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By Alameda County Environmental Health 9:35 am, Aug 18, 2015

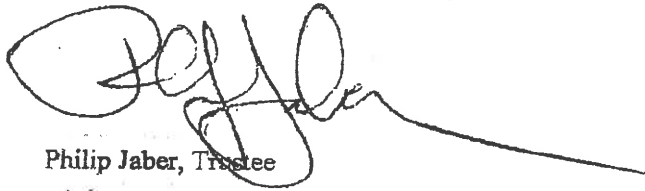
Mr. Mark Detterman
Alameda County Environmental Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: Former Olympic Service Station
1436 Grant Avenue
San Lorenzo, California
ACEHD Case No. RO0000373, GeoTacker No. T0600102256

Dear Mr. Detterman:

I declare, under penalty of perjury, that the information and or recommendations contained in the attached document are true and correct to the best of my knowledge.

Sincerely,
George and Frida Jaber 1989 Family Trust



Philip Jaber, Trustee



3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

August 12, 2015
Project No. 2115-1436-01

Mr. Mark Detterman, P.G.
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Focused Site Conceptual Model and Work Plan for Additional Site Assessment and Expanded Water Supply Well Survey**
Former Olympic Service Station
1436 Grant Avenue, San Lorenzo, California
LOP Case #RO0000373

Dear Mr. Detterman:

Stratus Environmental, Inc. (Stratus), on behalf of Mr. Philip Jaber and the George and Frida Jaber 1989 Family Trust, has prepared this *Focused Site Conceptual Model (SCM) and Work Plan for Additional Site Assessment and Expanded Water Supply Well Survey (Work Plan)* for the Former Olympic Service Station located at 1436 Grant Avenue in San Lorenzo, California (the site, see Figures 1 and 2). Alameda County Environmental Health Department (ACEHD) currently regulates an environmental case on the subject property relating to a historical release of motor vehicle fuel to the subsurface. In a letter dated November 19, 2014, ACEHD personnel requested that historical data available for the subject property be compiled and presented in an SCM. This task has been completed and Table 1 presents the focused SCM in the format specified by ACEHD.

As part of the SCM, ACEHD requested that data gaps relating to the environmental case be identified and that a work plan be prepared to rectify this condition. Based on recent groundwater analytical data, the lateral extent of fuel contaminant impact to the subsurface cannot be fully constrained using the existing network of groundwater monitoring wells in place at the site. In order to address this condition, Stratus is proposing to drill and install two shallow screened groundwater monitoring wells at the site. In addition, after attending a recent meeting with ACEHD personnel, Stratus is proposing to install two additional soil vapor sampling points in the site vicinity, and perform a door-to-door reconnaissance within a 500-foot radius to the west of the site in order to attempt to locate any existing, but undocumented, water supply wells in this area. Details associated with the proposed monitoring well and soil vapor sampling point installation project and expanded water supply well survey are provided in the following subsections of this SCM/Work Plan.

SITE DESCRIPTION

The subject site is located on the southern corner of the intersection of Grant Avenue and Channel Street in San Lorenzo, California. The site previously operated as an Olympic service station; it is currently operated as San Lorenzo Auto Repair. The current configuration of the property is depicted on Figure 2.

The adjoining property to the southwest and south is developed as the Arroyo Center strip mall. Properties to the north and northwest (across Grant Avenue) are developed as single family detached residences, and the property to the east and northeast (across Channel Street) has been developed as multi-family housing units (apartments or condominiums). A parking lot and athletic fields for Arroyo High School are situated on property north of Grant Avenue, across the intersection.

SITE BACKGROUND SUMMARY

The following information has been summarized based on information presented in reports prepared by Reese Construction, Aqua Science Engineers, Inc. (ASE), and Conestoga-Rovers & Associates (CRA), and work performed by Stratus.

The former underground storage tanks (USTs) and associated product dispensers were removed in 1998. Eight groundwater monitoring wells (MW-1 through MW-4, MW-5A/B, MW-6A/B), five soil vapor sampling points (SV-1 through SV-5), seven extraction wells (EX-1 through EX-7), two ozone injection wells (IW-1 and IW-2), and nineteen exploratory soil borings (BH-A through BH-C, B-1 through B-13, and B-13A through B-13C) were installed between 1999 and 2014. Locations of the wells, vapor sampling points, and soil borings are shown on Figure 2. Drilling and well construction details are summarized in Table 2.

Chemicals of concern (COCs) at this site include gasoline-range organics (GRO)/total petroleum hydrocarbons as gasoline (TPHG), benzene, toluene, ethylbenzene, and xylenes (BTEX), and the gasoline additive methyl tertiary butyl ether (MTBE). Between 1999 and 2013, groundwater levels beneath the property have ranged between approximately 5.2 and 8.4 feet below ground surface (bgs). The site is currently under a semi-annual groundwater monitoring and sampling program. Figures 3 and 8 present a summary of recent groundwater analytical data.

Groundwater samples have historically been analyzed for diesel-range organics (DRO) and the fuel additives di-isopropyl ether (DIPE), tertiary amyl butyl ether (TAME), ethyl tertiary butyl ether (ETBE), tertiary butyl alcohol (TBA), 1,2-dichlorethane (1,2-DCA), 1,2-dibromoethane (EDB), and ethanol. These analytes are not currently included in the groundwater analytical suite.

In general, most soils situated in the upper 15 to 18 feet of the subsurface appear to be predominately fine grained (mixtures of silt/clay, exclusive of fill material). Below this depth, to approximately 25 feet bgs, soil strata have been described as silty sand, clayey sand, and sand.

Soil vapor sampling was performed at the site in 2010. In general, relatively high concentrations of GRO and BTEX were detected in these samples. GRO and benzene were reported at maximum levels of 52,000,000 micrograms per cubic meter (mg/m^3) and 160,000 mg/m^3 , respectively, at this time. This document includes a proposal to install two additional sampling points, and collection of post dual phase extraction (DPE) remediation samples (discussed below).

Most of the petroleum hydrocarbon impact to the subsurface appears to have been situated above approximately 20 feet bgs, and in relatively close proximity to the former USTs and fuel dispenser islands (samples collected prior to DPE remediation discussed below). In a September 2012 Corrective Action Plan (CAP), Stratus estimated that a mass of 955 pounds of TPHG/GRO were present in soil at the site above 20 feet bgs.

Based on our general understanding of the distribution of contaminants beneath the property, site geologic conditions, and depth to groundwater levels, DPE was selected as a possible remedial alternative for the site. In June 2011, a DPE pilot test was performed at the site, using wells EX-1 through EX-3 for extraction. Based on the findings of this test, DPE was deemed by Stratus to be a viable remedial alternative for the site. Stratus subsequently prepared a (CAP) for the property, recommending use of DPE at the site, and after receiving approval of this document, installed four additional extraction wells (EX-4 through EX-7).

In July 2014, Stratus initiated full scale DPE at the subject site. As of June 2, 2015, an estimated mass of 946 pounds of GRO have been removed from the subsurface in the vapor phase. As of December 4, 2014, approximately 979,100 gallons of groundwater have been extracted from the subsurface, treated onsite, and discharged to the local sewer system. Influent vapor phase concentrations of fuel contaminants have declined appreciably over time, and as of June 2015, relatively low concentrations of fuel contaminants were being removed from the subsurface.

Figures 3 through 8 depict concentrations and the approximate distribution of GRO, benzene, and MTBE in groundwater using groundwater analytical data collected in April 2015. A review of these data figures illustrates that samples collected from groundwater monitoring wells installed to only 10 feet bgs (a few feet below static groundwater levels) are generally impacted with higher levels of fuel contaminants than wells that extend deeper in the subsurface. The scope of work presented below is intended to allow for expanded groundwater monitoring in the uppermost portion of the shallow groundwater

interval, where the highest concentrations of fuel contaminants are detected (generally west of wells MW-5A and MW-6A).

