Health Care Services

Alameda County Environmental Health
Meeting Sign-In Sheet

Chevron #9-1723; RO0000412
9757 San Leandro Street, Oakland, CA

Thursday, January 18, 2018
10:00 AM

NAME	COMPANY	MAILING ADDRESS	PHONE	Signature	E-MAIL
Dilan Roe	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6767	[signature]	dilan.roe@acgov.org
Mark Detterman	Alameda County	1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502	(510) 567-6876	[signature]	mark.detterman@acgov.org
Jan Greben	Greben & Associates	125 E. De La Guerra St., #203, SB, CA 93101	805 963-9090	[signature]	jan@grebenlaw.com
Peter Krasnoff	WEST	711 Grand Ave, San Rafael	415-460-6770	[signature]	peterk@westenv.com
Francis Meynard	ECI	104 Caledonia St, Sausalito CA 94965	415-331-3838	[signature]	FMEYNARD@PACAMGROUP.com
Michael Bolster	Chevron	6001 Bollinger Canyon Road, San Ramon CA 94583	925-842-8918	[signature]	michael.bolster@chevron.com
Carryl MacLeod	EMC	6001 Bollinger Canyon Rd	925 842 3201	[signature]	carrylmacleod@chevron.com
Sergio Schirripa	Stantec	15575 Los Gatos Blvd, Build C Los Gatos, CA 95032	408-348-2940	[signature]	Sergio.Schirripa@stantec.com
Eva Hey	Stantec	1340 Treat Blvd, Suite 300, Walnut Creek	925-296-2101	[signature]	Eva.Hey@stantec.com
Natasha Molla	Chevron	1455 State College, Upland	714 671 3537	[signature]	natashamolla@chevron.com

Alameda County Department of Environmental Health Meeting Notes
Chevron Site #9-1723
9757 SAN Leandro Street, Oakland, CA 94603

Attendees: January 18th, 2018

- Carryl MacLeod (CEMC)
- Natasha Molla (CEMC)
- Michael Balster (CEMC Legal)
- Eva Hey (Stantec)
- Sergio Schirripa (Stantec)
- Dilan Roe (ACDEH)
- Mark Detterman (ACDEH)
- Jan Greben (Legal for Property Owner)
- Peter Krasnoff (Consultant for Property Owner)
- Francis Meynard (Property Owner)

Discussion topics led by Eva Hey in Power Point Slide Deck:

- Discussion of Utility Survey Results
- Discussion of Methane Survey Results
- Discussion of Soil//Groundwater/Soil Vapor (s/gw/sv) results

Meeting Notes:

- O2 and Helium levels in November soil vapor data signify a leak in the system and breakthrough. Several rounds of soil vapor sampling using different methods were conducted to collect data for the meeting.
- Soil vapor sample collection was unsuccessful due to low permeability of clay/bay mud lithology.
- Soil sample collection was completed in accordance with work plan.
- ACDEH noted that in addition to the modified soil vapor sampling method for low flow formations which was used, the DTSC soil vapor sampling guidance also notes reinstallation of the sampling point with a larger diameter boring/ sand pack, and an extended equilibration time as an alternative method
- For sample point PSS2 – ACDEH requested to collect VOCs in addition to methane at this location in the future.
- ACDEH requested a figure showing Soil/groundwater/soil vapor data lumped by constituent showing tanks and known infrastructure to include Benzene, Naphthalene, DRO, GRO and Ethylbenzene
- Are there any records/data on tanks:
    - No known reports available
    - An anomaly" noted in a 2015 survey, but not noted in 2017 survey
- ACDEH requested a Site Conceptual Model (SCM) showing cross sections/ vertical profile to include tank depths as well as the following:
    - Confirm smear zone (approx. 8.5-10.5 feet bgs)
    - What is source of the vapor
    - Review boring logs and where did we see GW
    - SCM should demonstrate water as confined or within formation
    - SCM should show if vapor concentrations are sourced in soil or groundwater contamination. How does methane relate to s/gw/sv?
    - Would like comprehensive data tables showing historical data and recent data for s/gw/sv.
    - Figures (and cross sections?) showing data, GW contours, static & first encountered water
    - Show current & historic data in tables
    - Place well screen intervals on data tables
    - Include hydrographs with concentrations and water levels
    - Place iso-contours in plan-view showing groundwater concentration range fluctuations
    - Vertical delineation of soil/groundwater contours
    - Why are vapor concentrations where they are?
    - Look at the TVP-3 area
    - Cross sections with historic infrastructure
    - Show onsite vs. offsite data

- 1,1-DCE, TCA and 1,1-DCA were identified as part of the Shell Station, ACDEH will review that site data and evaluate need to open a new case.

