/2014	methylene chloride -- 0.41 J	<5.0
EB-20140904	14-09-0312-02	9/4/2014	ND	<5.0
EB-20140905	14-09-0448-02	9/5/2014	methylene chloride -- 1.3	<5.0
EB-20140908	14-09-0556-02	9/8/2014	methylene chloride -- 0.92 J	<5.0
EB-20140909	14-09-0658-02	9/9/2014	methylene chloride -- 0.53 J	<5.0
EB-20140910	14-09-0760-02	9/10/2014	chlorobenzene -- 0.22 J	<5.0
EB-20140911	14-09-0943-03	9/11/2014	methylene chloride -- 0.47 J	<5.0
EB-20140915	14-09-1187-02	9/15/2014	ND	<5.0
EB-20140916	14-09-1264-02	9/16/2014	ND	<5.0
EB-20140918	14-09-1462-02	9/18/2014	chloroform -- 0.28 J	<5.0
EB-20140919	14-09-1606-01	9/19/2014	acetone -- 3.7 J (J) toluene -- 0.43 J	<5.0
EB-20150113	15-01-0665	1/13/2015	acetone -- 3.8 J chloroform -- 0.22 J TBA --8.0 J	<5.0

Notes:

-- sample not submitted for analysis by laboratory method
µg/L micrograms per liter
EPA United States Environmental Protection Agency
ND analytes listed as part of EPA Method 8260B were not detected
pCBSA 4-chlorobenzenesulfonic acid
QA/QC quality assurance/quality control
VOC volatile organic compound

Laboratory-Assigned Qualifier

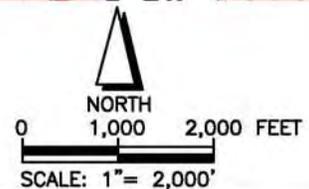
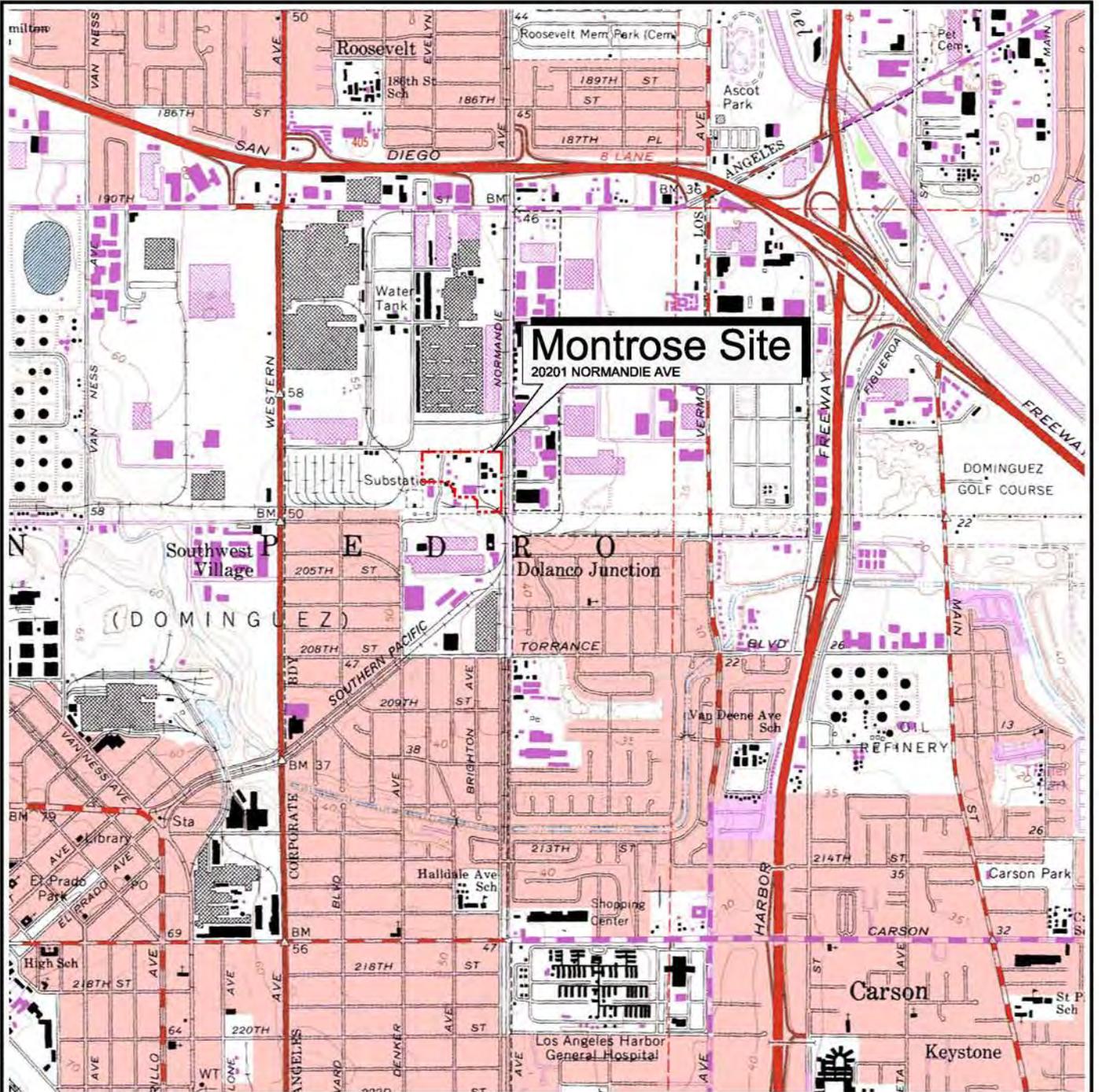
J Estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.

Data Validation Qualifier

(J) Estimated value.

FIGURES

FILE NAME: Z:\ET\MONTROSE\TORRANCE\SLM\2010\SLM\1010\60150255 SLM.1010.DWG

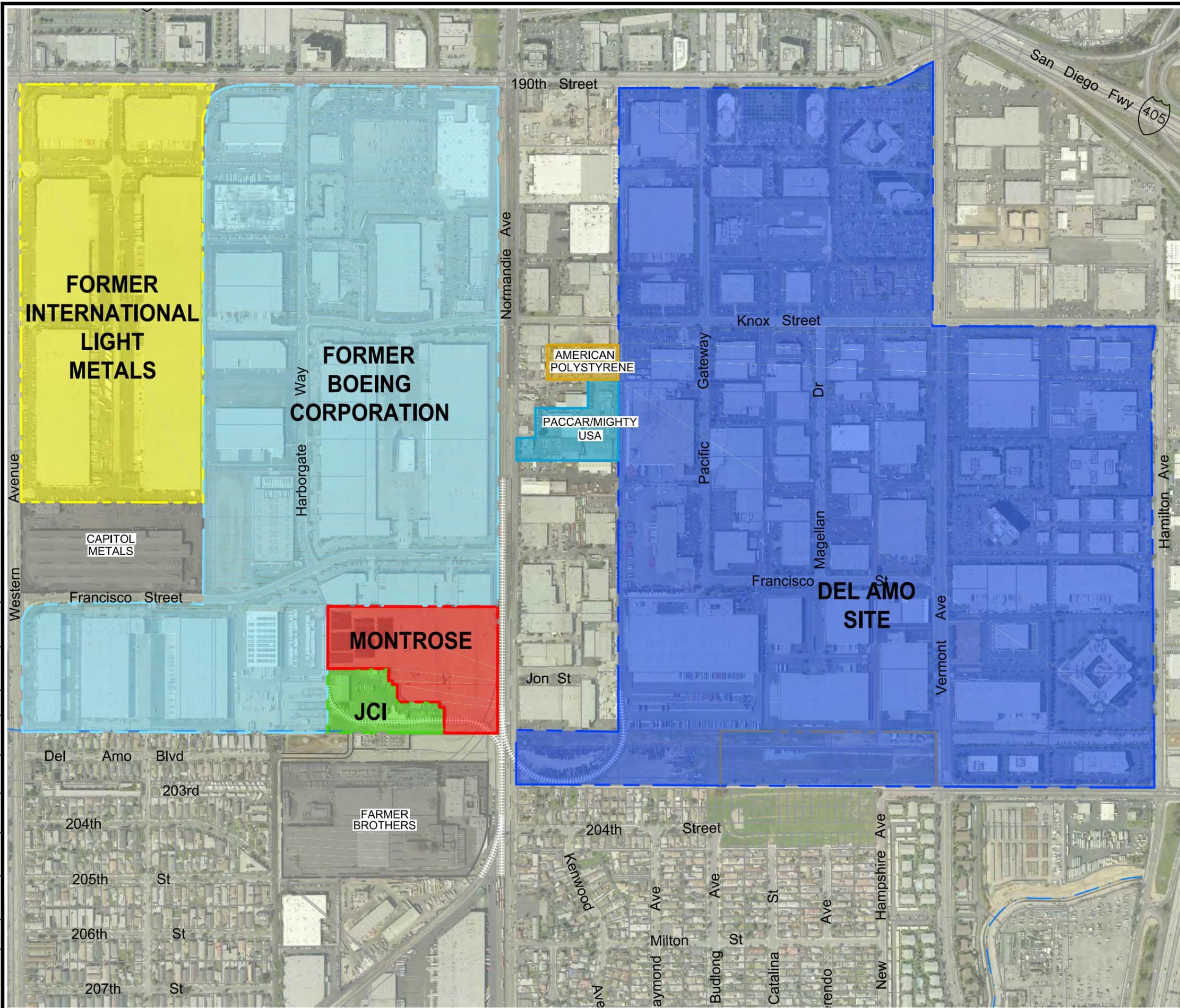


Reference:

1. U.S.G.S. Topographic Map, Torrance, California 7.5 Minute Quadrangle. Georeferenced using the State of California's CASIL On-line GIS Database, Copyright 2010.

Montrose Chemical Corporation		
Site Location Map		
Date: 10-10	Montrose Superfund Site	
Project No. 60150255	AECOM	
		Figure 1

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\CURRENT\GW MAPS\MAP\FINAL EPA\DWGS\0714_60288979_13.05_MONTROSE_SW_0714.DWG

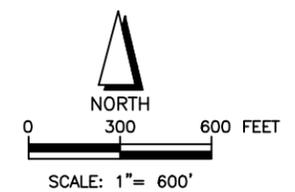


Legend:

- Location of Montrose Property Boundary
- Location of Del Amo Superfund Site Boundary
- Jones Chemical Site Boundary
- Former Boeing Corp Site Boundary
- Former ILM Site Boundary
- Paccar/Mighty USA Site Boundary
- American Polystyrene Site Boundary
- Existing Railroad Tracks
- LADWP Los Angeles Department of Water and Power
- UPRR Union Pacific Railroad