SCOPE OF WORK

The objectives of the proposed scope of work are to:

- Further assess the lateral extent of fuel contaminant impact to shallow groundwater west (generally downgradient) of the site.
- Evaluate current concentrations of petroleum hydrocarbons in shallow soil vapor.
- Attempt to locate any undocumented water supply wells that may potentially be threatened from dissolved fuel contaminants originating from the site.

To accomplish this objective, Stratus is proposing the following work activities:

- Drill and install two (2) 2-inch diameter groundwater monitoring wells (MW-7A and MW-8A) to approximately 12 feet bgs using hollow stem augers.
- Install two soil vapor sampling points (SV-6 and SV-7) to approximately 5 feet bgs using hand tools.
- Develop and sample each newly completed monitoring well.
- Collect soil vapor samples from SV-1 through SV-7.
- Survey each newly constructed monitoring well and soil vapor sampling point.
- Conduct a door-to-door field reconnaissance in the neighborhood within a 500-foot radius west (downgradient) of the site to attempt to locate any water wells currently unknown to Stratus and ACEHD.

The proposed scope of work has been subdivided into four tasks, as outlined below. All work will be conducted under the direct supervision of a State of California Professional Geologist or Professional Engineer, and will be conducted in accordance with standards established by the *Tri-Regional Board Staff Recommendations of Preliminary Investigation and Evaluation of Underground Tank Sites* (Regional Water Quality Control Board [RWQCB], April 2004).

Task 1: Pre-field Activities

Following approval of this *Work Plan* by ACEHD, the following activities will be completed:

- Obtain a drilling permit from Alameda County Public Works Agency (ACPWA).

- Retain and schedule a licensed C-57 drilling contractor.
- Update the site specific Health and Safety Plan.
- Mark boring locations and contact Underground Service Alert to locate underground utilities in the vicinity of the work site.
- Notify ACEHD, ACPWA, the Jaber's, and the facility tenant of the proposed work schedule.

Task 2: Field Work

Task 2A: Soil Borings

A C-57 licensed drilling contractor will advance well borings MW-7A and MW-8A to approximately 12 feet bgs using a truck mounted or limited access hollow stem auger drill rig equipped with 8-inch diameter hollow stem augers. The approximate location of each proposed monitoring well and soil gas sampling point is shown on Figure 2. The initial portion of each well boring will be advanced with hand tools, as conditions allow, to reduce the possibility of damaging underground utilities. Once borings MW-7A through MW-8A have been advanced to total depth, groundwater monitoring wells will be completed within each borehole. Hand tools will be used to advance the soil vapor sampling point borings. No soil samples are proposed for collection, as the borings will only extend a few feet into groundwater and each boring is located relatively distant from the former USTs and fuel dispenser islands.

Task 2B: Monitoring Well Construction

Monitoring wells MW-7A and MW-8A will be constructed using 2-inch diameter schedule 40 PVC and 8 feet of 0.02-inch diameter slotted well screen, situated from approximately 4 to 12 feet bgs. A filter pack of #3 or #2/12 sand will be placed in the annular space around the well casing from the bottom of the well screen to approximately 1 foot above the top of the well screen. Approximately 1.5 feet of bentonite chips will be placed on top of the filter pack and hydrated with clean water to provide a transition seal for the well. Neat cement will be used to backfill the remaining annular space around the well casing. A watertight locking cap will be placed over the top of the well casing, and a traffic rated vault box will be installed around the top of the well. The actual well construction may be modified in the field based on conditions encountered at the time of the investigation.

Task 2C: Soil Vapor Sampling Point Construction

Upon reaching the base of boreholes SV-6 and SV-7 (approximately 5.5 feet bgs), a polyethylene soil gas implant (Environmental Service Products Part No. SVPT-91, or similar) attached to 0.25-inch diameter Teflon tubing, or similar, will be installed a few inches above the base of the borehole. A filter pack of graded sand will be placed around

the soil gas implant to approximately 4 feet bgs. Granular bentonite will be placed on top of the filter pack sand from approximately 2 to 4 feet bgs and hydrated with clean water. The remaining annular space will subsequently be backfilled with neat cement. A traffic-rated vault box will then be installed over the top of each soil vapor sampling point.

Task 2D: Monitoring Well Development and Sampling

The newly installed monitoring wells will be allowed to stand a minimum of 72 hours before being developed. Monitoring well development will consist of surging with a bailer followed by groundwater pumping. Development will continue, to the extent practical, until the discharged water runs clear and pH and conductivity measurements stabilize. Water levels, water-quality parameters (pH, temperature, conductivity), and discharged quantities will be recorded for each well.

A minimum of 24 hours after the groundwater monitoring wells are developed, the monitoring wells will be purged and groundwater samples will be collected. The samples will be collected using a disposable bailer, transferred to laboratory-supplied glass vials, and placed in an ice-chilled cooler. The groundwater samples will be transported under strict chain-of-custody protocol to a California-certified analytical laboratory for analysis.

Task 2E: Soil Vapor Sampling

Following eventual termination of DPE remediation, Stratus will return to the site to collect samples from SV-1 through SV-7. Prior to sampling, the approximate air volume situated inside of the Teflon tubing and the filter pack sand surrounding each soil vapor implant will be calculated. Stratus will use expendable Summa Canister(s) to purge this ambient air. Following purging of the ambient air, a separate Summa Canister will be used to collect each soil gas sample. During filling of the canisters, the flowrate will be regulated to fill at a rate between 100 and 200 milliliters per minute (ml/min). A tracer gas leak check (using 1,1-difluoroethane [1,1-DFA]) will be used to assess potential leakage within the sampling train. Leak detection will be evaluated by spraying the outside of the sample train assembly with 1,1-DFA. Once the samples are collected, the Summa Canisters will be stored at ambient air temperature before delivery to the laboratory for chemical analysis.

Task 2F: Waste Management

Drill cuttings and wastewater generated during the field activities will be contained in DOT-approved 55-gallon steel drums. The drums will be appropriately labeled and stored at the site pending proper disposal. A licensed contractor will transport the soil and wastewater to an appropriate facility for disposal.

Task 2G: Site Survey

A California licensed land surveyor will be retained to survey the horizontal coordinates and elevations of each monitoring well, as required by AB 2886 (GeoTracker). Elevations of the top-of-casing of the wells will be surveyed to a 0.01-foot vertical accuracy and established relative to a known benchmark in feet mean sea level (MSL). The survey will be tied to the previous survey work performed at the site. These data will be uploaded to the GeoTracker database.

Task 2H: Expanded Water Supply Well Survey

A Stratus representative will canvas the neighborhood within a 500-foot radius to the west of the site in order to attempt to locate any undocumented water supply wells. In this area (primarily residential), Stratus will knock on the door of each residence and attempt to speak with each occupant. Stratus will complete these activities in the late afternoon and early evening hours, at a time of the day when we would expect a significant number of residents to be home. If a significant number of residents are not at home, the field reconnaissance will be expanded to a weekend in order to contact as many residents as possible. If any water wells are located in this area, Stratus will inquire about the current use of the well and ask the owner/tenant if we can inspect the well. Any information regarding water wells in this area will then be compiled and disseminated to ACEHD.

Task 3: Laboratory Analysis

Groundwater samples will be analyzed by state-certified laboratory for the same analyte suite already in place for the site's groundwater monitoring and sampling program. The samples will be analyzed for GRO using U.S. Environmental Protection Agency (USEPA) Method 8015B/8260B, and for BTEX and MTBE using USEPA Method 8260. Groundwater analytical data will be uploaded to the State of California's GeoTracker database.

Soil vapor samples will also be forwarded to a California state-certified laboratory for chemical analysis under strict chain-of-custody procedures. The soil gas samples will be analyzed for GRO, BTEX, MTBE, naphthalene, and the leak detection gas 1,1-DFA using USEPA Method TO-15. Soil vapor analytical data will also be uploaded to GeoTracker.