Next Steps in the path forward include:

- ACDEH to review the Shell Station
- Collect sub slab sample from inside warehouse (SS-1) which was contingency location in previously approved work plan
- Prepare a site investigation report to include data from the sub slab location inside the warehouse.
  - Include Site Conceptual Model in Tabular Format as outlined above
- Identify any data gaps
- Per RWQCB LTCP ACDEH will evaluate the site for closure as currently built – does not allow for change of use in future
- There was discussion regarding methane evaluation via trenching/sub-slab/vault construction
  - Future worker exposure evaluation
  - Plan/Discuss with Peter Krasnoff (recently constructed trench on another site)
- ACDEH requested that Stantec/ CEMC install a Trench & Vault. ACDEH confirmed with property owner that constructing a trench/vault on the property is acceptable.

Property Owner input:

- Asked if any lab data flagged, will review and confirm
- Requested protocol for sharing of data ahead of meetings
- Requested to schedule next meeting to keep moving forward

ACDEH

- Provide paper/ guidance from DTSC regarding trench
- Provide copy of work plan for site current testing out trench theory

Due Dates:

- **April 23, 2018**: Draft SWI circulated to ACDEH, CEMC, and Property Owner team for review
- **May 14, 2018**: Final SWI Report uploaded to Geotracker
- **May 30, 2018@ 10:00 am**: Next meeting