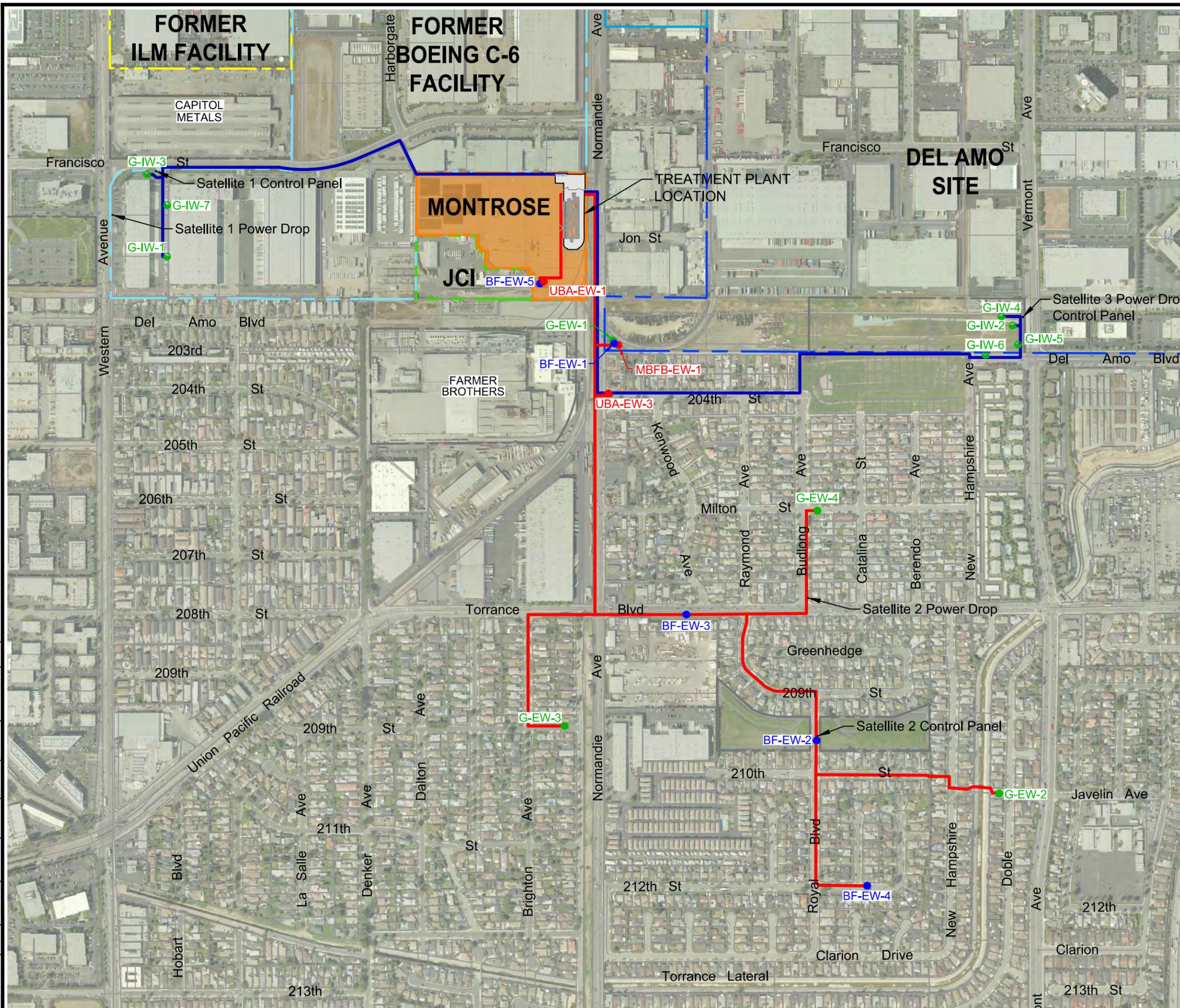
- References:**
- Parcel Boundary Information from Los Angeles, CA, Department of Public Works, Online GIS data set, ©2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin & Boynton Land Surveyors.
 - Satellite/Aerial Photos Reference: U.S.G.S Orthorectified Image, Dated July 29, 2009.

- Note:**
- The Former ILM Site Property is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
Site Vicinity Map		
Date: 07-14	Montrose Superfund Site	
Project No. 60288979		Figure 2

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\GW BASELINE\MAGR\60288979.13.03_MONTROSE_TGRS_INFRASTRUCTURE_MACR.0315.DWG



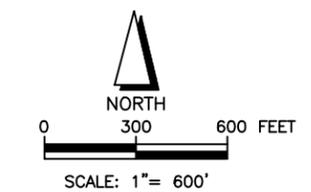
- Legend:**
- - - Location of Montrose Property Boundary
 - - - Location of Del Amo Superfund Site Boundary
 - - - Jones Chemical Site Boundary
 - - - Former Boeing C-6 Site Boundary
 - - - Former ILM Site Boundary
 - - - Paccar/Mighty USA Site Boundary

- Well Legend:**
- UBE-EW-1 Upper Bellflower Aquitard (UBF) Extraction Wells
 - BF-EW-1 MBFC (BFS) Extraction Wells
 - G-EW-4 Gage Aquifer Extraction Wells
 - G-IW-3 Gage Aquifer Injection Wells
 - Extraction Pipeline
 - Re-Injection Pipeline

- References:**
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArclInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 2. Satellite/Aerial Photos Reference: U.S.G.S Orthorectified Image, Dated July 29, 2009.
 3. Well Locations surveyed by Calvada Surveying Inc., from Los Angeles, CA (951)280-9960. Survey publish date September 21, 2014.

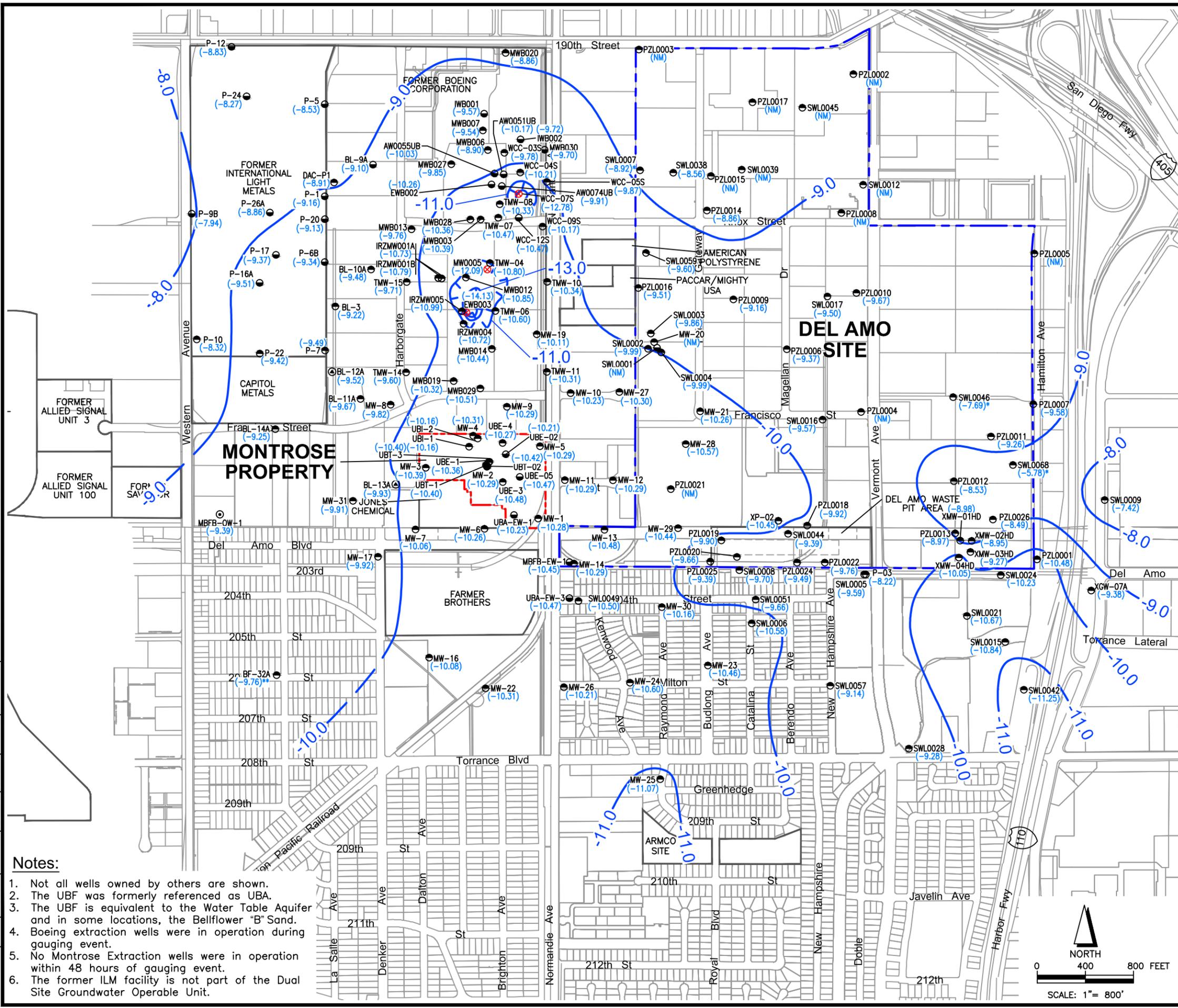
Note:

1. The Former ILM Site Property is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
Torrance Groundwater Remediation System Infrastructure Map		
Date: 03-15	Montrose Superfund Site	
Project No. 60288979	AECOM	Figure 3

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\TORRANCE_GW_UBA_0315.DWG



Legend:

- Location of Montrose Property Boundary
- Location of Del Amo Superfund Site Boundary

Well Legend:

- SWL0012 Upper Bellflower Aquitard (UBF) Groundwater Monitoring Well Location
- BL-12A Cluster Well
- EWB003 Boeing Extraction Wells
- UBA-EW-3 Montrose TGRS Extraction Wells
- (-9.67) Groundwater Elevation in Feet Mean Sea Level (MSL) Measured September 2014
- (NM) Not measured
- 10.0 Interpreted Groundwater Elevation Contours in Feet (MSL). Contour Intervals are 1.00 Feet. Dashed where Inferred.
- * = Groundwater Elevation not used for contouring purposes.
- ** = Well is screened from the UBF to the Middle Bellflower "B" Sands

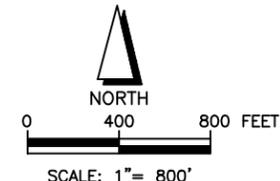
Well Identifier Notes:

- MW = Montrose Monitoring Wells
- G, GW, SWL, PZL, GW = Del Amo Monitoring Wells
- P, MW-2T, MW-xHD = American Polystyrene Monitoring Wells
- AMW, AMP, ARB = Armco Monitoring Wells
- DAC, TMW, WCC, MWB = Boeing Monitoring Wells
- BL, P = International Light Metals Monitoring Wells
- IRZB, IRZMW = Boeing Bioremediation Wells

References:

- Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
- Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
- Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
- URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

- Notes:**
- Not all wells owned by others are shown.
 - The UBF was formerly referenced as UBA.
 - The UBF is equivalent to the Water Table Aquifer and in some locations, the Bellflower "B" Sand.
 - Boeing extraction wells were in operation during gauging event.
 - No Montrose Extraction wells were in operation within 48 hours of gauging event.
 - The former ILM facility is not part of the Dual Site Groundwater Operable Unit.

