



P.O. Box 1839
Vista, CA 92085-1839
(760) 639-3600
Fax (760) 639-3603

Donan Environmental Services, Inc.

SITE ASSESSMENT WORK PLAN
Soil and Groundwater Investigation

and

Community and Worker Health and Safety Plan

for

Geotracker ID # T0607700425
Central Valley RWQCB Case # 390541

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California

Prepared By:
DONAN ENVIRONMENTAL SERVICES, INC.

April 29, 2016

Copy ____ of 4

SIGNATORY PAGE

Designation:

DES Project Number 12E4175

Site Assessment Work Plan, Soil and Groundwater Investigation

Geotracker ID# T0607700425

Central Valley RWQCB Case # 390541

Report Prepared For:

California Tank Lines, Inc.

3105 South El Dorado Street

Stockton, California 95206

Prepared and Submitted By:

DONAN ENVIRONMENTAL SERVICES, INC.



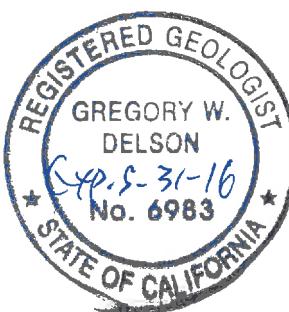
Greg Delson, PG#6983

Senior Vice President/

Technical Operations


Anderson M. Donan

General Manager



cc: Ms. Vera Fischer, Central Valley Regional Water Quality Control Board

TABLE OF CONTENTS

1.0 INTRODUCTION

- 1.1 Site Setting
- 1.2 Water Use Basin
- 1.3 Background
- 1.4 Basis for Proposed Well Locations
 - 1.4.1 Impacts to Soil and Groundwater
 - 1.4.1.1 South Tank Pit Investigation Needs
 - 1.4.1.2 North Tank Pit Investigation Needs
 - 1.4.1.3 Plume Leading Edge at MW4
 - 1.4.2 Impacts to Groundwater
 - 1.4.3 Rationale for Well Locations

2.0 OBJECTIVE

3.0 SCOPE OF SERVICES

- 3.1 Project Plans and Permits
 - 3.1.1 Work Plan Approval
 - 3.1.2 Drilling Permit
 - 3.1.3 Utility Clearance
- 3.2 Soil Boring and Monitoring Well Installation
 - 3.2.1 Depth Zone A, Soil Boring and Monitoring Well Installation
 - 3.2.2 Depth Zone B, Soil Boring and Monitoring Well Installation
 - 3.2.3 Depth Zone C, Soil Boring and Monitoring Well Installation
- 3.3 Sample Collection and Analytical Methods
 - 3.3.1 Soil Sampling
 - 3.3.2 Soil Sample Analytical Methods and Reporting
 - 3.3.3 Additional Analyses at North Tank Pit
 - 3.3.4 Groundwater Samples
 - 3.3.5 Groundwater Sampling Under Free Product
 - 3.3.6 Groundwater Sample Analytical Methods and Reporting
 - 3.3.7 Free Product Sampling
 - 3.3.8 Free Product Sample Analytical Methods and Reporting
- 3.4 Well Installation
- 3.5 Groundwater Monitoring Frequency
- 3.6 Updated Well Survey
- 3.7 Management of Wastes
- 3.8 Site Assessment Report

APPENDIX

FIGURES

- Figure 1 - Site Location Map
- Figure 2 - Updated Site Plan
- Figure 3 - Groundwater Plan - July 14, 2015
- Figure 4 - Oil-Impacted Soil Plan
- Figure 5 - Diesel-Impacted Soil Plan
- Figure 6 - Gasoline-Impacted Soil Plan
- Figure 7 - Cross-Section A-A'
- Figure 8 - Cross-Section B-B'
- Figure 9 - Product Thickness Plan - July 14, 2015
- Figure 10 - Dissolved Gasoline Groundwater Plan - June 9, 2015
- Figure 11 - Dissolved Diesel Groundwater Plan - June 9, 2015
- Figure 12 - Dissolved Motor Oil Groundwater Plan - June 9, 2015
- Figure 13 - Dissolved Benzene Groundwater Plan - June 9, 2015
- Figure 14 - Proposed Groundwater Monitoring Wells, Depth Zone A
- Figure 15 - Proposed Groundwater Monitoring Wells, Depth Zone B
- Figure 16 - Proposed Groundwater Monitoring Wells, Depth Zone C
- Figure 17 - Proposed Monitoring Well Construction

TABLES

- Table 1 - Summary of Soil Sample and Analytical Data
- Table 2 - Summary of Monitoring Well Construction Details
- Table 3 - Summary of Site Groundwater Levels
- Table 4 - Summary of Groundwater Sample and Analytical Data
- Table 5 - Summary of Groundwater Flow Directions
- Table 6 - Rationale for Proposed Wells

SUPPORT DOCUMENTS

- LTCP Checklist as of March 25, 2016
- Geotracker - Impediments to Closure as of March 25, 2016
- RWQCB-CV Letter (March 28, 2016)
- SJCEHD Letter (August 17, 2011)
- SJCEHD Letter (September 9, 2014)
- County of San Diego, Department of Environmental Health, Site Assessment and Mitigation Manual - Table 5-8

COMMUNITY AND WORKER HEALTH AND SAFETY PLAN



P.O. Box 1839
Vista, CA 92085-1839
(760) 639-3600
Fax (760) 639-3603

Donan Environmental Services, Inc.

April 29, 2016

Project Number: 12E4175

Report Delivered To:

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California 95206

RE: SITE ASSESSMENT WORK PLAN

Soil and Groundwater Investigation

Geotracker ID# T0607700425

California Tank Lines, Inc., 3105 South El Dorado Street, Stockton, California (Site)

Donan Environmental Services, Inc. (DES) has prepared this Site Assessment Work Plan (Work Plan) for the above-referenced Site in response to the findings of the Groundwater Assessment activities presented in the DES Site Assessment Report (SAR) (July 24, 2015) and the directives in the attached State of California Regional Water Quality Control Board, Central Valley Region (RWQCB-CV) Letter (March 28, 2016).

1.0 INTRODUCTION

1.1 Site Setting

The Site is located in a commercial and industrial area in Stockton, California. Refer to the enclosed site location map (Figure 1).

The Site is a commercial operation that provides truck maintenance and fueling services. The Site improvements include an office building, two truck maintenance buildings, a truck wash rack, an aboveground storage tank area for fueling, a vehicle fueling facility, and a large paved parking area for tank trailers. South of the Cal Tank Site is a case known as Pacific Pride. The Pacific Pride case is managed as a separate leaking under ground storage tank (LUST) case overseen by the San Joaquin County Environmental Health Department (SJCEHD) and the RWQCB-CV.

1.2 Water Use Basin

The Site's groundwater quality objectives are subject to the beneficial water uses designated by RWQCB-CV Basin Plan (1998) (revised October 2011). The RWQCB-CV Basin plan indicates that, unless otherwise designated, all groundwaters in the Sacramento River and San Joaquin River basins are considered suitable

for municipal and domestic drinking water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO). The Site is located in the Calaveras River surface water body number (66) (New Hogan Reservoir to Delta Surface Water Body) which has existing beneficial water uses for MUN, AGR, IND, and PRO water supply. Therefore, the groundwater basin associated with the Calaveras River is designated as having beneficial uses for drinking water supply. As indicated on Figure 1 a groundwater supply well is located within 2,000 feet of the Site to the northwest. The Taber Corrective Action Plan (CAP) (August 11, 2011), presented the details in a sensitive receptor survey. The Taber CAP (August 11, 2011) indicated that the following three domestic wells were reported within 2,000 feet of the Site:

- 1) 2943 South Harris Street
- 2) 3506 Harvey Street
- 3) 3436 South Odell

The Taber CAP (August 11, 2011) indicated that the status of the three wells was not determined but that the reported wells are not a concern because the addresses are served by the public water system.

The depth to the saturated zone at the Site has been measured in terms of Depth to Water (DTW) in MW2 from the deepest depth of 37.30 feet below grade (fbg) (September 2004) to the shallowest Depth to Product (DTP) of 22.19 fbg in MW4 (March 2013) (Table 3). Previous DES Reports have found that groundwater flows predominantly to the northeast. However, the DES Report (March 12, 2015) indicated that in December 2014, data from the wider new well network indicated a westward groundwater flow direction. The data indicate varying groundwater flow directions at the Site. Evaluation of groundwater flow directions is also complicated by inconsistent well screen intervals in the Site well network (Table 2 and 5).

1.3 Background

The activities leading up to this Report are as follows:

- | | |
|------|---|
| 1990 | Bill Messick Co. removed two waste oil USTs. Confirmation soil samples were analyzed for total petroleum hydrocarbons (TPH) to a diesel standard (TPHd) and for benzene, toluene, ethylbenzene, and xylenes (BTEX). It has not been determined why heavier oil-range hydrocarbons were not tested. According to the Taber CAP (August 11, 2011), reported TPHd concentrations up to 470 parts per million (ppm) (in sample Tank #3 Center) and visual soil staining in the tank pit indicated a release from the USTs. |
| 1997 | Sierra Pacific investigated the extent of soil and groundwater impacts associated with the former waste oil USTs that were removed in 1990. Sierra Pacific advanced four soil borings (B1 through B4) and converted soil boring B2 to well MW2. The soil samples were analyzed for TPHg, TPHo, BTEX and methyl tertiary butyl ether (MTBE). It has not been determined why TPHd was not tested. Grab groundwater samples were collected from B3 and B4. Groundwater impacts in MW2, B3, and B4 warranted further investigation. |
| 1998 | Station Equipment Company removed two 10,000-gallon diesel USTs. Reported TPHd concentrations up to 14,000 ppm (TK1 east @ 15) on the soil confirmation samples indicated a release from the diesel UST system (Table 1). The tank associated with sample TK1 east |

@15 is referred to in later reports as Tank 1 or Tank 2, as indicated in the enclosed Figures in this Report.

- 1999 EI investigated the release from the former diesel USTs. EI advanced soil boring B5 and installed wells MW1 and MW3. The investigation results were presented in EI Report (February 3, 2000). Elevated TPHd impacts in MW1 warranted further investigation.
- 2000 EI installed groundwater monitoring well MW4 and advanced and sampled soil borings B6 and B7 (Figure 2). Very little impact was reported in soil borings B6 and B7. In well MW4, Elevated TPHg was reported in the soil samples for the first time (Table 1). Table 4 shows that TPHg impacts in MW1 were sporadic during the history of monitoring. More consistent TPHg impacts in groundwater have been reported in MW2 and suggest that the gasoline may have been part of the oil waste stream managed in the former waste oil USTs. Furthermore, MW3 has a similar offset and directional relationship to former diesel USTs as MW4 has to the former waste oil tanks and very little TPHg has been reported in MW3. Therefore, this relationship provides another line of evidence that the former waste oil USTs are the source of gasoline impacts in MW2 and MW4.
- 1999-2009 A quarterly groundwater monitoring program was performed at the Site.
- 2009 - 2014 In 2009, the groundwater monitoring frequency was changed from quarterly to semi-annually. A semi-annual groundwater monitoring program has been implemented from 2009 to December 2014. In accordance with the previous DES Work Plan (October 12, 2014), a quarterly groundwater monitoring program is under way to provide seasonal data for the newly-installed wells built in December 2014.
- October 2007 Western Resource Management (WRM) investigated soil types and groundwater conditions by advancing cone penetrometer (CPT) borings P1 through P4 and S5 (Figure 2). The determination of soil types was performed by evaluating the CPT geophysical logging results. The lateral and vertical extent of hydrocarbon impacts in the saturated zone was evaluated by collecting groundwater grab samples at multiple depths below the water table in the CPT borings. The only soil samples analyzed from the CPT borings were from P2 at 65 fbg and S5 at 35 fbg. Neither of the two soil samples collected in 2007 were analyzed for the Site contaminants of concern. The two soil samples were tested for total organic carbon and porosity only for use in developing the Site Conceptual Model and for risk modeling.
- March 2009 Taber conducted a sensitive receptor survey and found the wells discussed in Section 1.2 of this Work Plan.
- June 2009 Taber conducted a soil gas survey of the Site by advancing and sampling soil-gas probe borings SV1 through SV5. The results of the soil gas survey were presented in Taber Report (January 25, 2010). The Taber Report (January 25, 2010) indicated acceptable cancer and non-cancer risks for an industrial worker exposure scenario. Mixed results were estimated for a residential land use exposure scenario.

- October 2010 Taber installed two Geoprobe borings (GP1 and GP2) to evaluate groundwater conditions east of the Site. Borings GP1 and GP2 were also sampled at depths of 125 fbg to evaluate vertical migration of the Site plume. The 2007 - 2010 grab groundwater sampling efforts appear to have assessed the lateral extent of impacts east of the Site. These results were confirmed by the later December 2014 installation and sampling of wells MW7 and MW8 (Figure 4).
- 2011 Taber prepared a corrective action plan (CAP) and feasibility study. The Taber CAP (August 11, 2011) concluded that Rockworks® modeling using data from the CPT geophysical study indicated that the geologic materials at the water table were sufficiently permeable to provide a pathway for impacts from the Pacific Pride Site to migrate to MW4. The Taber CAP (August 11, 2011) also concluded that 55 gallons of product is in the vicinity of MW2. The Taber CAP (August 11, 2011) recommended that free product bailing be performed to mitigate product in MW2 and to implement a monitored natural attenuation (MNA) remedial program. To address the rising water table at the Site, the Taber CAP (August 11, 2011) recommended that a shallow well be installed adjacent to product-impacted well MW2.
- Aug. 2011 The enclosed SJCEHD Letter (August 17, 2011) was issued and refuted Taber's conclusion in the Taber CAP (August 11, 2011) that gasoline impacts in MW4 are due to the Pacific Pride site based low dissolved gasoline and aromatic impacts in a sentry well between the two Sites. The SJCEHD Letter (August 17, 2011) also approved the installation of MW5 to allow for more effective product bailing in the vicinity of submerged well MW2. The SJCEHD Letter (August 17, 2011) also indicated that a Work Plan be prepared to implement batch groundwater extraction at MW4.
- Sept. 2011 In response to the directive in the SJCEHD Letter (August 17, 2013), Taber installed MW5 adjacent to MW2 (Figure 2). During sampling in September 2011, no product was reported in MW5. Taber also conducted a slug test in MW5 and found that the hydraulic conductivities of 1.03×10^{-4} to 1.48×10^{-4} centimeters per second (cm/sec) were consistent with the silty sands logged at the Site and the literature values of 10^{-3} and 10^{-5} cm/sec for hydraulic conductivity in silty sand (Fetter, C.W. *Applied Hydrogeology*. Fourth Edition).
- March 2013 DES was engaged by the Responsible Party to provide consulting services for the Case. On March 29, 2013, DES gauged, purged, and sampled MW1, MW3, MW4, and MW5. Well MW2 was gauged only and was not sampled because of the presence of measurable product. The sampling was conducted to provide the required semi-annual monitoring data for First Quarter 2013. The First Quarter 2013 data along with the historical, groundwater , product, and soil data were used to develop a conceptual impact model that was presented in the DES Report (January 2, 2014). The DES Report (January 2, 2014) found multiple data gaps for the lateral and vertical extent of soil contamination. The conceptual model was then used with confirmation data in the follow-on DES Report (February 3, 2014) to develop a groundwater investigation approach.
- Sept. 2013 DES conducted the Third Quarter 2013 groundwater monitoring event. The results of the Third Quarter 2013 groundwater monitoring were presented in the DES Report (February 3, 2014). The DES Report (February 3, 2014) evaluated the September 2013 data relative to the

conceptual model in the previous DES Report (January 2, 2014) to develop a groundwater investigation approach. The DES Report (January 2, 2014) found that a wide vertical fluctuation in groundwater levels provided the means for contamination to accumulate in multiple depth zones. Based on that concern, the DES Report (February 3, 2014) recommended installing cluster wells to address the lateral and vertical data gaps at the multiple water-bearing zone depths.

- Feb. 2014 DES conducted the First Quarter 2014 groundwater monitoring event at the Site.
- Mar. 2014 On March 12, 2014, the SJCEHD, the Responsible Party, and DES met to discuss the recommendations in the DES Report (February 3, 2014). The SJCEHD indicated that the data from the adjacent Pacific Pride case should be evaluated with the Site data as part of the basis for developing new well locations. DES agreed that the additional evaluation would be incorporated into the First Quarter 2014 groundwater monitoring Report.
- Jun. 2014 Based on the discussions in the March 2014 SJCEHD meeting, DES evaluated more of the Site's historical groundwater and soil data and the historical data from the adjacent Pacific Pride site. The combined data were used to update the conceptual model for the Site and provide a stronger basis for recommended well locations. The updated conceptual model and the First Quarter 2014 groundwater monitoring results were presented in the DES Report (June 16, 2014).
- Sept. 2014 On September 8, 2014, the SJCEHD, the Responsible Party, and DES met to discuss the recommendations in the DES Report (June 16, 2014). From discussions during the meeting, the SJCEHD concurred with the proposed well locations in the DES Report (June 16, 2014) and directed that a third well also be installed east of South El Dorado Street. Well screen depths and the preferred Corrective Action Plan (CAP) process for implementing dual-phase extraction (DPE) as a remedial action for the product at the Site (such as the approach currently under way at the adjacent Pacific Pride site) were also discussed. The SJCEHD documented the directives from the meeting in the enclosed SJCEHD Letter (September 9, 2014).
- October 2014 DES submitted a Work Plan (October 10, 2014) in response to the directives in the SJCEHD Letter (September 9, 2014).
- Dec. 2014 DES installed the three approved groundwater monitoring wells (MW6, MW7, and MW8) from the DES Work Plan (October 10, 2014). The new wells and the Site well network were surveyed on December 10, 2014. The wells were surveyed to horizontal coordinates based on the North American Datum (NAD) 83 datum and to vertical elevation based on the NGVD29 datum.
- March 2015 DES submitted a Site Assessment Report (March 12, 2015) which detailed the December 2014 well installation and sampling, and updated the Site conceptual model. The DES SAR (March 12, 2015) found that with the new wider well network and updated elevation survey, westward groundwater flow was indicated by the data. Westward groundwater flow was a

new finding for the Site and the DES SAR (March 12, 2015) recommended that a new groundwater monitoring well be installed downgradient and westward of product impacts reported in MW2.

The DES SAR (March 12, 2015) also found that more soil data is needed to determine depth zones that provide a source of product in deep well MW2 but only provide a sheen in shallow well MW5. To determine the depth of product-impacted soils, the DES SAR (March 12, 2015) recommended installation of a continuous core boring at the MW2 location. The continuous core data would provide a basis to determine depths that require further investigation and cleanup. Should product be found at depths below 50 fbg, the continuous core boring was planned to be converted to a groundwater monitoring well (MW9).

The screen interval in westward dowgradient well (MW10) was proposed to be installed at the same depth interval as MW9 in order to assess product impacts anticipated in MW9.

May 2015 In a telephone call with the SJCEHD on May 15, 2015, the SJCEHD conceptually agreed with the proposed investigation approach in the DES SAR (March 12, 2015) and directed that DES prepare a Work Plan to guide installation and sampling of the proposed new wells. The DES Work Plan (May 26, 2015) was submitted in response to the conclusions of the SJCEHD teleconference. The SJCEHD approved the DES Work Plan (May 26, 2015) in a Letter dated June 16, 2015.

June 2015 DES conducted the drilling approved in the DES Work Plan (May 26, 2015). The drilling work resulted in the installation of new well MW9 and collection of continuous core soil data at the North Tank Pit release area. The construction of MW9 was conducted in close coordination with the SJCEHD during drilling and the screen interval was developed based on real-time discussions of the field data with the SJCEHD. At that time, the SJCEHD found no need to install a well in the continuous core boring WPMW9. At that time, the SJCEHD only required installation of well MW9 at the WPMW10 location (Figure 2).

July 2015 DES submitted a Site Assessment Report (July 24, 2015) which detailed the June 2015 well installation and sampling, and updated the Site conceptual model. The DES SAR (July 24, 2015) concluded that the assessment phase of the Case response was complete, based on SJCEHD objectives, and proposed a configuration for a DPE remediation system. A recommendation was made to prepare a corrective action plan (CAP) to present a full-scale remedial design.

July 2015 The Case was transferred from the SJCEHD to the RWQCB-CV. Upon being informed of this change, DES coordinated with the RWQCB-CV to have a meeting to discuss the status of the Case and confirm RWQCB-CV's objectives for the Case.

August 2015 On August 19, 2015, DES, the Site Owner, and the RWQCB-CV met at the RWQCB-CV offices to discuss the Case. At the meeting, the RWQCB-CV indicated that further assessment of the multiple depth zones at the Site would likely be required prior to implementing full-scale remediation of the product plume. The RWQCB-CV indicated that directives for further

investigation would likely be issued upon completion of RWQCB-CV review of the DES SAR (July 24, 2015).

March 2016 RWQCB-CV completed review of the DES SAR (July 24, 2015) and required further investigation of the vertical extent of contamination and lateral assessment of vertical water bearing zones designated as follows:

- 1) Depth Zone A, existing wells screened from 17 to 37 fbg.
- 2) Depth Zone B, existing wells screened from 27 to 50 fbg
- 3) Depth Zone C, comprising the 3rd Sand at depths from 52 to 65 fbg.

This Work Plan was prepared in response to the RWQCB-CV Letter (March 28, 2016) and presents an approach to characterize the three depth zones. The RWQCB-CV Letter (March 28, 2016) also requested that a Dual Phase Extraction (DPE) Pilot Test Work Plan be submitted. The DPE Pilot Test Work Plan will be issued under a separate cover.

1.4 Basis for Proposed Well Locations

The background discussion above indicates that the lateral extent of soil, product, and dissolved-phase impacts at the Site are not assessed. To provide a basis for proposing new well locations, the available data are discussed below.

1.4.1 Impacts to Soil and Groundwater

To meet the objectives of SJCEHD, the DES SAR (July 24, 2015) assessed the lateral and vertical extent of product contamination at the former waste oil tank pit based on available soil data and from groundwater gauging in wells screened in Depth Zones A and B. The lateral extent of product in soil was sufficiently assessed to provide a basis for conducting DPE to remove the oil product. Enclosed Figure 4 shows the lateral and vertical extent of oil contamination reported in the DES SAR (July 24, 2015).

Review of soil data for TPH-diesel and TPH-gasoline, also provides information on areas that should be investigated during the proposed assessment of Depth Zones A, B, and C. Figure 5 shows that TPH-diesel impacts were reported in soil at 20 and 30 fbg at the south tank pit (former diesel tanks) and at depths from 10 fbg (27.8 ppm TPH-diesel) to 36 fbg (5,210 ppm TPH-diesel) in the north tank pit (former waste oil tanks).

1.4.1.1 South Tank Pit Investigation Needs

The TPH-diesel impacts at the south tank pit warrants investigation of depth zones A, B, and C as follows:

- 1) In south tank pit, TPH-diesel impacts from 15 fbg (95 ppm in sample TK2west) to 30 fbg (2,230 ppm in sample MW-1-30') are only investigated by existing well MW1 which is only screened in the Zone B (30-50 fbg) (Figure 5). Shallower diesel impacts at 15 fbg (95 ppm in sample TK2 West) and 20 fbg (2,300 ppm in sample MW-1-20') indicate that a well is needed in Zone A at the South Tank Pit (former diesel tanks) (Figure 5).

- 2) Groundwater data from MW-1 only represents groundwater impacted by soils at 30 to 50 fbg. Groundwater impacted by soils at 25 fbg is not represented. The historical data that shows TPH-diesel attenuation in MW1 from 310,000 ppb (12/22/1999) to ND (6/9/15) does not apply to groundwater in the shallower Zone A depth zone (Table 4). A well in Zone A at the south tank pit is needed to address this data gap and assess TPH-diesel impacts in Zone A.
- 3) There is no Zone C groundwater data at the South Tank Pit, therefore, a groundwater well is needed in Zone C in order to vertically assess groundwater impacts previously reported in Zone B.
- 4) Groundwater Monitoring wells in Depth Zones A, B, and C are warranted at the existing MW3 (Zone B) location to assess dissolved fuel from the South Tank Pit release along the primary southeastward contamination migration pathway at the Site (Figure 10).

1.4.1.2 North Tank Pit Investigation Needs

The lateral and vertical extent of soil impacts at the North Tank Pit were evaluated in detail in the DES SAR (July 24, 2015). Figures 4, 5, and 6 show that no TPH-oil, TPH-diesel, nor TPH-gasoline impacts were detected in the soil samples from 38 to 70 fbg in soil boring WPMW9. The North Tank Pit impacts to soil were assessed vertically by soil boring WPMW9. The lateral extent of TPH-oil and TPH-diesel under the Site building to the east of the North Tank pit is not assessed.

Wells MW2 and MW5 provide sufficient screen coverage to provide groundwater data for depth Zones A and B. There is no groundwater well at the North Tank Pit that provides data for Zone C. A well that is screened in Zone C is needed at the North Tank Pit to vertically assess dissolved impacts in groundwater under the North Tank Pit release source area.

Figures 4, 5, and 6 show that there is no data under the building to the east of the North Tank Pit. To determine if migration of oil impacts under the building is a concern, wells are proposed northeast of the North Tank Pit and at existing well location MW6 as indicated on Figures 14, 15, and 16.

1.4.1.3 Plume Leading Edge at MW4

The DES SAR (July 25, 2015) indicated elevated gasoline impacts in soils and groundwater at downgradient well location MW4 (Figures 6 and 10). Existing well MW4 is installed in Zone B. Wells in Zone A and Zone C are needed at the MW4 location to vertically assess impacts at the MW4 location at the leading edge of the plume. There is also a need to step out further to provide ND results at the leading edge of the plume, which is anticipated to be east and southeast of MW4.

1.4.2 Impacts to Groundwater

The DES SAR (July 24, 2015) provided a detailed evaluation of the product impacts to groundwater. The groundwater data was also affected by the data gaps due to available well coverage in the deep groundwater zone versus the shallow groundwater zone. The groundwater impacts are shown on Figure 9 (product), Figure 10 (dissolved TPH-gasoline), Figure 11 (dissolved TPH-diesel), Figure 12 (Dissolved TPH-motor oil), and Figure 13 (dissolved benzene). The proposed wells in Zones A, B, C are anticipated to assess the lateral and vertical dissolved-phase impacts at the Site. There was no groundwater contamination detected in well MW9,

therefore, well MW9 is considered sufficient to assess impacts to the west, unless other issues are identified from the testing in the proposed well network.

1.4.3 Rationale for Well Locations

Enclosed Table 6 provides details on how the proposed well locations in Zones A, B, and C address the data gaps discussed in Section 1.4.1 of this Work Plan. To present how the proposed wells will augment the existing well network screen interval coverage for each Zone, the proposed well locations are shown on enclosed Figure 14 (Zone A), Figure 15 (Zone B), and Figure 16 (Zone C). Proposed well screen depths and well construction for wells in each zone are depicted on enclosed Figure 17. Wells are proposed to be installed in clusters rather than as nested wells because there is very little vertical separation of the screen intervals between the Depth Zones and cross-contamination is a concern.

2.0 OBJECTIVE

The objective is to further assess the petroleum hydrocarbon impacts in soil and groundwater in the three Depth Zones A, B, and C at the Site. The proposed groundwater monitoring wells can also be used as DPE wells to support the remedial approach that is discussed in the in-progress DPE Pilot Test Work Plan for the Site. The lateral extent of dissolved-phase impacts needs to be assessed, in addition to cleanup of free product, in order to meet the Case Closure requirements of the LTCP.

3.0 SCOPE OF SERVICES

The soil and groundwater investigation scope of services will be performed in general accordance with the latest State of California Leaking Underground Fuel Tank (LUFT) Manual guidelines. This Work Plan provides an approach to investigate the lateral extent of soil, product, and groundwater contamination.

On the basis of the discussed Site information and the above-outlined objective, the investigation work scope is presented as follows:

- 1) To investigate the lateral extent of product and dissolved-phase impacts in Depth Zone A, advance and sample proposed wells MW10, MW11, MW12, MW13, and MW14 with screen intervals from 18 to 28 fbg (Figure 14). Further details and rationale for the Zone A wells are discussed in Section 3.2.1 of this Work Plan. The proposed wells are intended to augment the existing well coverage in Zone A provided by existing wells MW5, MW6, MW7, and MW8 (Figure 14).
- 2) To investigate the lateral extent of product and dissolved-phase impacts in Depth Zone B, advance and sample proposed wells MW15, MW16, MW17, and MW18 with screen intervals from 30 to 50 fbg (Figure 15). Further details and rationale for the Zone A wells are discussed in Section 3.2.2 of this Work Plan. The proposed wells are intended to augment the existing well coverage in Zone B provided by existing wells MW1, MW2, MW3, MW4, and MW9 (Figure 15).
- 3) To investigate the lateral and vertical extent of dissolved-phase impacts in Depth Zone C, advance and sample proposed wells MW19, MW20, MW21, and MW22 with screen intervals from 52 to 62 fbg (Figure 16). Further details and rationale for the Zone C wells are discussed

in Section 3.2.3 of this Work Plan. The proposed Zone C wells are needed because there is no existing Zone C well coverage at the Site.

The proposed scope of services, which is currently anticipated to meet the project objective, is presented in the description of the following tasks:

3.1 Project Plans and Permits

The scope of services anticipated for this project will require obtaining various approvals for the following plans and permits prior to mobilization.

3.1.1 Work Plan Approval

This Work Plan, including the project objective and scope of services, is to be uploaded to Geotracker for approval by the RWQCB-CV.

3.1.2 Drilling Permit

Upon RWQCB-CV approval of this Work Plan, a drilling and monitoring well construction permit must be obtained from the SJCEHD. An encroachment permit will be required from the City of Stockton for proposed offsite wells MW10, MW11, MW12, MW15, MW16, MW17, MW18, MW20 and MW21 (Figures 14, 15, and 16).

3.1.3 Utility Clearance

In order to minimize the potential Site hazards during the proposed soil and groundwater investigation, and as required by law, Underground Service Alert will be notified to identify public utilities encroaching onto the Site. The mark-out of potential utilities is intended to reduce the risk of encountering or damaging an underground structure during the proposed subsurface activities. Private utility service connections are also known to exist in the work area, and must be further evaluated prior to drilling. A private utility locator service will be employed to locate the private connections to the public utilities. In addition, each prospective boring location will be “air-knifed” with a vacuum drilling application down to 5 feet below ground surface (bgs) to verify utility clearance. This precaution is applicable, since the proposed drilling locations are near multiple underground utility lines at the operating trucking facility, and multiple wells are in the City of Stockton right-of-way.