Soil Vapor Assessment Discussion

Former Chevron #91723

9757 San Leandro Street

Oakland, California

Stantec

Agenda

1. Meeting Objectives
2. Work Plan Summary
3. Work Completed
4. Discussion of Results
5. Next Steps

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Meeting Objectives

1. Work Scope Review

2. Evaluation and discussion of new data

3. Discussion of options for additional evaluation

Work Plan Summary

1. Utility Survey

2. Surface Sweep for methane

3. Soil and soil vapor sample collection

4. Pressure readings at 3' and 5' vapor points

5. Install VP-2S and PSS-2

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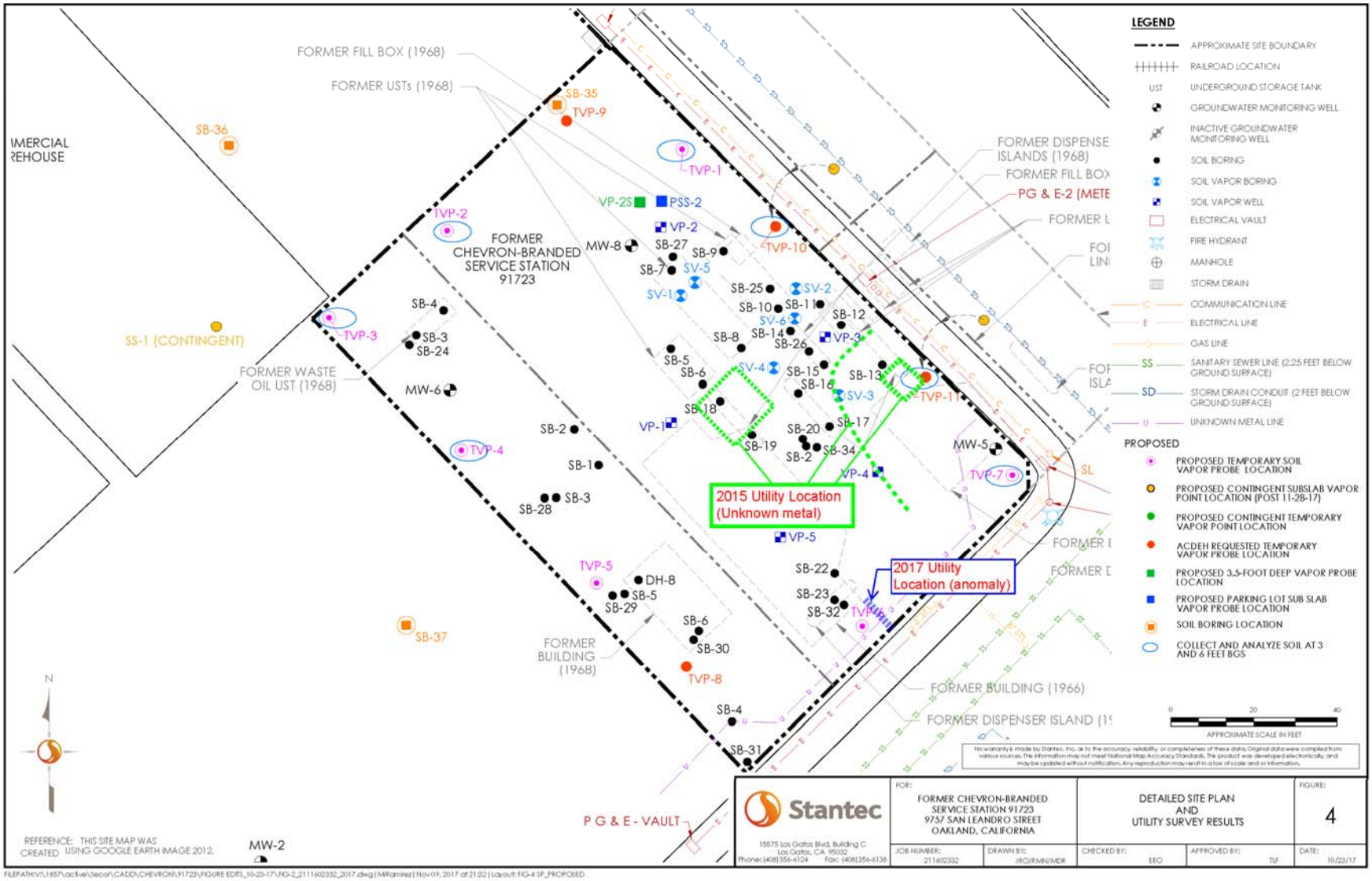
UTILITY SURVEY