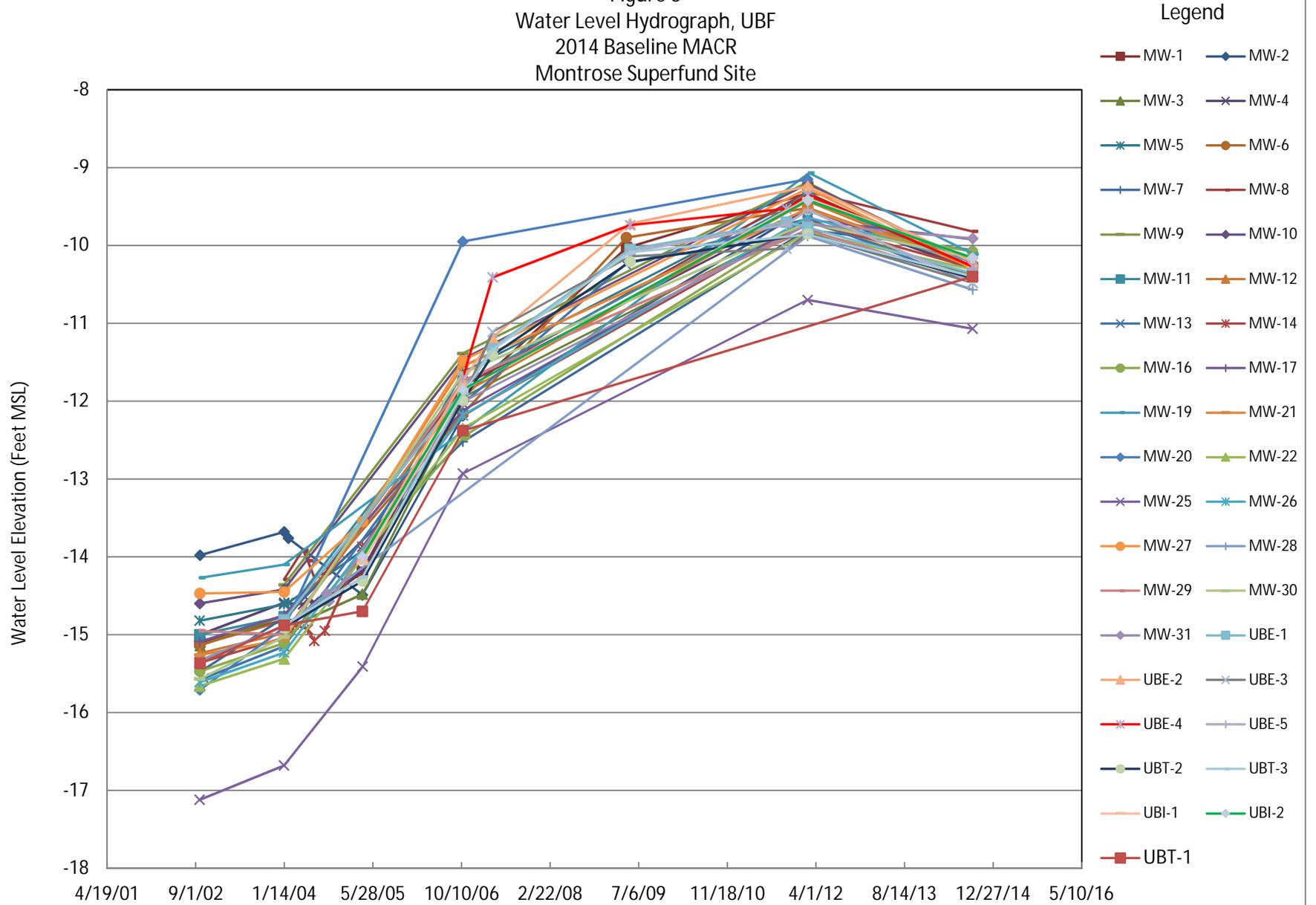


Montrose Chemical Corporation

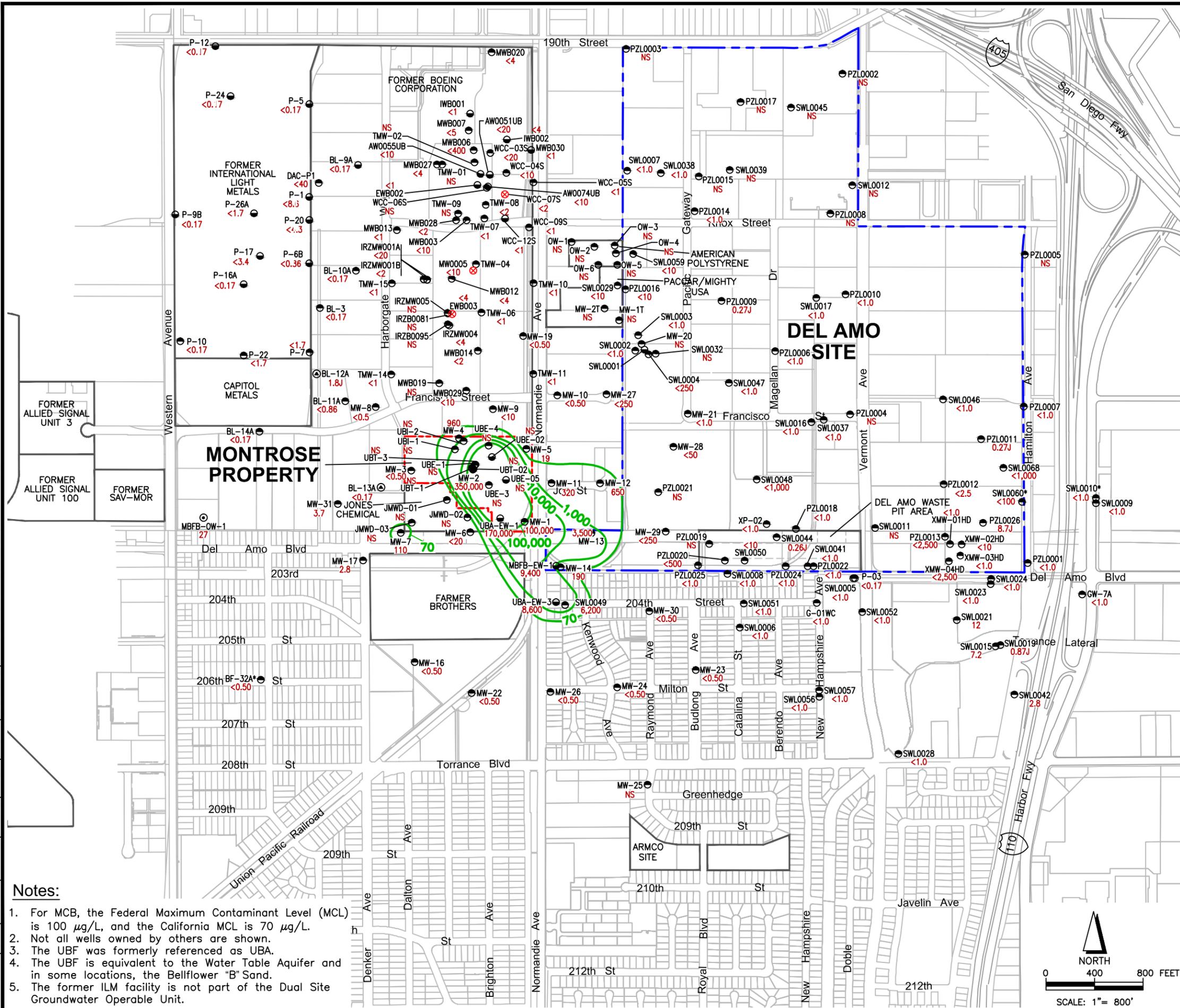
2014 Groundwater Elevations Map, UBF

Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979		4

Figure 5
 Water Level Hydrograph, UBF
 2014 Baseline MACR
 Montrose Superfund Site



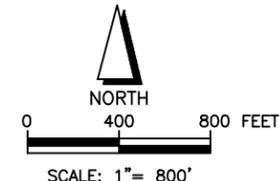
FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\BASELINE\60288979_13.02_MONTROSE_CB_IN_GW_UBA_0315.DWG



- Legend:**
- Location of Montrose Property Boundary
 - Location of Del Amo Superfund Site Boundary
- Well Legend:**
- SWL0012 ● Upper Belflower Aquitard (UBF) Groundwater Monitoring Well Location
 - BL-12A Cluster Well
 - ⊗ EWB003 Boeing Extraction Wells
 - UBA-EW-3 ● Montrose TGRS Extraction Wells
 - <1 Less than; Numerical value is the limit of detection for this analysis.
 - * Well screened from the water table zone into the Middle Belflower 'C' sand.
 - MCB concentration in micrograms per liter. 2013 to September 2014 Baseline Groundwater Monitoring Event. Most recent data shown.
 - MCB Chlorobenzene
 - 1,000— Contour line of equal concentration of CB in micrograms per liter dashed where approximate, dashed where inferred
- Well Identifier Notes:**
- MW = Montrose Monitoring Wells
 - G, GW, SWL, PZL, GW = Del Amo Monitoring Wells
 - P, MW-2T, MW-xHD = American Polystyrene Monitoring Wells
 - AMW, AMP, ARB = Armco Monitoring Wells
 - DAC, TMW, WCC, MWB = Boeing Monitoring Wells
 - BL, P = International Light Metals Monitoring Wells
 - IRZB, IRZMW = Boeing Bioremediation Wells

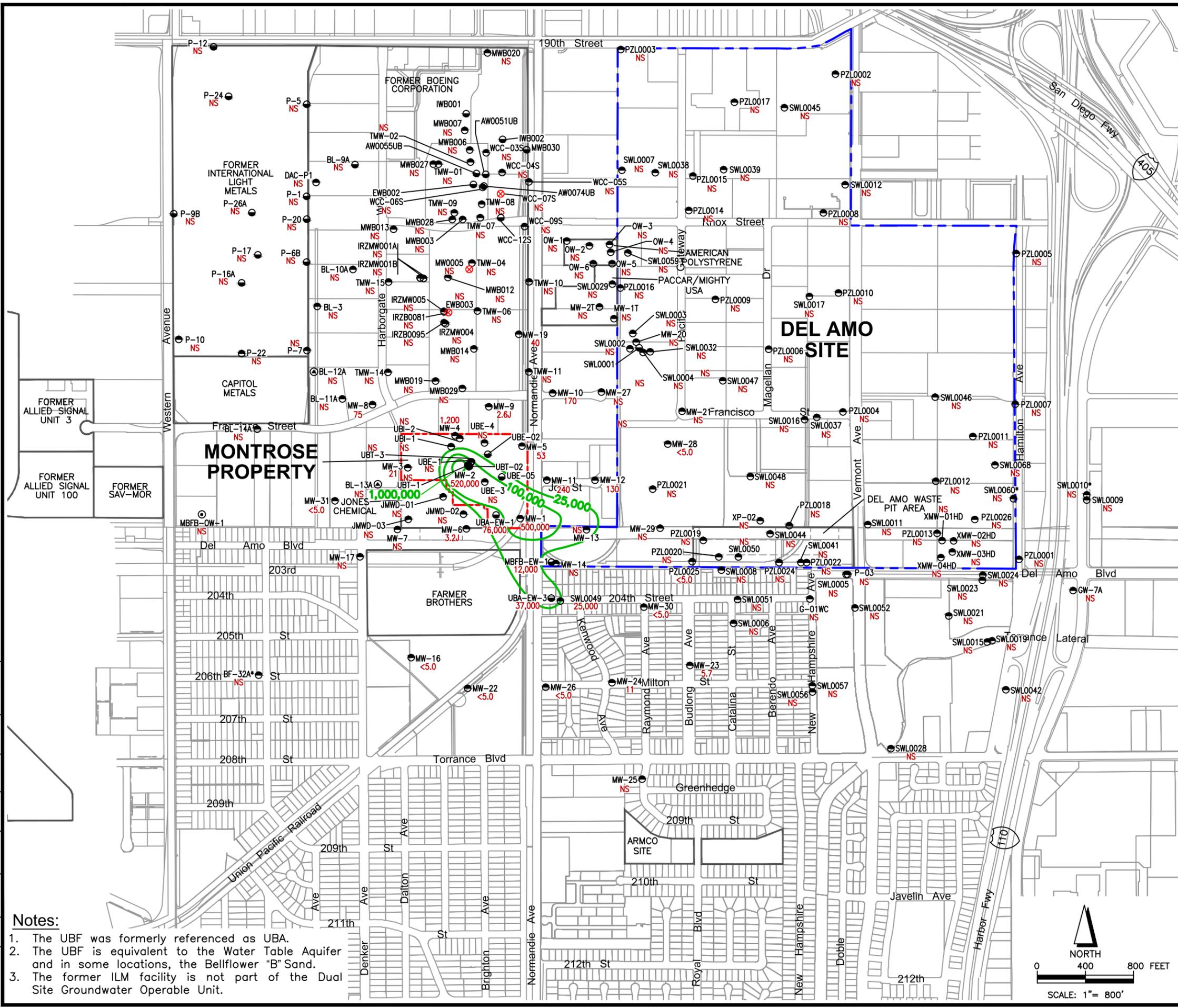
- References:**
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 2. Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 3. Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 4. URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

- Notes:**
1. For MCB, the Federal Maximum Contaminant Level (MCL) is 100 µg/L, and the California MCL is 70 µg/L.
 2. Not all wells owned by others are shown.
 3. The UBF was formerly referenced as UBA.
 4. The UBF is equivalent to the Water Table Aquifer and in some locations, the Belflower "B" Sand.
 5. The former ILM facility is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
Chlorobenzene in UBF		
Date: 03-15	Montrose Superfund Site	
Project No. 60288979	AECOM	Figure 6

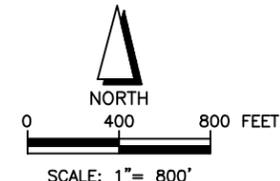
FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\BASELINE\60288979.13.02_MONTROSE_PCBSA_IN_GW_UBA_0315.DWG



- Legend:**
- Location of Current Montrose Property Boundary
 - Location of Current Del Amo Superfund Site Boundary
- Well Legend:**
- Upper Belflower Aquitard (UBF) Groundwater Monitoring Well Location
 - Cluster Well
 - Boeing Extraction Wells
 - Extraction Wells
 - Well screened from the water table zone into the Middle Belflower 'C' sand.
 - pCBSA concentration in micrograms per liter. 2013 to September 2014 Baseline Groundwater Monitoring Event. Most recent data shown.
 - 37,000
 - pCBSA
 - 4-Chlorobenzenesulfonic Acid
 - Contour line of equal concentration of pCBSA in micrograms per liter dashed where approximate, queried where inferred based on most recent sampling results.
- Well Identifier Notes:**
- MW = Montrose Monitor Wells
 - G, GW, SWL, PZL, GW, P, = Del Amo Monitor Wells
 - MW-2T, MW-xHD
 - OW = American Polystyrene Monitor Wells
 - AMW, AMP, ARB = Armco Monitor Wells
 - DAC, TMW, WCC, MWB = Boeing Monitor Wells
 - BL = Industrial Light Metals Monitor Wells
 - IRZB, IRZMW = Boeing Bioremediation Wells