Task 4: Site Assessment Report Preparation

Following completion of the additional site characterization activities, a site assessment report will be prepared. The report will include, but not be limited to, a scaled site plan, well details, a report from a licensed surveying contractor, tabulated analytical results,

August 12, 2015

and certified analytical results. The report will be uploaded to GeoTracker upon finalization.

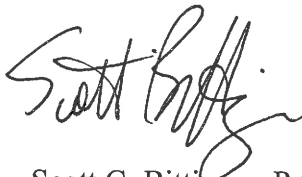
LIMITATIONS

This document was prepared in general accordance with accepted standards of care that existed at the time this work was performed. No other warranty, expressed or implied, is made. Conclusions and recommendations are based on field observations and data obtained from this work and previous investigations. It should be recognized that definition and evaluation of geologic conditions is a difficult and somewhat inexact science. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. More extensive studies may be performed to reduce uncertainties. This document is solely for the use and information of our client unless otherwise noted.

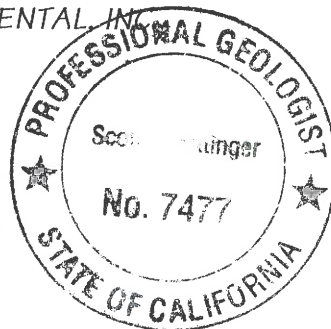
If you have any questions regarding this document, or the project in general, please contact Scott Bittinger at (530) 676-2062 or Gowri Kowtha at (530) 676-6001.

Sincerely,

STRATUS ENVIRONMENTAL, INC.



Scott G. Bittinger, P.G.
Project Geologist



Gowri S. Kowtha, P.E.
Project Manager

ATTACHMENTS:

Table 1	Focused Site Conceptual Model
Table 2	Well Construction Detail Summary
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	GRO in Groundwater, 10' Depth Wells, April 2015
Figure 4	Benzene in Groundwater, 10' Depth Wells, April 2015
Figure 5	MTBE in Groundwater, 10' Depth Wells, April 2015
Figure 6	GRO in Groundwater, 20-26' Depth Wells, April 2015
Figure 7	Benzene in Groundwater, 20-26' Depth Wells, April 2015
Figure 8	MTBE in Groundwater, 20-26' Depth Wells, April 2015

cc: Mr. Philip Jaber
Ms. Cherie McCaulou, RWQCB (via GeoTracker)

**Table 1
Focused Site Conceptual Model**

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Geology and Hydrogeology	Site	Silt/clay mixtures predominately observed to depths ranging from about 15 to 25 feet bgs, except in areas of overexcavation. Some sandy stratum observed near surface grade extending a few feet in depth (likely fill). Below the 15 to 25 foot level, silty sand and clayey sand have been observed. The thickness of these sandy strata is unknown. Most contaminant impact appears to be present within fine grained silt/clay soils. Historically, groundwater levels in the monitoring wells have ranged from approximately 5 to 8.5 feet bgs with only minimal seasonal fluctuation. Groundwater flow is predominately towards the southwest and west-southwest at a low gradient.	None	N/A
Geology and Hydrogeology	Regional	The site is situated on the East Bay Plain, at an elevation of approximately 15 to 18 feet above mean sea level. The East Bay Plain slopes gently from East to West. The base of the San Leandro Hills are situated approximately 3 miles to the east. Regional groundwater in the area also flows from east to west, following surface water drainage patterns.	None	N/A
Surface Water Bodies		The closest surface water body to the site is San Lorenzo Creek, which is located approximately 1,000 to 1,500 feet north-northwest of the site (San Lorenzo Creek is concrete lined). The property is located approximately 7,000 feet northeast of San Francisco Bay.	None	N/A
Nearby Water Wells		Conestoga Rovers Associates performed a water supply well survey in 2008, reviewing well completion records on file with the Department of Water Resources and Alameda County Public Works Agency. No water wells were identified within 1,000-feet of the site. Two wells were located approximately 1,100 feet from the site, but generally in the upgradient direction. Based on available data, no water wells appear threatened by the site's contaminant plume.	None	N/A

**Table 1
Focused Site Conceptual Model (Continued)**

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Release Source and Volume		<p>Two gasoline USTs, a diesel UST, a waste oil UST, six fuel dispensers, and associated fuel product lines were removed in July 1998. Compliance soil samples confirmed the presence of a petroleum hydrocarbon release to the subsurface.</p> <p>Several phases of assessment were completed in order to investigate the release. In a September 2012 Corrective Action Plan, Stratus compiled the available data and calculated the estimated fuel contaminant mass. In these calculations, Stratus estimated that 955 pounds of GRO, 5.32 pounds of benzene, and 8.71 pounds of MTBE were present in soil beneath the site. Using available groundwater analytical data from 2012, Stratus estimated that approximately 2.5 pounds of GRO, 0.13 pounds of benzene, and 0.98 pounds of MTBE were dissolved in groundwater beneath the site.</p>	None	N/A
LNAPL		No free product is present at the site.	None	N/A
Source Removal Activities	Over-excavation	In 1998, soil was overexcavated in the vicinity of the waste oil UST and the southern fuel dispenser island. The waste oil UST pit was expanded from 8 to 12 feet bgs. The fuel dispenser excavation extended to about 3.5 feet bgs.	None	N/A
	DPE	Dual phase extraction (DPE) was initiated in July 2014. As of December 4, 2014 an estimated mass of 946 pounds of GRO has been removed by DPE in the vapor phase. The ability of DPE to reduce petroleum hydrocarbons in soil gas has not been evaluated. DPE has improved groundwater contaminant concentrations, but not to closure levels specified by Low Threat Closure Policy.	None (ACEHD verbally indicated that agency did not want current soil gas sampling)	Future soil gas sampling needed once DPE terminated
Contaminants of Concern		Based on historical soil investigations and groundwater monitoring events conducted at the site, diesel range organics (DRO), gasoline range organics (GRO), benzene, toluene, ethyl-benzene, total xylenes (collectively BTEX), and methyl tertiary butyl ether (MTBE), are the contaminants of concern. Analyzing groundwater for DRO is no longer performed.	None	N/A