Work Plan Summary

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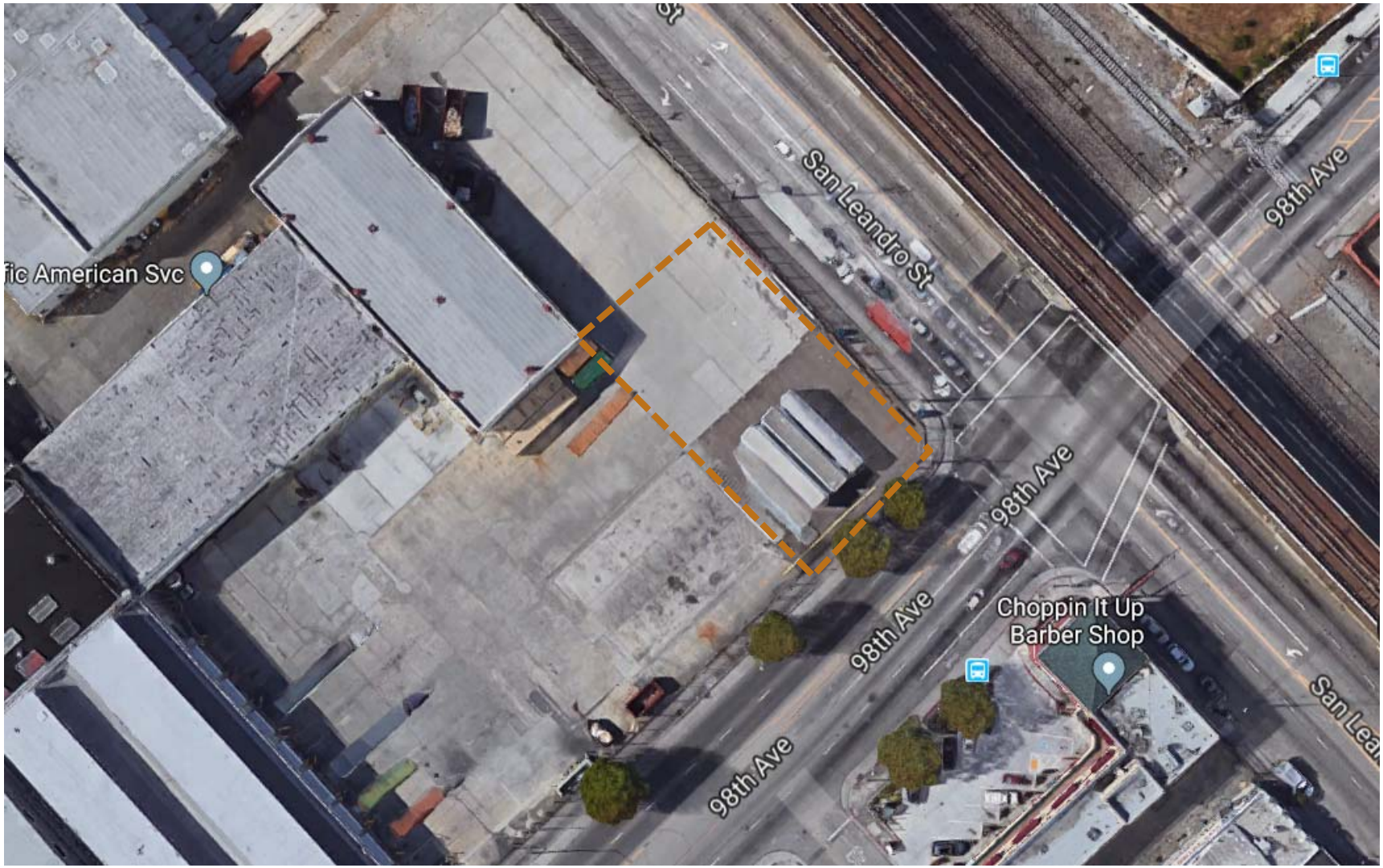
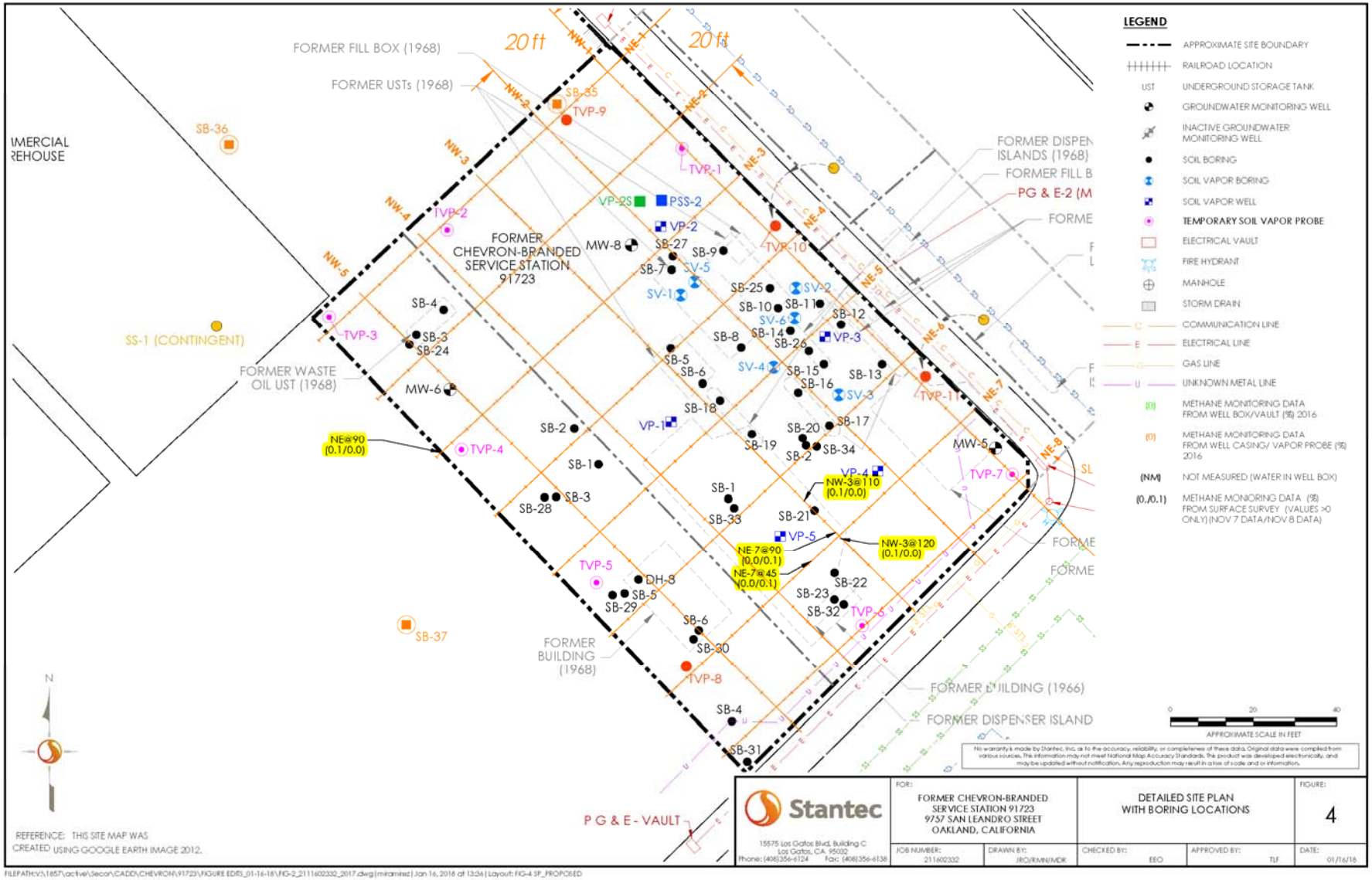
METHANE SURVEY