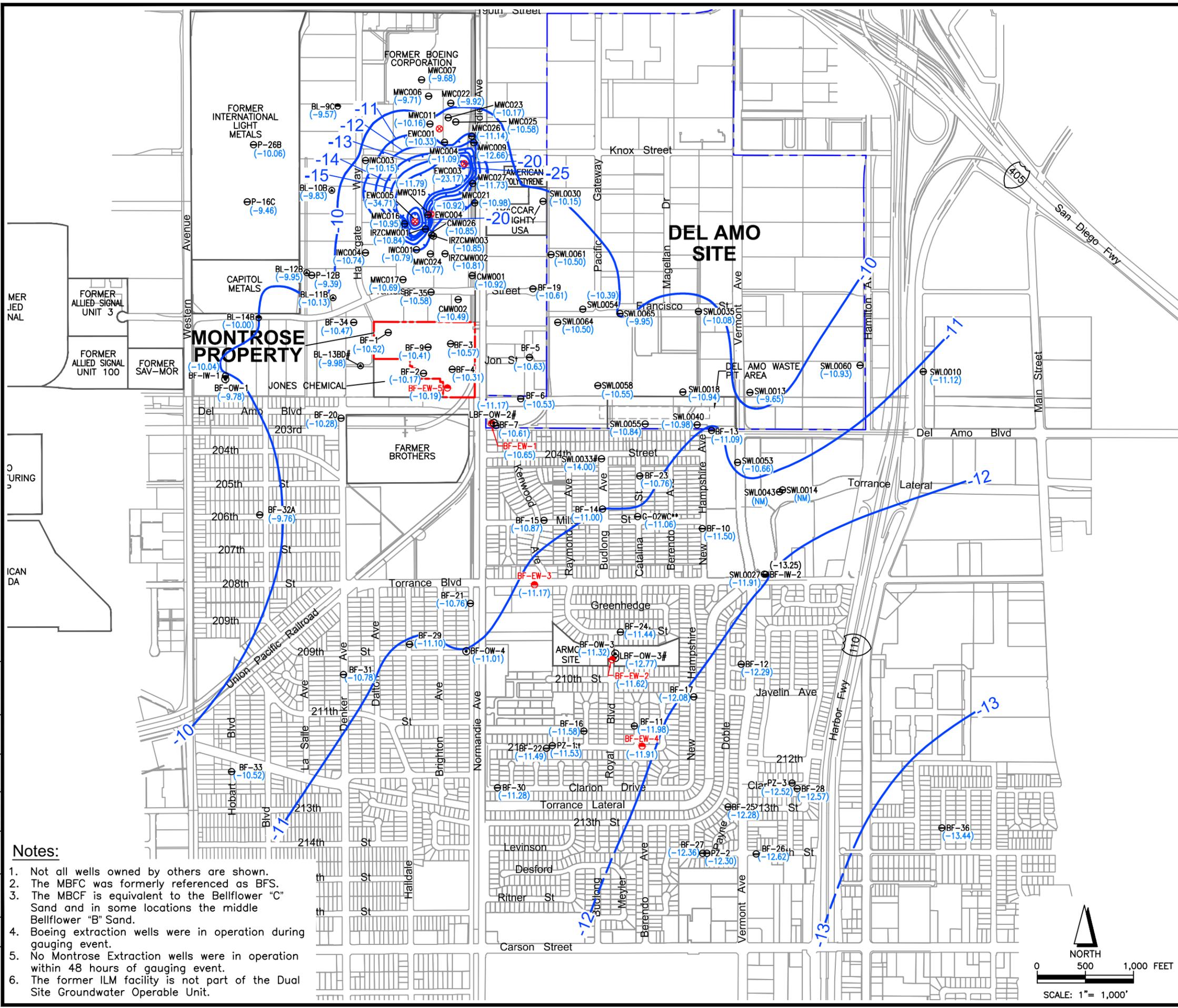
- Notes:**
- The UBF was formerly referenced as UBA.
 - The UBF is equivalent to the Water Table Aquifer and in some locations, the Belflower "B" Sand.
 - The former ILM facility is not part of the Dual Site Groundwater Operable Unit.

- References:**
- Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 - Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 - Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 - URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.



Montrose Chemical Corporation		
pCBSA in UBF		
Date: 03-15	Montrose Superfund Site	
Project No. 60288979	AECOM	Figure 7

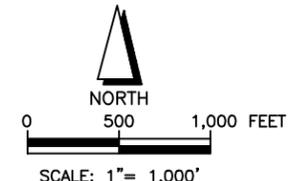
FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GWS\MAPS\CURRENT\GWS\MAPS\GWBFC\BFS\0315.DWG



- Legend:**
- Location of Montrose Property Boundary
 - Location of Del Amo Superfund Site Boundary
- Well Legend:**
- ⊙ SWL0013 Middle Belflower "C" Sand (MBFC) Groundwater Monitoring Well Location
 - ⊙ BL-12B Cluster Well
 - ⊙ EWC003 Boeing Extraction Wells
 - ⊙ BF-OW-3 Middle Belflower "B" Observation Well
 - ⊙ BF-EW-3 Montrose TGRS Extraction Wells
 - ⊙ BF-IW-3 Montrose TGRS Injection Wells
 - (-9.65) Groundwater Elevation in Feet Mean Sea Level (MSL) Measured September 2014
 - (-13.25) Not used for contouring purposes
 - (NM) Not measured
 - 10.0 Interpreted Groundwater Elevation Contours in Feet (MSL.) Contour Intervals are 1.00 Feet. Dashed where Inferred.
 - # = Well is screened in the Lower Belflower Aquifer, not used for contouring
- Well Identifier Notes:**
- BF = Montrose Monitoring Wells
 - SWL = Del Amo Monitoring Wells
 - P = International Light Metals Monitoring Wells
 - CMW, MWC = Boeing Monitoring Wells
 - ECW, BL, IWC = Boeing Bioremediation Wells
 - IRZC, IRZMW = Belflower Sands
 - BFS = Belflower Sands
- Belflower Sand is equivalent to Middle Belflower "C" Sand
- G-02WC is hydraulically consistent with the BFS, although it is screened 82-92 ft bgs ** and characterized as a MBFB sand well by Shell.

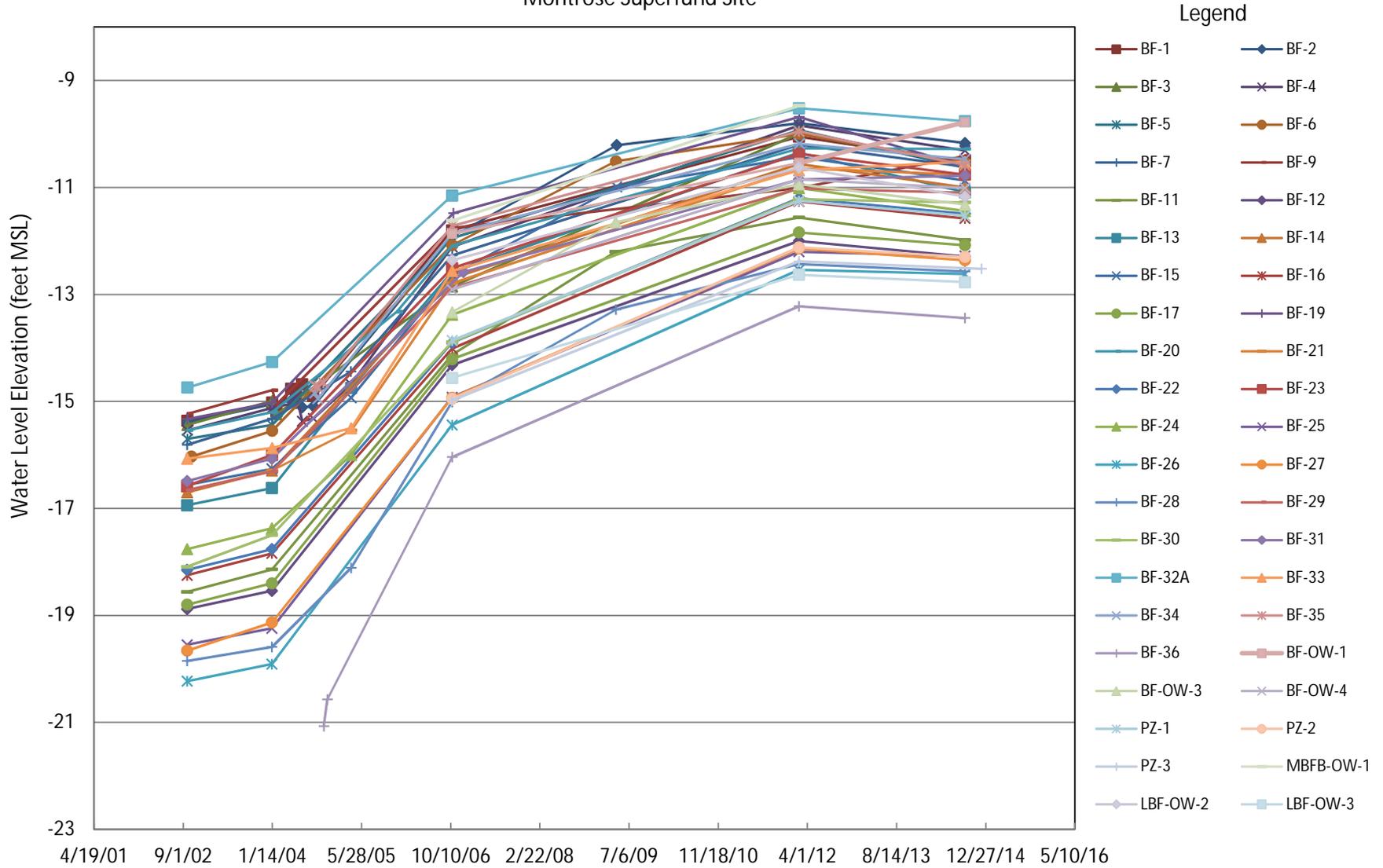
- References:**
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 2. Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 3. Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 4. URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

- Notes:**
1. Not all wells owned by others are shown.
 2. The MBFC was formerly referenced as BFS.
 3. The MBCF is equivalent to the Belflower "C" Sand and in some locations the middle Belflower "B" Sand.
 4. Boeing extraction wells were in operation during gauging event.
 5. No Montrose Extraction wells were in operation within 48 hours of gauging event.
 6. The former ILM facility is not part of the Dual Site Groundwater Operable Unit.

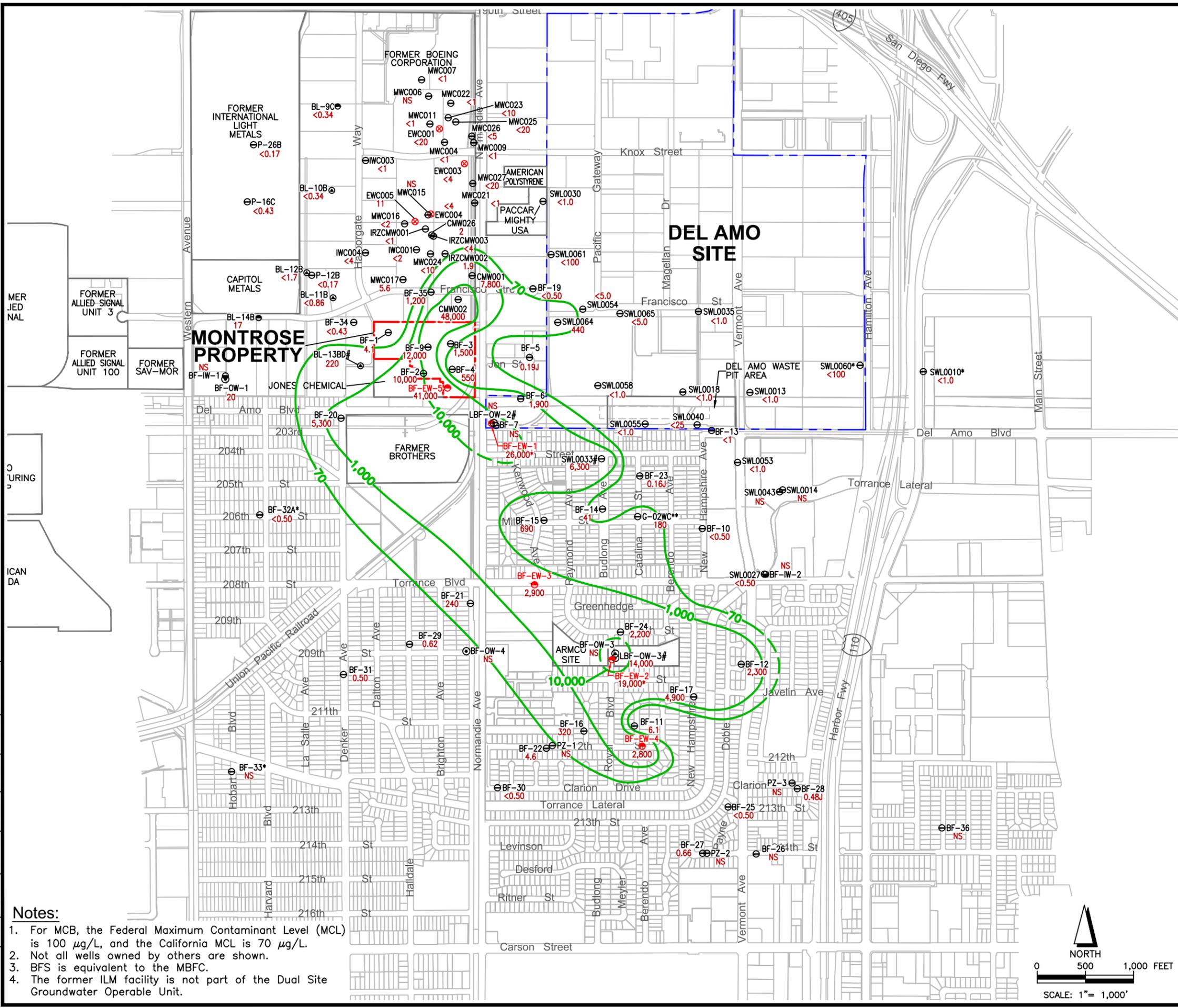


Montrose Chemical Corporation		
2014 Groundwater Elevations Map, MBFC		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	8