3.2 Soil Boring and Monitoring Well Installation

DES proposes to drill thirteen soil borings and convert them to monitoring wells (Figures 14, 15, and 16). Drilling and well installation will be performed by a drilling company with an active California C-57 contractor’s license. Portions of the soil boring will be advanced using continuous core methods to identify product or water-bearing sand stringers. Soil samples from the continuous core will be collected as indicated in Section 3.3 of this Work Plan. The field geologist will inspect the soil samples to determine if soil staining, seeping product, odor, or elevated PID measurements indicate product-bearing soils.

3.2.1 Depth Zone A Soil Boring and Monitoring Well Installation

Wells in Depth Zone A (Figure 14) will be installed to target dissolved-phase impacts at 18 to 28 fbg depths. Depth Zone A is between the Upper Confining Unit and the Lower Confining Unit (Figures 7 and 8). Wells in Zone A will be installed with screen intervals that cross the static water table and will be used to evaluate free product on the water table and groundwater flow direction. The rationale for well locations in Zone A are

summarized on enclosed Table 6. Groundwater levels at the Site are reported at depths of about 25 fbg, therefore, screen intervals will be installed from 18 to 28 fbg. This screen interval is proposed in order to not cross the screen interval of adjacent Zone B wells as follows (Figure 17):

- 1) Proposed Zone A Well MW10 will be installed with a screen interval of 18 to 28 fbg in order to not cross the 30 to 50 fbg screen interval of adjacent proposed well MW15 in Zone B.
- 2) Proposed Zone A Well MW11 will be installed with a screen interval of 18 to 28 fbg in order to not cross the 30 to 50 fbg screen interval of adjacent existing well MW4 in Zone B.
- 3) Proposed Zone A Well MW12 will be installed with a screen interval of 18 to 28 fbg in order to not cross the 30 to 50 fbg screen interval of adjacent proposed well MW16 in Zone B.
- 4) Proposed Zone A Well MW13 will be installed with a screen interval of 18 to 28 fbg in order to not cross the 30 to 50 fbg screen interval of adjacent existing well MW1 in Zone B.
- 5) Proposed Zone A Well MW14 will be installed with a screen interval of 18 to 28 fbg in order to not cross the 30 to 50 fbg screen interval of adjacent existing well MW3 in Zone B.

Due to the current water table depth and proposed well screen interval of 18 to 28 fbg, the pilot borings for Zone A wells will be advanced to 28 fbg. Zone A borings are installed at downgradient locations, or at locations where soil samples were previously collected, therefore the following soil sampling depths are proposed for Zone A wells:

- 1) 0-20 fbg, no soil sampling, except in MW13 at the former diesel UST tank pit. A soil sample will be collected at 15 fbg at the former tank pit floor depth.
- 2) 20-28 fbg, continuous core soil sampling - The field crew will collect 3 soil samples to represent the capillary fringe, the water table, and total depth.

3.2.2 Depth Zone B Soil Boring and Monitoring Well Installation

Wells in Depth Zone B (Figure 15) will be installed to target dissolved-phase impacts at 30-50 fbg depths. Wells in Zone B will be installed with screen intervals that evaluate dissolved-phase contamination migration in submerged portions of the 2nd Sand and the underlying clays and silts of the Lower Confining Unit. The rationale for well locations in Zone B are summarized on enclosed Table 6. A screen interval of 30 to 50 fbg is proposed for the Zone B wells in order to be similar to the 30 to 50 fbg screen interval of existing Zone B wells MW1, MW2, MW3, and MW4 (Figures 15 and 17). The 30 to 50 fbg screen interval of the Zone B wells is intended to not cross the 18 to 28 fbg screen intervals of the Zone A wells nor the 52 to 62 fbg screen interval of the Zone C Wells.

To accommodate the proposed well screen interval of 30 to 50 fbg, the pilot borings for Zone B wells will be advanced to 50 fbg. Zone B borings are installed at downgradient locations, or at locations where soil samples were previously collected, therefore, the following soil sampling depths are proposed for Zone B wells:

- 1) 0-30 fbg, no soil sampling.

- 2) 30-40 fbg, continuous core soil sampling to find the 2nd Sand - The field crew will collect 3 soil samples to represent the 2nd Sand, the 2nd Sand/ Lower Confining Unit contact, and the fine-grained soils of the Lower Confining Unit.
- 3) Soil samples at 40, 45, and 50 fbg will be collected to characterize the Lower Confining Unit and possibly the top of the 3rd Sand. Care will be taken not to install the screen of the Zone B wells into the 3rd Sand.

3.2.3 Depth Zone C Soil Boring and Monitoring Well Installation

Wells in Depth Zone C (Figure 16) will be installed to target dissolved-phase impacts in the 3rd Sand at 52-62 fbg depths. Zone C is below the Lower Confining Unit and straddles the upper part of the 3rd Sand (Figures 7 and 8). Wells in Zone C will be installed with screen intervals that evaluate dissolved-phase contamination migration in submerged portions of the 3rd Sand. The rationale for well locations in Zone C are summarized on enclosed Table 6. A screen interval of 52 to 62 fbg is proposed for the Zone C wells in order provide data for the 3rd Sand reported at that depth (Figure 7). The 52 to 62 fbg screen interval of the Zone C wells is intended to not cross the 18 to 28 fbg screen intervals of the Zone A wells nor the 30 to 50 fbg screen interval of the Zone B Wells.

To accommodate the proposed well screen interval of 52 to 62 fbg, the pilot borings for Zone C wells will be advanced to 62 fbg. Zone C borings are installed at downgradient locations, or at locations where soil samples were previously collected, therefore the following soil sampling depths are proposed for Zone C wells:

- 1) 0-50 fbg - No soil sampling will be conducted, except for samples collected from 5, 10, and 15 fbg in MW19 to provide soil data for the additional waste oil UST soil analyses directed in the enclosed RWQCB-CV Letter (March 28, 2016).
- 2) 50-62 fbg - Continuous core soil sampling will be conducted to find the 3rd Sand. The field crew will collect 3 soil samples to represent the Confining Layer/3rd Sand contact, soils within the 3rd Sand, and the bottom of the 3rd Sand or the well Total Depth (with a preference for a soil sample from the bottom of the 3rd Sand (if encountered at a depth shallower than 62 fbg)).

3.3 Sample Collection and Analytical Methods

3.3.1 Soil Sampling

Based on the assessment needs for each Depth Zone, continuous core soil sampling methods will be used as indicated in Section 3.2 of this Work Plan. Continuous core, or equivalent continuous soil sampling will be conducted at depths specified in Section 3.2 of this Work Plan in order to target chemical analysis of soil samples from sand stringers in the 1st, 2nd, and 3rd Sands. The soil samples will be collected from the continuous core using a decontaminated or new trowel and transferred to glass jars or metal sleeves capped with Teflon® sheets and plastic caps. The soil samples will be selected for chemical analysis based on field indications of hydrocarbon staining, seeping product, odors and/or geologic conditions, vapor screening results, laboratory results, and relation to the 1st, 2nd, and 3rd Sands. Unless otherwise specified in Section 3.2, one soil sample will be collected for every 5 feet of continuous core. Should splitspoon soil sampling methods be used, sand catchers will be placed at the bottom of the sampler in order to minimize sample loss.

The soil samples will be labeled with a unique identification number and the location will be recorded on the boring log. The labeled soil samples will be placed in an ice-chilled cooler and delivered to the State-certified laboratory under chain-of-custody procedures. New single-use disposable gloves will be donned prior to collecting each soil sample.

3.3.2 Soil Sample Analytical Methods and Reporting

In the 2014 SAR activities, the soil and groundwater samples were analyzed for the one-time analyte list directed in the enclosed SJCEHD Letter (September 9, 2014). DES understands that previous sampling efforts have provided the data for the additional analytes listed in the SJCEHD Letter (September 9, 2014). Therefore, for this Work Plan, the soil and groundwater samples will be analyzed for a more targeted list related to the petroleum hydrocarbon release concerns. Based on this approach, soil samples will be analyzed for TPH by EPA Method 8015-modified using a gasoline standard (TPHg), a diesel standard (TPHd), and an oil standard (TPHo).

The one soil sample that exhibits the highest TPHg concentration in each soil boring will also be analyzed by EPA Method 8260B for BTEX, MTBE and oxygenates, and naphthalene.

The analytical report, including quality assurance/quality control data, will be provided by the State-certified laboratory upon completion of the sample testing.

3.3.3 Additional Analyses at North Tank Pit

In response to the enclosed RWQCB-CV Letter (March 28, 2016), soil samples from 5, 10, and 15 fbg in soil boring MW19 (Figure 16) will be analyzed for Full-Scan VOCs by EPA Method 8260B, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C, and polychlorinated biphenyls (PCBs) by EPA Method 8080.

3.3.4 Groundwater Samples

No earlier than 72 hours after well development (refer to Section 3.4), product and groundwater levels will be gauged and groundwater samples will be collected from each well. In wells that do not have measurable product, groundwater samples will be collected with bladder pumps using micropurge methods. In wells with product impacts, non-purge samples of groundwater from beneath the product will be collected and analyzed for evaluation in terms of the LTCP cleanup levels. The purging and sampling will be conducted micropurge techniques and flow-through cell parameter measurement. The groundwater samples will be collected into appropriate containers, such as 40ml VOA vials, and 1-liter amber bottles (as required by the proposed chemical analyses in Section 3.3.6 of this Work Plan), and a unique sample identification number will be used for each sample. The samples will be stored in an ice-chilled cooler until delivery to a State-certified laboratory for testing. Proper chain-of-custody procedures will be utilized to document sample collection, handling, and transport.

3.3.5 Groundwater Sampling Under Free Product

The free product provides a source of dissolved-phase impacts in groundwater. In order to determine trends at the release source, samples of groundwater under the product will be collected. The RWQCB-CV concurred with this approach in the RWQCB-CV Letter (March 28, 2016). The sampling approach below is presented in response to further details requested in the RWQCB-CV Letter (March 28, 2016).

In order to minimize the amount of free product that may enter the water sample, the free product in the well will be bailed, using a single-use disposable bailer, until only a sheen is visible. Upon achieving a non-measurable product thickness in the well (sheen), a new disposable bailer will be used to collect the groundwater sample. A bailer will be used, because product bailing will disturb the water column in the well, so that low-flow purging methods will not be suitable. The State Fund has proscribed purging of wells that contain product, therefore, no purging will be conducted prior to groundwater sampling in the product-bearing wells. Upon bailing out the product, groundwater sampling will be conducted using bailing techniques with new single-use disposable bailers. The groundwater samples will be collected into appropriate containers, such as 40ml VOA vials, and 1-liter amber bottles (as required for analysis of TPH-diesel and TPH-motor oil), and a unique sample identification number will be used for each sample. The samples will be stored in an ice-chilled cooler until delivery to a State-certified laboratory for testing. Proper chain-of-custody procedures will be utilized to document sample collection, handling, and transport.

3.3.6 Groundwater Sample Analytical Methods and Reporting

Up to twenty two (22) groundwater samples (13 from the new wells and 9 from existing wells) will be submitted for analytical testing. In the 2014 SAR activities, the soil and groundwater samples were analyzed for the one-time analyte list directed in the enclosed SJCEHD Letter (September 9, 2014). DES understands that previous sampling efforts have provided the data for the additional analytes listed in the SJCEHD Letter (September 9, 2014). Therefore, for this Work Plan, the groundwater samples will be analyzed for a more targeted list related to the petroleum hydrocarbon release concerns. Based on this approach, groundwater samples will be analyzed for TPHg, TPHd, and TPHo by EPA Method 8015-modified. The groundwater samples will also be analyzed by EPA Method 8260B for BTEX, MTBE and oxygenates, and naphthalene. Should product be measured in the well, no purging will be conducted but a grab groundwater sample will be collected from the groundwater under the product to provide analytical data for comparison the LTCP cleanup levels for benzene and MTBE.

The analytical report, including quality assurance/quality control data, will be provided by the State-certified laboratory upon completion of the sample testing.

3.3.7 Free Product Sampling

The free product provides a source of dissolved-phase impacts in groundwater. The appearance of greater product thicknesses in MW2 versus lesser product thicknesses in MW5 raises questions, as to whether the same type of product is in each well. In response to the concurrence in the RWQCB-CV Letter (March 28, 2016), free product samples will be collected from MW2 and MW5. The analytical results for the product samples will be compared to determine if MW5 in Zone A is impacted by the same product as that found in MW2 in Zone B.

Sampling of product will be performed only once. Further sampling of product may be conducted if directed by the RWQCB-CV. Product samples will be collected prior to collection of groundwater under the product (in Section 3.3.5 of this Work Plan). Free product will be collected using a new disposable bailer. The State fund has proscribed purging of wells that contain product, therefore, no purging will be conducted prior to sampling free product floating on the water table. Product sampling will be conducted using bailing techniques with new single-use disposable bailer. The product samples will be collected into appropriate containers, such as 40ml VOA vials, and 1-liter amber bottles (as required for analysis of TPH-diesel and TPH-motor oil), and a unique sample identification number will be used for each sample. The samples will be stored in an ice-chilled cooler

until delivery to a State-certified laboratory for testing. Proper chain-of-custody procedures will be utilized to document sample collection, handling, and transport.

3.3.8 Free Product Analytical Methods and Reporting

Up to two (2) free product sample from MW2 and MW5 will be submitted for analytical testing. Free product samples will be analyzed for TPHg, TPHd, and TPHo by EPA Method 8015-modified. The free product samples will also be analyzed by EPA Method 8260B for BTEX, MTBE and oxygenates.

3.4 Well Installation

The new soil borings will be converted to groundwater monitoring wells to target the specific depths for Depth Zones A, B, and C. The proposed monitoring wells will be constructed with 0.020-inch slotted PVC casing and sufficient blank PVC casing to reach ground surface (refer to Figure 17 for screen and blank casing lengths). The well casing diameter will be 2 inches. The gravel pack will consist of Monterey Sand#3, or equivalent, and placed in the annular space from the termination depth to 2 foot above the slotted casing. Upon installing the sand pack, a surge block will be used to develop the well in an effort to prevent future settling of the sand pack. Upon completing the surge block development, a minimum 3 feet of bentonite chips will be placed on top of the sand and hydrated. Neat cement with 5% bentonite grout will be placed from the top of the bentonite seal to 3 fbg. Then 3 feet of concrete with a traffic box will enclose the upper part of the well. Refer to the enclosed Figure 17 for further well construction detail.

Following installation, each new well will be developed using a bailer, and/or submersible pump in accordance with LUFT Guidelines. Water generated during development will be containerized and left onsite for future disposal.

3.5 Groundwater Monitoring Frequency

Gauging and sampling will be performed no earlier than 72 hours after well development to allow potential phase-separated hydrocarbons to enter the new wells. The new wells will be gauged and sampled with micropurge techniques (if no product is measurable). The new wells, and the existing wells, will be sampled on a quarterly basis to monitor the groundwater and contaminant character through seasonal changes.

3.6 Updated Well Survey

The tops of casing (TOC) of the 13 new wells will be surveyed for x and y coordinates and elevation consistent with the Site NGVD29 (vertical datum) survey (which is consistent with the December 2014 Site survey discussed in the DES SAR (March 12, 2015), referenced to the San Joaquin County Benchmark # 117 (Figure 3), and NAD 83 (horizontal datum) consistent with the Pacific Pride site evaluated in the DES Report (June 16, 2014). The survey mark will be notched on the TOC. The Site map will be updated based on the new survey data.

3.7 Management of Wastes

Non-regulated and uncontaminated waste products generated during the environmental Site activities will be handled and disposed of as municipal waste. Soil and rock cuttings, equipment wash water, and purged groundwater must be handled and disposed of appropriately. It is anticipated that these waste products will be containerized in 55-gallon DOT drums as they are generated. Each drum will be labeled with its contents, date of generation, and emergency contact information. The drummed wastes will be stored in a secure area until transport to an appropriate treatment/disposal facility. California-regulated wastes will be removed via a

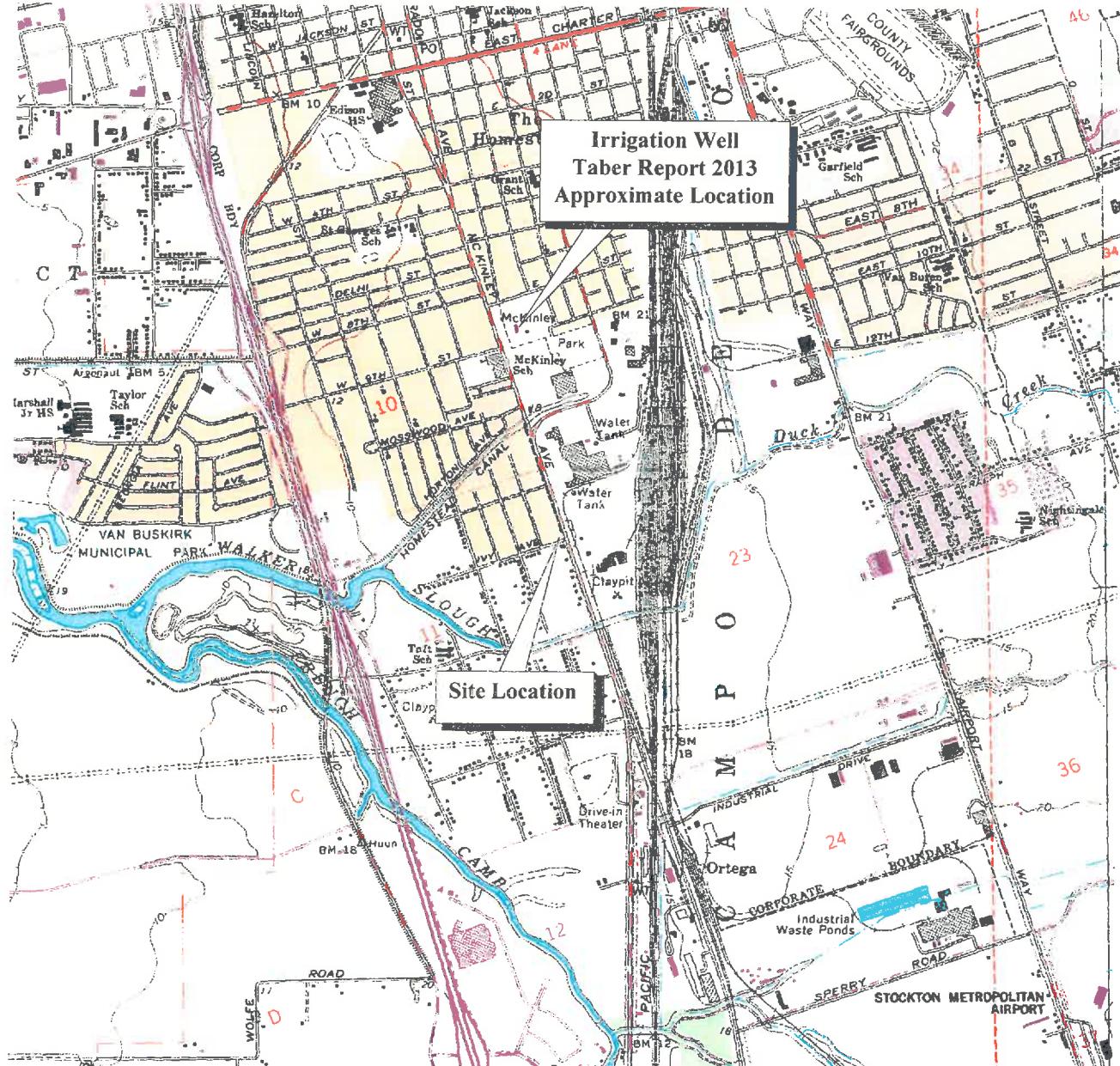
licensed recycler, and the RWQCB-CV will be provided with the appropriate documentation as the disposal actions are completed.

3.8 Site Assessment Report

At the completion of field and laboratory analysis, a SAR will be prepared in general accordance with the LUFT guidelines, executed with the proper professional signatures, and submitted to the RWQCB-CV. The SAR will summarize the methods used during the Soil and Groundwater Investigation. Sampling locations, laboratory findings, and the indicated extent of the petroleum hydrocarbon impact will be presented in the appropriate figures, tables, and other support documents.

FIGURES

- Figure 1 - Site Location Map
- Figure 2 - Updated Site Plan
- Figure 3 - Groundwater Plan - July 14, 2015
- Figure 4 - Oil-Impacted Soil Plan
- Figure 5 - Diesel-Impacted Soil Plan
- Figure 6 - Gasoline-Impacted Soil Plan
- Figure 7 - Cross-Section A-A'
- Figure 8 - Cross-Section B-B'
- Figure 9 - Product Thickness Plan - July 14, 2015
- Figure 10 - Dissolved Gasoline Groundwater Plan - June 9, 2015
- Figure 11 - Dissolved Diesel Groundwater Plan - June 9, 2015
- Figure 12 - Dissolved Motor Oil Groundwater Plan - June 9, 2015
- Figure 13 - Dissolved Benzene Groundwater Plan - June 9, 2015
- Figure 14 - Proposed Groundwater Monitoring Well Locations, Depth Zone A
- Figure 15 - Proposed Groundwater Monitoring Well Locations, Depth Zone B
- Figure 16 - Proposed Groundwater Monitoring Well Locations, Depth Zone C
- Figure 17 - Proposed Monitoring Well Construction, Depth Zones A, B, and C



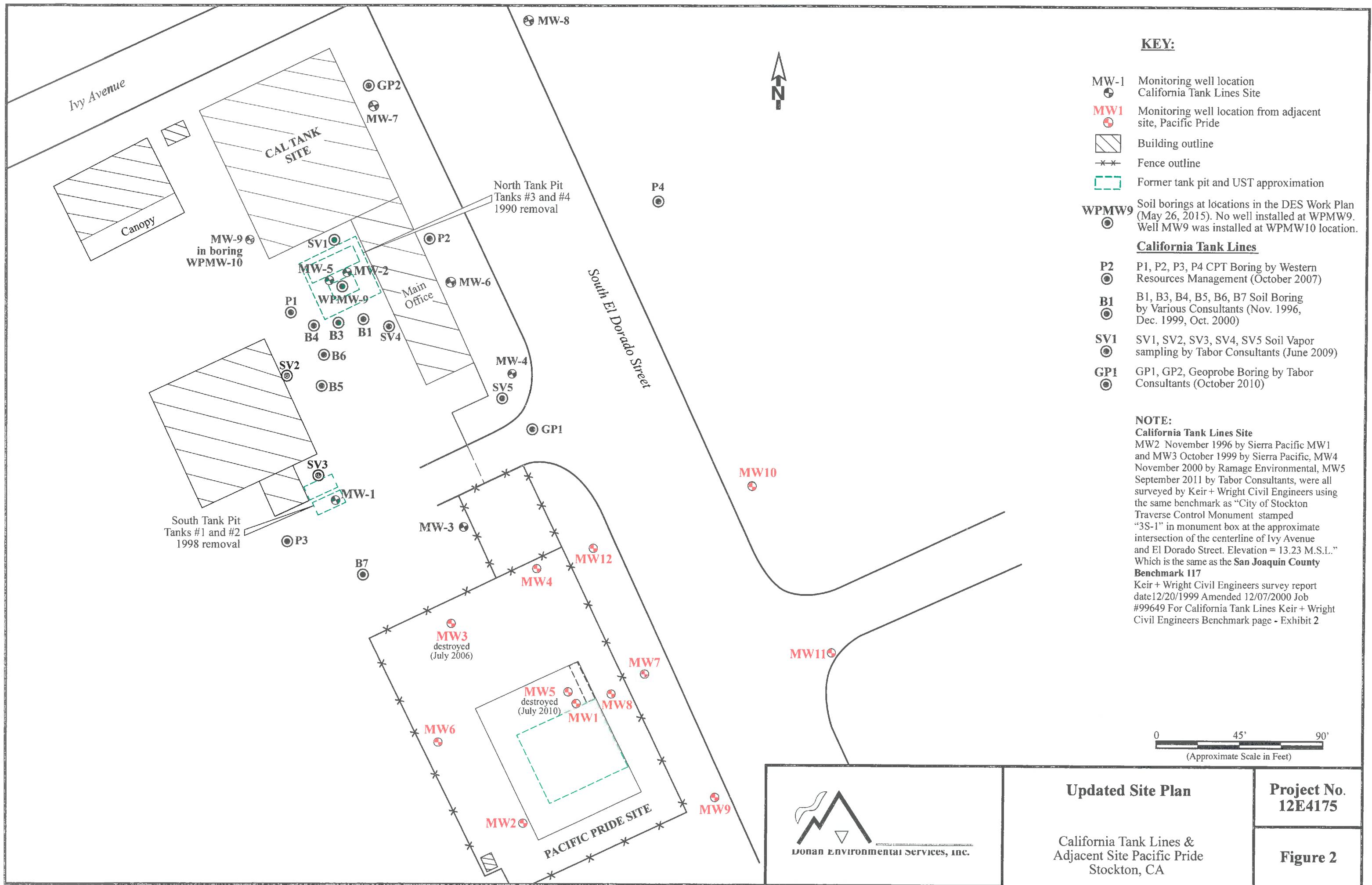
Donan Environmental Services, Inc.

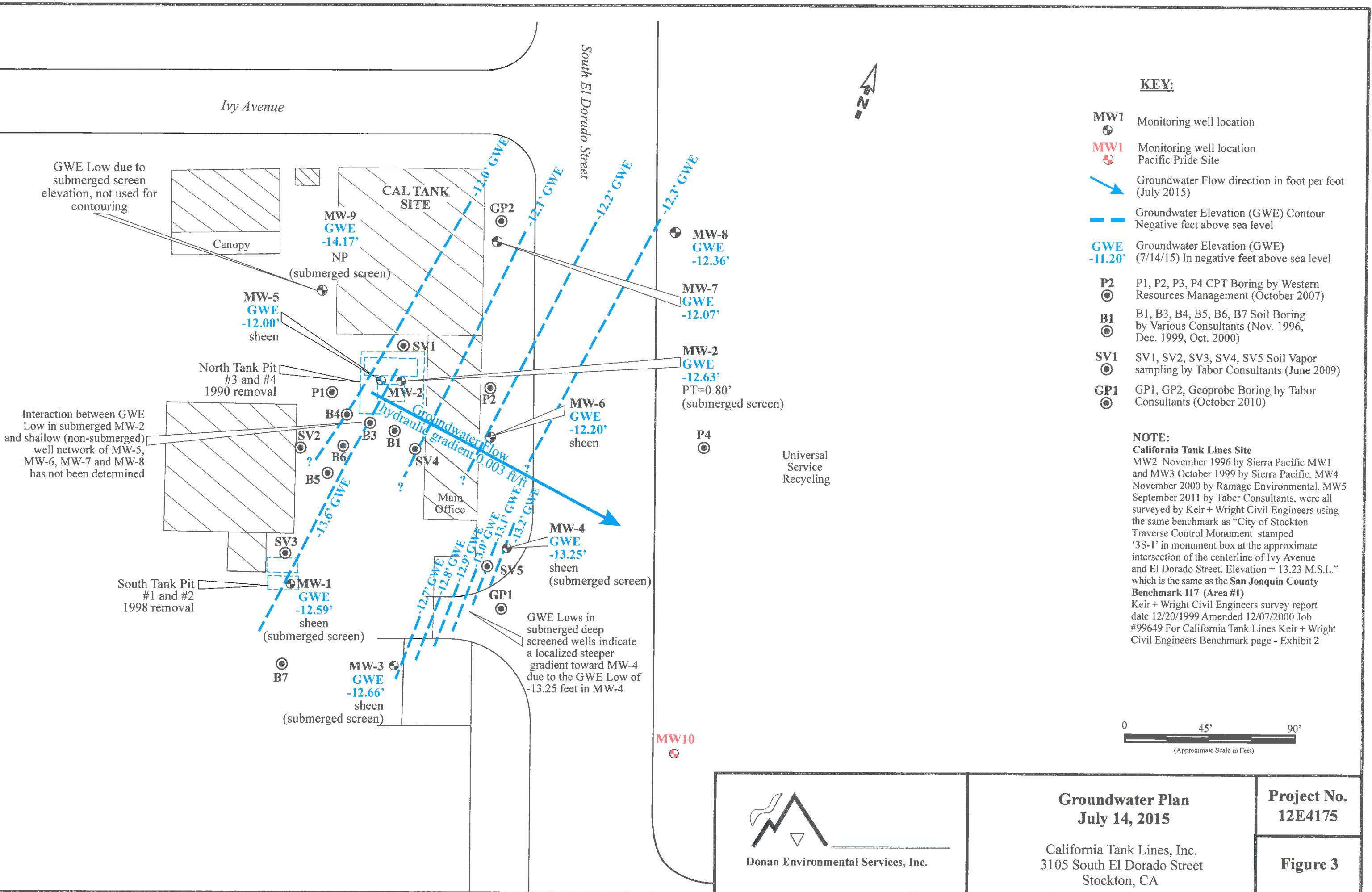
Site Location Map

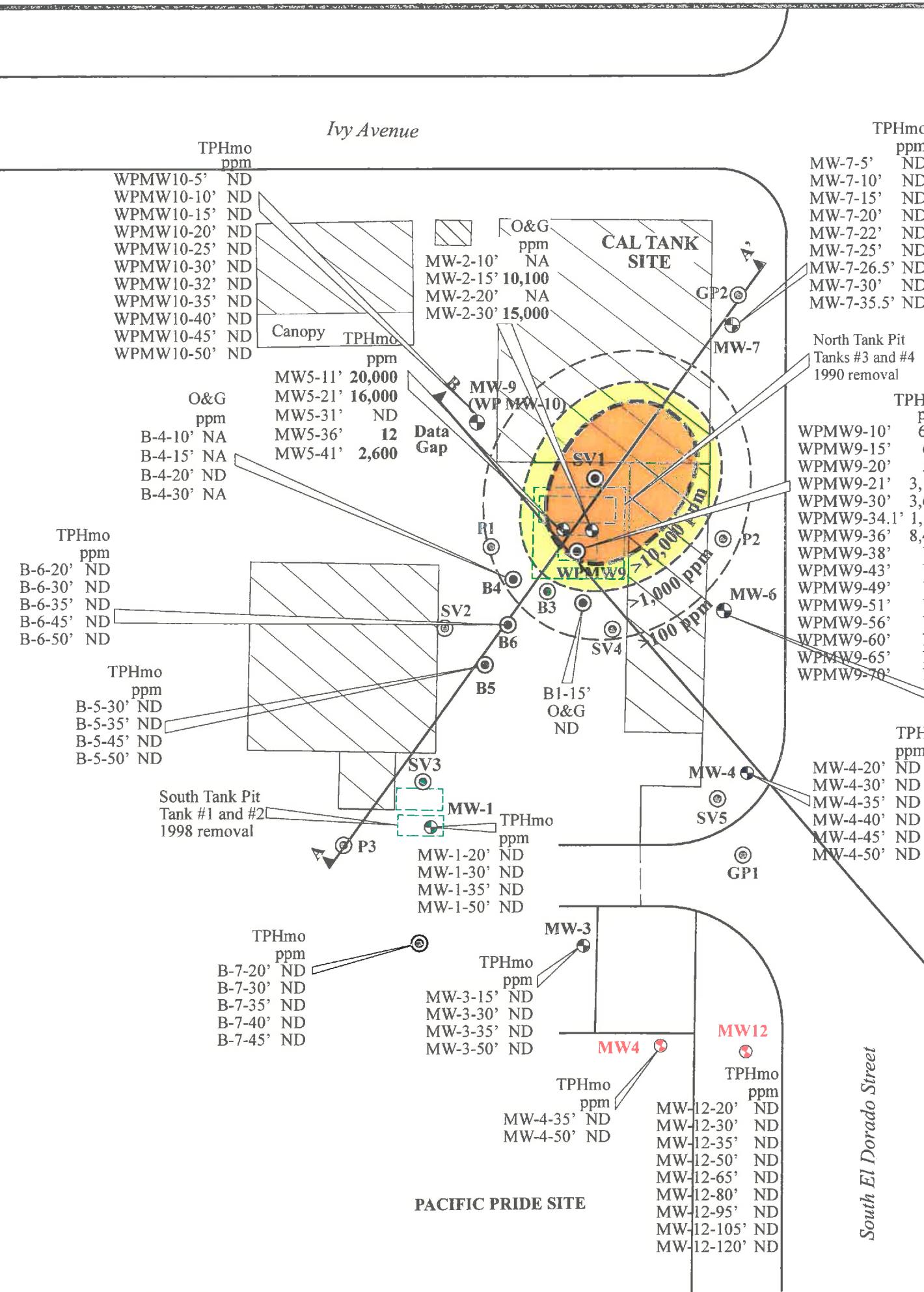
California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, CA