**Table 1
Focused Site Conceptual Model (Continued)**

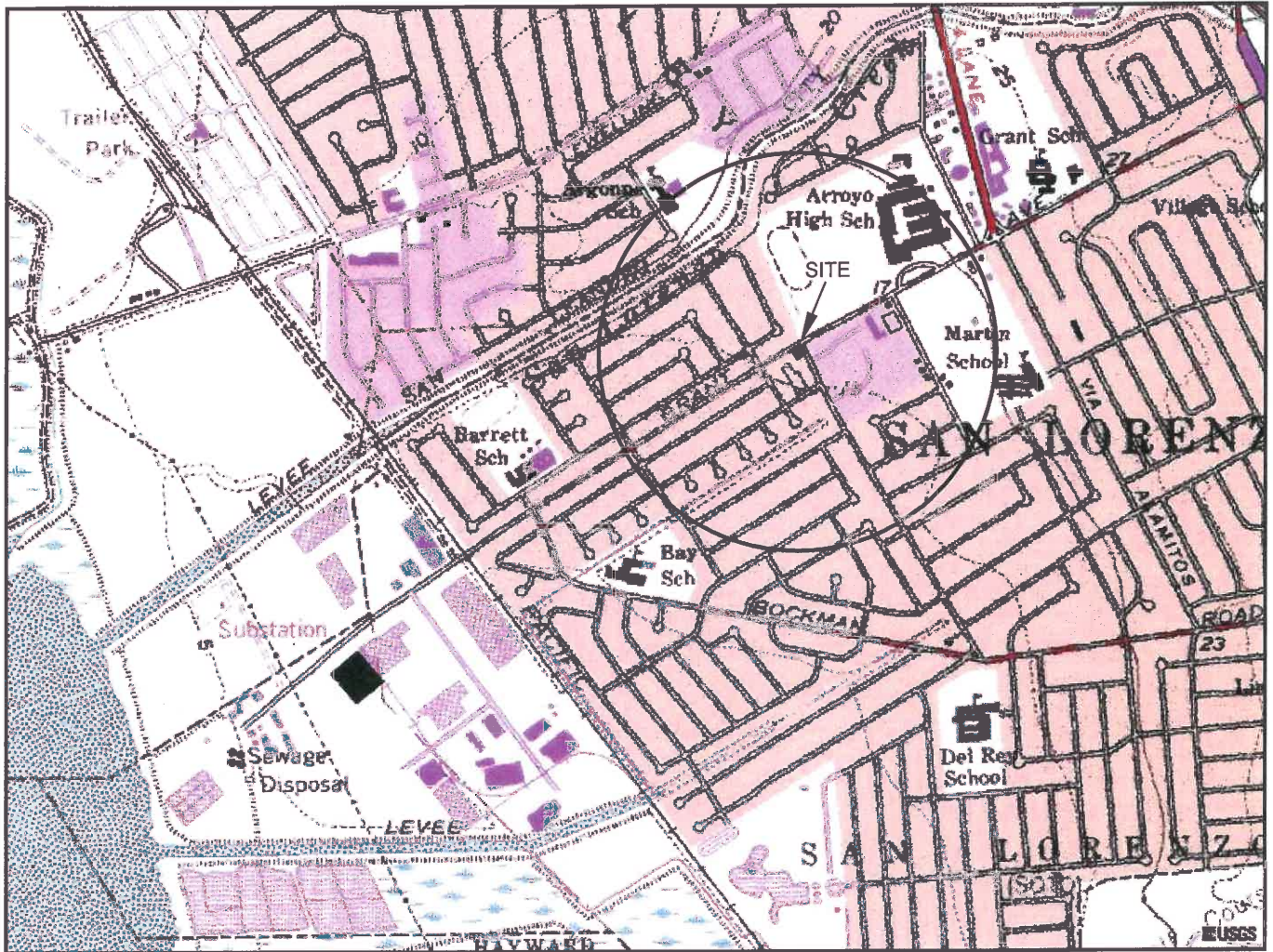
SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Petroleum Hydrocarbons in Soil		All soil analytical data was collected prior to initiating DPE, and thus available data is not current. Historically, most (over 95%) of fuel contaminant mass in soil was calculated to be present above 15 feet bgs, or within about 6 to 7 feet of the historical low groundwater level. Most fuel contaminant mass in soil appears to be onsite. Pre-DPE iso-concentration contour maps for soil were presented in the September 2012 CAP.	None	N/A
Petroleum Hydrocarbons in Groundwater		<p>Three wells (MW-4, MW-5A, and MW-6A) extend to only 10 feet bgs (typically 2-4 feet below static groundwater) and the other wells extend to depths of 20 to 26 feet bgs. In the three shallow wells, contaminant concentrations are much higher than in the other wells. In April 2015, GRO, benzene, and MTBE was detected at maximum concentrations of 12,000 µg/L, 2,100 µg/L, and 730 µg/L, respectively. In the deeper wells, GRO, BTEX, and MTBE were reported at maximum levels of 180 µg/L, 25 µg/L, and 150 µg/L, respectively.</p> <p>The lateral extent of impact is not fully constrained by the site's monitoring well network. ACEHD has asked for additional site assessment, and Stratus intends to install additional monitoring wells to the west-southwest of the site. North of the site, a busy roadway strongly inhibits site assessment. Stratus attempted to find a suitable well location in the median/left turn lane of Grant Avenue in the summer of 2014, but underground utility corridors inhibited installation. It is our understanding that ACEHD deems wells installed on the northern shoulder of Grant Avenue to be 'too far away'.</p>	Not fully assessed	Work Plan requested by ACEHD
Risk Evaluation		The site is a currently used as an auto repair business. The property is located in a mixed residential and commercial neighborhood. The auto repair business is part of a larger shopping center complex. Behind the shopping center, downgradient of the site, is a residential neighborhood.	None	N/A

**Table 1
Focused Site Conceptual Model (Continued)**

SCM Element	SCM Sub-Element	Description	Data Gap Item #	Resolution
Risk Evaluation Continued		<p>Since the site is not an active gas station, it is not exempt from soil gas survey requirements. In February 2010, relatively high concentrations of petroleum hydrocarbons in soil gas were detected. At four sampling locations (SV-1 through SV-4, GRO concentrations ranged from 36,000,000 to 52,000,000 micrograms per cubic meter, and benzene concentrations ranged from 18,000 to 160,000 micrograms per cubic meter. These concentrations are well above Environmental Screening Levels established by the California Regional Water Quality Control Board.</p> <p>Based on historical depth to groundwater data, subgrade utility trenches could potentially function as conduits for preferential contaminant migration. In particular, large diameter storm drain conduits are situated beneath the Grant Avenue right-of-way. Conestoga Rovers Associates also has stated that sewer lines in Grant Avenue are also a preferential pathway for contaminant migration. Proper personal protective equipment should be used if excavation work is performed near the site.</p>	Future soil gas survey	Future soil gas sampling needed once DPE terminated

TABLE 2
WELL CONSTRUCTION DETAIL SUMMARY
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Boring/Well I.D.	Date	Boring Depth (feet)	Boring Diameter (inches)	Well Diameter (inches)	Screen Interval (feet bgs)	Slot Size (inches)	Drilling Method	Consultant
Groundwater Monitoring Wells								
MW-1	09/24/99	26.5	8	2	5 - 26.5	0.020	HSA	Aqua Science Engineers
MW-2	09/24/99	20	8	2	5-20	0.020	HSA	Aqua Science Engineers
MW-3	09/24/99	21.5	8	2	5-21	0.020	HSA	Aqua Science Engineers
MW-4	02/09/10	10	10	4	5-10	0.020	Air Knife	Conestoga-Rovers & Associates
MW-5A	05/28/14	10	8	2	5-10	0.020	HSA	Stratus Environmental
MW-5B	05/28/14	20	8	2	15-20	0.020	HSA	Stratus Environmental
MW-6A	05/28/14	10	8	2	5-10	0.020	HSA	Stratus Environmental
MW-6B	05/28/14	20	8	2	15-20	0.020	HSA	Stratus Environmental
Extraction Wells								
EX-1	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-2	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-3	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-4	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-5	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-6	02/21/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-7	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
Injection Wells								
IW-1	05/20/11	11.5	8	0.75	9.5-11.5	microporous	HSA	Stratus Environmental
IW-2	05/20/11	16	8	0.75	14-16	microporous	HSA	Stratus Environmental
Soil Vapor Sampling Points								
SV-1	02/12/10	5.5	3.25	0.375	5-5.1	0.002	HA	Conestoga-Rovers & Assoc.
SV-2	02/09/10	5.5	3.25	0.375	5-5.1	0.002	HA	Conestoga-Rovers & Assoc.
SV-3	02/09/10	5.5	3.25	0.375	5-5.1	0.002	HA	Conestoga-Rovers & Assoc.
SV-4	02/09/10	5.5	3.25	0.375	5-5.1	0.002	HA	Conestoga-Rovers & Assoc.
SV-5	05/20/11	5.5	3.25	0.375	5-5.1	0.002	HA	Stratus Environmental, Inc.
Notes:								
HSA = Hollow Stem Auger								
HA = Hand Auger								
Data regarding the construction of wells MW-1 through MW-4 obtained from groundwater monitoring reports prepared by Conestoga-Rovers & Associates								



GENERAL NOTES:
 BASE MAP FROM U.S.G.S.
 SAN LORENZO, CA.
 7.5 MINUTE TOPOGRAPHIC
 PHOTOREVISED 1978



QUADRANGLE LOCATION



APPROXIMATE SCALE



STRATUS
 ENVIRONMENTAL, INC.