Figure 9
 Water Level Hydrograph, MBFC Aquifer
 2014 Baseline MACR
 Montrose Superfund Site



FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GWS\MAPS\CURRENT\GWS\MAPS\GWBASLINE\60288979.13.02_MONTROSE_CB_IN_GW_MBCF_BFS.0315.DWG

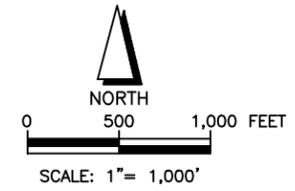


- Legend:**
- Location of Montrose Property Boundary
 - Location of Del Amo Superfund Site Boundary
- Well Legend:**
- ⊙ SWL0013 Middle Bellflower "C" Sand (MBFC) Groundwater Monitoring Well Location
 - ⊙ BL-12B Cluster Well
 - ⊙ EWC003 Boeing Extraction Wells
 - ⊙ BF-OW-3 Middle Bellflower "B" Observation Well
 - ⊙ BF-EW-3 Montrose TGRS Extraction Wells
- 1,100** MCB concentration in micrograms per liter 2013 to October 2014
- <math><1.0</math>** Less than; Numerical value is the limit of detection for this analysis. Wells sampled by Tetra Tech are reported above the MDL
- *** TRGS well sample collected 2005 - 2012
- MCB** Chlorobenzene
- 1,000** Contour line of equal concentration of MCB in micrograms per liter dashed where approximate, dashed where inferred
- *** = Well is screened from the MBFC Middle Bellflower "C" Sand
- #** = Well is screened in the Lower Bellflower Aquifer
- Well Identifier Notes:**
- BF = Montrose Monitoring Wells
 - SWL = Del Amo Monitoring Wells
 - P = International Light Metals Monitoring Wells
 - CMW, MWC = Boeing Monitoring Wells
 - ECW, BL, IWC = Boeing Bioremediation Wells
 - IRZC, IRZCMW = Boeing Monitoring Wells
 - BFS = Bellflower Sands
- Bellflower Sand is equivalent to Middle Bellflower "C" Sand
- ** G-02WC is hydraulically consistent with the BFS, although it is screened 82-92 ft bgs and characterized as a MBFB sand well by Shell.

References:

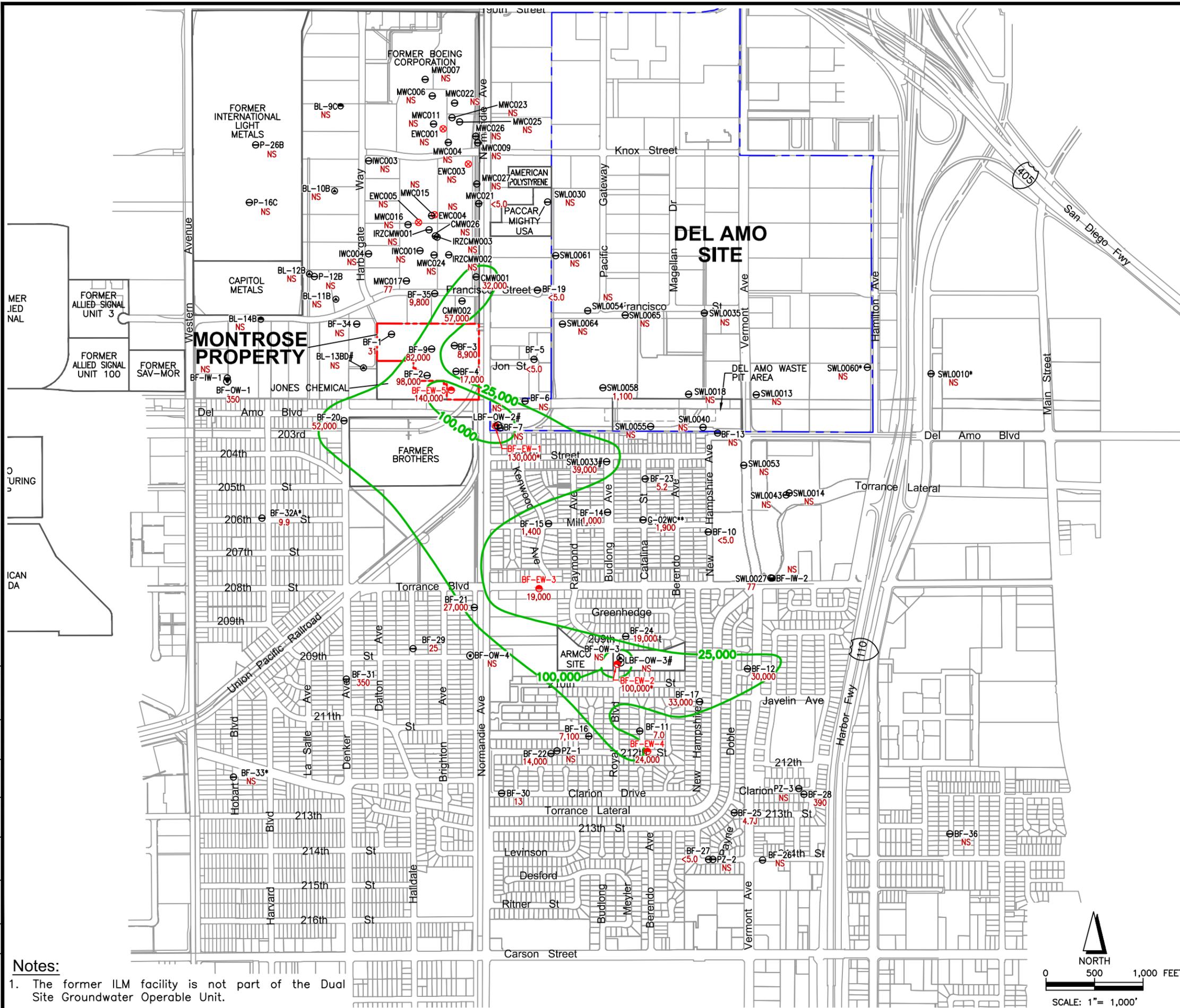
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
2. Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
3. Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
4. URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

- Notes:**
1. For MCB, the Federal Maximum Contaminant Level (MCL) is $100\ \mu\text{g/L}$, and the California MCL is $70\ \mu\text{g/L}$.
 2. Not all wells owned by others are shown.
 3. BFS is equivalent to the MBFC.
 4. The former ILM facility is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
Chlorobenzene in MBFC Aquifer		
Date: 03-15	Montrose Superfund Site	
Project No. 60288979	AECOM	Figure 10

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\MONTROSE_PCBSA IN GW_MBFC_BFS.0315.DWG



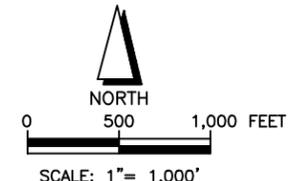
- Legend:**
- Location of Current Montrose Property Boundary
 - Location of Current Del Amo Superfund Site Boundary
- Well Legend:**
- ⊙ SWL0013 Middle Bellflower "C" Sand (MBFC) Groundwater Monitoring Well Location
 - ⊙ BL-12B Cluster Well
 - ⊙ EW0003 Boeing Extraction Wells
 - ⊙ BF-OW-3 Middle Bellflower "B" Observation Well
 - ⊙ BF-EW-3 Montrose TGRS Extraction Wells
- 140,000 pCBSA concentration in micrograms per liter 2013 to October 2014
- NA Not Analyzed
- <5.0 Less than; Numerical value is the limit of detection for this analysis. Wells sampled by Tetra Tech are reported above the MDL
- * TRGS well sample collected 2005 - 2012
- pCBSA 4-Chlorobenzenesulfonic Acid
- Contour line of equal concentration of pCBSA in micrograms per liter dashed where approximate, queried where inferred based on most recent sampling results.

- 25,000
 - 100,000
- * = Well is screened from the MBFC Middle Bellflower "C" Sand
- # = Well is screened in the Lower Bellflower Aquifer
- Well Identifier Notes:**
- BF = Montrose Monitoring Wells
 - SWL = Del Amo Monitoring Wells
 - P = International Light Metals Monitoring Wells
 - CMW, MWC = Boeing Monitoring Wells
 - ECW, BL, IWC = Boeing Bioremediation Wells
 - IRZC, IRZMW = Boeing Bioremediation Wells
 - BFS = Bellflower Sands
- Bellflower Sand is equivalent to Middle Bellflower "C" Sand
- ** G-02WC is hydraulically consistent with the BFS, although it is screened 82-92 ft bgs and characterized as a MBFB sand well by Shell.

- References:**
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 2. Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 3. Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 4. URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

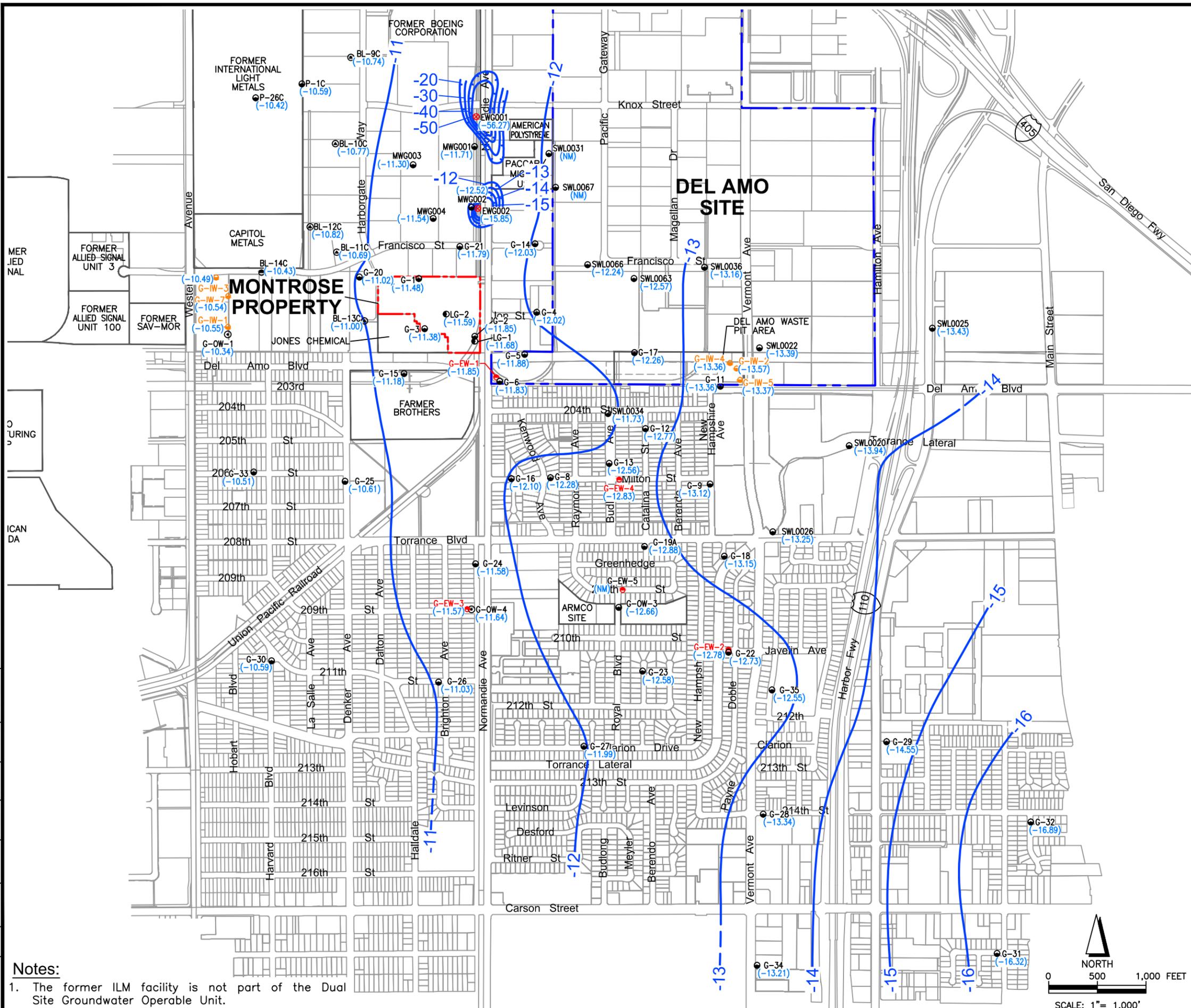
Notes:

1. The former ILM facility is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
pCBSA in MBFC Aquifer		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	11

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GWS\MAPS\CURRENT\GWS\MAPS\GAGE\0315.DWG



Legend:

- Location of Montrose Property Boundary
- Location of Del Amo Superfund Site Boundary

Well Legend:

- G-13 Gage Groundwater Monitoring Well Location
- G-OW-3 Gage Aquifer Observation Well
- LG-2 Lower Gage Aquifer Monitoring Well
- EGC003 Boeing Extraction Wells
- G-EW-3 Montrose TGRS Extraction Wells
- G-IW-3 Montrose TGRS Injection Wells
- (-9.06) Groundwater Elevation in Feet Mean Sea Level (MSL) Measured September 2014
- (UTM) Unable to Measure
- 12.0 Interpreted Groundwater Elevation Contours in Feet (MSL.) Contour Intervals are 1.00 Feet

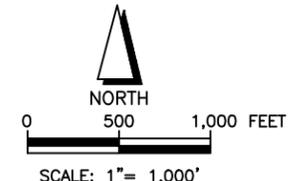
Well Identifier Notes:

- G = Montrose Monitoring Wells
- SWL = Del Amo Monitoring Wells
- P = International Light Metals Monitoring Wells
- MWG = Boeing Monitoring Wells
- EWG, BL, IWG = Boeing Bioremediation Wells

- References:**
- Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 - Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 - Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 - URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

Notes:

- The former ILM facility is not part of the Dual Site Groundwater Operable Unit.

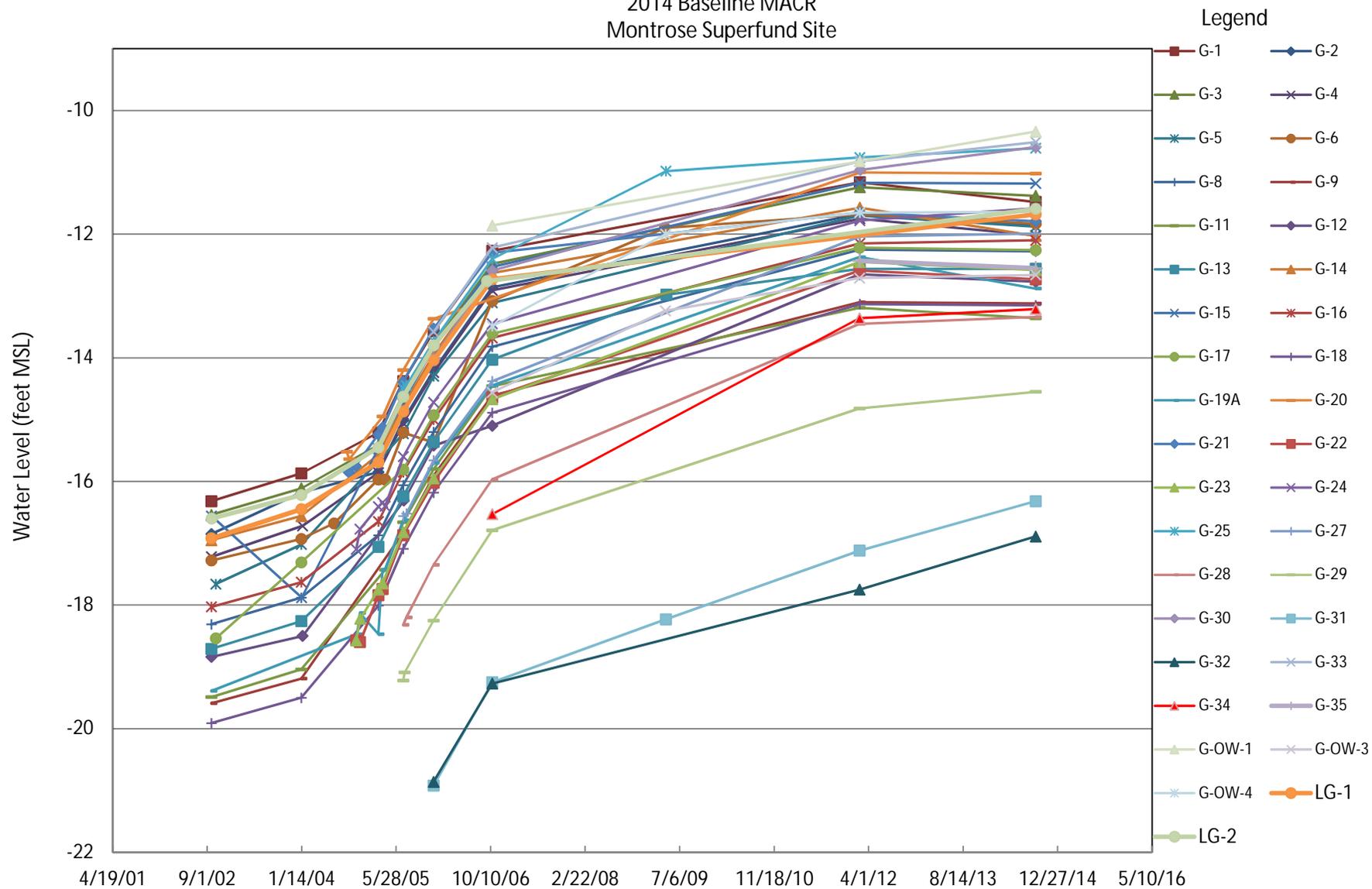


Montrose Chemical Corporation

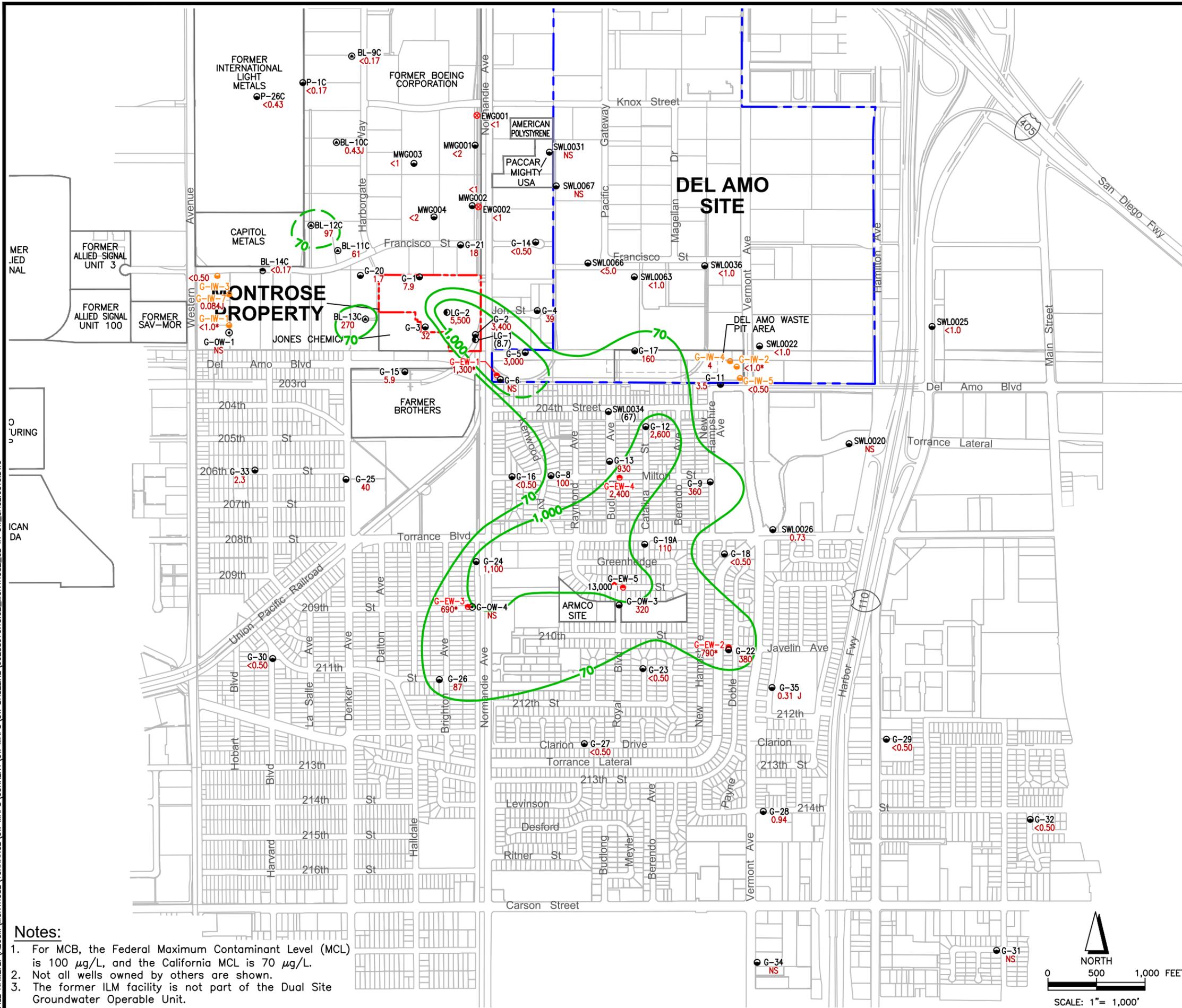
2014 Groundwater Elevations Map, Gage Aquifer

Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	12

Figure 13
Water Level Hydrograph, Gage Aquifer
2014 Baseline MACR
Montrose Superfund Site



FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\GW BASELINE\60288979.13.02_MONTROSE_CB_IN_GW_GAGE_0315.DWG



Legend:

- - - Location of Montrose Property Boundary
- - - Location of Del Amo Superfund Site Boundary

Well Legend:

- G-13 Gage Groundwater Monitoring Well Location
- ⊙ G-OW-3 ⊙ Gage Aquifer Observation Well
- LG-2 Lower Gage Aquifer Monitoring Well
- ⊙ EGC003 Boeing Extraction Wells
- G-EW-3 Montrose TGRS Extraction Wells
- G-IW-3 Montrose TGRS Injection Wells
- G-17 MCB concentration in micrograms per liter 2013 to October 2014
- 160 Less than; Numerical value is the limit of detection for this analysis.
- <0.50 MCB Chlorobenzene
- (67) Concentration not contoured
- NS Not Sampled
- J Estimated Value
- * TRGS well sample collected 2005 – 2012
- ^ G-EW-5 results are not representative of the Gage Aquifer and are not contoured
- 70 Contour line of equal concentration of MCB in micrograms per liter dashed where approximate, dashed where inferred

Well Identifier Notes:

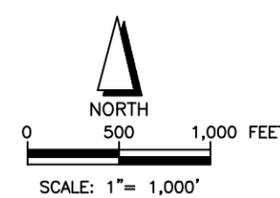
- G = Montrose Monitoring Wells
- SWL = Del Amo Monitoring Wells
- P = International Light Metals Monitoring Wells
- MWG = Boeing Monitoring Wells
- EWG, BL, IWG = Boeing Bioremediation Wells

References:

- Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
- Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
- Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
- URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