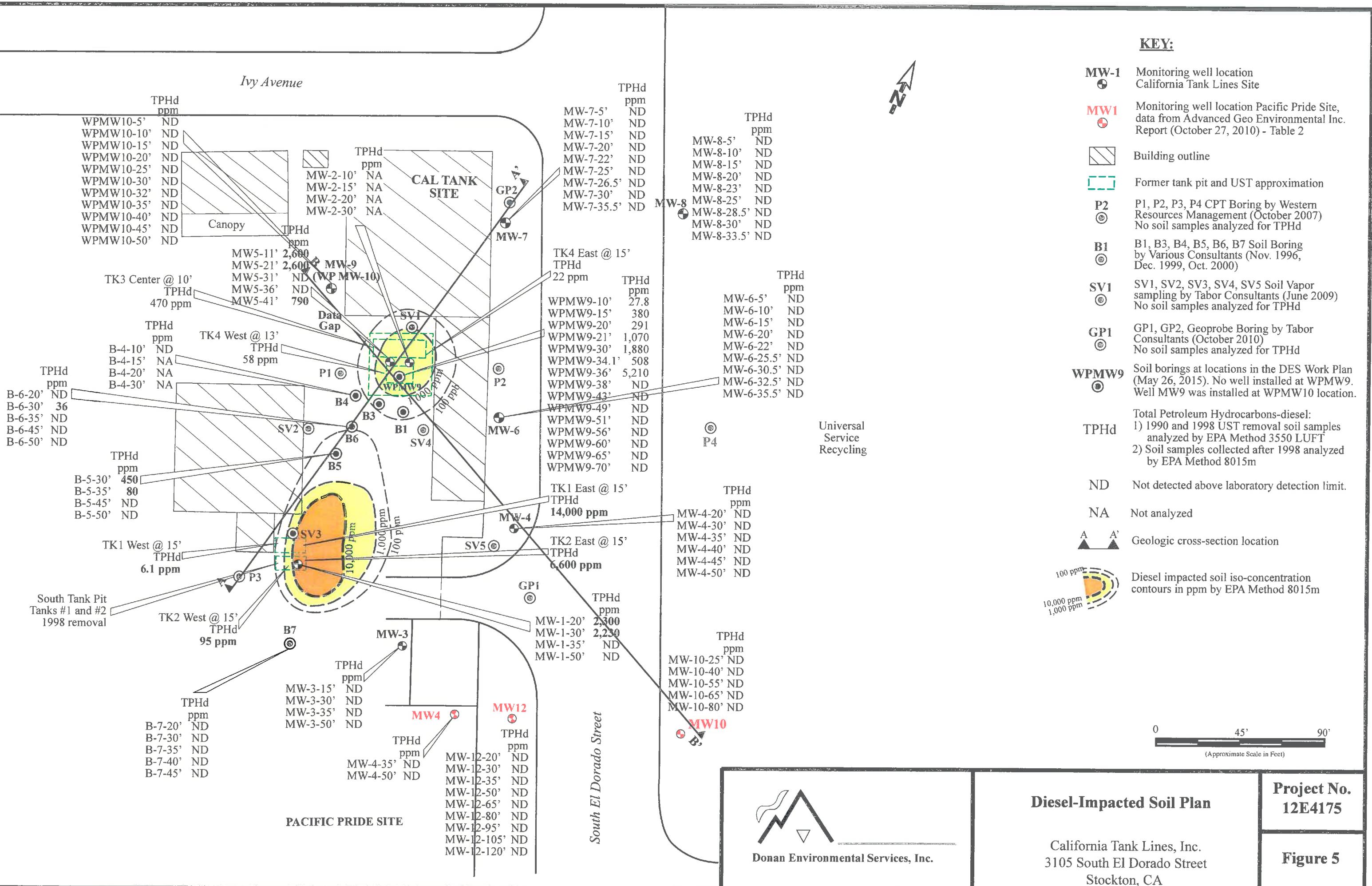
Project No.
12E4175

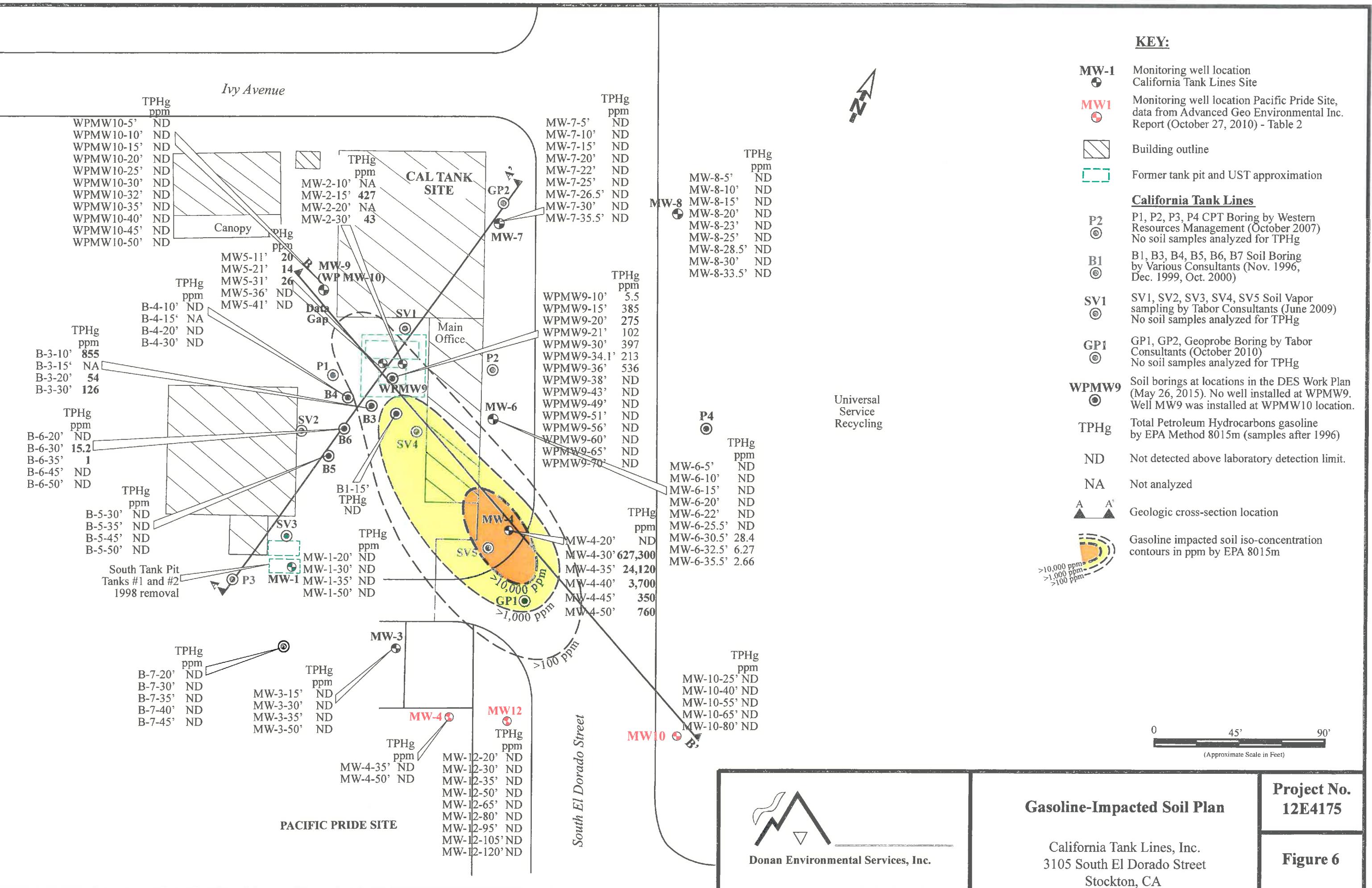
Figure 1

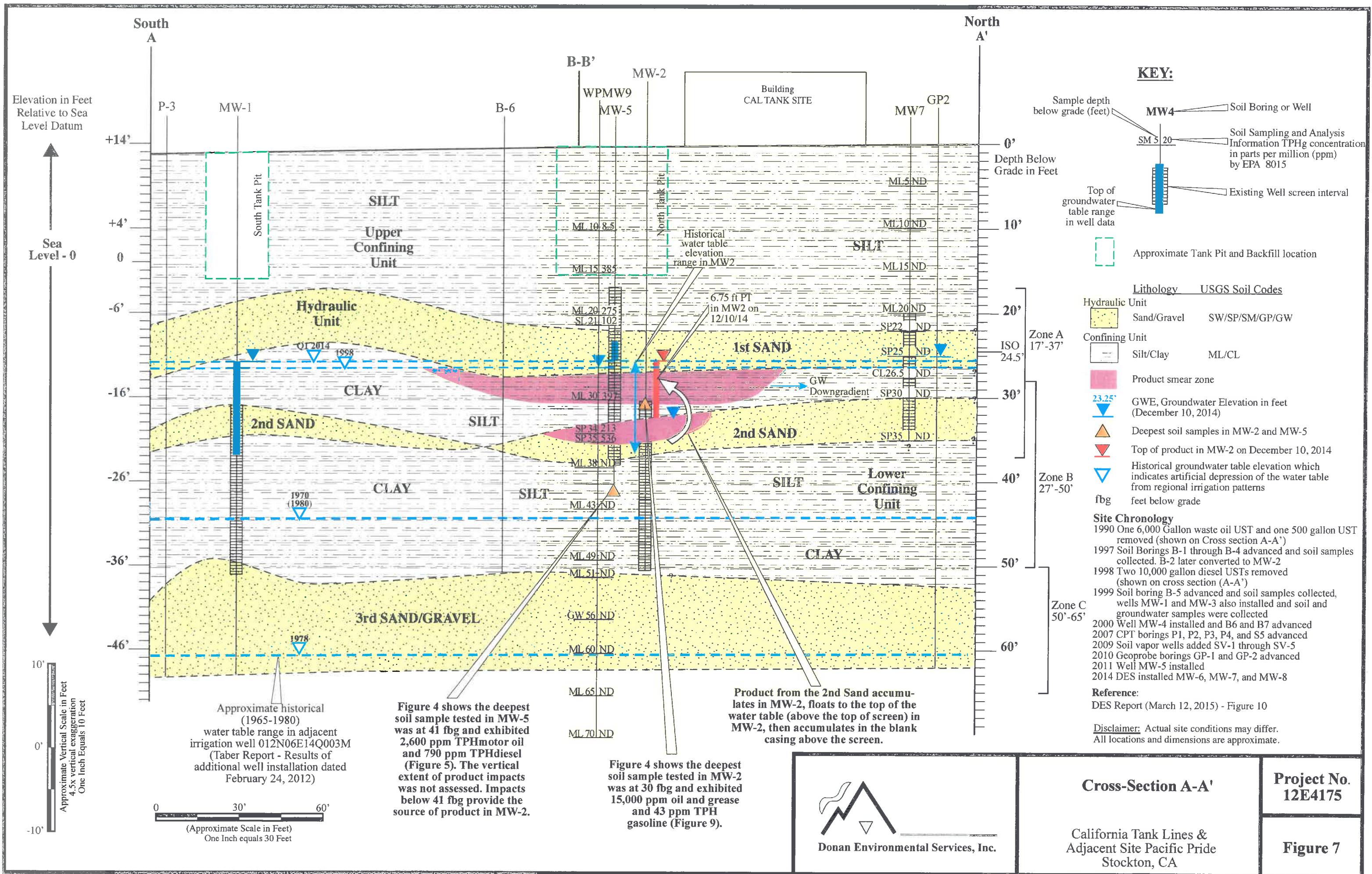


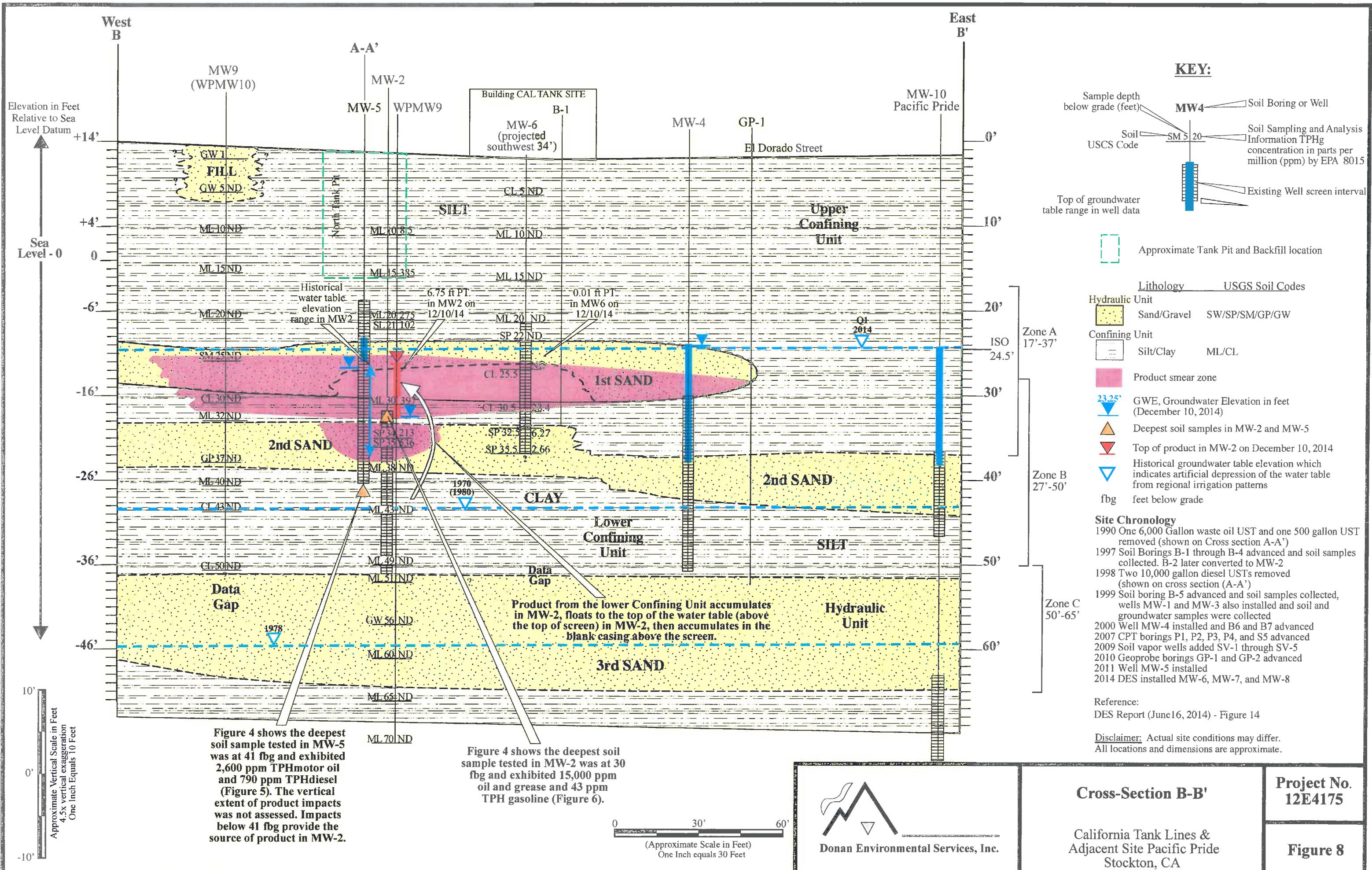


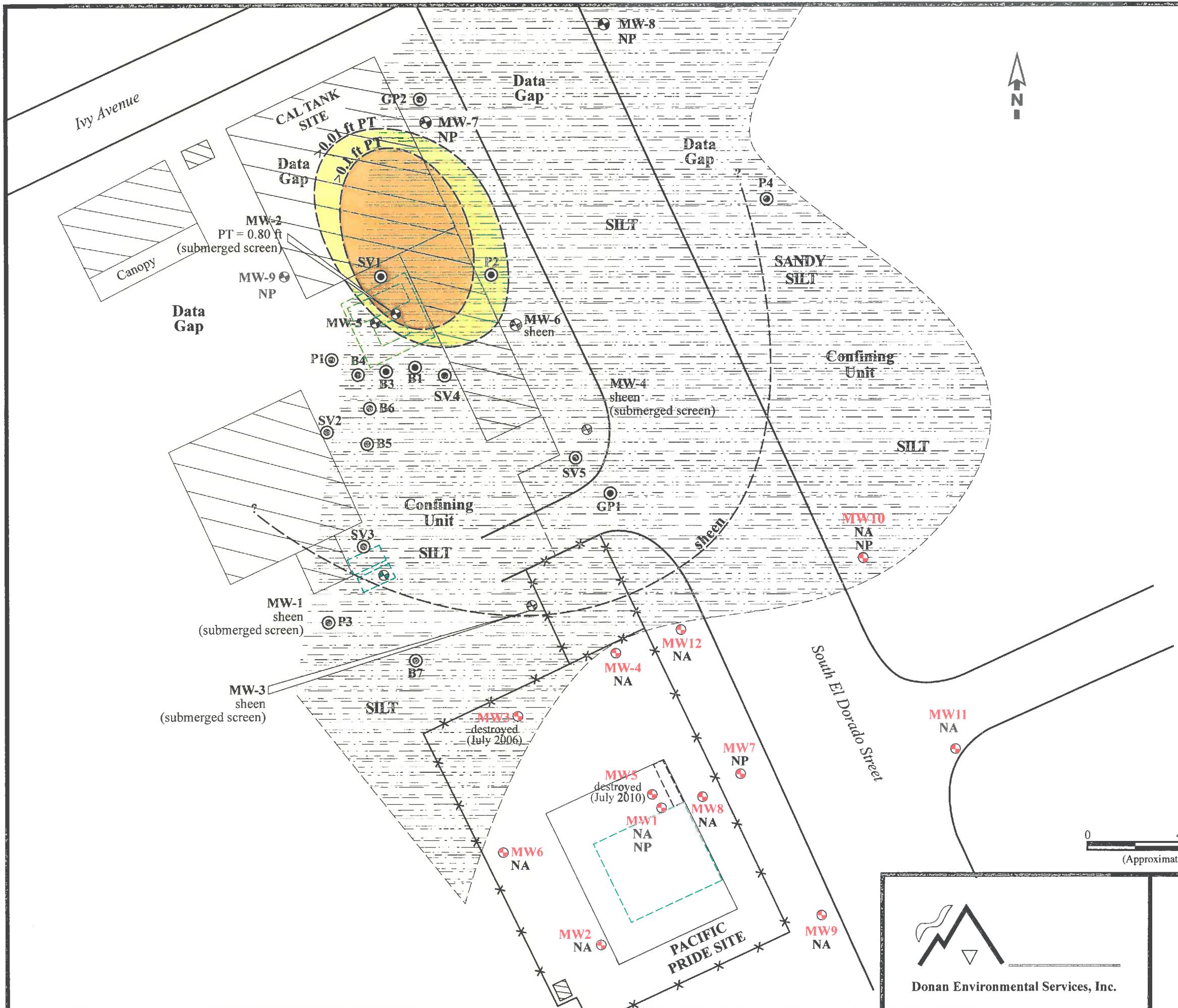


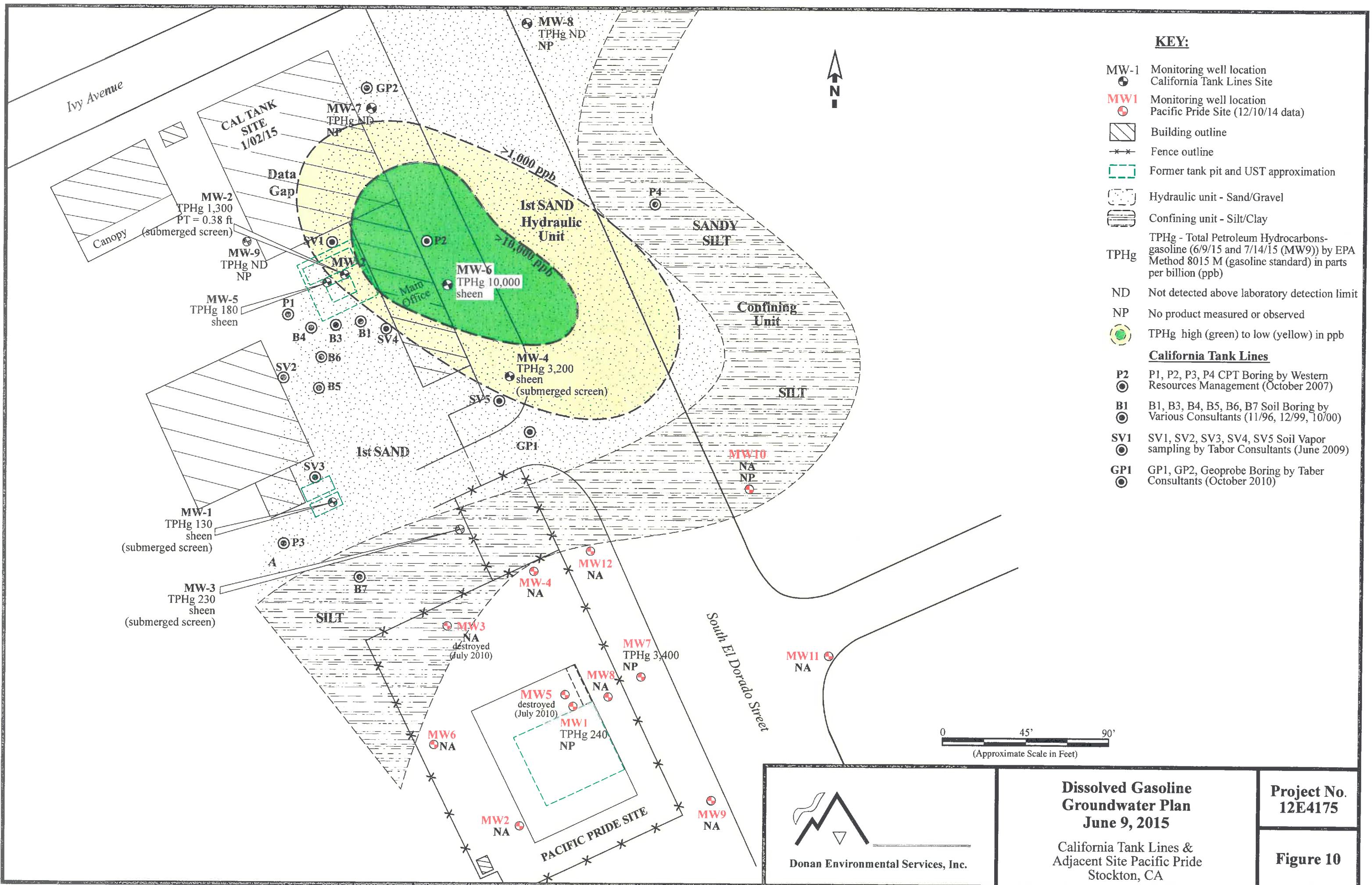


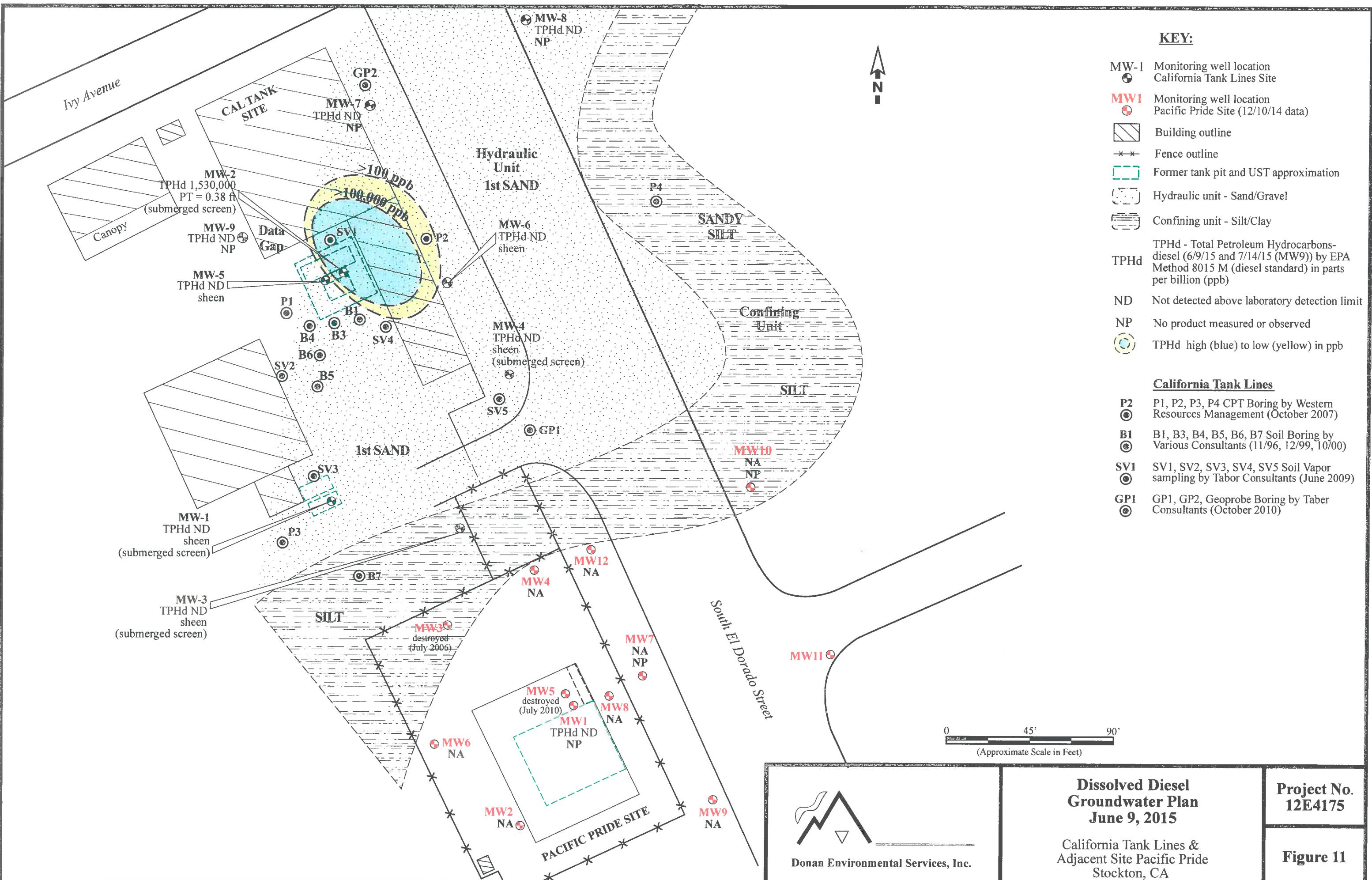


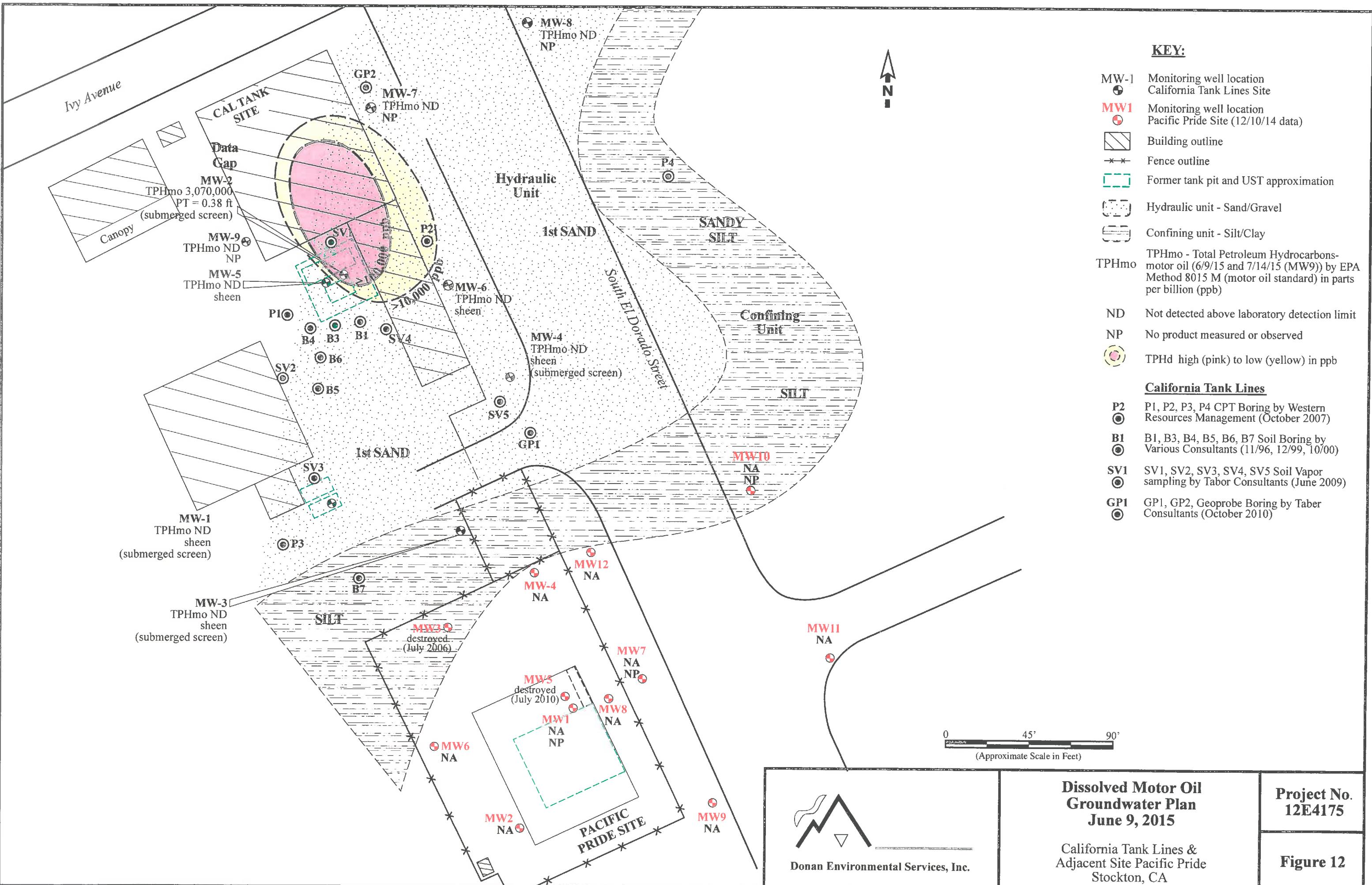


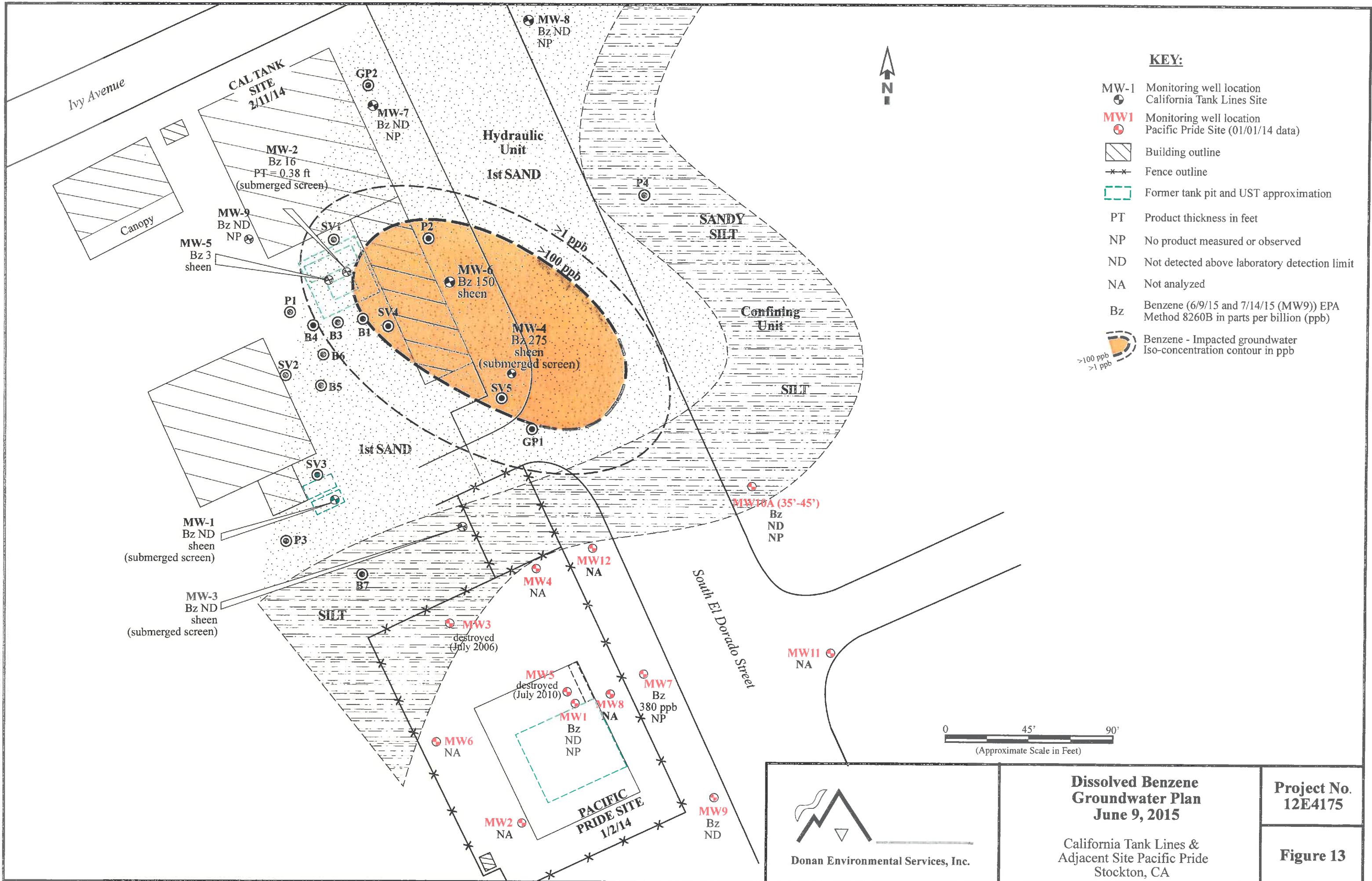


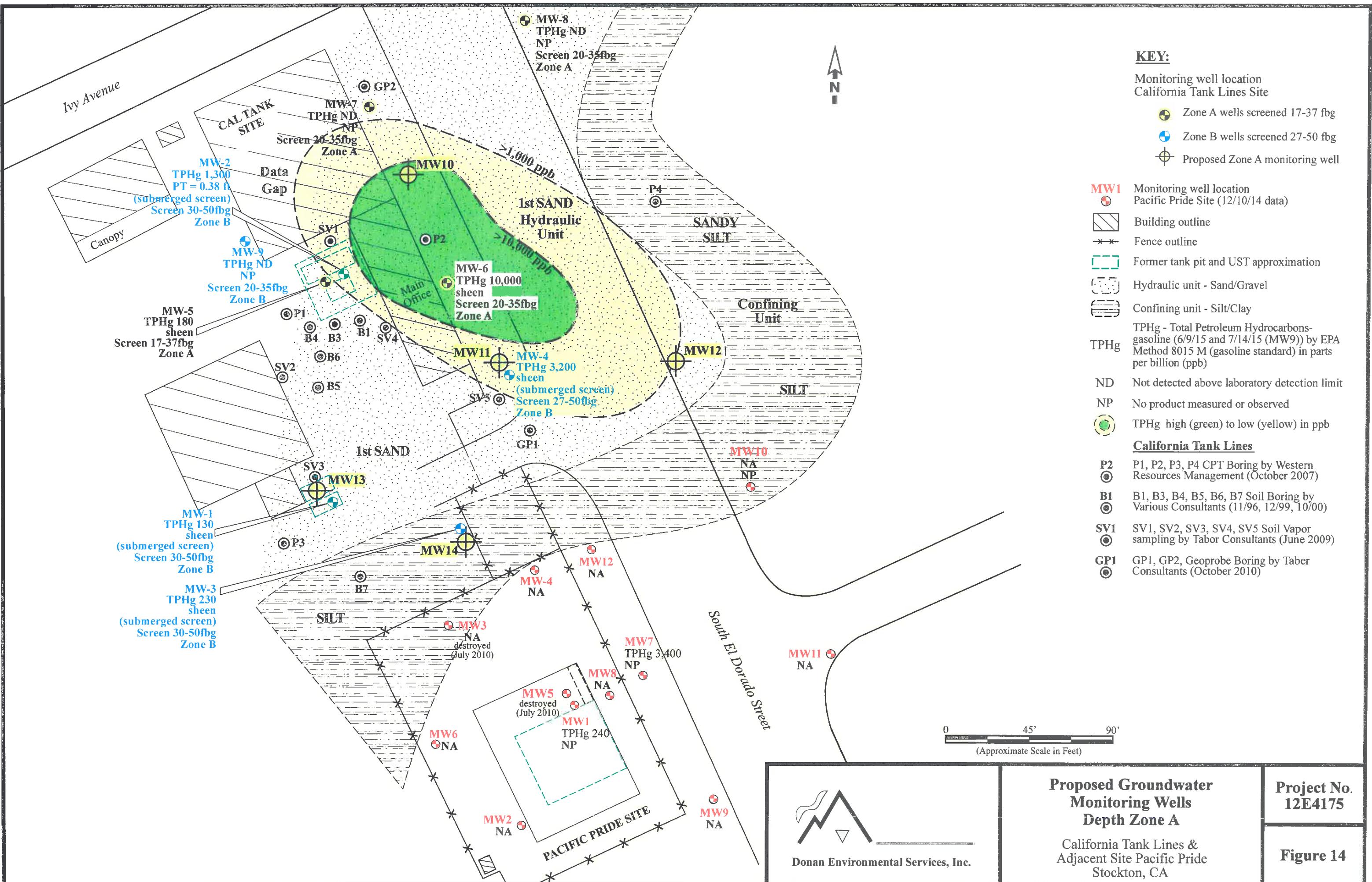


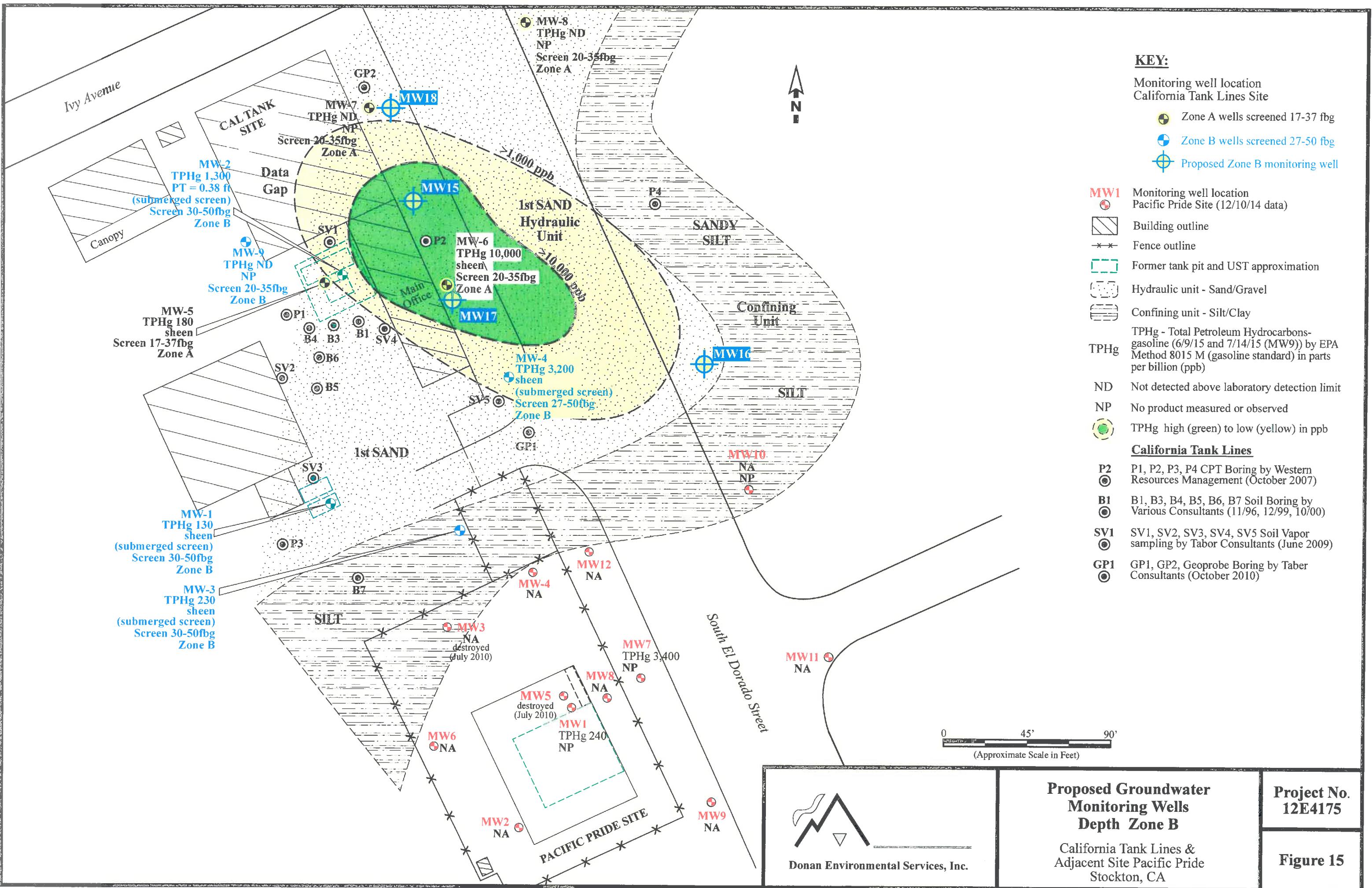


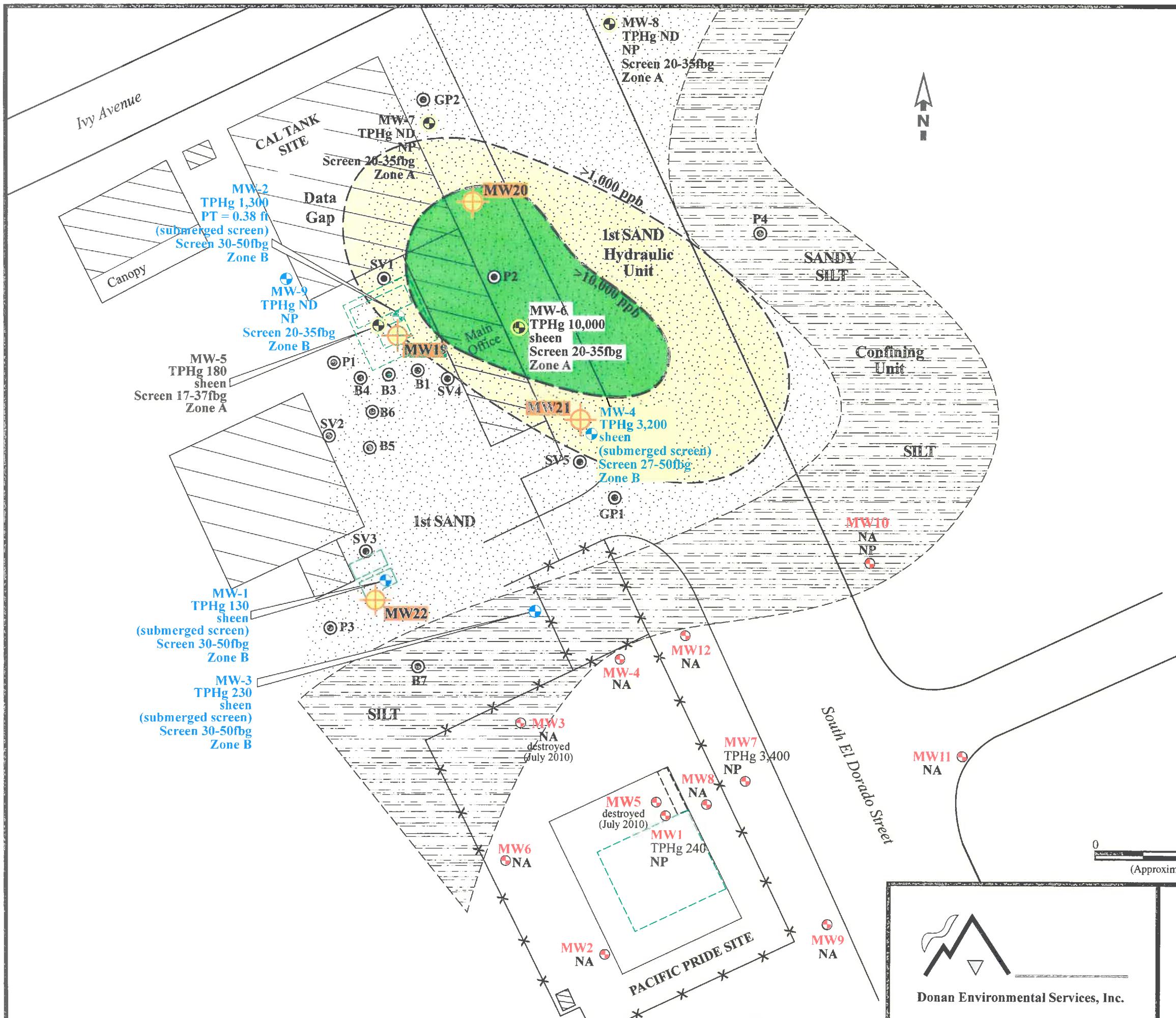






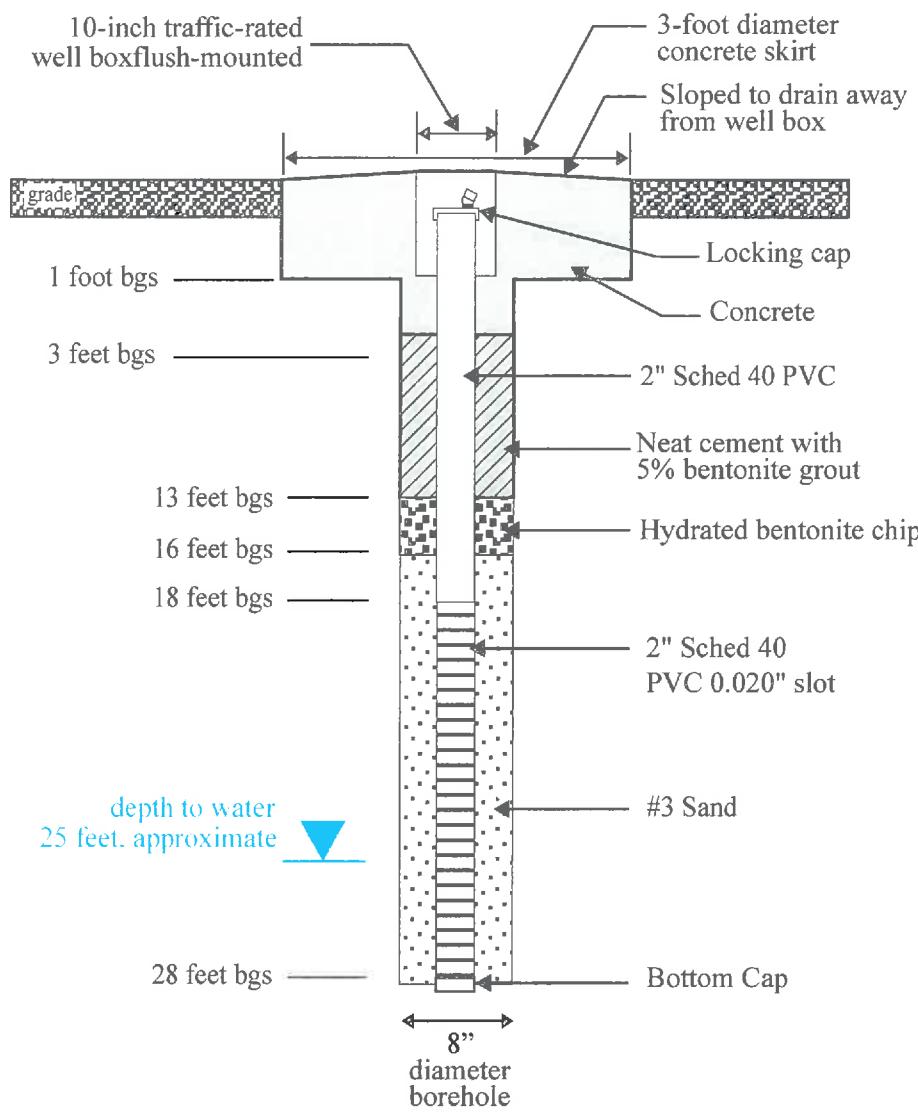






Proposed Well Construction

Zone A wells



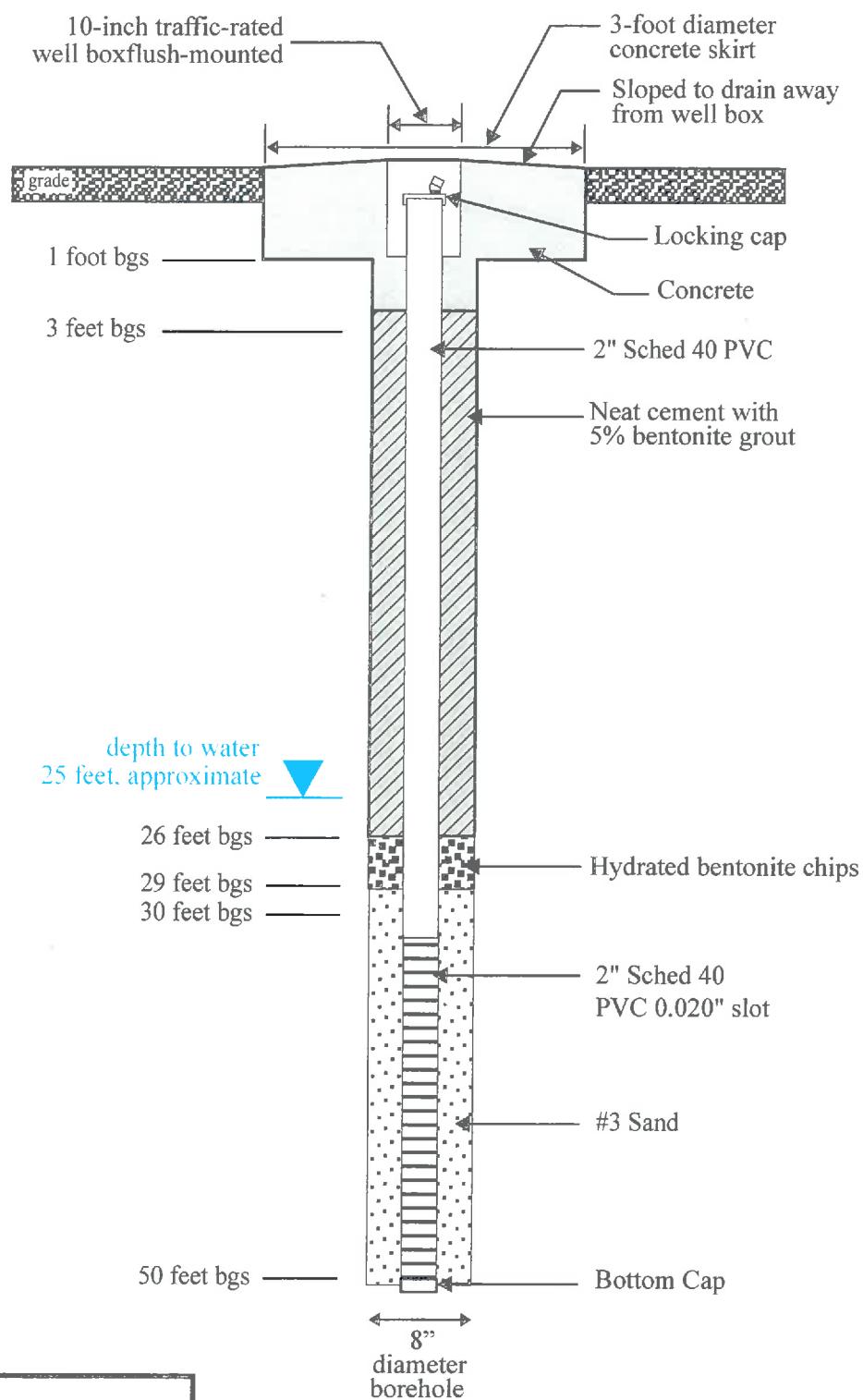
bgs = below ground surface

NOTE:

4" diameter wells are proposed to provide flexibility for use as future dual-phase extraction wells

Proposed Well Construction

Zone B wells



Donan Environmental Services, Inc.

Proposed Monitoring Well Construction

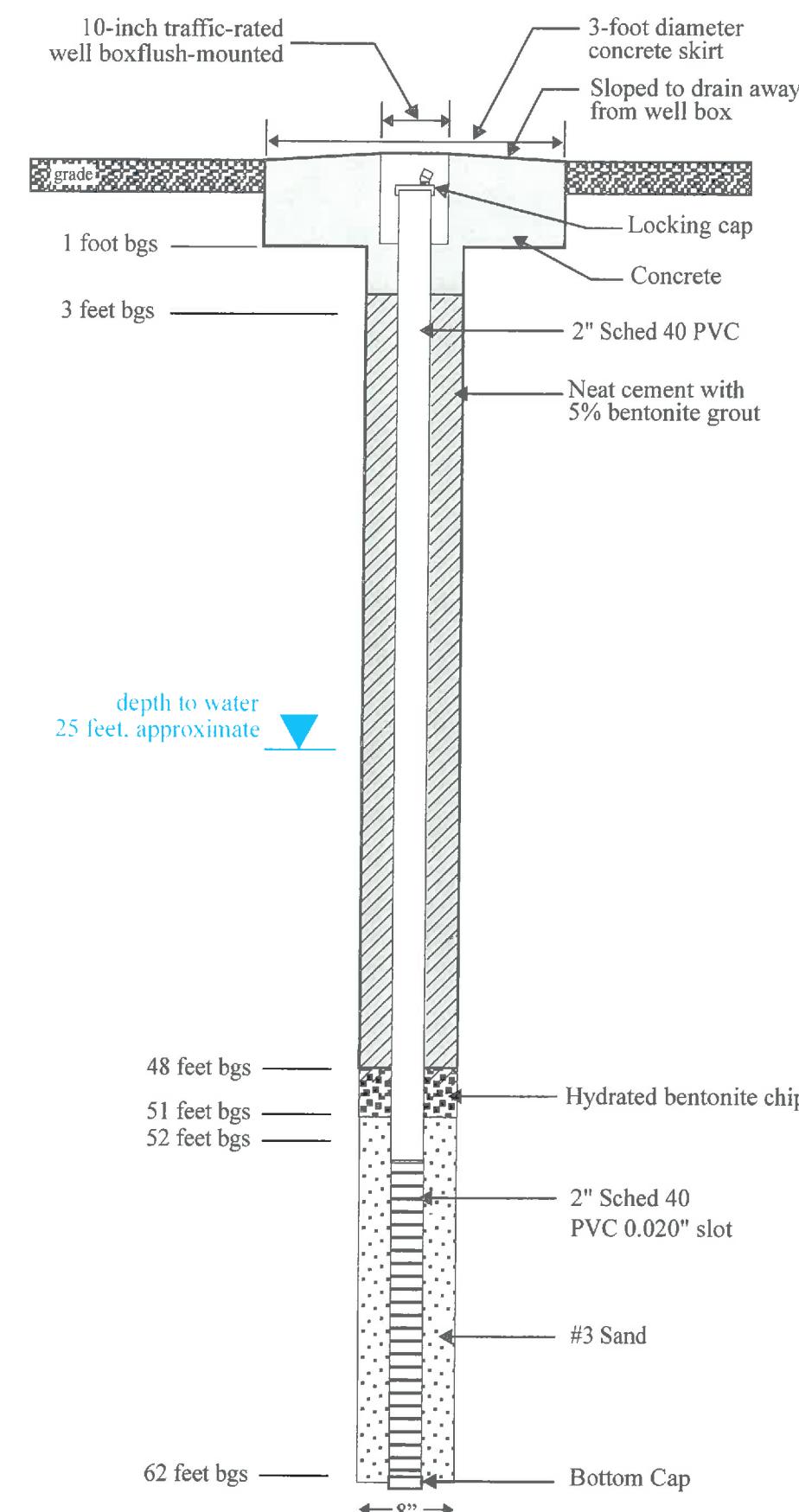
California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, CA

Project No.
11E4148

Figure 17

Proposed Well Construction

Zone C wells



TABLES

- Table 1 - Summary of Soil Sample and Analytical Data
- Table 2 - Summary of Monitoring Well Construction Details
- Table 3 - Summary of Site Groundwater Levels
- Table 4 - Summary of Groundwater Sample and Analytical Data
- Table 5 - Summary of Groundwater Flow Directions
- Table 6 - Rationale for Proposed Wells

TABLE 1
Summary of Soil Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample Location	Sample ID	Sample Data		TPH-g	TPH-d	TPH-O&G	TPH-mo	Volatile Organic Compounds								Lab	CARs/Refs	
		Date Sampled	Depth (feet)	(1) ppm	(2) ppm	(4) ppm	(5) ppm	B (3) ppb	T (3) ppb	E (3) ppb	X (3) ppb	MTBE (3) ppb	ETBE (3) ppb	TAME (3) ppb	DIPE (3) ppb	TBA (3) ppb		
Sierra Pacific Soil Investigation, August 1990																		
Tank #4	Tank #4 East	8/6/90	15		22			<2.8	<2.8	19	29							(A)
Tank #4	Tank #4 West	8/6/90	13		58			<2.4	<2.4	<2.4	<2.4							(A)
Tank #3	Tank #3 Center	8/6/90	10		470			<2.7	<2.7	<2.7	<2.7							(A)