FORMER OLYMPIC SERVICE STATION
 1436 GRANT AVENUE
 SAN LORENZO, CALIFORNIA

FIGURE

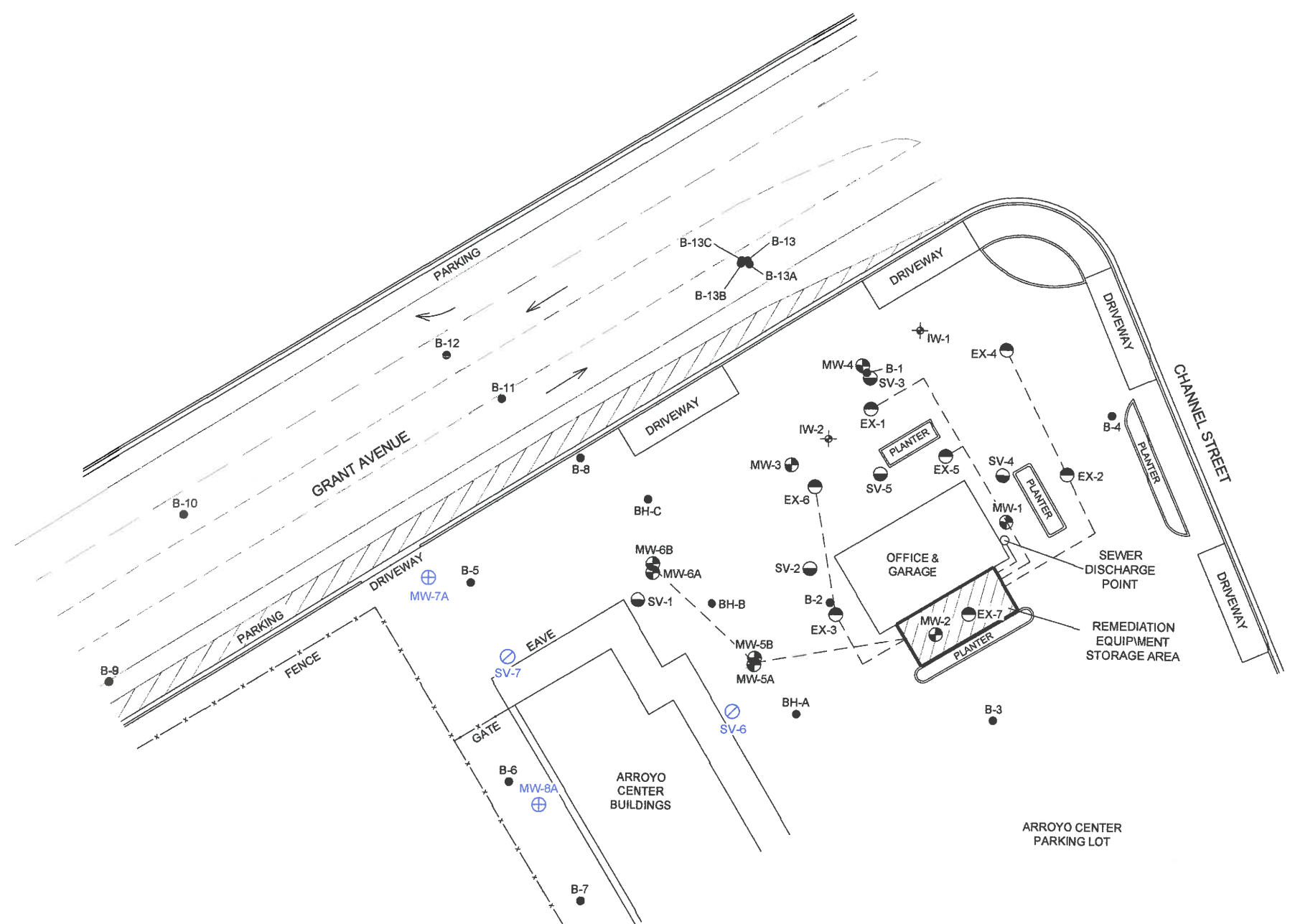
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PROJECT NO.
 2115-1436-01

SITE LOCATION MAP

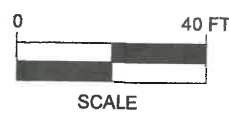


- LEGEND
- ⊕ MW-1 MONITORING WELL LOCATION
 - SV-1 SOIL VAPOR SAMPLING WELL LOCATION
 - ⊖ EX-1 EXTRACTION WELL LOCATION
 - ⊕ IW-1 OZONE INJECTION WELL LOCATION
 - B-1 SOIL BORING LOCATION
 - - - APPROXIMATE LOCATIONS OF ABOVE GROUND CONVEYANCE PIPING
 - ⊕ MW-7A PROPOSED MONITORING WELL LOCATION
 - ⊖ SV-6 PROPOSED SOIL VAPOR SAMPLING WELL LOCATION



STRATUS
ENVIRONMENTAL, INC.

PATH NAME: OlympicSCM
DRAFTER INITIALS: JMP
DATE LAST REVISED: July 15, 2015
FILENAME: Olympic Siteplan



FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

SITE PLAN

FIGURE
2
PROJECT NO.
2115-1436-01

GRO IN GROUNDWATER
10' DEPTH WELLS
APRIL 2015



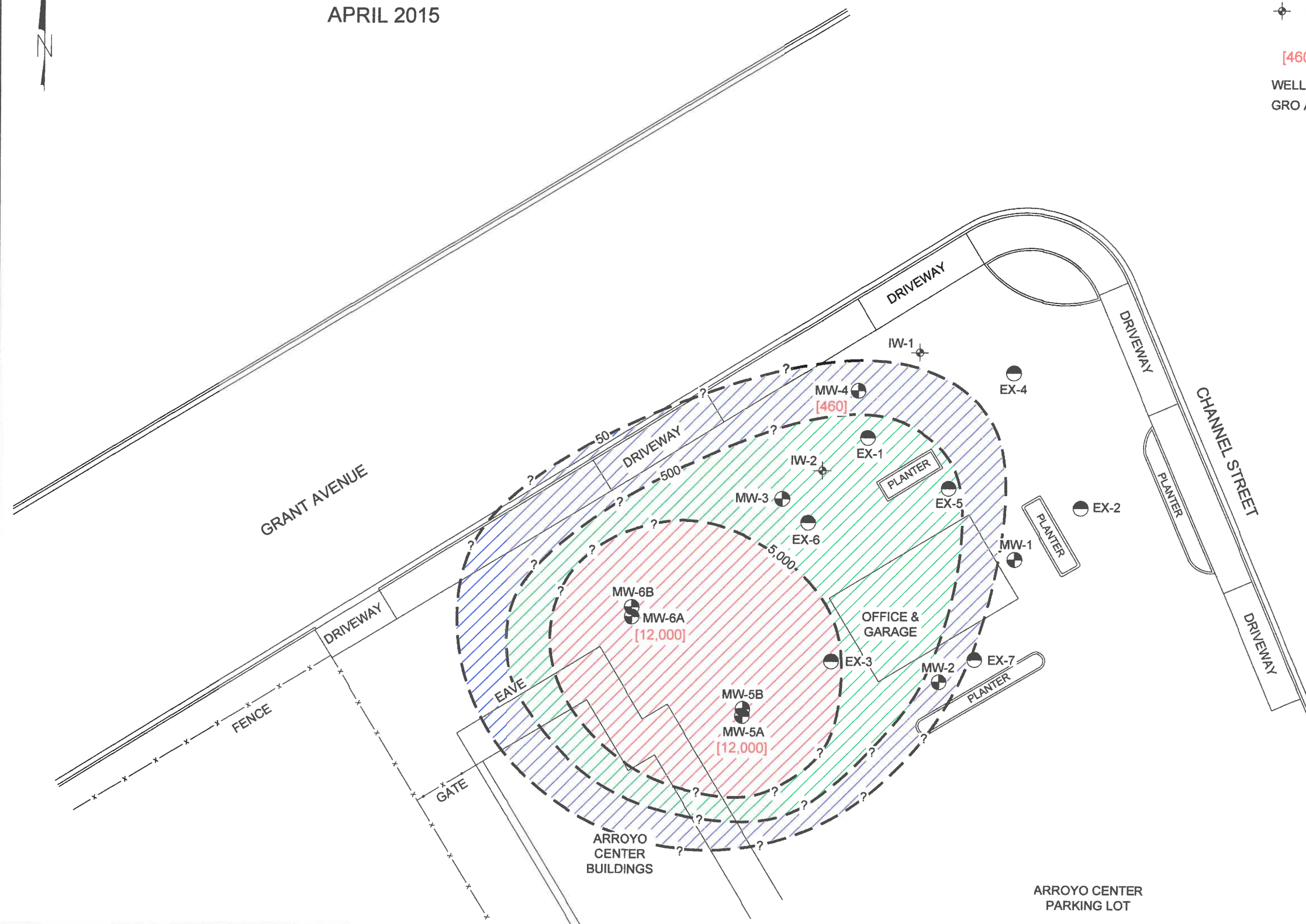
LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- ⊕ IW-1 OZONE INJECTION WELL LOCATION