METHANE SURVEY



METHANE SURVEY

Ground Surface Methane Survey

Cheveron 91723
9757 San Leandro Street, Oakland

Stantec Field Staff: Richie Winn

SURVEY DATE: November 7, 2017 (afternoon) 1340 - 1445

Surface Conditions: concrete and asphalt
Equipment: GEM 2000 (Pine Rental ID 2121)

Grid Line Distance	Grid Line NW-1 Methane (%)	Grid Line NW-2 Methane (%)	Grid Line NW-3 Methane (%)	Grid Line NW-4 Methane (%)	Grid Line NW-5 Methane (%)
5	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.1	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.1	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0

Grid Line Distance	Grid Line NE-1 Methane (%)	Grid Line NE-2 Methane (%)	Grid Line NE-3 Methane (%)	Grid Line NE-4 Methane (%)	Grid Line NE-5 Methane (%)	Grid Line NE-6 Methane (%)	Grid Line NE-7 Methane (%)	Grid Line NE-8 Methane (%)
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0

METHANE SURVEY

Ground Surface Methane Survey

Cheveron 91723
9757 San Leandro Street, Oakland

Stantec Field Staff: Richie Winn

SURVEY DATE: November 8, 2017 (morning) 0900 - 1000

Surface Conditions: concrete and asphalt
Equipment: GEM 2000 (Pine Rental ID 2121)

Grid Line Distance	Grid Line NW-1 Methane (%)	Grid Line NW-2 Methane (%)	Grid Line NW-3 Methane (%)	Grid Line NW-4 Methane (%)	Grid Line NW-5 Methane (%)
5	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0

Grid Line Distance	Grid Line NE-1 Methane (%)	Grid Line NE-2 Methane (%)	Grid Line NE-3 Methane (%)	Grid Line NE-4 Methane (%)	Grid Line NE-5 Methane (%)	Grid Line NE-6 Methane (%)	Grid Line NE-7 Methane (%)	Grid Line NE-8 Methane (%)
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Work Plan Summary