Sierra Pacific Soil Investigation, November 1996																		
B-1	B-1-10	Nov-96	10	-		-		--	--	--	--							(A)
B-1	B-1-15	Nov-96	15	<10		<50		<5	<5	<5	<5							(A)
B-1	B-1-20	Nov-96	20	--		-		--	--	--	--							(A)
B-1	B-1-30	Nov-96	30	--		-		--	--	--	--							(A)
MW-2	MW-2-10	Nov-96	10	--		-		--	--	--	--							(A)
MW-2	MW-2-15	Nov-96	15	427		10,100		<300	<300	300	1300	<300						(A)
MW-2	MW-2-20	Nov-96	20	--		-		--	--	--	--							(A)
MW-2	MW-2-30	Nov-96	30	43		15,000		<50	50	70	290	<5						(A)
B-3	B-3-10	Nov-96	10	855		-		<300	500	1200	6600	<300						(A)
B-3	B-3-15	Nov-96	15	--		-		--	--	--	--							(A)
B-3	B-3-20	Nov-96	20	54		-		60	230	90	620	60'						(A)
B-3	B-3-30	Nov-96	30	126		-		60	210	170	760	90'						(A)
B-4	B-4-10	Nov-96	10	<10		--		<5	<5	<5	<5	<5						(A)
B-4	B-4-15	Nov-96	15	--		--		--	--	--	--							(A)
B-4	B-4-20	Nov-96	20	<1.0		<50		<5	<5	<5	<5	<5						(A)
B-4	B-4-30	Nov-96	30	<1.0		--		<5	<5	<5	<5	<5						(A)
Sierra Pacific Soil Investigation, September 1998																		
Tank #1	TK1 West@15	9/4/1998	15		6.1			<5	<5	<5	<5							(A)
Tank #1	TK1 East@15	9/4/1998	15		14,000			<500	<500	<500	980							(A)
Tank #2	TK2 West@15	9/4/1998	15		95			<5	<5	<5	<5							(A)
Tank #2	TK2 East@15	9/4/1998	15		6,600			<500	<500	<500	580							(A)
Piping	Piping #1	9/4/1998	1.5		990			<5	<5	<5	<5							(A)
Piping	Piping#2	9/4/1998	1.5		<1.0			<5	<5	<5	<5							(A)
E.I. Soil Investigation, December 1999																		
B-5	B-5-30	12/4/99	30	<1	450		<1	<5	<5	<5	<5							(A)
B-5	B-5-35	12/4/99	35	<1	80		<1	<5	<5	<5	<5							(A)
B-5	B-5-45	12/4/99	45	<1	<1		<1	<5	<5	<5	<5							(A)
B-5	B-5-50	12/4/99	50	<1	<1		<1	<5	<5	<5	<5							(A)
MW-1	MW-1-20	12/4/99	20	<1	2,300		<1	<5	<5	260	330	<5						(A)
MW-1	MW-1-30	12/4/99	30	<1	2,230		<1	<5	<5	110	175	<5						(A)
MW-1	MW-1-35	12/4/99	35	<1	<1		<1	<5	<5	<5	<5							(A)
MW-1	MW-1-50	12/4/99	50	<1	<1		<1	<5	<5	<5	<5							(A)
MW-3	MW-3-15	12/4/99	15	<1	<1		<1	<5	<5	<5	<5							(A)
MW-3	MW-3-30	12/4/99	30	<1	<1		<1	<5	<5	<5	<5							(A)
MW-3	MW-3-35	12/4/99	35	<1	<1		<1	<5	<5	7	7.6	<5						(A)
MW-3	MW-3-50	12/4/99	50	<1	<1		<1	<5	<5	<5	<5							(A)