[460] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN $\mu\text{g/L}$

WELLS SAMPLED ON 4/14/15

GRO ANALYZED BY EPA METHOD SW8015B/SW8260B



STRATUS
ENVIRONMENTAL, INC.



FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
GRO IN GROUNDWATER, 10' DEPTH WELLS
APRIL 2015

FIGURE
3

PROJECT NO.
2115-1436-01

BENZENE IN GROUNDWATER
10' DEPTH WELLS
APRIL 2015

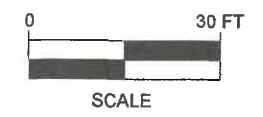
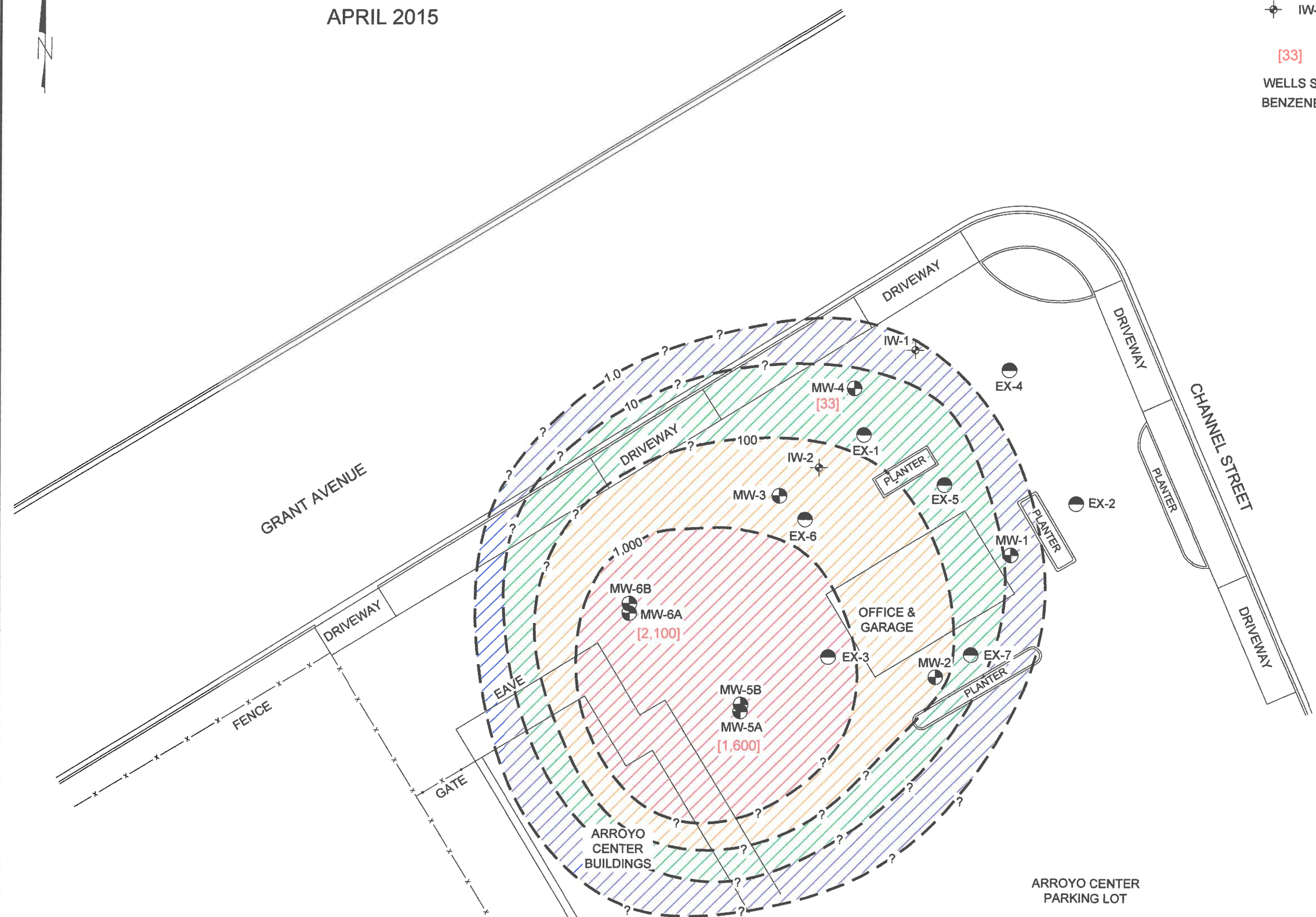


LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

[33] BENZENE CONCENTRATION IN µg/L

WELLS SAMPLED ON 4/14/15
BENZENE ANALYZED BY EPA METHOD SW8260B



FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

BENZENE IN GROUNDWATER, 10' DEPTH WELLS
APRIL 2015

FIGURE
4
PROJECT NO.
2115-1436-01

MTBE IN GROUNDWATER
10' DEPTH WELLS
APRIL 2015



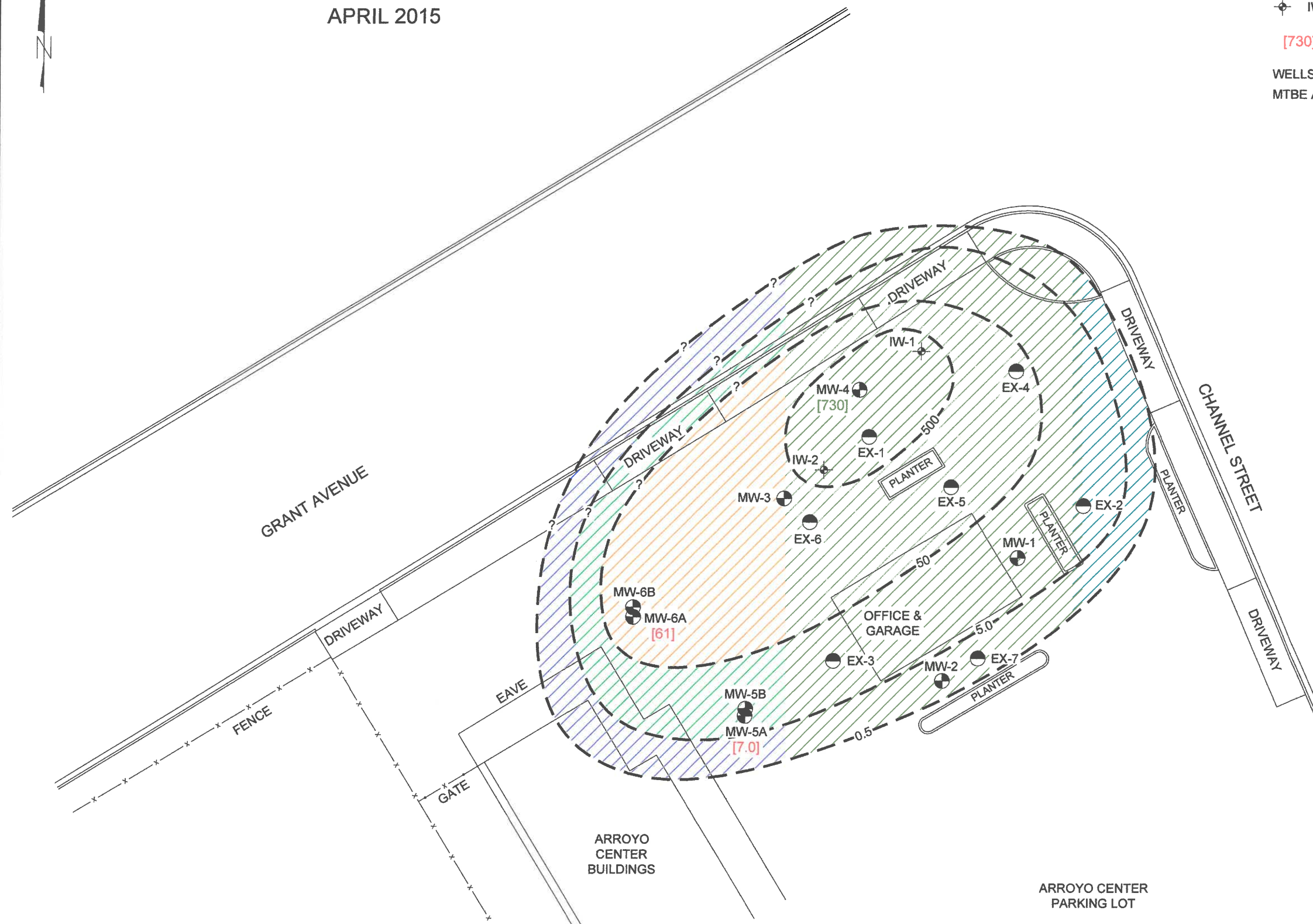
LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

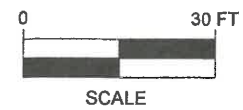
[730] METHYL TERTIARY BUTYL ETHER (MTBE) IN $\mu\text{g/L}$

WELLS SAMPLED ON 4/14/15

MTBE ANALYZED BY EPA METHOD SW8260B



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FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

FIGURE

5

MTBE IN GROUNDWATER, 10' DEPTH WELLS
APRIL 2015

PROJECT NO.
2115-1436-01

GRO IN GROUNDWATER
20-26' DEPTH WELLS
APRIL 2015



LEGEND

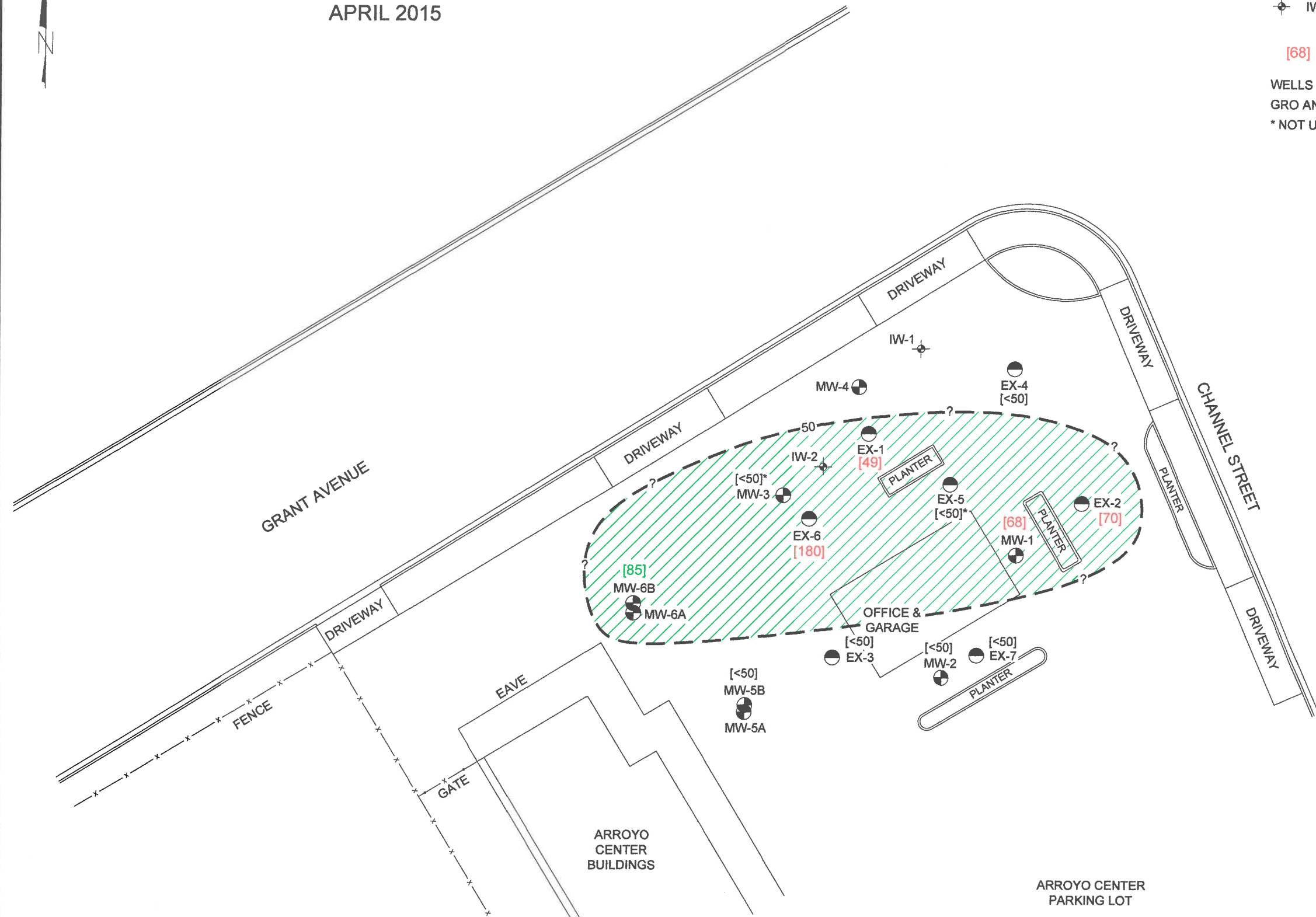
- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

[68] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN $\mu\text{g/L}$

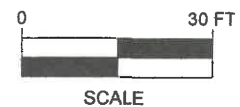
WELLS SAMPLED ON 4/14/15

GRO ANALYZED BY EPA METHOD SW8015B/SW8260B

* NOT USED FOR CONTOURING



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FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
GRO IN GROUNDWATER, 20-26' DEPTH WELLS
APRIL 2015