1. Utility Survey

2. Surface Sweep for methane

3. Soil and soil vapor sample collection

4. Pressure readings at 3' and 5' vapor points

5. Install VP-2S and PSS-2

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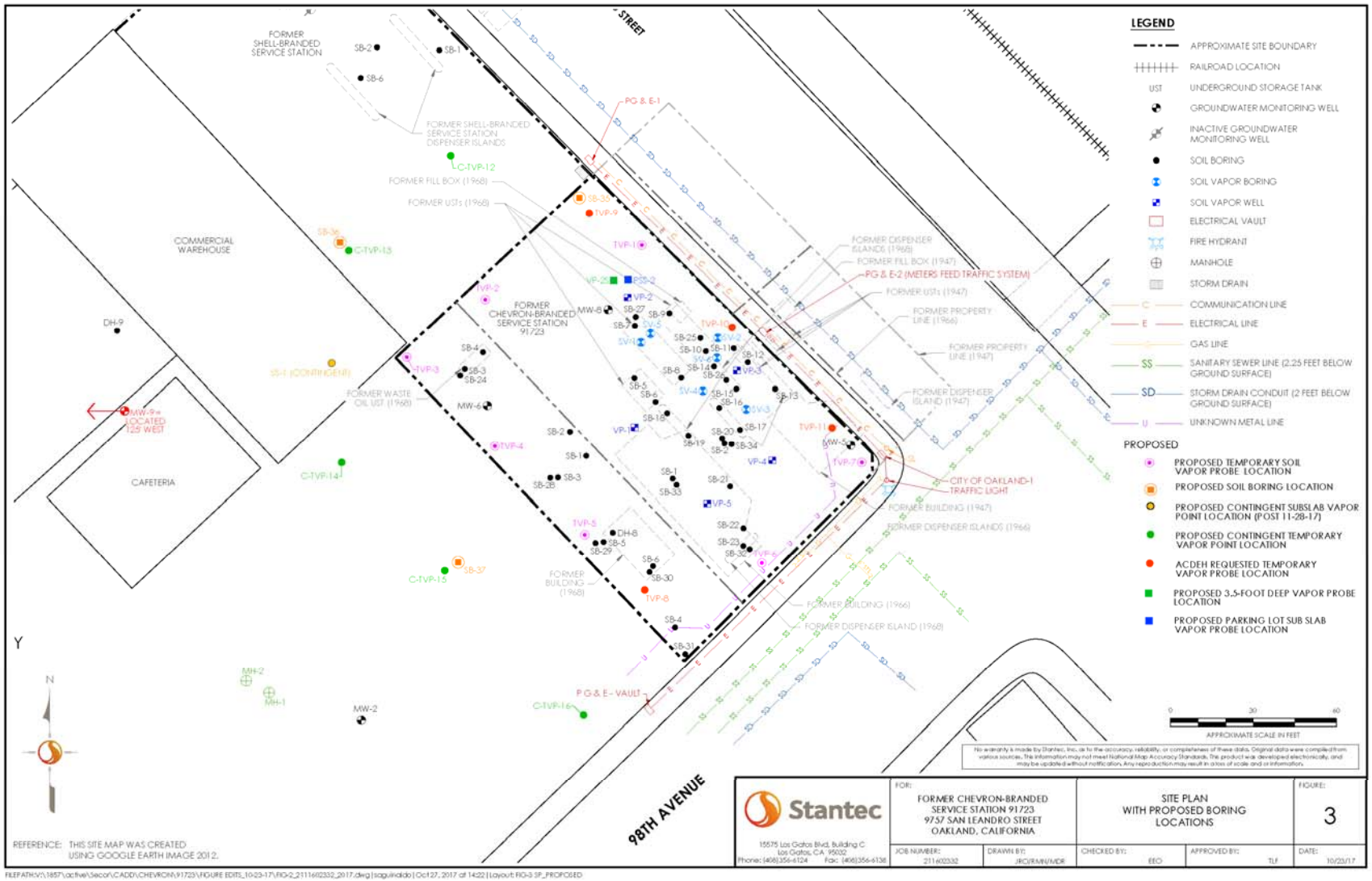
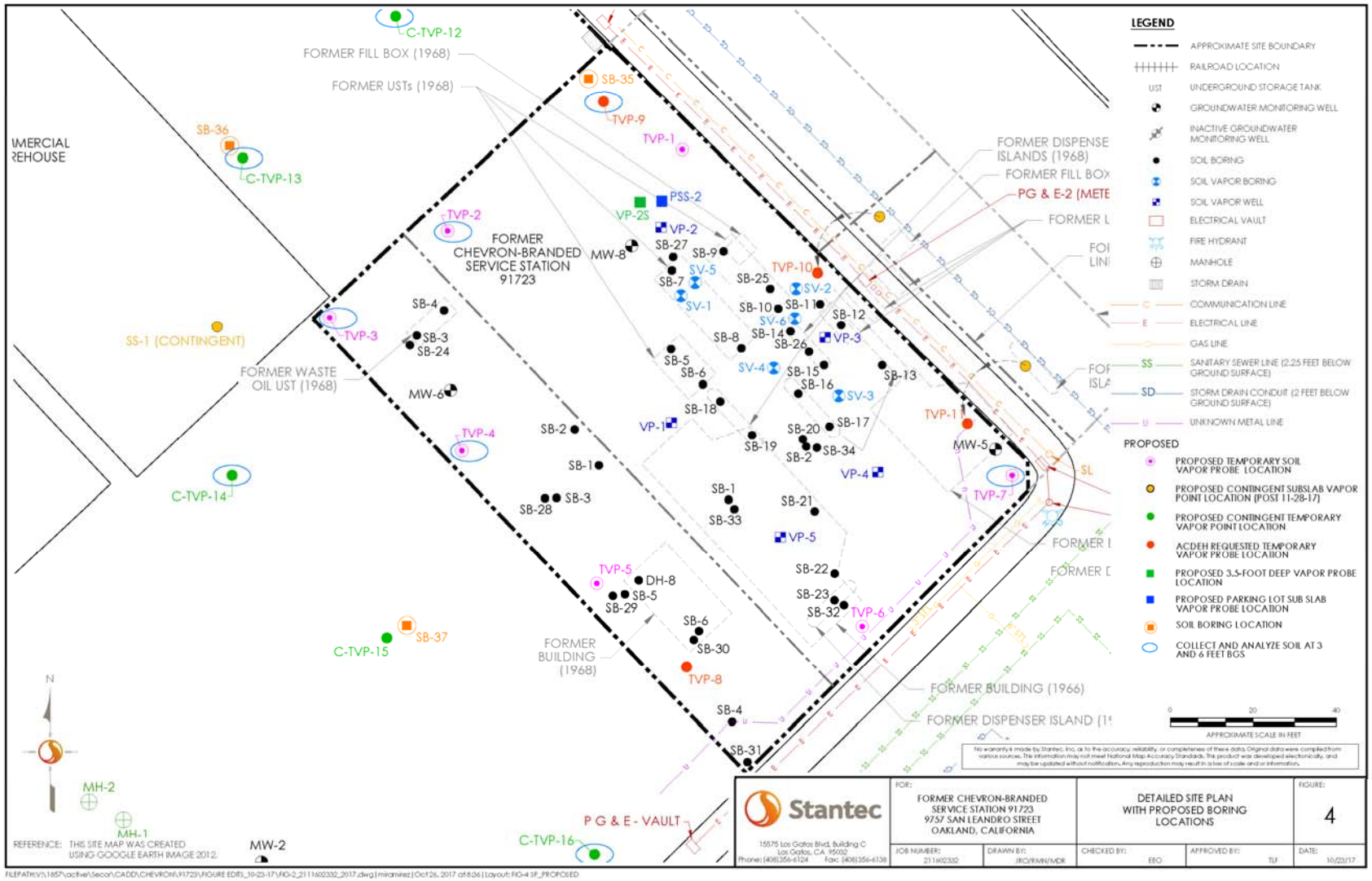
PROPOSED SAMPLE LOCATIONS