TABLE 1
Summary of Soil Sample and Analytical Data

TABLE 1
Summary of Soil Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample Data				TPH-g ⁽¹⁾ ppm	TPH-d ⁽²⁾ ppm	TPH-O&G ⁽⁴⁾ ppm	TPH-mo ⁽⁵⁾ ppm	Volatile Organic Compounds									Lab	CARS/ Refs	
Sample Location	Sample ID	Date Sampled	Depth (feet)					B ⁽³⁾ ppb	T ⁽³⁾ ppb	E ⁽³⁾ ppb	X ⁽³⁾ ppb	MTBE ⁽³⁾ ppb	ETBE ⁽³⁾ ppb	TAME ⁽³⁾ ppb	DIPE ⁽³⁾ ppb	TBA ⁽³⁾ ppb			
WPMW9	WPMW9-10	6/17/15	10	5.5	27.8		69.9											CHEMTEK	(C)
WPMW9	WPMW9-15	6/17/15	15	385	380		678											CHEMTEK	(C)
WPMW9	WPMW9-20	6/17/15	20	275	291		560											CHEMTEK	(C)
WPMW9	WPMW9-21	6/17/15	21	102	1,070		3,100											CHEMTEK	(C)
WPMW9	WPMW9-30	6/17/15	30	397	1,880		3,640											CHEMTEK	(C)
WPMW9	WPMW9-34.1	6/17/15	34.1	213	508		1,100											CHEMTEK	(C)
WPMW9	WPMW9-36	6/17/15	36	536	5,210		8,400		ND	ND	ND	ND	ND	ND	ND	ND		CHEMTEK	(C)
WPMW9	WPMW9-38	6/17/15	38	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-43	6/17/15	43	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-49	6/17/15	49	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-51	6/17/15	51	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-56	6/17/15	56	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-60	6/17/15	60	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-65	6/17/15	65	ND	ND		ND											CHEMTEK	(C)
WPMW9	WPMW9-70	6/17/15	70	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-5	6/18/15	5	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-10	6/18/15	10	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-15	6/18/15	15	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-20	6/18/15	20	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-25	6/18/15	25	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-30	6/18/15	30	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-32	6/18/15	32	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND		CHEMTEK	(C)
WPMW10	WPMW10-35	6/18/15	35	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-40	6/18/15	40	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-45	6/18/15	45	ND	ND		ND											CHEMTEK	(C)
WPMW10	WPMW10-50	6/18/15	50	ND	ND		ND											CHEMTEK	(C)
EPA Region IX Residential SL (ppb)								1,100	5,000,000	5,400	630,000	43,000	None	None	None	None			
EPA Region IX Industrial SL (ppb)								5,400	45,000,000	27,000	2,700,000	220,000	None	None	None	None			

B	Ethylbenzene	TPH-g	Total Petroleum Hydrocarbons-Gasoline
T	Benzene	TPH-d	Total Petroleum Hydrocarbons-Diesel
E	Ethylbenzene	TPH-o	Total Petroleum Hydrocarbons-Oil
X	Total Xylenes	NAP	Naphthalene
MTBE	Methyl Tertiary Butyl Ether	CARs	Certified Analytical Reports
ETBE	Ethyl Tertiary Butyl Ether	Refs	Reference where chemical data are first reported
TAME	Tertiary Amyl Methyl Ether	ppb	Parts per billion or Micrograms per kilogram (ug/kg)
DIPE	Diisopropyl Ether	ppm	Parts per million or Milligrams per kilogram (mg/kg)
TBA	Tertiary Butyl Alcohol	ND	Not detected
Bold	Detected TPH concentration or volatile organic compound concentration exceeds EPA region IX residential SL	--	Lab test part of analyte list for sampling event, but not tested in indicated sample
			Blank Analyte not tested during the associated sampling event

Footnotes:

- (1) Total Petroleum Hydrocarbons (TPH-gasoline) - Analyzed using EPA Method 8015-modified using gasoline as a standard.
- (2) Total Petroleum Hydrocarbons (TPH-diesel) - Analyzed using EPA Method 8015-modified using diesel as a standard.
- (3) Volatile Organic Compounds - VOCS - Analyzed using EPA Method 8260B.
- (4) Oil and Grease (O&G) by EPA method 5520B
- (5) Total Petroleum Hydrocarbons (TPH-oil) - Analyzed using EPA Method 8015-modified using oil as a standard.

(A) Cumulative Soil Analytical Data Report (August 1990 - September 2011)
 (B) CHEMTEK Environmental Laboratories, Inc., Report No. 412043 (December 15, 2014)
 (C) CHEMTEK Environmental Laboratories, Inc., Report No. 506062 (June 22, 2015)

TABLE 2
Summary of Monitoring Well Construction Details
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Monitor Well ID	Groundwater Depth Zone	Casing Type	Casing Diameter inches	Construction Details					Screen Interval feet	14-Jul-2015 DTW feet
				Total Well Depth feet	Screen Length feet	Depth to Top of Screen feet	Screen Interval feet			
MW-1	Deep	PVC	2	50	20	30	30-50	25.60		
MW-2	Deep	PVC	2	50	20	30	30-50	25.80*		
MW-3	Deep	PVC	2	50	20	30	30-50	25.47		
MW-4	Deep	PVC	2	50	23	27	27-50	25.61		
MW-5	Shallow	PVC	2	37	20	17	17-37	25.41		
MW-6	Shallow	PVC	4	35	15	20	20-35	24.64		
MW-7	Shallow	PVC	4	35	15	20	20-35	24.61		
MW-8	Shallow	PVC	2	35	15	20	20-35	25.54		
MW-9	Deep	PVC	4	42.5	10	32	32-42	25.80		

Abbreviations:

- ID Identification
- PVC Poly Vinyl Chloride - Plastic casing
- DTW Depth to water (7/14/2015)
- *
- Depth to product in MW2 is the indication of the depth of the water table in that well

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _{TF} ^(b) (ft)	GWE _E ^(c) (ft)	GW Flow ^(d)	DFP _{TP} ^(e) (ft)	PT _{TP} ^(f) (ft)	GWE _T ^(g) (ft)	TOS ^(h) (ft)	WT _O ⁽ⁱ⁾ (ft)	WP _T _O ^(j) (ft)
MWI	T.E. ^(k)	Q4	12/22/99	13.02	29.92	?	?	-16.90	30.00	30.00	0.08		
30'-50' Screen	T.E.	Q1	01/27/00	13.02	28.70	?	?	-15.68	30.00	30.00	1.30		
	T.E.	Q2	04/20/00	13.02	25.62	?	?	-12.60	30.00	30.00	4.38		
	T.E.	Q3	07/26/00	13.02	28.00	?	?	-14.98	30.00	30.00	2.00		
	T.E.	Q4	11/21/00	13.02	29.21	?	?	-16.19	30.00	30.00	0.79		
	T.E.	Q1	03/28/01	13.02	27.50	E	?	-14.48	30.00	30.00	2.50		
	T.E.	Q2	06/27/01	13.02	29.65	SE	?	-16.63	30.00	30.00	0.35		
	T.E.	Q3	09/19/01	13.02	32.60	SE	?	-19.58	30.00	30.00	-2.60		
	T.E.	Q4	12/27/01	13.02	30.68	?	?	-17.66	30.00	30.00	-0.68		
	T.E.	Q1	03/21/02	13.02	29.07	NE	?	-16.05	30.00	30.00	0.93		
	T.E.	Q2	06/25/02	13.02	30.10	N	?	-17.08	30.00	30.00	-0.10		
	T.E.	Q3	09/11/02	13.02	32.80	SE	?	-19.78	30.00	30.00	-2.80		
	T.E.	Q1	02/01/03	13.02	31.60	SE/SW	?	-18.58	30.00	30.00	-1.60		
	T.E.	Q2	06/21/03	13.02	32.40	SE	?	-19.38	30.00	30.00	-2.40		
	T.E.	Q3	09/30/03	13.02	34.89	E	?	-21.87	30.00	30.00	-4.89		
	T.E.	Q4	11/11/03	13.02	35.28	SE	?	-22.26	30.00	30.00	-5.28		
	T.E.	Q1	03/10/04	13.02	32.31	N/E	?	-19.29	30.00	30.00	-2.31		
	T.E.	Q2	06/16/04	13.02	34.10	NE	?	-21.08	30.00	30.00	-4.10		
	T.E.	Q3	09/22/04	13.02	36.86	E	?	-23.84	30.00	30.00	-6.86		
	T.E.	Q4	12/17/04	13.02	35.68	?	?	-22.66	30.00	30.00	-5.68		
	T.E.	Q1	03/11/05	13.02	31.97	E	?	-18.95	30.00	30.00	-1.97		
	T.E.	Q2	06/24/05	13.02	32.01	NE	NP	-18.99	30.00	30.00	-2.01		
	T.E.	Q3	09/12/05	13.02	34.68	NE/SE	NP	-21.66	30.00	30.00	-4.68		
	T.E.	Q4	12/20/05	13.02	35.17	NW/NE	NP	-22.15	30.00	30.00	-5.17		
	T.E.	Q1	03/29/06	13.02	30.47	NW/SE	NP	-17.45	30.00	30.00	-0.47		
	T.E.	Q2	06/20/06	13.02	27.83	NW/NE	NP	-14.81	30.00	30.00	2.17		
	T.E.	Q3	09/18/06	13.02	30.80	NW/E	NP	-17.78	30.00	30.00	-0.80		
	T.E.	Q4	12/20/06	13.02	29.57	NE/SE	NP	-16.55	30.00	30.00	0.43		
	T.E.	Q1	03/19/07	13.02	27.90	NW/NE	NP	-14.88	30.00	30.00	2.10		
	T.E.	Q2	06/26/07	13.02	28.77	NW/NW	NP	-15.75	30.00	30.00	1.23		
	T.E.	Q3	10/02/07	13.02	34.28	E/SE	NP	-21.26	30.00	30.00	-4.28		
	T.E.	Q4	12/13/07	13.02	29.82	E/SF	NP	-16.80	30.00	30.00	0.18		

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DWT _{ref} ^(a) (ft)	GWE _{ref} ^(a) (ft)	GW Flow ^(b)	DFP _{TD} ^(b) (ft)	P _{TD} ^(b) (ft)	GWE _T ^(b) (ft)	GW _{E_b} ^(b) (ft)	TOS ^(b) (ft)	WT _o ^(b) (ft)	WPT _o ^(b) (ft)
MW1	T.E.	Q1	03/29/08	13.02	26.95	NE/SE	NP	-13.93		30.00		3.05		
Continued	T.E.	Q2	06/09/08	13.02	27.72	N/E	NP	-14.70		30.00		2.28		
30'-50'	T.E.	Q3	08/25/08	13.02	29.83	N/SE	NP	-16.81		30.00		0.17		
Screen	T.E.	Q4	11/25/08	13.02	29.88	SE	NP	-16.86		30.00		0.12		
	T.E.	Q1	02/13/09	13.02	28.07	NE/SE	NP	-15.05		30.00		1.93		
	T.E.	Q1	02/11/10	13.02	27.10	E/SE	NP	-14.08		30.00		2.90		
	T.E.	Q3	09/09/10	13.02	27.47	E/SE	NP	-14.45		30.00		2.53		
	T.E.	Q1	02/16/11	13.02	24.93	E/SE	NP	-11.91		30.00		5.07		
	T.E.	Q3	09/26/11	13.02	24.82	N/E	NP	-11.80		30.00		5.18		
	T.E.	Q4	12/23/11	13.02	24.82	N/E	NP	-11.80		30.00		5.18		
	T.E.	Q1	03/06/12	13.02	24.61	NW	NP	-11.59		30.00		5.39		
	T.E.	Q3	09/13/12	13.02	25.17	NW	NP	-12.15		30.00		4.83		
	DES	Q1	03/29/13	13.02	22.82	NE/SE	NP	-9.80		30.00		7.18		
	DES	Q3	09/12/13	13.02	24.75	N/SE	NP	-11.73		30.00		5.25		
	DES	Q1	02/11/14	13.02	24.64	NP		-11.62		30.00		5.36		
	DES	Q4	12/10/14	13.01	25.65	sheen		-12.64		30.00		4.35		
	DES	Q1	03/13/15	13.01	23.51	sheen		-10.50		30.00		6.49		
	DES	Q2	06/09/15	13.01	24.52	sheen		-11.51		30.00		5.48		
	DES	Q3	07/14/15	13.01	25.60	sheen		-12.59		30.00		4.40		
MW2	T.E.	Q2	04/20/00	13.42	25.99	?	?	-12.57		30.00		4.01		
30'-50'	T.E.	Q3	07/26/00	13.42	28.25	?	?	-14.83		30.00		1.75		
Screen	T.E.	Q4	11/21/00	13.42	28.60	?	?	-15.18		30.00		1.40		
	T.E.	Q1	03/28/01	13.42	27.90	E	?	-14.48		30.00		2.10		
	T.E.	Q2	06/27/01	13.42	29.95	SE	?	-16.53		30.00		0.05		
	T.E.	Q3	09/19/01	13.42	32.50	SE	?	-19.08		30.00		-2.50		
	T.E.	Q4	12/27/01	13.42	30.90	?	?	-17.48		30.00		-0.90		
	T.E.	Q1	03/21/02	13.42	29.53	NE	?	-16.11		30.00		0.47		
	T.E.	Q2	06/25/02	13.42	31.00	N	?	-17.58		30.00		-1.00		
	T.E.	Q3	09/11/02	13.42	32.50	SE	?	-19.08		30.00		-5.30		
	T.E.	Q1	02/01/03	13.42	32.50	SE/SW	?	-19.08		30.00		-2.50		
	T.E.	Q2	06/21/03	13.42	32.70	SE	?	-19.28		30.00		-2.70		
	T.E.	Q3	09/30/03	13.42	35.30	E	?	-21.88		30.00				
	T.E.	Q4	11/11/03	13.42	35.27	SE	?	-21.85		30.00		-5.27		
	T.E.	Q1	03/10/04	13.42	32.86	N/E	?	-19.44		30.00		-2.86		
	T.E.	Q2	06/16/04	13.42	34.62	NE	?	-21.20		30.00		-4.62		
	T.E.	Q3	09/22/04	13.42	37.30	E	?	-23.88		30.00		-7.30		
	T.E.	Q4	12/17/04	13.42	37.16	?	?	-23.74		30.00		-7.16		

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _{WT} ^(a) (ft)	GWE _{WT} ^(a) (ft)	GW Flow ^(b)	DFP _{WT} ^(a) (ft)	PT _{WT} ^(a) (ft)	GWE _{TR} ^(a) (ft)	GWE _{SD} ^(a) (ft)	TOS ^(a) (ft)	WT _{SD} ^(a) (ft)	WP _{SD} ^(a) (ft)
MW2	T.E.	Q1	03/11/05	13.42	33.72	E	?	?	?	-20.30	30.00	30.00	-3.72	-2.53
Continued	T.E.	Q2	06/24/05	13.42	32.53	NE	?	?	?	-19.11	30.00	30.00	-6.44	-4.90
T.E.	Q3	09/12/05	13.42	36.44	-21.48	NE/SE	34.90	1.54	-21.63	30.00	30.00	-6.20	-5.71	
T.E.	Q4	12/20/05	13.42	36.20	-22.78	NW/NE	35.71	0.49	-22.34	30.00	30.00	-1.21	-0.90	
T.E.	Q1	03/29/06	13.42	31.21	-17.79	NW/SE	30.90	0.31	-17.51	30.00	30.00	0.99	1.15	
T.E.	Q2	06/20/06	13.42	29.01	-15.59	NW/NE	28.85	0.16	-15.45	30.00	30.00	-2.49	-2.23	
T.E.	Q3	09/18/06	13.42	32.49	-18.83	NW/E	32.23	0.26	-18.84	30.00	30.00	-1.41	0.18	
T.E.	Q4	12/20/06	13.42	31.41	NE/SE	29.82	1.59	-16.56	30.00	30.00	-15.04	1.72		
T.E.	Q1	03/19/07	13.42	30.11	-16.69	NW/NE	28.28	1.83	-15.04	30.00	30.00	-0.64	0.98	
T.E.	Q2	06/29/07	13.42	30.64	-17.22	NW/NE	29.02	1.62	-15.76	30.00	30.00	-2.08	-0.95	
T.E.	Q4	10/02/07	13.42	32.08	-18.66	SE/E	30.95	1.13	-17.64	30.00	30.00	-0.26	1.14	
T.E.	Q4	12/13/07	13.42	30.26	-16.84	NE/E	28.86	1.40	-15.58	30.00	30.00	-1.40	0.18	
T.E.	Q1	03/29/08	13.42	30.48	NE/SE	27.10	3.38	-14.02	30.00	30.00	-0.48	2.90		
T.E.	Q2	06/09/08	13.42	31.25	NW-E	28.00	3.25	-14.91	30.00	30.00	-1.25	2.00		
T.E.	Q3	08/25/08	13.42	33.29	N-SE	30.05	3.24	-16.95	30.00	30.00	-3.29	-0.05		
T.E.	Q4	11/25/08	13.42	33.07	SE	29.44	2.63	-16.38	30.00	30.00	-3.07	0.56		
T.E.	Q1	02/13/09	13.42	31.45	NE/SE	28.20	3.25	-15.11	30.00	30.00	-1.45	1.80		
T.E.	Q3	09/02/09	13.42	34.40	-16.38	SE	29.80	4.60	-16.84	30.00	30.00	-4.40	0.20	
T.E.	Q1	02/11/10	13.42	31.25	E	27.10	4.15	-14.10	30.00	30.00	-1.25	2.90		
T.E.	Q3	09/09/10	13.42	31.40	E	27.50	3.90	-14.47	30.00	30.00	-1.40	2.50		
T.E.	Q1	02/06/11	13.42	29.55	E-NE	24.90	4.65	-11.95	30.00	30.00	0.45	5.10		
T.E.	Q3	09/26/11	13.42	26.28	NE	25.20	1.08	-11.89	30.00	30.00	3.72	4.80		
T.E.	Q4	12/23/11	13.42	26.05	NE	25.21	0.84	-11.87	30.00	30.00	3.95	4.79		
T.E.	Q1	03/06/12	13.42	26.10	NW	25.00	1.10	-11.69	30.00	30.00	3.90	5.00		
T.E.	Q3	09/13/12	13.42	25.95	NW	25.50	0.45	-12.13	30.00	30.00	4.05	4.50		
DES	Q1	03/29/13	13.42	24.91	NE-SE	23.90	1.01	-10.58	30.00	30.00	5.09	6.10		
DES	Q3	09/12/13	13.42	26.46	NE-SE	24.75	1.71	-11.50	30.00	30.00	3.54	5.25		
DES	Q1	02/11/14	13.42	28.72	NE-SE	24.98	3.74	-11.93	30.00	30.00	1.28	5.02		
DES	Q4	12/10/14	13.36	31.95	NE-SE	25.20	6.75	-12.51	30.00	30.00	-1.95	4.80		
DES	Q1	03/13/15	13.36	29.34	NE-SE	23.18	6.16	-11.30	30.00	30.00	0.66	6.82		
DES	Q2	06/09/15	13.36	25.31	NE-SE	24.93	0.38	-11.66	30.00	30.00	4.69	5.07		
DES	Q3	07/14/15	13.36	26.60	NE-SE	25.80	0.80	-12.63	30.00	30.00	3.40	4.20		
MW3	E1	Q4	12/22/99	12.84	30.40	?	?	-17.56	30.00	30.00	-0.40			
E1	Q1	01/27/00	12.84	28.60	?	?	-15.76	30.00	30.00	1.40				
E1	Q2	04/20/00	12.84	25.55	?	?	-12.71	30.00	30.00	4.45				
E1	Q3	07/26/00	12.84	27.90	?	?	-15.06	30.00	30.00	2.10				
E1	Q4	11/21/00	12.84	29.10	?	?	-16.26	30.00	30.00	0.90				

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _n ^(b) (ft)	GWE _n ^(b) (ft)	GW Flow ^(c)	DPP _{in} ^(d) (ft)	PT _{in} ^(d) (ft)	GWE _d ^(e) (ft)	TOS ^(f) (ft)	WT _d ^(g) (ft)	WPT _d ^(h) (ft)
MW3	EI	Q1	03/28/01	12.84	27.40	E	?	?	-14.56	30.00	2.60		
Continued	EI	Q2	06/27/01	12.84	29.45	SE	?	?	-16.61	30.00	0.55		
EI	Q3	09/19/01	12.84	32.49	SE	?	?	-19.65	30.00	-2.49			
EI	Q4	12/27/01	12.84	30.60	?	?	?	-17.76	30.00	-0.60			
30'-50'	EI	Q1	03/21/02	12.84	28.94	NE	?	?	-16.10	30.00	1.06		
Screen	EI	Q2	06/25/02	12.84	29.96	N	?	?	-17.12	30.00	0.04		
EI	Q3	09/11/02	12.84	32.70	SE	?	?	-19.86	30.00	-2.70			
EI	Q4	11/11/03	12.84	32.35	SE/SW	?	?	-19.51	30.00	-2.35			
EI	Q1	02/01/03	12.84	32.29	SE	?	?	-19.45	30.00	-2.29			
EI	Q2	06/21/03	12.84	34.79	E	?	?	-21.95	30.00	-4.79			
EI	Q3	09/30/03	12.84	35.13	SE	?	?	-22.29	30.00	-5.13			
EI	Q4	11/11/03	12.84	32.25	NE	?	?	-19.41	30.00	-2.25			
EI	Q1	03/10/04	12.84	34.00	NE	?	?	-21.16	30.00	-4.00			
EI	Q2	06/16/04	12.84	36.82	E	?	?	-23.98	30.00	-6.82			
EI	Q3	09/22/04	12.84	35.50	?	?	?	-22.66	30.00	-5.50			
EI	Q4	12/17/04	12.84	31.89	E	?	?	-19.05	30.00	-1.89			
EI	Q1	03/11/05	12.84	31.91	NE			-19.07	30.00	-1.91			
EI	Q2	06/24/05	12.84	34.60	NE/SE			-21.76	30.00	-4.60			
EI	Q3	09/12/05	12.84	35.10	NW/NE			-22.26	30.00	-5.10			
EI	Q4	12/20/05	12.84	30.49	NW/SE			-17.65	30.00	-0.49			
EI	Q1	03/29/06	12.84	27.72	NW/NE			-14.88	30.00	2.28			
EI	Q2	06/20/06	12.84	30.73	NW/SE			-17.89	30.00	-0.73			
EI	Q3	09/18/06	12.84	29.41	NE/SE			-16.57	30.00	0.59			
EI	Q4	12/20/06	12.84	27.75	NW/NE			-14.91	30.00	2.25			
EI	Q1	03/19/07	12.84	28.63	NW/NE			-15.79	30.00	1.37			
EI	Q2	06/29/07	12.84	34.18	E/NE			-21.34	30.00	-4.18			
EI	Q4	10/02/07	12.84										

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _m ^(a) (ft)	GWE _{E_x} ^(a) (ft)	GW Flow ^(a)	DPP _{TD} ^(a) (ft)	PT _{TD} ^(a) (ft)	GWE _T ^(a) (ft)	GWE _p ^(a) (ft)	TOS ^(m) (ft)	WT _o ^(m) (ft)	WT _o ^(a) (ft)
MW3														
Continued														
EI	Q4	12/13/07	12.84	29.71	E/SE			-16.87		30.00	0.29			
EI	Q1	03/29/08	12.84	26.85	NE/SE			-14.01		30.00	3.15			
EI	Q2	06/09/08	12.84	27.60	N/E			-14.76		30.00	2.40			
EI	Q3	08/25/08	12.84	29.76	S/SE			-16.92		30.00	0.24			
EI	Q4	11/25/08	12.84	29.76	SE			-16.92		30.00	0.24			
EI	Q1	02/13/09	12.84	27.97	NE/SE			-15.13		30.00	2.03			
EI	Q3	09/02/09	12.84	29.63				-16.83		30.00	0.33			
EI	Q1	02/11/10	12.84	26.98	E/SE			-14.14		30.00	3.02			
EI	Q3	09/09/10	12.84	27.36	E/SE			-14.52		30.00	2.64			
EI	Q3	09/26/11	12.84	24.68	NE/E			-11.84		30.00	5.32			
EI	Q4	12/23/11	12.84	24.67	NE			-11.83		30.00	5.33			
EI	Q1	03/06/12	12.84	24.46	NW			-11.62		30.00	5.54			
EI	Q3	09/13/12	12.84	25.01	NW			-12.17		30.00	4.99			
DES	Q1	03/29/13	12.84	22.67	NE/SE			-9.83		30.00	7.33			
DES	Q3	09/12/13	12.84	24.61	NE/SE			-11.77		30.00	5.39			
DES	Q1	02/11/14	12.84	24.50	24.49	0.01		-11.65		30.00	5.50			
DES	Q4	12/10/14	12.81	25.40	sheen			-12.59		30.00	4.60			
DES	Q1	03/13/15	12.81	23.44				-10.63		30.00	6.56			
DES	Q2	06/09/15	12.81	24.31	sheen			-11.50		30.00	5.69			
DES	Q3	07/14/15	12.81	25.47	sheen			-12.66		30.00	4.53			
MW4														
27-50 ^b	Q4	11/21/00	12.35	28.65			?	-16.30		27.00	-1.65			
Screen	Q1	03/28/01	12.35	26.90	E		?	-14.55		27.00	0.10			
EI	Q2	06/27/01	12.35	29.04	SE		?	-16.69		27.00	-2.04			
EI	Q3	09/19/01	12.35	32.05	SE		?	-19.70		27.00	-5.05			
EI	Q4	12/27/01	12.35	30.10			?	-17.75		27.00	-3.10			
EI	Q1	03/21/02	12.35	28.52	NE		?	-16.17		27.00	-1.52			
EI	Q2	06/25/02	12.35	29.57	N		?	-17.22		27.00	-2.57			
EI	Q3	09/11/02	12.35	32.30	SE		?	-19.95		27.00	-5.30			
EI	Q1	02/01/03	12.35	30.95	SE/SW		?	-18.60		27.00	-3.95			
EI	Q2	06/21/03	12.35	31.89	SE		?	-19.54		27.00	-4.89			
EI	Q3	09/30/03	12.35	34.40	E		?	-22.05		27.00	-7.40			
EI	Q4	11/11/03	12.35	34.73	SE		?	-22.38		27.00	-7.73			
EI	Q1	03/10/04	12.35	31.75	N/E		?	-19.40		27.00	-4.75			
EI	Q2	06/16/04	12.35	33.60	NE		?	-21.25		27.00	-6.60			
EI	Q3	09/22/04	12.35	36.43	E		?	-24.08		27.00	-9.43			
EI	Q4	12/17/04	12.35	35.18	?		?	-22.83		27.00	-8.18			

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _{TE} ^(b) (ft)	GWE _E ^(c) (ft)	GW Flow ^(d)	DFT _{TD} ^(e) (ft)	PT _{TD} ^(f) (ft)	GW E _T ^(g) (ft)	GW E _D ^(h) (ft)	TGS ⁽ⁱ⁾ (ft)	WT _o ^(m) (ft)	WT _o ⁽ⁿ⁾ (ft)
MW4	EI	Q1	03/11/05	12.35	31.76					-19.41		27.00	-4.76	
Continued	EI	Q2	06/24/05	12.35	31.53	NE				-19.18		27.00	-4.53	
27-50'	EI	Q3	09/12/05	12.35	34.23	NE/SE				-21.88		27.00	-7.23	
Screen	EI	Q4	12/20/05	12.35	34.77	NW/NE				-22.42	2.00	27.00	-7.77	
EI	Q1	03/29/06	12.35	29.88	NW/SE					-17.53		27.00	-2.88	
EI	Q2	06/20/06	12.35	27.37	NW/NE					-15.02		27.00	-0.37	
EI	Q3	09/18/06	12.35	30.34	NW/E					-17.99		27.00	-3.34	
EI	Q4	12/20/06	12.35	29.00	NE/SE					-16.65		27.00	-2.00	
EI	Q1	03/19/07	12.35	27.37	NW/NE					-15.02		27.00	-0.37	
EI	Q2	06/29/07	12.35	28.23	NW/NE					-15.88		27.00	-1.23	
EI	Q4	10/02/07	12.35	33.74	E/SE					-21.39		27.00	-6.74	
EI	Q4	12/13/07	12.35	29.27	E/SE					-16.92		27.00	-2.27	
EI	Q1	03/29/08	12.35	26.37	NE/SE					-14.02		27.00	0.63	
EI	Q2	06/09/08	12.35	27.15	N/E					-14.80		27.00	-0.15	
EI	Q3	08/25/08	12.35	29.25	N/SE					-16.90		27.00	-2.25	
EI	Q4	11/25/08	12.35	29.30	SE					-16.95		27.00	-2.30	
EI	Q1	02/13/09	12.35	27.47	NE/SE					-15.12		27.00	-0.47	
EI	Q3	09/02/09	12.35	29.24	SE					-16.89		27.00	-2.24	
EI	Q1	02/11/10	12.35	26.52	E/SE					-14.17		27.00	0.48	
EI	Q3	09/09/10	12.35	26.90	E/SE					-14.55		27.00	0.10	
EI	Q3	09/26/11	12.35	24.23	NE/E					-11.88		27.00	2.77	
EI	Q4	12/23/11	12.35	24.23	NE					-11.88		27.00	2.77	
EI	Q1	03/06/12	12.35	24.05	NW					-11.70		27.00	2.95	
EI	Q3	09/13/12	12.35	24.54	NW					-12.19		27.00	2.46	
DES	Q1	03/29/13	12.35	22.20	NE/SE							27.00	4.80	4.81
DES	Q3	09/12/13	12.35	24.11	NE/SE							27.00	2.89	
DES	Q1	02/11/14	12.35	24.13	24.12	0.61						-11.77	2.87	2.88
DES	Q4	12/10/14	12.36	24.93	sheen							-12.57	2.07	
DES	Q1	03/13/15	12.36	23.07	23.06	0.01						-10.70	3.93	3.94
DES	Q2	06/09/15	12.36	23.83	sheen							-11.47	3.17	
DES	Q3	07/14/15	12.36	25.61	sheen							-13.25	27.00	1.39