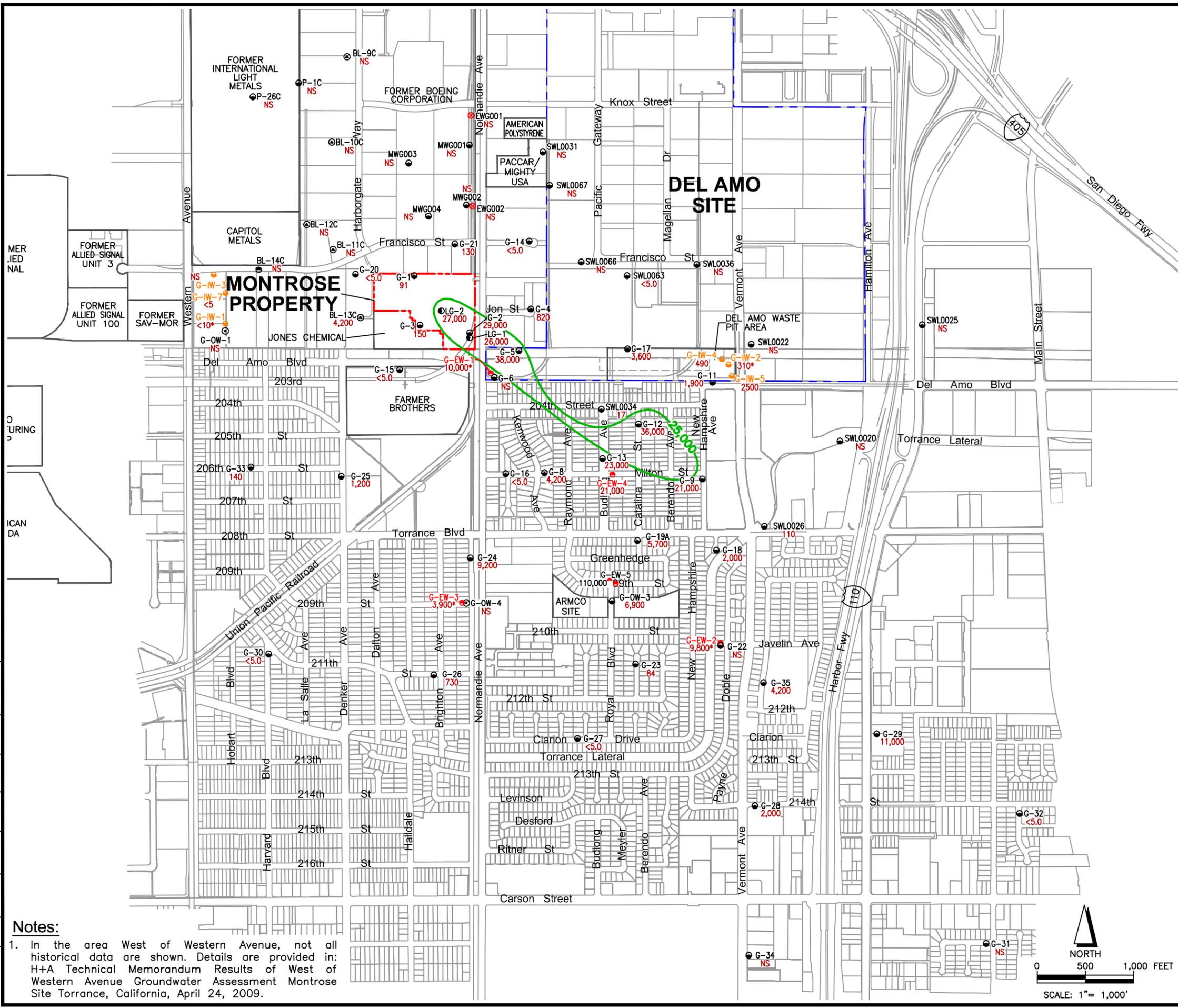
Notes:

- For MCB, the Federal Maximum Contaminant Level (MCL) is 100 µg/L, and the California MCL is 70 µg/L.
- Not all wells owned by others are shown.
- The former ILM facility is not part of the Dual Site Groundwater Operable Unit.



Montrose Chemical Corporation		
Chlorobenzene in Gage Aquifer		
Date: 03-15	Montrose Superfund Site	
Project No. 60288979		Figure 14

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GWS\CURRENT\GWS\MAPS\GAGE\GAGE_0315.DWG



Legend:
 - - - - - Location of Current Montrose Property Boundary
 - - - - - Location of Current Del Amo Superfund Site Boundary

Well Legend:

- G-13 Gage Groundwater Monitoring Well Location
- ⊙ G-OW-3 Gage Aquifer Observation Well
- ⊙ LG-2 Lower Gage Aquifer Monitoring Well
- ⊙ EGC003 Boeing Extraction Wells
- ⊙ G-EW-3 Montrose TGRS Extraction Wells
- ⊙ G-IW-3 Montrose TGRS Injection Wells
- G-17 3,600 pCBSA concentration in micrograms per liter 2013 to October 2014
- <5.0 Less than; Numerical value is the limit of detection for this analysis.
- pCBSA 4-Chlorobenzenesulfonic Acid
- NA Not Analyzed
- TRGS well sample collected 2005 – 2012
- ^ G-EW-5 results are not representative of the Gage Aquifer and are not contoured
- 25,000 Contour line of equal concentration of pCBSA in micrograms per liter dashed where approximate, queried where inferred based on most recent sampling results.

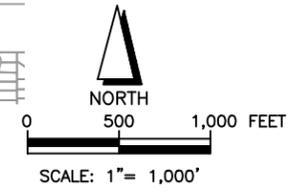
Well Identifier Notes:

- G = Montrose Monitoring Wells
- SWL = Del Amo Monitoring Wells
- P = International Light Metals Monitoring Wells
- MWG = Boeing Monitoring Wells
- EWG, BL, IWG = Boeing Bioremediation Wells

- References:**
1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.
 2. Avocet, 2014. September 2014 Annual Groundwater and GET System Performance Monitoring Report, Boeing Former C-6 Facility, 19502 Normandie Ave., Los Angeles, California.
 3. Tetra Tech, 2014. 2014 Annual Groundwater Monitoring and Inspection Report, Former International Light Metals Facility, Torrance, California.
 4. URS, 2015. 2014 Baseline Groundwater Monitoring Report, Dual Site Groundwater Operable Unit, Montrose Chemical and Del Amo Superfund Sites, Los Angeles, California.

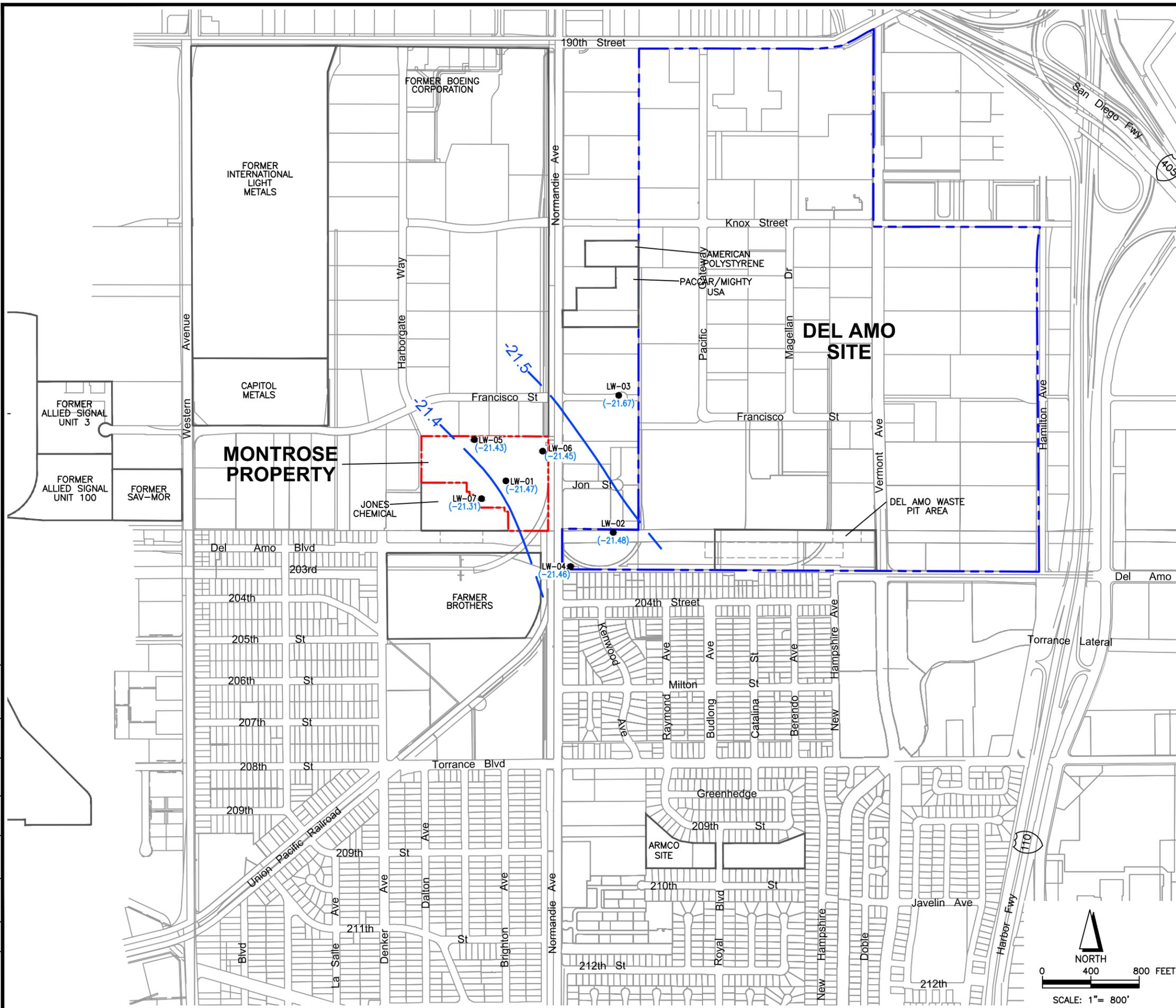
Notes:

1. In the area West of Western Avenue, not all historical data are shown. Details are provided in: H+A Technical Memorandum Results of West of Western Avenue Groundwater Assessment Montrose Site Torrance, California, April 24, 2009.



Montrose Chemical Corporation		
pCBSA in Gage Aquifer		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	15

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\BASELINE\60288979.13.02_MONTROSE_GW_LYNW.0315.DWG

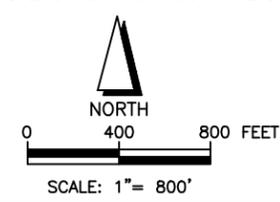


Legend:
 - - - - - Location of Montrose Property Boundary
 - - - - - Location of Del Amo Superfund Site Boundary

Well Legend:
 ● LW-03 Groundwater Monitoring Well Location
 (-23.47) Groundwater Elevation in Feet Mean Sea Level (MSL) Measured September 2014
 -21.5 Interpreted Groundwater Elevation Contours in Feet (MSL.) Contour Intervals are 0.10 Feet