FIGURE
6
PROJECT NO.
2115-1436-01

BENZENE IN GROUNDWATER
20-26' DEPTH WELLS
APRIL 2015

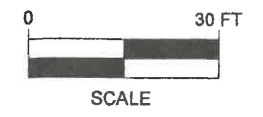
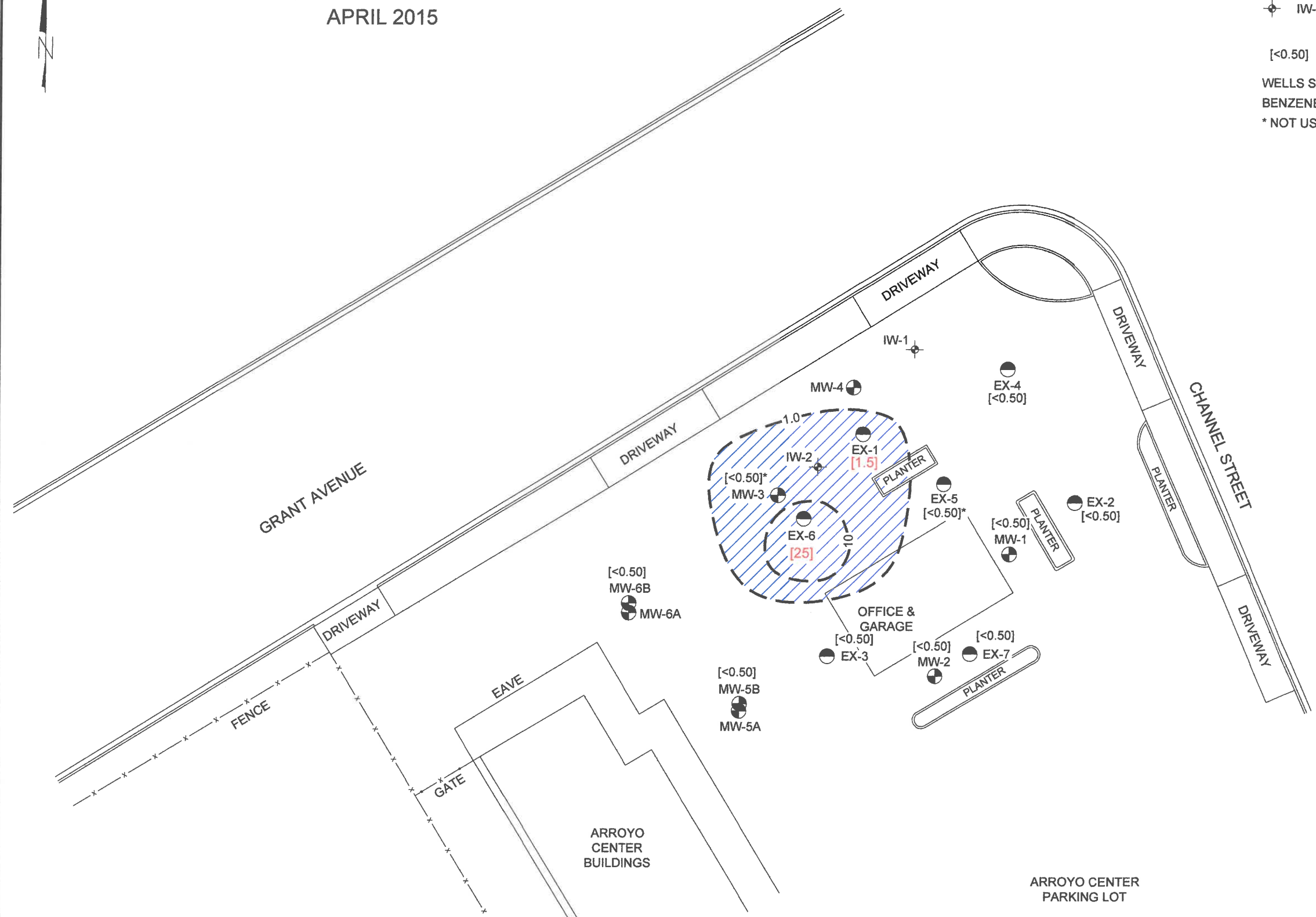


LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

[<0.50] BENZENE CONCENTRATION IN $\mu\text{g/L}$

WELLS SAMPLED ON 4/14/15
BENZENE ANALYZED BY EPA METHOD SW8260B
* NOT USED FOR CONTOURING



FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

BENZENE IN GROUNDWATER, 20-26' DEPTH WELLS
APRIL 2015

FIGURE
7
PROJECT NO.
2115-1436-01

MTBE IN GROUNDWATER
20-26' DEPTH WELLS
APRIL 2015

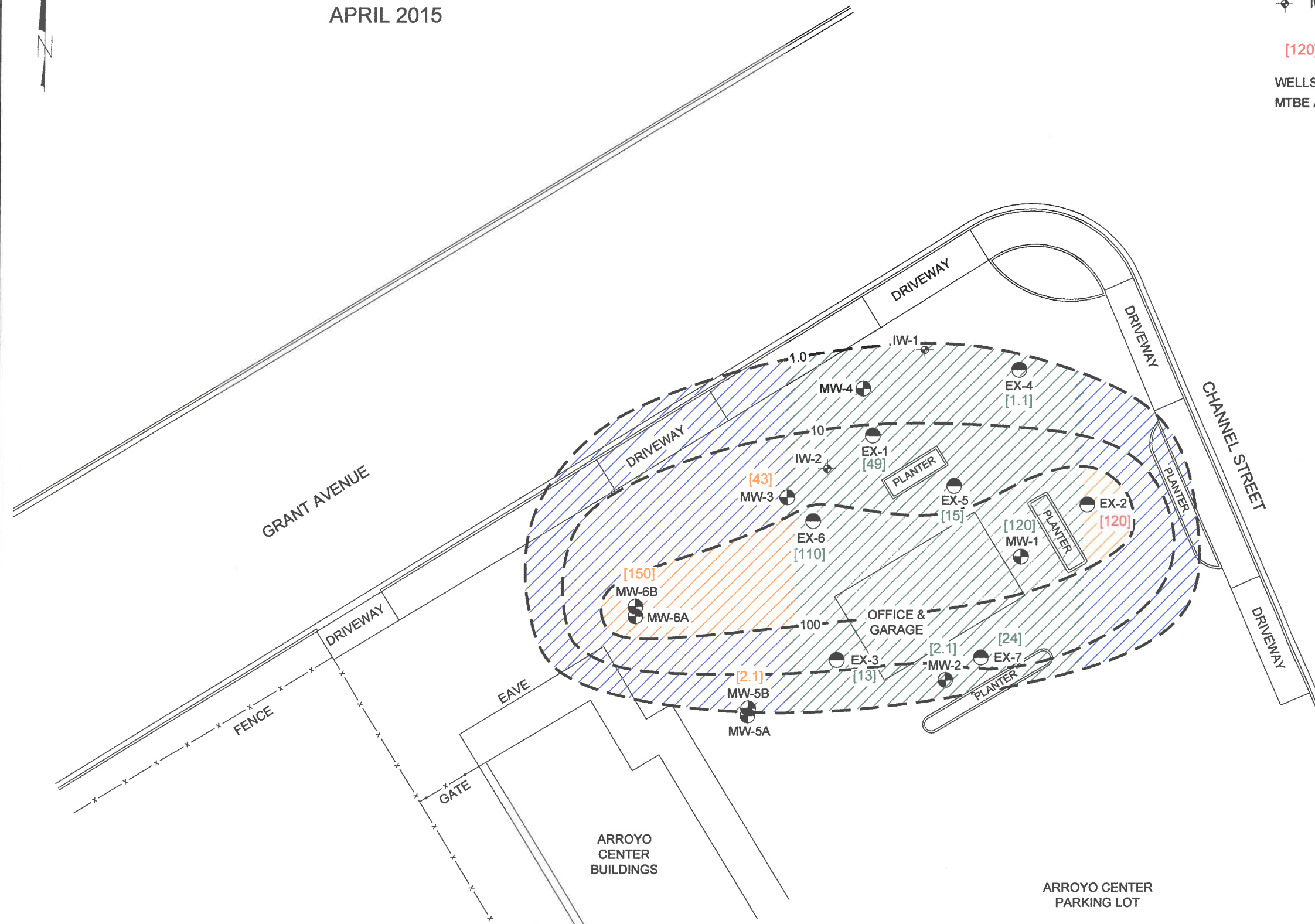


LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

[120] METHYL TERTIARY BUTYL ETHER (MTBE) IN $\mu\text{g/L}$

WELLS SAMPLED ON 4/14/15
MTBE ANALYZED BY EPA METHOD SW8260B



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FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
MTBE IN GROUNDWATER, 20-26' DEPTH WELLS
APRIL 2015

FIGURE
8
PROJECT NO.
2115-1436-01