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOC <small>E⁽²⁾</small> (ft)	DTW <small>T_{TE}</small> (ft)	GWE <small>E_T</small> (ft)	GW Flow ⁽³⁾	DFP <small>T_{MP}</small> (ft)	PT <small>T_{MP}</small> (ft)	GWE <small>E_T</small> (ft)	TOS <small>MM</small> (ft)	WT _{TO} (ft)	WP <small>T₀</small> (ft)
MW5	EI	Q3	09/26/11	13.47	25.07	NE/SE				-11.60	17.00	-8.07	
17'-37'	EI	Q4	12/23/11	13.47	25.20	NE				-11.73	17.00	-8.20	
Screen	EI	Q1	03/06/12	13.47	25.00	-12.65	NW			-11.53	17.00	-8.00	
	EI	Q3	09/13/12	13.47	25.25	-12.90	NW			-11.78	17.00	-8.25	
	DES	Q1	03/29/13	13.47	23.17	-9.70	NE/SE	24.65	0.17	-9.70	17.00	-6.17	
	DES	Q3	09/12/13	13.47	24.82	-11.35	NE/SE	25.20	0.20	-11.20	17.00	-7.82	-7.65
	DES	Q1	02/11/14	13.47	25.40	-11.93				-11.78	17.00	-8.40	-8.20
	DES	Q4	12/10/14	13.41	26.20	-12.79		26.02	0.18	-12.63	17.00	-9.20	-9.02
	DES	Q1	03/13/15	13.41	23.99	-10.58				-10.58	17.00	-6.99	
	DES	Q2	06/09/15	13.41	24.72					-11.31	17.00	-7.72	
	DES	Q3	07/14/15	13.41	25.41					-12.00	17.00	-8.41	
MW6	DES	Q4	12/10/14	12.44	25.04			25.03	0.01	-12.59	20.00	-5.04	
20'-35'	DES	Q1	03/13/15	12.44	23.03			23.02	0.01	-10.58	20.00	-3.03	
screen	DES	Q2	06/09/15	12.44	23.79					-11.35	20.00	-3.79	
	DES	Q3	07/14/15	12.44	24.64					-12.20	20.00	-4.64	
MW7	DES	Q4	12/10/14	12.54	25.19					-12.65	20.00	-5.19	
20'-35'	DES	Q1	03/13/15	12.54	23.32					-10.78	20.00	-3.32	
screen	DES	Q2	06/09/15	12.54	23.84					-11.30	20.00	-3.84	
	DES	Q3	07/14/15	12.54	24.61					-12.07	20.00	-4.61	
MW8	DES	Q4	12/10/14	13.18	25.39					-12.21	20.00	-5.39	
20'-35'	DES	Q1	03/13/15	13.18	23.78					-10.60	20.00	-3.78	
screen	DES	Q2	06/09/15	13.18	24.66					-11.48	20.00	-4.66	
	DES	Q3	07/14/15	13.18	25.54					-12.36	20.00	-5.54	
MW9	DES	Q3	07/14/15	11.63	25.80					-14.17	32.00	6.20	
32'-42'	screen												

Table 3
Summary of Site Groundwater Levels
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Well Number	Rep.	Quarter	Date Measured	TOCE ^(a) (ft)	DTW _{TB} ^(c) (ft)	GWE _E ^(d) (ft)	GW Flow ^(e)	DFP _{TP} ^(f) (ft)	PT _{TP} ^(g) (ft)	GWE _T ^(h) (ft)	GWE _D ⁽ⁱ⁾ (ft)	TOS ^(m) (ft)	WT _O ⁽ⁿ⁾ (ft)	WPT _O ⁽ⁿ⁾ (ft)
-------------	------	---------	---------------	--------------------------	---------------------------------------	--------------------------------------	------------------------	---------------------------------------	--------------------------------------	--------------------------------------	--------------------------------------	-------------------------	-------------------------------------	--------------------------------------

Notes:

- (1) TE.
- (2) TOCE
DTW_M
GWE_E
GW Flow
DFP_{TP}
- (3) Depth to water measured by Enviroengineering, Inc. on behalf of Taber Consultants
- (4) Groundwater elevation in feet relative to sea level datum calculated by Enviroengineering, Inc. and used for their quarterly GW flow maps
- (5) Groundwater flow direction calculated by Enviroengineering, Inc. and plotted on their quarterly GW flow maps
- (6) Depth to free product in feet from grade as reported by Taber Report (February 24, 2012-Table 5 from December 22, 1998 to December 23, 2011) and DES 1c Q1-2013 and Q3-2013
- (7) Product thickness in feet =DTW-DFP as reported by Taber Report (February 24, 2012) and by DES measurements later for Q1-2013 and Q3-2013
- (8) Groundwater elevation reported by Taber
- (9) data is from Taber Report (February 24, 2012 - Table 5)
- (10) Groundwater elevation from DES gauging
- (11) The product adjusted GWE calculation is as follows:

GWE	Adjusted	=	[TOCE (ft)]	-	DTW (ft)	+ [Product specific gravity coefficient* (DTW (ft)]	-	DFP (ft)
Oil product specific gravity coefficient = 0.90 - used for probable waste oil product in MW2 and MW5								
Gasoline product specific gravity coefficient = 0.76								
Top of screen depth in feet below grade								
(10) TOS (ft)								
(11) WT _O								
(12) WPT _O								

Water and product thickness above the top of the well screen. When no product is measurable (or not reported in Geotracker-posted reports prior to September 12, 2005 for this Site), then just the DTW is used, as follows:

$$WT_O = \frac{\text{Top of Screen Depth}}{\text{DTW}}$$

When product is measurable its depth to top of product DFP includes the depressed water level (DTW). Thus the upper fluid level above the screen is calculated as follows:

$$WPT_O = \frac{\text{Top of Screen Depth}}{\text{DFP}}$$

Submerged well screen is when the WPT_O or the WT_O is above the top of the well screen with values of +WPT_O or +WT_O

(no color)

Unsubmerged well screen is when WPT_O or WT_O are below the top of the well screen with values of -WPT_O or -WT_O

Biased result due to potentially missing product values in the unposted reports on Geotracker prior to September 2005 at the Site.

Groundwater elevation in feet relative to sea level datum calculated by Enviroengineering, Inc. and used for their quarterly GW flow maps

TABLE 4
Summary of Groundwater Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample			Analytical Data														Lab	CARs/ Refs	
Sample Location	Date Sampled	ID	TPHg ⁽¹⁾ ppb	TPHd ⁽¹⁾ ppb	TPHmo ⁽³⁾ ppb	DF g/d/mo	TOG ⁽³⁾ ppb	B ⁽²⁾ ppb	T ⁽²⁾ ppb	E ⁽²⁾ ppb	X ⁽²⁾ ppb	MTBE ⁽²⁾ ppb	ETBE ⁽²⁾ ppb	DIPE ⁽²⁾ ppb	TAME ⁽²⁾ ppb	TBA ⁽²⁾ ppb	DF		
MW-1 30'-50' Screen	12/22/99	EI	<50	310,000	<1,000			<0.5	<0.5	2.5	4	<0.5	NA	NA	NA	NA			
	04/20/00	EI	<50	330,000	<10,000			<0.5	<0.5	0.6	0.7	<0.5	<0.5	<0.5	<0.5	<10			
	07/26/00	EI	<50	280,000	<10,000			<0.5	<0.5	1	1	<0.5	<0.5	<0.5	<0.5	NA			
	11/21/00	EI	<50	9,300	<10			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA			
	03/28/01	EI	<50	8,800	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA			
	06/27/01	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	09/19/01	EI	<50	59,000	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		
	12/27/01	EI	4,000	69,000	<100			4.6	1.7	2.4	<0.5	4.6	<0.5	<0.5	<0.5	<0.5	<10		
	03/21/02	EI	3,800	68,400	<100			<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<50			
	06/25/02	EI	500	72,000	<100			<0.5	<0.5	3.1	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<10		
	09/11/02	EI	600	58,000	<100			<0.5	<0.5	2.2	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	02/01/03	EI	3,600	7,500	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	06/21/03	EI	430	1,200	<1,000			<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	09/30/03	EI	<100	1,000	<1,000			8.97	2.69	1.84	NA	<1	<1	<1	<1	<1	<50		
	11/11/03	EI	422	<100	<1,000			<1	<1	1.02	NA	<1	<1	<1	<1	<1	<50		
	03/10/04	EI	<1	3,750	<1,000			<1	<1	<1	<2	3.1	<1	<1	<1	<1	<50		
	06/16/04	EI	<100	4,800	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<50		
	09/22/04	EI	<100	4,500	<1,000			<0.5	<0.5	0.79	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/17/04	EI	<100	2,800	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/11/05	EI	<100	8,800	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/24/05	EI	<100	15,000	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	09/12/05	EI	<100	5,700	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/20/05	EI	<100	4,100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/29/06	EI	<100	4,100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/20/06	EI	<100	3,100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	09/18/06	EI	<100	2,900	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/20/06	EI	<100	2,500	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/19/07	EI	<100	235	<1,000			<0.5	<0.5	1.48	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/29/07	EI	<100	1,720	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	10/02/07	EI	140	6,210	<1,000			<0.5	0.61	0.68	3.96	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/13/07	EI	<100	<100	<1,000			<0.5	<0.5	1.18	2.93	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/29/08	EI	<100	<100	<1,000			<0.5	<0.5	1.5	1.84	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/09/08	EI	<100	<1,000	<1,000			<0.5	<0.5	1.26	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	08/25/08	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	11/25/08	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/13/09	EI	<100	2,810	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/11/10	EI	<100	<100	NA			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/16/11	EI	220	<100	<1,000			<1	1.52	0.84	5.45	<1	<1	<1	<1	<1	<5		
	03/06/12	EI	160	<100	<1,000			<1	<1	<1	<1	NA	NA	NA	NA	NA			
	03/29/13	DES	120	ND	NA	1/1	--	ND	ND	ND	ND								

TABLE 4
Summary of Groundwater Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample			Analytical Data																
Sample Location	Date Sampled	ID	TPHg ⁽¹⁾ ppb	TPHd ⁽¹⁾ ppb	TPHmo ⁽³⁾ ppb	DF g/d/mo	TOG ⁽³⁾ ppb	B ⁽²⁾ ppb	T ⁽²⁾ ppb	E ⁽²⁾ ppb	X ⁽²⁾ ppb	MTBE ⁽²⁾ ppb	ETBE ⁽²⁾ ppb	DIPE ⁽²⁾ ppb	TAME ⁽²⁾ ppb	TBA ⁽²⁾ ppb	DF	Lab	CARS/ Refs
MW-2	01/09/97	EI	361	<50	<50			9.4	<0.5	<0.5	1.3	1,590	NA	NA	NA	NA			
	04/20/00	EI	280	1,400	120,000			2.6	3.4	1	8.2	4.5	<0.5	6.1	<0.5	NA			
	07/26/00	EI	210	<1,000	98,000			6.8	8.3	3.1	23	20	<0.5	44	<0.5	94			
Screen	11/21/00	EI	6,700	<50	170,000			8	12	<0.5	7.7	4.3	<0.5	11	<0.5	NA			
	03/28/01	EI	480	<50	150,000			11	24	6.2	75	<0.5	<0.5	6.5	<0.5	9			
	06/27/01	EI	460	<50	149,000			10	25	7	80	<0.5	<0.5	4	<0.5	<10			
	09/19/01	EI	420	<50	<100			122	23	22	33	3.8	<0.5	20	<0.5	<10			
	12/27/01	EI	<50	71,000	11,000,000			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	03/21/02	EI	3,200	74,000	10,800,000			23	78	33	NA	<0.5	<0.5	<0.5	<0.5	<50			
	06/25/02	EI	3,300	68,000	8,800,000			29	51	11	144	<0.5	<0.5	26	<0.5	<10			
	09/11/02	EI	<50	36,000	600,000			4	17	3.3	NA	<0.5	<0.5	<0.5	<0.5	<50			
	02/01/03	EI	68,000	22,000	42,000			<0.5	<0.5	<0.5	120	<0.5	<0.5	<0.5	<0.5	<50			
	06/21/03	EI	780	2,750	5,020			4.6	0.7	0.8	NA	8	<0.5	16	<0.5	<50			
	09/30/03	EI	274	2,500	4,400			12.4	26	6.6	NA	9.01	<1	18.1	<1	<50			
	11/11/03	EI	780	3,300	6,700			6.56	13.8	6.9	NA	11.4	<1	<1	<1	117			
	03/10/04	EI	<1	1,130	6,400			<1	<1	<1	<2	8.45	<1	7.45	<1	52.4			
	06/16/04	EI	105	1,200	5,500			4.8	3.4	1.33	13.68	3.33	<1	8.83	<1	<50			
	09/22/04	EI	<100	1,300	5,200			3.94	1.83	2.47	10.78	<0.5	<0.5	11	<0.5	8.01			
	12/17/04	EI	<100	750	3,800			1.76	1.84	0.7	5.51	<0.5	<0.5	<0.5	<0.5	<5			
	03/11/05	EI	<100	1,100	4,800			2.79	4.55	1.88	14.46	0.66	<0.5	4.31	<0.5	<5			
	06/24/05	EI	<100	710	7,900			14	36.9	22.7	182.8	<0.5	<0.5	15.9	0.88	<5			
	09/12/05	EI	<100	150	7,100			13.9	12.2	3.13	26.9	6.6	<0.5	20.6	<0.5	<5			
	12/20/05	EI	<100	890	4,800			3.88	1.5	0.76	6.91	<0.5	<0.5	8.82	<0.5	<5			
	03/29/06	EI	<100	1,100	5,400			2.07	3.25	1.02	13.31	<0.5	<0.5	2.99	<0.5	<5			
	06/20/06	EI	<100	870	4,600			5.33	4.61	1.63	14.23	<0.5	<0.5	9.26	<0.5	5.68			
	09/18/06	EI	<100	850	4,200			9.46	10.2	2.68	18.91	2.39	<0.5	21	<0.5	<5			
	12/20/06	EI	<100	750	3,950			4.5	18.3	13	61.8	<0.5	<0.5	1.99	<0.5	<5			
	03/19/07	EI	<100	1,590	<1,000			2.32	2.48	1.12	8.16	<0.5	<0.5	1.89	0.66	<5			
	06/29/07	EI	<100	11,200	<1,000			8.37	3.92	0.85	6.39	0.97	<0.5	12.6	<0.5	<5			
	10/02/07	EI	746	20,700	13,000			13.3	14.6	3.95	27.8	<0.5	<0.5	20.1	<0.5	<5			
	12/13/07	EI	<100	47,500	10,700,000			8.51	24.3	20.8	158.2	<0.5	<0.5	6.83	<0.5	<5			
	03/29/08	EI	<100	72,300	23,700,000			7.79	13.6	4.74	39.1	<0.5	<0.5	12	<0.5	<5			
	06/09/08	EI	<100	10,900	12,600			17.2	45.5	<0.5	211	1.02	<0.5	21.1	<0.5	<5			
	08/25/08	EI	2,080	11,500	12,300			14	24.6	5.98	57.6	<1	<1	17.9	<1	27.14			
	11/25/08	EI	3,250	10,900	10,300			4.94	9.94	1.92	16.6	<1	<1	7.19	<1	<5			
	02/13/09	EI	703	39,400	36,900			4.51	9.36	1.94	15.49	<1	<1	3.94	<1	<5			
	09/02/09	EI	820	40,500	39,300			9.2	16.9	3.41	31.5	<1	<1	<1	<1	<5			
	02/11/10	EI	240	19,000	277,000			8.35	18	2.47	19.86	<1	<1	5.74	<1	<5			
	09/09/10	EI	1,260	322,000	11,900			7.64	8.75	2.51	13.86	1.24	<1	14.7	0.98	<5			
	02/16/11	EI	650	16,500	248,000			<1	1.82	1.01	3.87	<1	<1	3.06	<1	<5			
03/29/13	DES	Product	--	--	--			--	--	--	--	--	--	--	--	--			
	09/12/13	DES	876	1,800	NA	1/2	--	13	26	ND	58	ND	ND	14	ND	ND	5	Assoc (B)	
	02/11/14	DES	1,240	1,100	8,100	1/1/1	--	11	ND	ND	34	ND	ND	13	ND	ND	5		

TABLE 4
Summary of Groundwater Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample			Analytical Data																
Sample Location	Date Sampled	ID	TPHg ⁽¹⁾ ppb	TPHd ⁽¹⁾ ppb	TPHmo ⁽³⁾ ppb	DF g/d/mo	TOG ⁽³⁾ ppb	B ⁽²⁾ ppb	T ⁽²⁾ ppb	E ⁽²⁾ ppb	X ⁽²⁾ ppb	MTBE ⁽²⁾ ppb	ETBE ⁽²⁾ ppb	DIPE ⁽²⁾ ppb	TAME ⁽²⁾ ppb	TBA ⁽²⁾ ppb	DF	Lab	CARs/Refs
MW-3	12/22/99	EI	<50	110,000	<1,000			<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA			
	04/20/00	EI	<50	50,000	<10,000			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	07/26/00	EI	<50	<1000	<10,000			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	11/21/00	EI	<50	<50	<10			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	03/28/01	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	06/27/01	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	09/19/01	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	12/27/01	EI	<50	<50	4,600			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		
	03/21/02	EI	<50	500	5,100			<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	06/25/02	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10		
	09/11/02	EI	<50	<50	<100			<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	02/01/03	EI	<50	<50	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	06/21/03	EI	<50	<100	<1,000			<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<50		
	09/30/03	EI	<100	<100	<1,000			<1	<1	<1	NA	<1	<1	<1	<1	<1	<50		
	11/11/03	EI	<100	<100	<1,000			<1	<1	<1	NA	<1	<1	<1	<1	<1	<50		
	03/10/04	EI	<1	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<50		
	06/16/04	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<50		
	09/22/04	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/17/04	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/11/05	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/24/05	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	09/12/05	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/20/05	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/29/06	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/20/06	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	09/18/06	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/20/06	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/19/07	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/29/07	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	10/02/07	EI	125	11,900	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	12/13/07	EI	<100	<100	<1,000			<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	03/29/08	EI	<100	<100	<1,000			<0.5	<0.5	0.79	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	06/09/08	EI	<100	<1000	<1,000			<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5		
	08/25/08	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	11/25/08	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/13/09	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/11/10	EI	<100	<100	NA			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	02/16/11	EI	<100	<100	<1,000			<1	<1	<1	<2	<1	<1	<1	<1	<1	<5		
	03/06/12	EI	<100	<100	<1,000			<1	0.29	<1	<2	NA	NA	NA	NA	NA			
03/29/13	DES	ND	ND	NA	1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(A)
09/12/13	DES	ND	ND	NA	1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	Assoc	(B)
02/11/14	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	Assoc	(C)
12/10/14	DES	360	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(D)
03/14/15	DES	180	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(E)
06/09/15	DES	230	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(F)

TABLE 4
Summary of Groundwater Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample			Analytical Data																
Sample Location	Date Sampled	ID	TPHg ⁽¹⁾ ppb	TPHd ⁽¹⁾ ppb	TPHmo ⁽³⁾ ppb	DF g/d/mo	TOG ⁽³⁾ ppb	B ⁽²⁾ ppb	T ⁽²⁾ ppb	E ⁽²⁾ ppb	X ⁽²⁾ ppb	MTBE ⁽²⁾ ppb	ETBE ⁽²⁾ ppb	DIPE ⁽²⁾ ppb	TAME ⁽²⁾ ppb	TBA ⁽²⁾ ppb	DF	Lab	CARS/ Refs
MW-4	11/21/00	EI	76,000	<50	<10			3,200	4,200	810	2,800	<0.5	<0.5	990	<0.5	NA			
	03/28/01	EI	85,800	<50	<100			3,500	4,800	1,620	6,600	<0.5	<0.5	1,360	<0.5	<10			
	06/27/01	EI	86,000	<50	<100			3,480	4,800	1,700	6,800	<0.5	<0.5	1,400	<0.5	<10			
Screen	09/19/01	EI	<50	83,000	<100			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			
	12/27/01	EI	240,000	12,000	<100			6,600	19,000	2,400	17,000	<0.5	<0.5	640	<0.5	<10			
	03/21/02	EI	232,000	8,000	<100			1,920	1,830	1,157	NA	<0.5	<0.5	1,955	<0.5	<50			
	06/25/02	EI	290,000	1,000	<100			3,580	3,300	3,280	7,500	<0.5	<0.5	1,150	<0.5	<10			
	09/11/02	EI	250,000	<50	<100			3,020	4,140	1,400	NA	<0.5	<0.5	1,300	<0.5	<50			
	02/01/03	EI	77,000	<50	<100			4,200	11,000	1,700	10,000	<0.5	<0.5	1,100	<0.5	<50			
	06/21/03	EI	21,900	<100	<1,000			1,830	2,570	1,040	NA	<0.5	<0.5	1,400	<0.5	<50			
	09/30/03	EI	2,280	<100	<1,000			3,230	4,160	1,060	NA	<1	<1	986	<1	<50			
	11/11/03	EI	18,500	<100	<1,000			2,710	2,070	802	NA	<1	<1	<1	<1	87			
	03/10/04	EI	5,540	<100	<1,000			3,120	5,540	1,400	9,310	3	<1	170	<1	68			
	06/16/04	EI	6,600	<100	<1,000			2,970	4,110	2,090	10,680	<1	<1	822	<1	<50			
	09/22/04	EI	2,950	<100	<1,000			2,050	2,060	1,130	6,120	<0.5	<0.5	1,800	<0.5	26			
	12/17/04	EI	1,840	<100	<1,000			2,090	1,470	891	3,207	<0.5	<0.5	993	<0.5	<5			
	03/11/05	EI	5,310	<100	<1,000			3,800	4,330	1,190	6,520	<0.5	<0.5	777	<0.5	<5			
	06/24/05	EI	2,700	<100	<1,000			1,710	3,280	1,180	6,730	<0.5	<0.5	604	<0.5	<5			
	09/12/05	EI	1,800	<100	<1,000			3,220	8,600	1,210	6,770	<0.5	<0.5	<0.5	<0.5	<5			
	12/20/05	EI	2,250	<100	<1,000			899	985	490	1,753	<0.5	<0.5	682	<0.5	<5			
	03/29/06	EI	5,240	<100	<1,000			1,640	2,520	1,060	3,510	<0.5	<0.5	678	<0.5	<5			
	06/20/06	EI	4,300	<100	<1,000			1,760	1,680	896	2,043	<0.5	<0.5	1,100	<0.5	<5			
	09/18/06	EI	4,200	<100	<1,000			1,240	2,240	1,250	2,980	<0.5	<0.5	516	<0.5	<5			
	12/20/06	EI	2,100	<100	<1,000			321	43	174	134	<0.5	<0.5	107	<0.5	<5			
	03/19/07	EI	2,100	<100	<1,000			323	322	210	637	<0.5	<0.5	95	<0.5	<5			
	06/29/07	EI	26,300	<100	<1,000			2,000	1,070	771	2,283	<0.5	<0.5	1,010	<0.5	<5			
	10/02/07	EI	<100	20,400	<1,000			1,690	1,180	1,450	2,993	<0.5	<0.5	753	<0.5	<5			
	12/13/07	EI	18,000	<100	<1,000			585	55	602	659	<0.5	<0.5	110	<0.5	<5			
	03/29/08	EI	20,900	<100	<1,000			1,660	179	1,410	5,336	<0.5	<0.5	587	<0.5	<5			
	06/09/08	EI	26,300	<1,000	<1,000			735	700	900	3,375	<0.5	<0.5	330	<0.5	126			
	08/25/08	EI	24,000	<100	<1,000			1,410	2,380	1,540	6,720	<1	<1	898	<1	20			
	11/25/08	EI	5,690	<100	<1,000			890	141	437	1,170	<1	<1	711	<1	<5			
	02/13/09	EI	25,400	<100	<1,000			1,900	3,090	1,760	9,190	<1	<1	329	<1	<5			
	09/02/09	EI	31,100	NA	NA			3,740	4,950	5,740	19,420	<1	<1	<1	<1	<5			
	02/11/10	EI	4,870	NA	NA			1,250	1,220	842	2,600	<1	<1	338	<1	<5			
	09/09/10	EI	36,500	NA	NA			1,500	1,180	1,160	2,860	<1	<1	845	38.1	<5			
	02/16/11	EI	5,640	NA	NA			122	25.2	367	116	<1	<1	130	<1	<5			
	09/26/11	EI	9,560	NA	NA			653	162	1,080	1,457	<1	<1	802	0.87	<5			
	03/06/12	EI	4,010	NA	NA			231	4.4	578	255	<1	<1	190	NA	NA			
	09/13/12	EI	9,130	NA	NA			472	148	636	914	<1	<1	880	<1	<5			
03/29/13	DES	540	ND	NA	1/1	--	115	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK (A)		
09/12/13	DES	4,810	1,000	NA	5/5	--	580	32	1,000	550	ND	ND	440	ND	ND</td				

TABLE 4
Summary of Groundwater Sample and Analytical Data
 California Tank Lines, Inc.
 3105 South El Dorado Street, Stockton, CA (Site)

Sample			Analytical Data																
Sample Location	Date Sampled	ID	TPHg ⁽¹⁾ ppb	TPHd ⁽¹⁾ ppb	TPHmo ⁽³⁾ ppb	DF g/d/mo	TOG ⁽³⁾ ppb	B ⁽²⁾ ppb	T ⁽²⁾ ppb	E ⁽²⁾ ppb	X ⁽²⁾ ppb	MTBE ⁽²⁾ ppb	ETBE ⁽²⁾ ppb	DIPE ⁽²⁾ ppb	TAME ⁽²⁾ ppb	TBA ⁽²⁾ ppb	DF	Lab	CARs/ Refs
MW-5	09/26/11	EI	490	<100	<1,000			3.6	14.4	3.99	32.1	2.45	<1	21.2	0.84	<5			
	03/06/12	EI	360	<100	<1,000			1.57	<1	<1	<2	<1	<1	3.7	<1	<5			
17'-37'	09/13/12	EI	350	<100	46,400			2.47	0.67	1.06	1	<1	<1	10.4	<1	<5			
Screen	03/29/13	DES	230	ND	NA	1/1	--	3	ND	ND	ND	ND	ND	5	ND	ND	1	CHTK	(A)
	09/12/13	DES	435	2,900	NA	1/5	--	2.9	6.4	ND	19	ND	ND	7.3	ND	15	1	Assoc	(B)
	02/11/14	DES	273	620	5,900	1/5/1	--	5.7	ND	ND	5.8	ND	ND	10	ND	18	1	Assoc	(C)
	12/10/14	DES	660	ND	ND	1/1/1	--	3	4	2	7	ND	ND	6	ND	ND	1	CHTK	(D)
	03/13/15	DES	150	ND	ND	1/1/1	--	2	ND	ND	ND	ND	ND	5	ND	ND	1	CHTK	(E)
	06/09/15	DES	180	ND	ND	1/1/1	--	3	ND	ND	ND	ND	ND	3	ND	43	1	CHTK	(F)
MW-6	12/10/14	DES	12,700	ND	ND	1/1/1	--	233	5	687	1,040	ND	ND	455	ND	ND	4	CHTK	(D)
	03/14/15	DES	14,500	ND	ND	20/1/1	--	215	9	750	2,000	ND	ND	520	ND	ND	1	CHTK	(E)
	06/09/15	DES	10,000	ND	ND	10/1/1	--	150	3	235	430	ND	ND	232	ND	ND	1	CHTK	(F)
MW-7	12/10/14	DES	120	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	7	ND	ND	1	CHTK	(D)
	03/13/15	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	4	ND	ND	1	CHTK	(E)
	06/09/15	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	3	ND	ND	1	CHTK	(F)
MW-8	12/10/14	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(D)
	03/14/15	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(E)
	06/09/15	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(F)
MW-9	07/14/15	DES	ND	ND	ND	1/1/1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	CHTK	(G)
Primary MCLs								1	150	300	1,750	13							
Notification Levels																		12	
LTCP cleanup levels								No product										3,000 ppb	
Detection Limits								100	500									1,000 ppb	

Abbreviations:

TPHg Total Petroleum Hydrocarbons per a gasoline standard
 TPHd Total Petroleum Hydrocarbons per a diesel standard
 TPHmo Total Petroleum Hydrocarbons per a motor oil standard
 TOG Total Oil and Grease
 B Benzene
 T Toluene
 E Ethylbenzene
 X Reported Total Xylenes or sum of reported m,p, and o-xylene
 ND Not detected at concentration above the dilution factor multiplied by the detection limit.

Submerged well screen below top of groundwater table	TBA Tertiary-Butyl-Alcohol
Concentration exceeds LTCP cleanup level	CARs Certified Analytical Reports
ID Sampler	Refs Reference where chemical data are first reported
EI Enviroengineering, Inc.	CHTK CHEMTEK Environmental Laboratories, Inc.
DES Donan Environmental Services, Inc.	ppb Parts per billion (ppb) or micrograms per liter
MTBE Methyl-Tertiary-Butyl-Ether	NA Not analyzed
ETBE Ethyl-Tertiary-Butyl-Ether	--- Not Applicable, Analyzed or Available
DIPE Di-isopropyl-Ether	DF Lab dilution factor
TAME Tertiary-Amyl-Methyl-Ether	G/D/mo Gasoline / Diesel / Motor Oil

MCL Maximum Contaminant Levels for Organic Chemicals specified in Table 64444-A - Section 64444 of Title 22 (California Code of Regulations) as amended March 10, 2010.
 Notification Non-enforceable notification levels (also known as California Action Levels) developed by the California Department of Public Health (CDPH) for contaminants not having MCLs. Intended for use of drinking water suppliers for protecting their consumers. Published in "Drinking Water Notification Levels and Response Levels: An Overview" (CDPH, December 14, 2007).