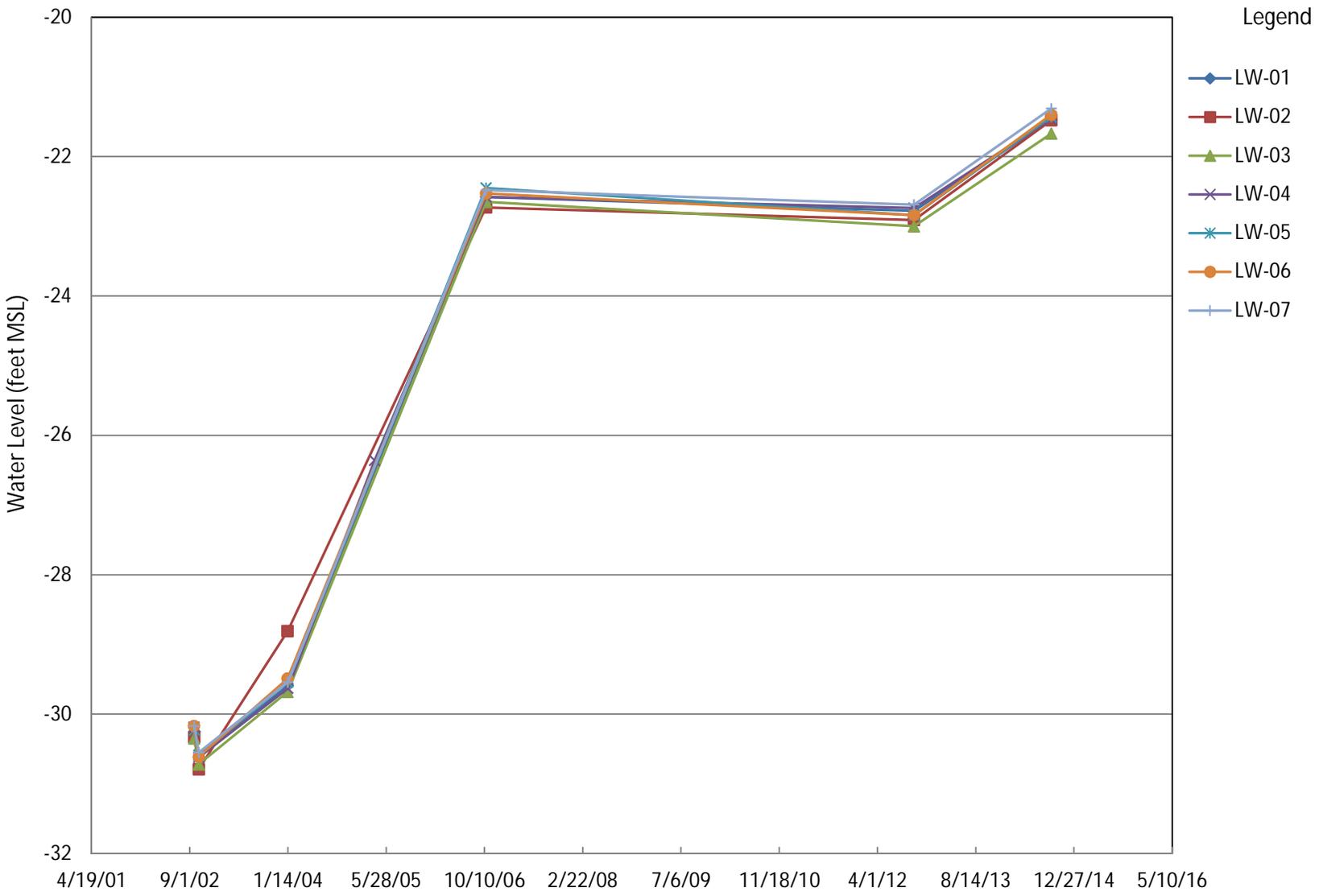
Well Identifier Notes:
 LW = Montrose Monitoring Wells

References:
 1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.

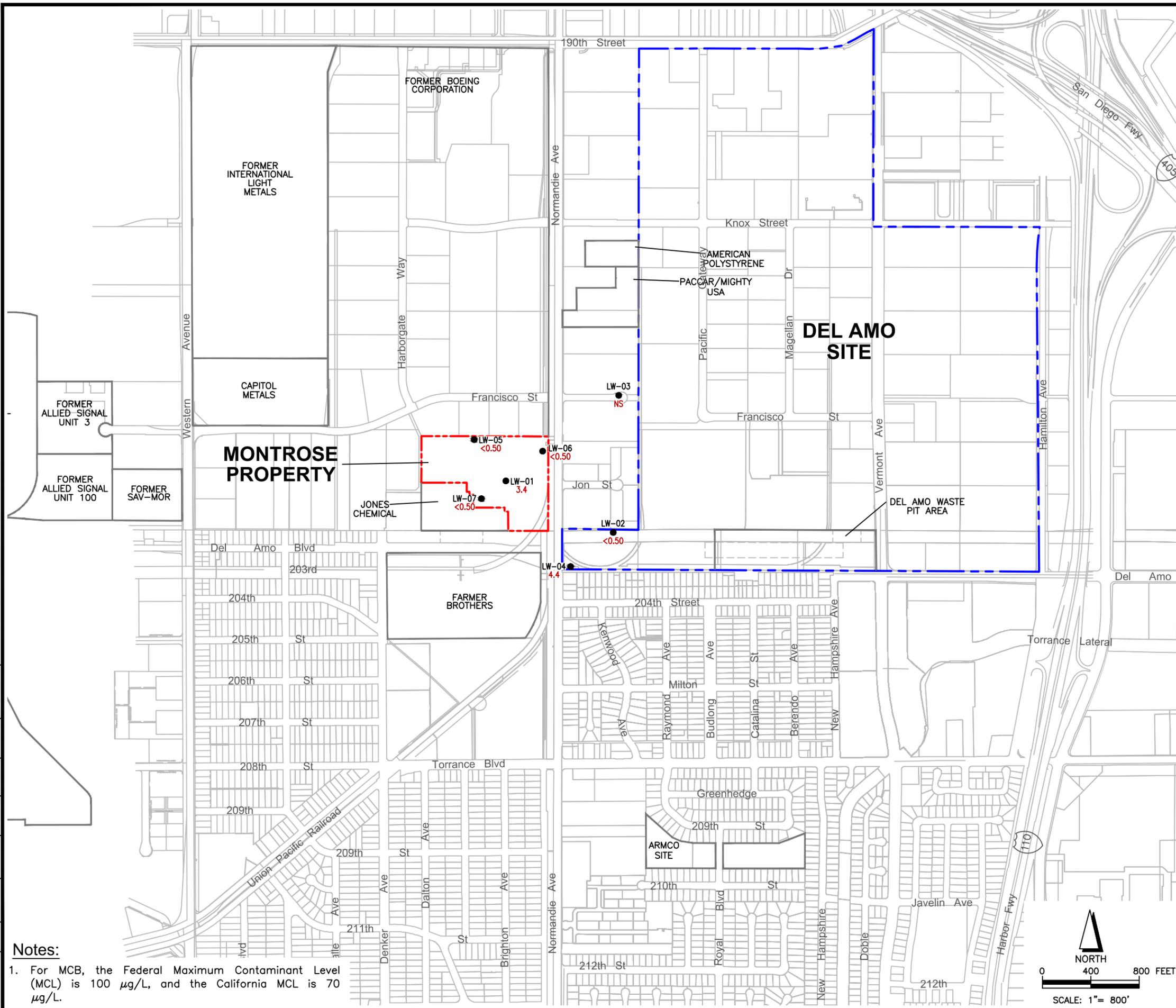


Montrose Chemical Corporation		
2014 Groundwater Elevations Map, Lynwood Aquifer		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	16

Figure 17
Water Level Hydrograph, Lynwood Aquifer
2014 Baseline MACR
Montrose Superfund Site



FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\GW BASELINE\60288979.13.02_MONTROSE_CB IN GW_LYNW.0315.DWG



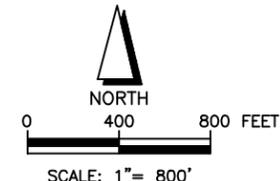
Legend:
 - - - - - Location of Montrose Property Boundary
 - - - - - Location of Del Amo Superfund Site Boundary

Well Legend:
 LW-01 ● Lynwood Aquifer Monitoring Well
 <0.50 Less than; Numerical value is the limit of detection for this analysis.
 MCB concentration in micrograms per liter.
 LW-04 4.4 2013 to September 2014 Baseline Ground-water Monitoring Event. Most recent data shown.
 NS Not Sampled
 MCB Chlorobenzene

Well Identifier Notes:
 LW = Montrose Monitoring Wells

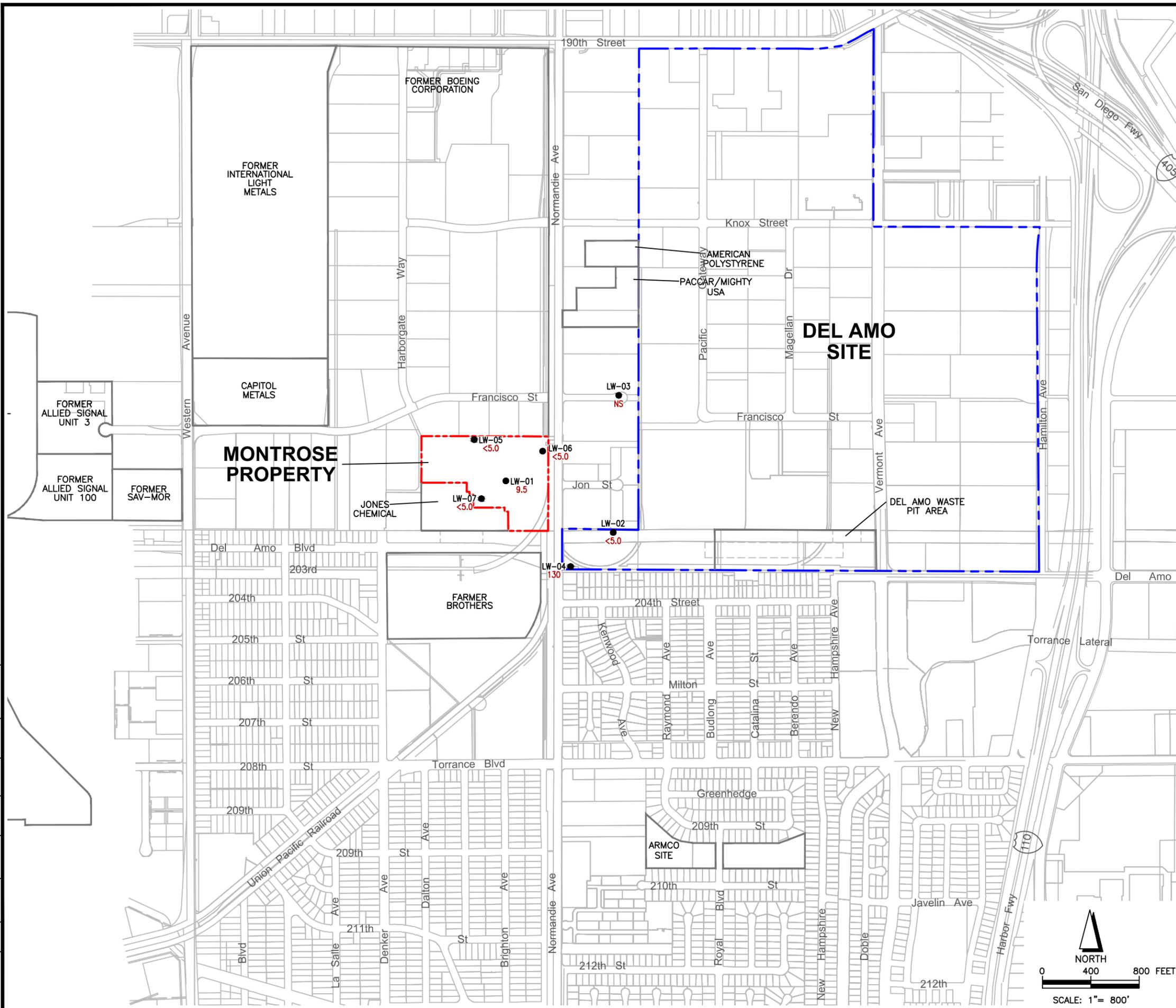
Notes:
 1. For MCB, the Federal Maximum Contaminant Level (MCL) is 100 µg/L, and the California MCL is 70 µg/L.

References:
 1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArcInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.



Montrose Chemical Corporation		
Chlorobenzene in Lynwood Aquifer		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	18

FILE NAME: Z:\AECOM\MONTROSE\TORRANCE\GW MAPS\CURRENT\GW MAPS\BASELINE\60288979.13.02_MONTROSE_PCBSA IN GW_LYNW.0315.DWG

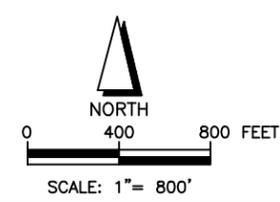


Legend:
 - - - - - Location of Montrose Property Boundary
 - - - - - Location of Del Amo Superfund Site Boundary

Well Legend:
 LW-01 ● Lynwood Aquifer Monitoring Well
 <5.0 Less than; Numerical value is the limit of detection for this analysis.
 LW-04 130 pCBSA concentration in micrograms per liter. Samples collected 2014
 NS Not Sampled
 pCBSA 4-Chlorobenzenesulfonic Acid

Well Identifier Notes:
 LW = Montrose Monitoring Wells

References:
 1. Parcel Boundary Information from Los Angeles, CA, Department of Public Works Bureau of Engineering Online ArcInfo GIS database, Copyright 2012. Montrose Chemical Corporation Boundary Survey conducted August 13, 2001 by Dulin-Boynton Land Surveyors.



Montrose Chemical Corporation		
pCBSA in Lynwood Aquifer		
Date: 03-15	Montrose Superfund Site	Figure
Project No. 60288979	AECOM	19

APPENDIX A

**LOW FLOW/MINIMAL DRAWDOWN
WELL SAMPLING LOG**

APPENDIX B

LABORATORY RESULTS AND ELECTRONIC DATA DELIVERABLES

APPENDIX C

DATA QUALITY ASSESSMENT AND DATA VALIDATION REPORT

APPENDIX D

**CHLOROBENZENE
CONCENTRATION VS TIME GRAPHS
FOR SELECTED WELLS**