Note: Orange and Bold results are above applicable MCL. Bold results for TBA exceeding the Notification Level.

⁽¹⁾ Analyzed using EPA Method 8015-modified using gasoline as a standard (TPHg), diesel as standard (TPHd), or oil as a standard to represent motor oil (TPHmo)

⁽²⁾ Analyzed using EPA Method 8260

⁽³⁾ Analyzed using EPA Method 1664A

ND Not detected at concentration above the dilution factor multiplied by the detection limit.

(A) CHEMTEK Environmental Laboratories, Inc. report dated April 11, 2013

(B) Associated Laboratories, Inc. report dated September 24, 2013

(C) Associated Laboratories, Inc. report dated February 27, 2014

(D) CHEMTEK Environmental Laboratories, Inc. report dated January 2, 2015

Reference: Data from 1997 to 9/2011 from Taber CAP (February 24, 2012). Data from 9/2011 to 9/2012 from Enviroengineering, Inc. Report (March 21, 2013).

(E) CHEMTEK Environmental Laboratories, Inc. report dated March 23, 2015

(F) CHEMTEK Environmental Laboratories, Inc. report dated June 22, 2015

Table 5
Summary of Groundwater Flow Directions
 California Tank Lines
 3105 South El Dorado Street
 Stockton, CA (Site)

General Condition	Submerged MW1-MW4 (4) Stable GW Flow	Unsubmerged MW1-MW4 (4) Stable GW Flow	Submerged MW1-MW4 Unstable GW Flow More Wells Submerged At least one well unsubmerged	Unsubmerged MW1-MW4 Unstable GW flow More wells unsubmerged At least one well submerged	Submerged MW1-MW5 Unstable GW flow More wells submerged (MW1-MW4) At least one well unsubmerged (MWS)
Flow Direction Endings	3/28/01 E 3/29/08 NE/SE 2/11/10 E/SE 9/9/10 E/SE	9/19/01 SE 9/11/02 SE 2/1/03 SE/SW 6/21/03 SE 9/30/03 E 11/11/03 SE 3/10/04 N/E 6/10/04 NE/E 3/11/05 E 6/24/05 NE 9/12/05 NE/SE 12/20/05 NW/NE 3/29/06 NW/SE 9/18/06 NW/E 10/2/07 E/SE	6/27/01 SE 3/21/02 NE 6/20/06 NW/NE 12/20/06 NE/SE 3/19/07 NW/NE 6/26/07 NW/NE 6/9/08 N/E 8/25/08 N/SE 11/25/08 SE 2/13/09 NE/SE	6/25/02 N	9/26/11 NE/E 12/23/11 NE 3/6/12 NW 9/13/12 NW 3/29/13 NE/SE 9/12/13 NE/SE
Conclusion	Variation in GW Flow Direction 90° NE-SE Stable variation in GW flow for submerged GW-Based wells MW1-MW4	Variation in GW flow direction 180° NW-SE Wide variation in unsubmerged unconfined GW flow due to small well array with insufficient number of wells	Variation in GW flow direction 180° NW-SE Wide variation in GW flow complicated by small well array and GWE data conflict of lumping submerged GWEs with unsubmerged GWEs	Not enough data to assess GW flow direction	Variation in GW flow direction 180° NW-SE Wide variation in GW flow complicated by small well array and GWE data conflict of lumping submerged GWEs with unsubmerged GWEs

Table 6
Rationale for Proposed Wells
California Tank Lines, Inc.
3105 South El Dorado Street. Stockton, CA (Site)

Proposed Well	Depth Zone	Objective Area	Target Plume	Vertical Assessment	Lateral Assessment
MW10	Zone A	Impacts northwest of North Tank Pit, and to provide informationon oil plume migration under the Site building east of the North Tank Pit	Free Product Oil, dissolved oil and dissolved diesel	NA	Assess eastward extent of plumes immediately adjacent to Site Building
MW11	Zone A	Leading edge gasoline impacts at MW4	dissolved gasoline	Determine if impacts in Zone B well MW4 are also in shallower Zone A.	Determine if lateral gasoline migration in Zone A is similar to that in deeper Zone B.
MW12	Zone A	Leading edge of plume	dissolved gasoline	NA	Assess the lateral extent of the dissolved gasoline plume in Zone A by laterally assessing impacts downgradient of MW4.
MW13	Zone A	South Tank Pit (former Diesel USTs)	Dissolved diesel	Determine if attenuation of dissolved impacts in Zone B well MW1 is also applicable to Zone A.	Determine if there are impacts in Zone A
MW14	Zone A	Leading edge of plume southeast of South Tank Pit at MW3	Dissolved Diesel and Dissolved gasoline	Determine if impacts in Zone B Well MW3 are also in Zone A.	Assess diesel imapcts downgradient of the South Tank Pit
MW15	Zone B	Impacts northwest of North Tank, and to provide informationon oil plume migration under the Site building east of the North Tank Pit	Free Product Oil in MW2, dissolved oil and dissolved diesel	NA	Assess eastward extent of plumes immediately adjacent to Site Building
MW16	Zone B	Leading edge of plume	dissolved gasoline	NA	Assess the lateral extent of the dissolved gasoline plume in Zone B by laterally assessing impacts downgradient of Zone B Well MW4.
MW17	Zone B	Impacts at MW6	Free product oil, dissolved gasoline, dissolved diesel, dissolved oil	Determine if impacts in Zone A well MW6 are in deeper Zone B.	Laterally assess oil and diesel impacts at the North Tank Pit in Zone B.
MW18	Zone B	Impacts at North Tank Pit	dissolved gasoline	confirm that ND imapcts in Zone A MW7 are also ND in Zone B	Laterally Assess the northward extent of dissolved impacts in Zone B
MW19	Zone C	North Tank Pit	Free product oil, dissolved gasoline, dissolved diesel, dissolved oil	Vertical assessment of impacts below Zone B well MW2.	NA
MW20	Zone C	Impacts northwest of North Tank Pit, and to provide informationon oil plume migration under the Site building east of the North Tank Pit	Free Product Oil, dissolved oil and dissolved diesel	NA	Assess eastward extent of plumes immediately adjacent to Site Building
MW21	Zone C	Leading edge gasoline impacts at MW4	dissolved gasoline	Determine if impacts in Zone B well MW4 are also in deeper Zone C.	Determine if lateral gasoline migration in Zone C is similar to that in shallower Zone B.
MW22	Zone C	South Tank Pit (former Diesel USTs)	Dissolved diesel	Vertical assessment of impacts below Zone B well MW1.	Determine if there are impacts in Zone A

SUPPORT DOCUMENTS

LTCP Checklist as of March 25, 2016

Geotracker - Impediments to Closure as of March 25, 2016

RWQCB-CV Letter (March 28, 2016)

SJCEHD Letter (August 17, 2011)

SJCEHD Letter (September 9, 2014)

County of San Diego, Department of Environmental Health, Site Assessment and Mitigation
Manual - Table 5-8



STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

CALIFORNIA TANK LINES (T0607700425) - [\(MAP\)](#)

[SIGN UP FOR EMAIL ALERTS](#)

3105 EL DORADO ST S
STOCKTON, CA 95206
SAN JOAQUIN COUNTY
LUST CLEANUP SITE
[ASSOCIATED ENVIROSTOR PROJECTS](#)
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES

CENTRAL VALLEY RWQCB (REGION 5S) (**LEAD**) - CASE #: 390541

CASEWORKER: [VERA FISCHER](#)

SAN JOAQUIN COUNTY - CASE # 1095

CUF Claim #:

8489

CUF Priority Assigned:

C

CUF Amount Paid:

\$492,036

LTCP CHECKLIST AS OF 3/25/2016

[VIEW PATH TO CLOSURE PLAN](#)

[BACK TO CASE SUMMARY](#)

General Criteria - The site satisfies the policy general criteria

NO

- a. Is the unauthorized release located within the service area of a public water system? YES
- b. The unauthorized release consists only of petroleum [\(info\)](#). YES
- c. The unauthorized ("primary") release from the UST system has been stopped. YES
- d. Free product has been removed to the maximum extent practicable [\(info\)](#). NO
- e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed [\(info\)](#). YES
- f. Secondary source has been removed to the extent practicable [\(info\)](#). NO
- g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15. YES
- h. Does a nuisance exist, as defined by [Water Code section 13050](#). NO

1. Media-Specific Criteria: Groundwater - The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below.

NO

EXEMPTION - Soil Only Case (Release has not Affected Groundwater - [Info](#))

NO

ADDITIONAL QUESTIONS - The following conditions exist that do not meet the policy criteria:

Plume Length (That Exceeds Water Quality Objectives) :

- ≥ 100 Feet and < 250 Feet

Plume is Stable or Decreasing in AREAL Extent :

- Unknown

Free Product in Groundwater :

- Yes

Free Product Has Been Removed to the Maximum Extent Practicable :

- No

For sites with free product, the Plume Has Been Stable or Decreasing for 5-Years ([info](#)) :

- Unknown

For sites with free product, owner Willing to Accept a Land Use Restriction (if required) :

- Unknown

Free Product Extends Offsite :

- Unknown

Nearest Supply Well (From Plume Boundary) :

- > 250 Feet and ≤ 1,000 Feet

2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c

3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below.

Additional Information

Copyright © 2016 State of California



STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

CALIFORNIA TANK LINES (T0607700425) - (MAP)

[SIGN UP FOR EMAIL ALERTS](#)

3105 EL DORADO ST S
STOCKTON, CA 95206
SAN JOAQUIN COUNTY
LUST CLEANUP SITE
[ASSOCIATED ENVIROSTOR PROJECTS](#)
[PRINTABLE CASE SUMMARY / CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
CENTRAL VALLEY RWQCB (REGION 5S) ([LEAD](#)) - CASE #: 390541
CASEWORKER: [VERA FISCHER](#)
SAN JOAQUIN COUNTY - CASE # 1095
CUF Claim #: 8489
CUF Priority Assigned: C
CUF Amount Paid: \$492,036

PATH TO CLOSURE PLAN FY 12/13 AS OF 3/25/2016

[BACK TO LTCP CHECKLIST](#)

IMPEDIMENT 1:

General Criteria D: Free product has NOT been removed to the maximum extent practicable

Step to Resolve Impediment 1 - Step 1:

Perform prompt and effective product removal

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
12/31/2017	

IMPEDIMENT 2:

General Criteria E: Secondary source has NOT been removed to the extent practicable

Step to Resolve Impediment 2 - Step 1:

Complete free product removal effort

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
12/31/2017	

IMPEDIMENT 3:

Media-Specific Criteria: Groundwater: The contaminant plume that exceeds water quality objectives is NOT stable or decreasing in areal extent, and does NOT meet all of the additional characteristics of one of the five classes of sites.

Conditions that do not meet the policy criteria:

- Plume Length (That Exceeds Water Quality Objectives): ≥ 100 Feet and < 250 Feet
- Plume is Stable or Decreasing in **AREAL** Extent: Unknown
- Free Product in Groundwater: Yes
- Free Product Has Been Removed to the Maximum Extent Practicable: No
- For sites with free product, the Plume Has Been Stable or Decreasing for 5-Years (info): Unknown
- For sites with free product, owner Willing to Accept a Land Use Restriction (if required): Unknown
- Free Product Extends Offsite: Unknown
- Nearest Supply Well (From Plume Boundary): > 250 Feet and $\leq 1,000$ Feet

Step to Resolve Impediment 3 - Step 1:

Perform active remediation to remove free product and contaminant mass to reduce concentrations of dissolved phase contaminant to levels that meet the LTCP.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
12/31/2017	1/3/2014

Step to Resolve Impediment 3 - Step 2:

Once groundwater concentrations have been reduced to levels that meet one of the groundwater scenarios in the LTCP criteria, perform post remedial monitoring to determine plume stability under natural conditions.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
12/30/2020	

Step to Resolve Impediment 3 - Step 3:

If a stable to decreasing post remedial plume is observed, and assuming all other impediments have been addressed, perform public participation.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
3/1/2021	

Step to Resolve Impediment 3 - Step 4:

Assuming no objections to closure, request destruction of remaining Site wells.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
7/31/2021	

Step to Resolve Impediment 3 - Step 5:

After submission of documentation of proper destruction of all remaining Site wells, and proper disposal of

all investigation derived wastes, issue the legislatively mandated NFA Letter.

PROJECTED DATE
12/31/2021

ACTUAL DATE

IMPEDIMENT 4:

Media Specific Criteria: Direct Contact and Outdoor Air Exposure: The site is NOT considered low-threat for direct contact and outdoor air exposure as it does NOT meet 1, 2, or 3.

Conditions that do not meet the policy criteria:

- Exposure Type: Commercial
- Petroleum Constituents in Soil: Unknown
- Soil Concentrations of Benzene: Unknown
- Soil Concentrations of EthylBenzene: Unknown
- Soil Concentrations of Naphthalene: Unknown
- Soil Concentrations of PAH: Unknown
- Area of Impacted Soil: Unknown

Step to Resolve Impediment 4 - Step 1:

Collect shallow soil samples for comparison to LTCP screening criteria.

COMPLETION DATE

PROJECTED DATE ACTUAL DATE
12/31/2016

Step to Resolve Impediment 4 - Step 2:

Perform active remediation as needed to reduce concentrations in shallow soil to meet LTCP screening criteria.

COMPLETION DATE

PROJECTED DATE ACTUAL DATE
12/31/2017

REQUIREMENTS ALONG PATH TO CLOSURE

DATE IDENTIFIED FOR CLOSURE	CLOSURE INITIATED BY	RP DATE	PUBLIC PARTICIPATION COMPLETION DATE	WELL DESTRUCTION LETTER DATE	WELL DESTRUCTION DATE	WASTE DISPOSAL DATE	LAND USE RESTRICTION DATE	SITE CLOSURE DATE
-----------------------------	----------------------	---------	--------------------------------------	------------------------------	-----------------------	---------------------	---------------------------	-------------------

Copyright © 2016 State of California



Central Valley Regional Water Quality Control Board

28 March 2016

El Dorado Land Holdings, LLC
Mr. Allen L. Genetti CPA, CFO
P.O. Box 6632
Stockton, CA 95206

Site Assessment Reprot and Third Quarter 2015 Groundwater Monitoring Report, California Tank Lines, 3105 El Dorado Street, Stockton, San Joaquin County

California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff reviewed the *Technical Report Third Quarter 2015 Groundwater Assessment* (3Q2015 Report) dated 2 December 2015, and the *Site Assessment Report* (Assessment Report) dated 24 July 2015, both submitted on your behalf by Donan Environmental Services, Inc. (Donan).

In the Assessment Report, Donan presented results of additional assessment activities conducted in an attempt to define the lateral and vertical extent of petroleum impacts. Donan oversaw the advancement of two soil borings, WPMW9 and WPMW10, and the construction of one well, MW9, installed in boring WPMW10.

Boring WPMW9 was advanced to 70 feet below ground surface (ft bgs) in the area of the former waste oil tanks to assess the vertical extent of soil impacts; soil samples were collected every 5 feet between 10 and 70 ft bgs. Soil impacts were detected in the samples collected between 10 and 36 ft bgs. In the soil sample collected from WPMW9 at 36 ft bgs, total purgeable hydrocarbons (TPH) as motor oil (TPH-MO), TPH as diesel (TPH-D), and TPH as gasoline (TPH-G) were detected at maximum concentrations of 8,400 milligrams per kilogram (mg/kg), 5,210 mg/kg, and 536 mg/kg, respectively,. Petroleum hydrocarbons have been detected in historic soil samples at depths of 41 ft bgs (well MW-5), 50 ft bgs (well MW-4).

Three permeable hydraulic units were identified by Donan at approximately, 24.5 to 26.5 ft bgs, 31 to 35 ft bgs, and 52 to 65 ft bgs. Donan identified two groundwater zones that existing Site wells are screened across. The shallow zone is identified from 20 to 35 ft bgs, and the deep groundwater zone from 30 to 50 ft bgs. Existing shallow Site wells are screened from 17 to 37 ft bgs or 20 to 35 ft bgs, while existing deep wells are screened from either 27 to 50 ft bgs, 30 to 50 ft bgs, or 32 to 42 ft bgs. Measureable free product has been observed in both shallow and deep screened wells.

During the third quarter 2015 groundwater monitoring event, free product was observed in two (2) wells and product sheen was observed in four (4) wells. Due to the presence of free product and sheen, only three (3) site wells were sampled; TPH-G was detected in one (1) of the three (3) groundwater samples at 160 micrograms per liter (ug/L). Depth to water increased in Site wells by approximately three (3) feet since the fourth quarter 2014 groundwater monitoring event. Free product thickness in Site wells is increasing. The groundwater gradient was calculated to be to the west to southwest. According to Donan, the increasing product thickness is likely due to exposure of previously submerged product bearing zones.

Donan's recommendations from the 3Q2015 Report and Assessment Report are listed below in *italics*, followed by Central Valley Water Board staff's responses:

1. *Prepare a Corrective Action Plan for dual-phase extraction (DPE) to remove submerged product impacts at the Site, which is needed to meet the State Water Resources Control Board's Low Threat Closure Policy's (LTCP's) requirement to remove free product to the extent practicable.*

Central Valley Water Board staff concur that remedial action is needed. Prior to selection of DPE as the final remedial action, staff request that a pilot test, lasting at least 30 days, be performed to evaluate effectiveness of this remedial technology. Therefore, by **30 April 2016**, submit a Dual-Phase Extraction Pilot Test Work Plan.

2. *Collection of groundwater samples in wells with measurable free product and sheen from under the product, in order to provide sufficient data to monitor the dissolved phase plume trends.*

Central Valley Water Board staff are concerned that collection of groundwater samples from wells with measurable free product and sheen may not be representative. In the 3Q2015 Report, Donan stated that groundwater samples would be collected from under the product. Staff request additional information detailing appropriate methods to collect groundwater samples from wells with free product and sheen to assure that samples are representative of the dissolved phase plume. Therefore, by **30 April 2016**, submit a Work Plan presenting a detailed scope of work on how groundwater sampling will be performed. Please include at a minimum, the depth below the free product that samples will be collected, how you will prevent sampling equipment from being impacted by the free product, and how you will assure that free product is not included in the sample.

3. *Test the free product in well MW5 to determine its composition for comparison to the free product in MW2.*

Central Valley Water Board staff concur with collection and analysis of free product from Site wells for comparison. Please include results in the next groundwater monitoring report, due **15 August 2016**.

4. *To perform quarterly groundwater monitoring of the Site's well network for one year to provide a basis for water level, product thickness, and dissolved-phase trends, in accordance with the June 2015 directive from the San Joaquin County Environmental*

Health Department. After one year of quarterly monitoring, to resume semi-annual groundwater monitoring.

Central Valley Water Board staff concur with this recommendation. Please submit quarterly groundwater monitoring reports 45-days after the end of the sampling quarter. The second quarter 2016 Groundwater Monitoring Report is due **15 August 2016**.

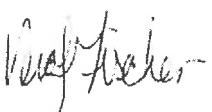
Central Valley Water Board staff have the following additional comments on project status and the path towards a finding of no further action required:

5. Existing Site wells have been classified as either shallow (screened between 17 and 37 ft bgs) or deep (screened between 27 to 50 ft bgs). Measureable free product and sheen have been detected in deep Site wells. Due to the presence of free product in existing deep wells, vertical delineation of groundwater is needed. Groundwater monitoring wells installed in the third identified hydraulic unit, at approximately 52 to 65 ft bgs, should confirm the depth of petroleum hydrocarbon impacts at the Site. Therefore, include in the Work Plan due **30 April 2016**, a scope of work proposing installation of a sufficient number of wells and/or borings to complete vertical delineation of groundwater. A minimum of three wells are needed to allow for generation of groundwater gradient and flow direction.
6. Staff request that the nomenclature for the groundwater depth zones be modified from shallow zone and deep zone to A zone and B zone. This will allow for referring to the wells requested in item 5 above to be referred to as C zone wells.
7. During the third quarter 2015 groundwater monitoring event, the groundwater flow direction was calculated to be towards the west to southwest. Free product and groundwater pollution are not defined to the west of the Site source areas including the former waste oil tank pit and former diesel tank pits. Installation of additional wells is needed to define the lateral extent of pollution. Therefore, include in the Work Plan due **30 April 2016**, a scope of work proposing advancement of a sufficient number of wells and or borings to complete lateral plume delineation, in both the A and B zones.
8. Highly elevated concentrations of petroleum hydrocarbons were detected in soil samples collected from the former waste oil tank pit demonstrating that a release occurred. Soil samples from the waste oil tank and surrounding area were not analyzed for all required parameters based upon a review of the laboratory reports. Waste oil tanks are often inappropriately used as a disposal tank for various chemical and solvents commonly used at an auto service and repair shop. Soil samples were not analyzed for the full volatile organic compound (VOC) list, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Please include in the Work Plan due **30 April 2016**, a scope of work to collect soil samples from at least 5, 10, and 15 ft bgs in the former waste oil tank pit and include the analysis listed above to asses soil for potential solvent impacts from the former waste oil tank.
9. Please include a summary of historic groundwater flow directions and gradients in future groundwater monitoring reports. This information will aid in evaluating long term trends of flow direction.

In summary, Central Valley Water Board staff expect the following:

- By **30 April 2016**, submit a Work Plan presenting scopes of work for lateral and vertical delineation, waste oil tank soil sampling, and a detailed description of proposed methods for sampling groundwater under free product and sheen.
- By **30 April 2016**, submit a Dual Phase Extraction Pilot Test Work Plan.
- By **15 August 2016**, submit the Second Quarter 2016 Groundwater Monitoring Report.

If you have any questions, please contact me by phone at (916) 464-4792 or by email at vera.fischer@waterboards.ca.gov.



Vera Fischer, P.G.
Engineering Geologist

cc: Mr. Sriram Iyer, Underground Storage Tank Cleanup Fund, Sacramento
Mr. Nuel Henderson, San Joaquin county Environmental Health Department, Stockton
Mr. Anderson Doran, Donan Environmental Services, Inc., P.O. Box 1839, Vista, CA

TEB



**San Joaquin County
Environmental Health Department**
600 East Main Street
Stockton, California 95202-3029

Website: www.sjgov.org/ehd
Phone: (209) 468-3420
Fax: (209) 464-0138

DIRECTOR
Donna Heran, REHS

PROGRAM COORDINATORS
Robert McClellan, REHS
Jeff Carruesco, REHS, RDI
Kasey Foley, REHS
Linda Turkatte, REHS

August 17, 2011

Mr. R. Ellis, Jr.
Ms. Ethyl D. Ellis, Trustee et alia
1991 West Lincoln Road
Stockton, California 95207-2462

Subject: California Tank Lines, Inc.
3105 South E! Dorado Street
Stockton, California 95206

Dear Mr. Ellis:

The San Joaquin County Environmental Health Department (EHD) has reviewed *Corrective Action Plan Feasibility Study* (CAPFS), dated June 2011, prepared by Taber Consultants (Taber), on your behalf for the above-referenced site. The CAPFS was submitted in response to the EHD letter dated 01 April 2011 directing that a revised corrective action plan (CAP) be submitted that included evaluation of several methods for site remediation, and directed that contaminant mass estimates, supported by calculations, for sorbed and dissolved total petroleum hydrocarbons as gasoline (TPH-g), benzene, 1,2-dichloroethane (1,2-DCA), total petroleum hydrocarbons as diesel (TPH-d), and total petroleum hydrocarbons as motor oil (TPH-mo) be included in the CAP as well as an analysis for cost-effectiveness for the recommended remedial technologies.

In the CAPFS, Taber focuses on the two areas where petroleum hydrocarbon concentrations are significant: 1) near MW-2 where TPH-d and TPH-mo have been detected as free product, and 2) near MW-4 where TPH-g; benzene, toluene, ethylbenzene and total xylenes (BTEX); di-isopropyl ether (DIPE) and 1,2-DCA have been the predominant contaminants of concern. Although Taber does not provide contaminant mass estimates for sorbed constituents, Taber estimates that approximately 55 gallons of free product remain in the area of MW-2; and approximately 11.4 pounds of TPH-g, 55.1 pounds of TPH-d, 615.6 pounds of TPH-mo, 0.3 pounds of benzene and 0.5 pounds of 1,2-DCA remain in groundwater at this site.

The source of the free product is inferred to have been an unauthorized release from two former waste oil underground storage tanks (USTs) removed from the site in 1990. The source of the petroleum hydrocarbon contamination in the area of MW-4 is unknown. Taber hypothesizes that the hydrocarbon contaminant source may be from an unreported surface spill or "possibly due to a documented groundwater plume emanating from the Pacific Pride facility to the south." Taber supports the second hypothesis with the following information:

- The Five-year Review Summary Report, dated 10 January 2011, issued by the State Water Resources Control Board Underground Storage Tank Cleanup Fund, states that "It is likely the contamination detected in MW-4 is from gasoline USTs located south of the site."
- The groundwater flow direction has been toward the east and southeast at this and the Pacific Pride site located adjacent to the south side of this site; however, the groundwater flow direction has also been reported toward the north at the Pacific Pride site.
- Taber used the Rockworks© program to interpret preferential lithologic pathways for petroleum hydrocarbon contaminants to migrate between this and the Pacific Pride site. Taber identified the depth interval where the greatest concentrations of contaminants have been detected at the California Tank Lines site as approximately 20 to 35 feet below surface grade (bsg). Taber described this depth interval as "a relatively continuous zone of clayey silt with sand interbeds between the most contaminated regions from both sites (MW-4 and P-2 from California Tank Lines and MW-7 near borings P-7, P-8 and P-9 from Pacific Pride)." Taber concluded that "These lithology types can facilitate migration of TPH-g and benzene through the groundwater zone at these depths."

The EHD has reviewed the bore logs for boreholes GP-2, cone penetration test (CPT) boring P-2, MW-4 and GP-1 at the California Tank Line site; and MW-12, CPT borings P-7 through P-9 and MW-7 at the Pacific Pride facility. Based on the EHD cross section, it is not obvious that connecting sand layers exist at approximately 20 to 35 feet bsg to provide a conduit between MW-7 at the Pacific Pride site and MW-4 at the California Tank Lines site. Furthermore, groundwater analytical data revealed the following:

- TPH-g was detected at 57 micrograms per liter ($\mu\text{g}/\text{L}$) and benzene was detected at 2.8 $\mu\text{g}/\text{L}$ in grab groundwater samples collected from GP-1 at approximately 35 feet bsg; GP-1 was advanced approximately 44 feet south of MW-4;
- Groundwater samples collected from MW-12A, screened between approximately 35 and 45 feet bsg, have historically been non-detect for contaminants of concern; MW-12 is approximately 80 feet southeast of MW-4;
- Grab groundwater samples collected between 36 and 40 feet bsg from P-8 were non-detect for contaminants of concern; P-8 was advanced approximately 90 feet southeast of MW-4;
- 3,200 $\mu\text{g}/\text{L}$ of TPH-g, 18 $\mu\text{g}/\text{L}$ of benzene, and 590 $\mu\text{g}/\text{L}$ of 1,2-DCA were detected in grab groundwater samples collected between 36 and 40 feet bsg from P-7; P-7 was advanced approximately 16 feet northeast of MW-7 and approximately 155 feet southeast of MW-4;
- MW-1, screened between 30 and 50 feet bsg, is the only other monitoring well at the Pacific Pride site with high concentrations of contaminants of concern detected in groundwater; this monitoring well is approximately 160 feet south/southeast of MW-4 at the California Tank Line site. There exists one monitoring well at the Pacific Pride facility, MW-4 screened between 30 and 50 feet bsg, which is located approximately halfway between MW-1 at the Pacific Pride facility and MW-4 at the California Tank Line site. Groundwater collected from MW-4 at the Pacific Pride facility was non-detect for contaminants of concern when last this well was sampled in December 2010.

Based on the high petroleum hydrocarbon concentrations detected in groundwater from MW-4 at the California Tank Line site, and MW-7 and MW-1 at the Pacific Pride facility, one would expect to find high contaminant concentrations in groundwater collected between these impacted areas if the southern site is the source of contaminants impacting MW-4 on the subject site; however, this is not the case. Based on this review, it does not appear that the petroleum hydrocarbon contamination detected in groundwater from MW-4 came from the Pacific Pride facility. If your consulting firm can demonstrate that the petroleum hydrocarbon contaminants detected near MW-4 are not related to the former USTs on your site, the EHD will refer the case to the Spills, Leaks, Investigations, and Cleanups (SLIC) program of the California Regional Water Quality Control Board Central Valley Region.

Taber compared doing no remedial action at this site to several active remedial methods: pump and treat (groundwater extraction); dual phase extraction; air sparging/in-situ chemical oxidation; free product removal by bailing; and monitored natural attenuation (MNA). Taber concluded that free product removal by bailing groundwater from MW-2 is the best remedial method to remove petroleum hydrocarbon contamination in the area of the former waste oil tanks; and MNA is the recommended remedial method to remove contaminants of concern in the area of MW-4.

Taber also recommends that an additional monitoring well (MW-5), screened between 17 and 37 feet bsg, be installed adjacent to MW-2. Since depth-to-groundwater measurements taken in February 2011 were approximately 25 feet bsg, this new well may enhance the removal of free product that is currently above MW-2's screened interval of 30 to 50 feet bsg. Taber proposes to continuously log the borehole to total depth of approximately 40 feet bsg. Although Taber does not illustrate the proposed location of MW-5 in any of the Figures presented in the CAPFS, the EHD approves the work plan for installing MW-5 adjacent to MW-2. Submit a boring/well permit application permit/inspection fee to the EHD and complete the well installation by 01 November 2011. (Please note that the EHD's hourly fee has increased from \$122 to \$125 per hour.)

The EHD also approves the pilot test using disposable bailers to bail free product from both MW-2 and newly-installed MW-5. Taber proposes to remove the free product daily for a period of one week or until the free product recovery rate has stabilized. If necessary, Taber proposes to use a skimmer if hand bailing fails to keep up with the recharge. Taber proposes to use existing data and collect additional data to input into the Bioscreen model to:

- Predict the future extent and concentration of the dissolved-phase contaminant plume by modeling the effects of advection, dispersion, sorption, and biodegradation;
- Assess the possible risk to potential down-gradient receptors; and
- Provide technical support for selection of the MNA option as the best remedial alternative."

The EHD approves the collection of the MNA parameters as proposed by Taber. The data will be used in the Bioscreen model to determine:

- Natural degradation rates;
- Fate and transport of dissolved degraded fuel hydrocarbons; and
- Potential risk to human health and the environment.

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California 95206

Page 4
August 17, 2011

If the results from the model are favorable for MNA, Taber proposes to prepare a site-specific, long-term monitoring plan.

The EHD will not approve long-term monitoring for MNA at this site. Although Taber has evaluated the use of pump and treat (groundwater extraction) and concluded that the "anticipated high costs, the limited effectiveness on mass removal, and the absence of down-gradient sensitive receptors" would not merit the implementation of this remedial method, the EHD recommends that groundwater batch extraction be tested using MW-4 to remove groundwater. Batch extraction has had some success in San Joaquin County for reducing limited hot-spots. If your consulting firm concurs with this recommendation, please submit a work plan to the EHD by 20 October 2011, to perform pilot test batch groundwater extraction.

Should you have any questions or concerns regarding this letter, please contact Vicki McCartney at (209) 468-9852, or by email at vmccartney@sjcehd.com.

Sincerely,



Victoria L. McCartney, REHS
Senior Registered Environmental Health Specialist



Nuel C. Henderson, Jr., PG
Engineering Geologist

- c: Mr. Thomas Ballard, PG, Taber Consultants, 3911 West Capitol Avenue, West Sacramento, California 95691
Mr. Guy Roy, Enviroengineering, Inc, Post Office Box 2498, Danville, California 94526
Mr. James L.L. Barton, PG, California Regional Water Quality Control Board Central Valley Region, 11020 Sun Center Drive, Suite 200, Rancho Cordova, California 95670



San Joaquin County
Environmental Health Department
1868 East Hazelton Avenue
Stockton, California 95205-6232

Website: www.sjgov.org/ehd
Phone: (209) 468-3420
Fax: (209) 464-0138

DIRECTOR
Donna Heran, REHS

PROGRAM COORDINATORS
Robert McClellon, REHS
Jeff Carrasco, REHS, RDI
Kasey Foley, REHS
Linda Turkalte, REHS
Rodney Estrada, REHS
Adrienne Ellsaesser, RFHS

September 9, 2014

El Dorado Land Holdings, LLC
Mr. Allen L. Genetti CPA, CFO
Post Office Box 6632
Stockton, California 95206

Subject: California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California 95206

Dear Mr. Genetti:

During a meeting on 8 September 2014, attended by you, Anderson Donan and Greg Delson of Donan Environmental Services, Inc. (DES), and Nuel Henderson and Vicki McCartney of the San Joaquin County Environmental Health Department (EHD), it was decided that additional monitoring wells were needed to delineate the horizontal extent of the petroleum hydrocarbon contaminant plume northeast of the above-referenced site and down-gradient of monitoring well MW-2. Please submit a work plan to the EHD by 10 November 2014 that addresses the installation of three additional monitoring wells. Include the proposed frequency of sampling the groundwater in the three proposed wells (the EHD prefers that newly-installed wells be sampled quarterly for one year only), and list the analyses to be performed on the groundwater collected from the newly-installed monitoring wells.

By letter dated 30 October 2013, the EHD directed that groundwater from monitoring wells MW-1 through MW-5 be analyzed for lead and naphthalene during the next sampling event. Except for groundwater collected from MW-1 and analyzed for naphthalene, lead and naphthalene analytical data were not reported for groundwater samples collected during the February 2014 sampling event. You are now directed to analyze groundwater for lead and naphthalene collected from all of the wells during the next scheduled sampling event.

As first stated by letter dated 30 October 2013, for case closure concurrence, the Central Valley Regional Water Quality Control Board (Regional Board) requires that if soil samples were not analyzed for specific contaminants during the removal of waste oil tanks, then groundwater samples must be collected near the site of the former waste oil tank and analyzed for selected contaminants listed in Table 2 of Appendix A of the *Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites*. To this end, EHD directs that during the next sampling event only, analyze groundwater from monitoring well MW-2 for total petroleum hydrocarbons as gasoline (TPH-g); total extractable hydrocarbons as diesel (TPH-d); total extractable hydrocarbons as motor oil (TPH-mo); the entire suite of method 8260B compounds that must include: benzene, toluene, ethylbenzene, total xylenes (BTEX);

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California 95206

Page 2 of 2
September 9, 2014

methyl tertiary-butyl ether (MTBE); ethyl tertiary-butyl ether (ETBE); tertiary-amyl methyl ether (TAME); di-isopropyl ether (DIPE); tertiary-butyl alcohol (TBA); naphthalene; methanol; ethanol; 1,2-dichloroethane (1,2-DCA); and 1,2-dichloroethane (EDB); the entire suite of 8270C compounds; oil and grease by method 1664A; polychlorinated biphenyls by method 8082 and the following metals: cadmium by method 7131A, lead by method 7421, nickel by method 7521, and chromium and copper by method 6010B. If groundwater from MW-2 is not able to be analyzed, then analyze groundwater from monitoring well MW-5 for the above-listed analyses.

Should you have any questions or concerns regarding this letter, please contact Vicki McCartney at (209) 468-9852, or by email at vmccartney@sjcehd.com.

Sincerely,



Victoria L. McCartney, REHS
Senior Registered Environmental Health Specialist



Nuel C. Henderson, Jr., PG
Engineering Geologist

c: Mr. Anderson Doran, Donan Environmental Services, Inc., Post Office Box 1839, Vista, California, 92085-1839
Ms. Cori Condon, PG, CHg, California Regional Water Quality Control Board Central Valley Region, 11020 Sun Center Drive, Suite 200, Rancho Cordova, California 95670

TABLE 5-8
Petroleum Residual NAPL Saturation Based
on
Soil Type in Sedimentary Environments

Soil Type ASTM-D2487	Approx. Particle Size (mm)	K_{swz} (cm/sec)	θ (dim)	S_w (dim)	ρ_b (gm/cm ³)	TPH Concentration (mg/kg)			
						Gasoline / Naphtha (mg/kg)	Kerosene / JP-4 (mg/kg)	Diesel #2 (mg/kg)	Fuel Oil (mg/kg)
Gravel	76.2-4.75	100	0.30	0.001	2.00	560	780	1000	1400
Sandy Gravel	Based on % fines	5.0	0.36	0.005	1.86	1,500	2,100	2,800	3,800
M-Coarse Sand	4.75-0.425	1.0	0.37	0.007	1.83	2,300	3,200	4,400	5,900
Fine Sand	0.425-0.074	0.5	0.38	0.009	1.81	2,900	4,000	5,400	7,300
Silty Sand	Based on % fines	0.05	0.41	0.018	1.76	5,600	7,800	10,000	14,000
Silt	0.074-0.005	0.0005	0.48	0.10	1.65	19,000	27,000	36,000	49,000
Clay	<0.005	0.000005	0.56	0.39	1.56	44,000	61,000	82,000	110,000

1. The critical flow rate (q_c) used to calculate the above values was 1×10^{-7} cm/sec.

This table does not apply in fractured crystalline rock environments

2. The TPH concentration values were determined by using Equations 5-3 and 5-4.

NAPL characterization requires an approach that is distinctly different from dissolved-phase characterization because immiscible flow is controlled by parameters not addressed in a dissolved-phase assessment. These parameters include the fluid properties of the NAPL and the capillary properties of the porous media.

There are many ways to determine the presence of NAPL. A more detailed discussion of the following techniques can be found in Cohen (1993) and Pankow (1996).

COMMUNITY AND WORKER HEALTH AND SAFETY PLAN

**DONAN ENVIRONMENTAL SERVICES, INC.
COMMUNITY and WORKER HEALTH AND SAFETY PLAN**

for
Geotracker ID # T0607700425
San Joaquin County Environmental Health Department Case # 1095
Central Valley RWQCB Case # 390541

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California

INTRODUCTION

Donan Environmental Services, Inc. (DES) has prepared this Community and Worker Health and Safety Plan (CWHSP) for the proposed site activities discussed in the DES Site Assessment Work Plan, dated October 10, 2014. This CWHSP is written pursuant to the regulations found in 29 CFR Part 1910.120 and includes the following information:

Site Identification and Description

Site Name:	California Tank Lines
Site Address:	3105 South El Dorado Street Stockton, California, 95206
Site Manager:	Mr. Allen L. Genetti (209) 466-3554 ext. 322
Site Safety Manager and Environmental Manager:	Mr. Greg Delson (858) 761 - 3611

The site is located in a commercial and industrial land use area. Refer to the enclosed Site Location

Map (Figure 1). The site is a commercial operation that provides truck maintenance and fueling services. The site improvements include an office building, two truck maintenance buildings, a truck wash rack, an aboveground storage tank area for fueling, a vehicle fueling facility, and a large paved parking area for tank trailers.

Project Description

DES will install, gauge, and sample groundwater monitoring wells to investigate free product and dissolved groundwater contamination in the subsurface. Truck-mounted drill rigs will be used to install the wells and collect soil samples. Traffic control under proper City of Stockton permits and approved traffic control plans will be implemented to install the wells in sidewalks and road shoulders that are in the City right of way (ROW).

Groundwater and soil waste generated by the activities will be stored in 55-gallon drums until waste characterization and arrangements are made for proper offsite disposal.

Evaluation of Organic Vapors and Off-Site Risk

The field operations may generate organic vapors, dust, and equipment noise.

Contaminants of Concern

Based on the history of monitoring data and the availability of regulatory criteria, the contaminants of concern (COCs) for the release are benzene and methyl-tertiary-butyl ether (MTBE).

Contaminant Toxicity, Persistence, and Mobility

Benzene Details

Benzene is a colorless and highly flammable liquid with a sweet smell and a relatively high melting point. According to an EPA Technical Fact Sheet for benzene, benzene is a known carcinogen and mutagen, its use as an additive in gasoline is now limited, but it is an important industrial solvent and precursor in the production of drugs, plastics, synthetic rubber, and dyes. Benzene is a natural constituent of crude oil, and may be synthesized from other compounds present in petroleum. As a gasoline additive, benzene increases the octane rating and reduces knocking. Consequently, gasoline often contained several percent benzene before the 1950s, when tetraethyl lead replaced it as the most widely-used antiknock additive. In the United States, concern over its negative health effects and the possibility of benzene entering the groundwater have led to stringent regulation of gasoline's benzene content, with limits in California below one percent.

Toxicity information in material safety data sheets (MSDS) indicate that exposure to benzene has serious health effects. Benzene targets liver, kidney, lung, heart and the brain and can cause DNA strand breaks, chromosomal damage, etc. The short term breathing of high levels of benzene can result in death, while low levels can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. Eating or drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, and death. The major effects of benzene occur through chronic exposure through the blood.

Benzene damages the bone marrow and can cause a decrease in red blood cells, leading to anemia. It can also cause excessive bleeding and depress the immune system, increasing the chance of infection.

Benzene causes leukemia and is associated with other blood cancers and pre-cancers of the blood. Breathing high levels of benzene for many months has caused irregular menstrual periods in women and a decrease in the size of their ovaries. It is not known whether benzene exposure affects the developing fetus in pregnant women or fertility in men.

The chemical properties of benzene and MTBE in this CWHSP were obtained from EPA Fact Sheets and the following reference:

“Regulatory Determinations Support Document for Selected Contaminants from the Second Drinking Water Candidate list (CCL2), EPA Report 815-R-08-012, Chapter 13, MTBE”, prepared by the United States Environmental Protection Agency Office of Groundwater and Drinking Water, June 2008.

Benzene solubility in water is 1,800 milligrams per liter (mg/l) (EPA Fact Sheet) compared to 48,000 mg/l (EPA Fact Sheet) for MTBE, therefore, benzene moves much slower in dissolved-phase plumes relative to MTBE. Benzene is also more readily biodegraded which also limits its observed lateral distance of travel compared to MTBE in dissolved-phase plumes. Biodegradation of benzene in the groundwater also limits its persistence in the environment. Another factor that affects the fate and transport of benzene in the environment is the fuel-water partitioning coefficient (K_{fw}). A comparison of K_{fw} values for benzene, MTBE and TBA was presented in the following paper:

“Role of Volatilization in Changing TBA and MTBE Concentrations at MTBE-Contaminated Sites,” Eweis, J.B., Labolle, E., M., Benson, D. A., and Fogg, G., E., in Environmental Science and Technology, Volume 41, No. 19, 2007.

Eweis, et. al. (2007) indicated that benzene has a high affinity for fuel with a K_{fw} of 350 versus a low K_{fw} of 15.5 for MTBE. Therefore, when product, or product-impacted soil, is exposed to water, MTBE more readily enters the water compared to benzene.

The tendency for benzene to migrate from groundwater into the air is evaluated by reviewing the vapor pressure. The vapor pressure for benzene at 25°C is 95.2 millimeters mercury (mmHg) (EPA 2008) compared to a 23.8 mmHg vapor pressure for water at 25°C. Therefore, benzene readily evaporates from water into the air. According to the Agency for Toxic Substances and Disease Registry (ATSDR), benzene readily reacts with free radical ions in the air and typically has a residence time of 2-8 days. Therefore, benzene is not persistent in the air. Benzene is persistent in soil and groundwater, but readily degrades in an aerobic environment.

MTBE Details

Fact sheets from the EPA describe MTBE as a volatile, flammable and colorless liquid that is highly soluble in water. MTBE has been used in gasoline at low levels since 1979 to increase its octane rating and help prevent engine knocking. Since 1992, MTBE has been used at higher concentrations in some gasoline to fulfill the oxygenate requirements set by the United States Congress in Clean Air Act amendments, specifically to promote

reduction of carbon monoxide and ozone in the atmosphere. The use of MTBE in gasoline in California was phased out in 2003. MTBE is a flammable liquid and vapor; vapors may flash if an ignition source is present.

MSDS data for MTBE indicate the State of California considers MTBE a suspect carcinogen based on carcinogenic effects observed on animals. Exposure to large doses of MTBE carries significant non-cancer-related health risks.

The solubility of MTBE of 48,000 mg/l (EPA Fact Sheet) is very high compared to solubility of benzene of 1,800 mg/l (EPA Fact Sheet), therefore, MTBE migrates more readily in the dissolved-phase than benzene. Also, Eweis, et. Al. (2007) indicates that MTBE with a K_{fw} of 15.5 has a lower affinity for fuels versus benzene with a higher K_{fw} of 350. Therefore, when product, or product-impacted soil, is exposed to water, MTBE more readily enters the water compared to benzene.

The tendency for MTBE to migrate from groundwater into the air is evaluated by reviewing the vapor pressure. The vapor pressure for MTBE at 25°C is 249 mmHg (EPA 2008) compared to a 23.8 mmHg vapor pressure for water at 25°C. MTBE with a vapor pressure of 245 mmHg (at 25°C) (EPA 2008) is roughly 2.6 times more volatile than benzene with a vapor pressure of 95.2 mmHg (at 25°C) (EPA 2008). Although that does not take into account the solubility of the compound. Henry's Law Constant provides a more representative physical property. Once MTBE is dissolved in water it prefers to stay there.

Henry's Law Constant expresses the ratio of a compound's concentration in air relative to its concentration in water at a given temperature. The larger the Henry's Law Constant, the more volatile a compound is (i.e., the more readily it moves from water to air). The Henry's Law Constant for MTBE is 0.024 at 25°C (EPA 2008). This contrasts to benzene with a Henry's Law Constant of 0.22 at 25°C (EPA 2008). Therefore, MTBE has a greater affinity for water than for air compared to benzene. MTBE that volatilizes into the air can be degraded to CO₂ and water when it absorbs ultraviolet light from the sun. However, if the MTBE comes in contact with precipitation in the atmosphere first, it will dissolve into the water and be stripped from the atmosphere. Therefore, MTBE is not persistent in the air. MTBE is highly persistent in groundwater because of its high solubility and resistance to biodegradation. MTBE has a low persistence in soil because of its high affinity for dissolving in water.

Control Methods

- Organic Vapors

Organic vapors will be monitored periodically during the well installation with a photoionization detector (PID) at the downwind perimeter of the work area. If the PID measurement exceeds 50 parts per million (ppm), the drilling will be temporarily stopped and vapor control methods, such as slowing down the drilling operation to more quickly containerize the waste, or applying additional ventilation at the work site, will be implemented.

If the PID reading exceeds 25 ppm, then chemical-specific detector tubes may be utilized. If the detected chemical concentration exceeds the NIOSH TWA vapor exposure limits for benzene (1 ppm),

then the work will be temporarily stopped and vapor control measures will be implemented. Monitoring will continue until the measured chemical's concentration is less than the benzene TWA exposure limit.

- Dust

During drilling of the extraction well, it is anticipated that dust may be generated over the roughly 3 days of well installation during business hours. Proper dust control measures and sweeping of drilling-related dust will be conducted to prevent offsite travel of dust.

- Noise

The site is located in a commercial and industrial area and noise during business hours is not a concern that requires monitoring. To comply with anticipated noise ordinances, the well installation will be conducted during the regular business hours between approximately 7 a.m. to 7 p.m. During drilling, hearing protection will be donned by workers in accordance with OSHA requirements for heavy equipment operation.

- Drill Site Access Management

Public access to the well installation area will be restricted to authorized personnel. The work area will be cordoned off with barricades and caution tape to minimize inadvertent entry of unauthorized personnel into the work area. Those entering the work area will be required to review and to sign the enclosed Site Worker Health and Safety (SWHS) Plan sign-in sheet. Unauthorized personnel will be excluded from the area of work. All field personnel working within the exclusion zone will be required to have completed proper Hazardous Waste Site Health and Safety training in accordance with 29 CFR 1910.120. The exclusion zone for this petroleum hydrocarbon investigation work is considered to be the area immediately around the drill rig where soils are being removed from the augers and placed into 55-gallon drums.

- Site Worker Health and Safety Plan

The enclosed Site Worker Health and Safety Plan (SWHS) sign-in sheet will be implemented onsite during drilling. The appropriate personal protective equipment and emergency response procedures for the site-specific chemical and physical hazards are summarized on the SWHS sign-in sheet. Prior to the commencement of the proposed field work, DES and contracted personnel will meet and review the SWHS sign-in sheet and this CWHSP. All field personnel within the exclusion zone will be required to sign the SWHS sign-in sheet in order to encourage proper health and safety practices.

Monitoring Equipment

A PID will be used to monitor the total organic vapors at the site. A Sensidyne Hand Pump or equivalent device, with replaceable chemical-specific tubes, will also be used to analyze for the potential benzene vapor concentrations. The monitored measurements will be recorded onto the field notes of the DES field representative.

Site Safety Manager

The DES environmental site safety manager will also be accessible by a 24-hour office number of 858-761-3611 during the time of the on-site activities.

Emergency Planning

In the event there is an emergency due to an accidental injury at the time of the DES field activities, the instructions of the SWHS sign-in sheet will be followed. The SWHS sign-in sheet instructions include recommendations 1) to telephone 911 and/or 2) to telephone the nearest hospital for assistance. The Enclosed SWHS sign-in sheet provides contact information and a driving directions map to the following medical facility:

St. Joseph's Immediate Care
1801 East March Lane, D470
Stockton, CA 95210

A first aid kit and an eye wash kit will be provided at the site. If there is an emergency due to an unanticipated physical or chemical event, which significantly affects the job site activities, then the field work will be temporarily stopped until appropriate action can be implemented to resolve the incident.

Public Notification

Should Public Notification be required by the permits associated with the work, a public notice will be posted at the site with information about the field activities. The name and 24-hour telephone number of a DES site safety manager and anticipated work schedule will be included. An example of the public notice is enclosed.

Site: California Tank Lines, Inc.
Project Number: 12E4175
Date: April 29, 2016

COMMUNITY and WORKER H&S PLAN
Page 7 of 7

If any further information is needed, please contact our office at (760-639-3600).

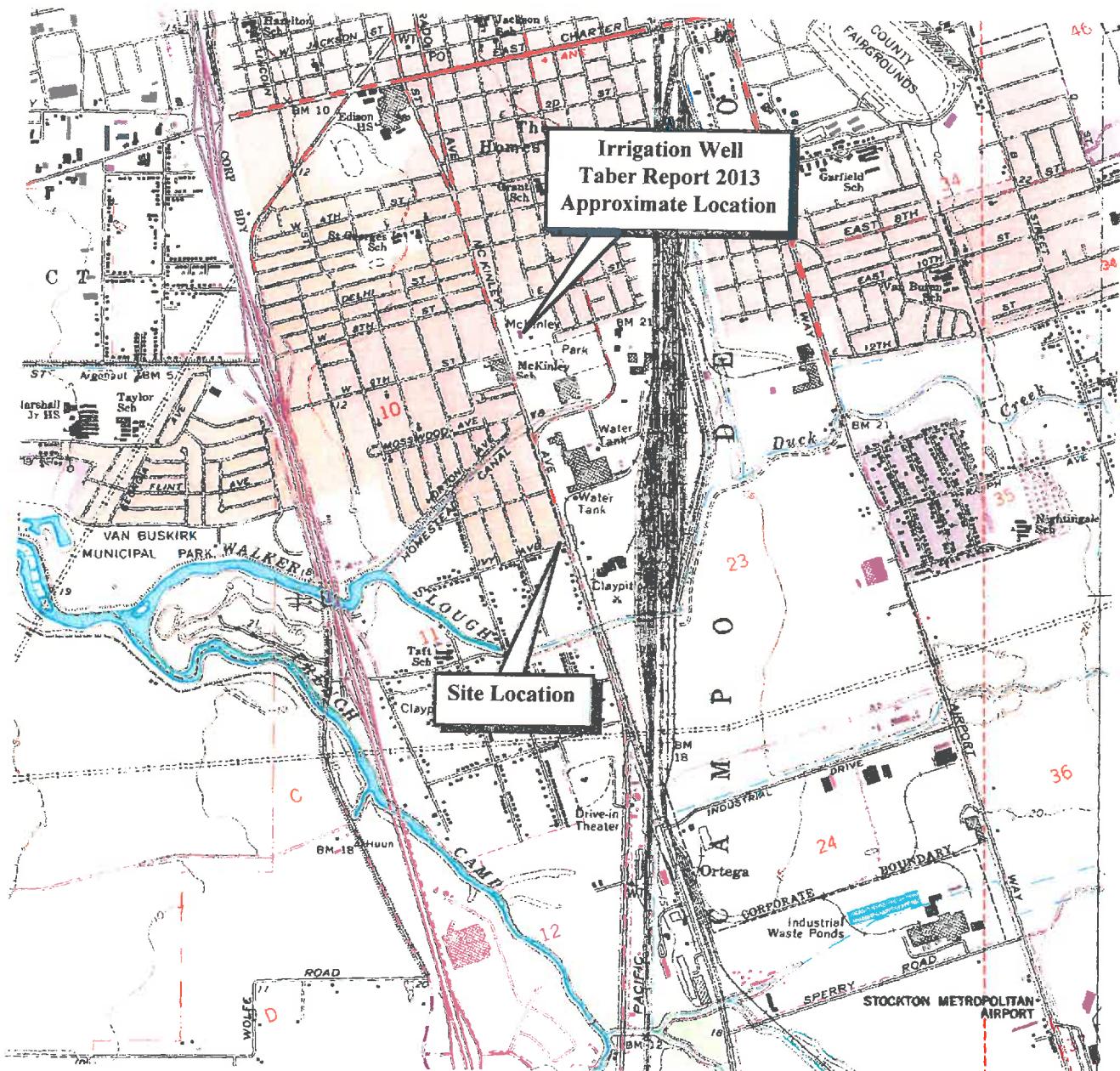
Respectfully,
DONAN ENVIRONMENTAL SERVICES, INC.

Greg Delson, P.G. #6983
Senior Vice President/
Technical Operations

Anderson M. Donan
General Manager

enc. Figure 1 - Site Location Map
Site Worker Health and Safety Plan sign-in sheet
Hospital Map
Example Public Notice Sheet

M/12E4175.hsp.wpd



Site Location Map

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, CA



Donan Environmental Services, Inc.

Project No.
12E4175

Figure 1

Site Worker Health/Safety Plan
for
California Tank Lines
3105 S. El Dorado Street
Stockton, CA (Site)

The above-referenced Site is being assessed for petroleum-hydrocarbon concentrations (gasoline) in the soil and groundwater by Donan Environmental Services, Inc.

Site workers will be responsible to observe safe work conduct and to inspect and maintain their equipment in good working condition. Workers within the exclusion zone will have at a minimum 40 hours OSHA training in hazardous materials health and safety training according to 29 CFR 1910.120.

The Site's subsurface soil and groundwater has been impacted by petroleum hydrocarbons (gasoline). In order for the Site workers to respond to the conditions at the Site, the following instructions will be observed:

- Level D personal protective equipment for ground personnel at the minimum includes the steel-toed boots and hard hat.
- Additional personal protective equipment may be necessary depending on discovered site-specific conditions.

If a physical injury should occur at the job site, please call (911) for an emergency or call the nearest medical facility, St. Joseph's Immediate Care, 1801 E. March Ln D470, Stockton CA 95210 (209) 954-3100. Refer to the enclosed Google Map. A First-Aid kit is available on-site for medical assistance.

**Site: California Tank Lines
Project Number:12E4175**

SITE WORKER HEALTH /SAFETY PLAN

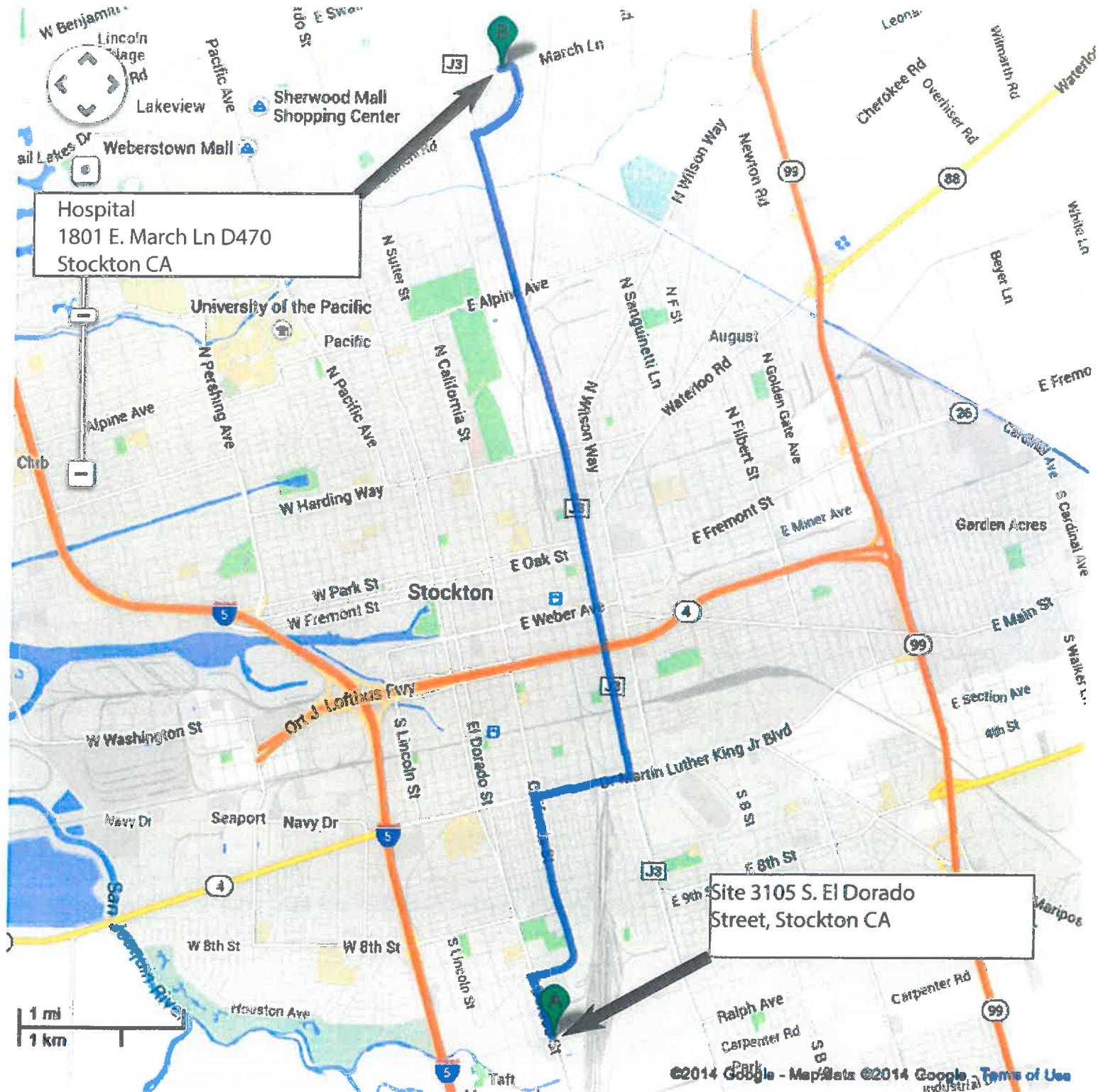
Page 2 of 2

The undersigned have read and understood the instructions of this Health and Safety Plan, as is acknowledged by their respective signatures.

Name _____

Company

Date





3105 S El Dorado St, Stockton, CA 95206

1. Head **north** on **El Dorado St** toward **W Ivy Ave** go 0.4 mi
total 0.4 mi
2. Take the 1st right onto **California St** go 1.3 mi
About 3 mins total 1.7 mi
3. Turn right onto **E Charter Way/Dr Martin Luther King Jr Blvd** go 0.6 mi
About 1 min total 2.3 mi
4. Turn left onto **S Airport Way** go 2.0 mi
About 5 mins total 4.3 mi
5. Continue onto **West Ln** go 2.0 mi
About 4 mins total 6.3 mi
6. Turn right onto **E Bianchi Rd** go 0.5 mi
About 1 min total 6.8 mi
7. Turn left onto **E March Ln** go 0.1 mi
Destination will be on the right total 7.0 mi



St Joseph's Immediate Care

1801 E March Ln D470, Stockton, CA 95210

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

NOTICE

On _____, from 7:00 AM to 7:00 PM , Donan Environmental Services, Inc. will be installing groundwater monitoring wells at the following location:

California Tank Lines, Inc.
3105 South El Dorado Street
Stockton, California

The activity is being conducted to test for components of gasoline, diesel, and waste oil found in the soil and groundwater under the Site. Some components of the subject fuels and oils are known to cause adverse health effects associated with chronic exposure. Based on the California Proposition 65 List, benzene is known to the State to cause cancer or reproductive toxicity. Ethylbenzene is known to the State to cause cancer. Toluene is known to the State to cause reproductive toxicity.

The investigation approach has been designed such that proper operation of the drilling equipment will not result in exposure of occupants of adjacent properties to the fuels and oils being investigated.

Should you have any questions or concerns, please call the following:

Donan Environmental Services, Inc.
Phone: 760-639-3600
Attention: Greg Delson, Project Manager