PROPOSED SAMPLE LOCATIONS

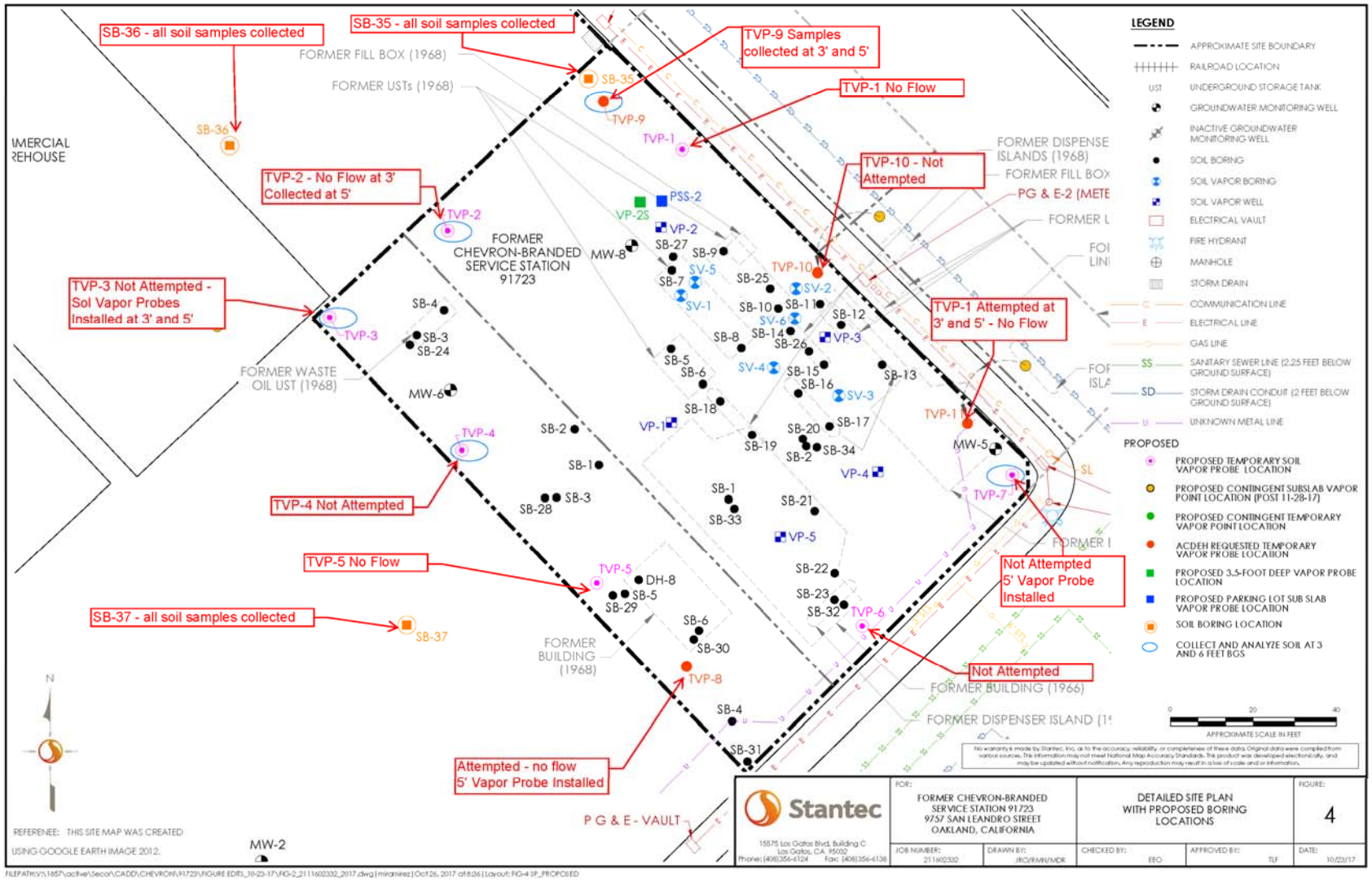


COMPLETED SAMPLE LOCATIONS

SUMMARY OF PROPOSED SAMPLE LOCATIONS

Location	Purpose	Soil Sample	Sampled	Vapor Sample	Sampled
TVP-1	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Attempted at 3' - No Flow Attempted at 5' - No Flow	--
TVP-2	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Attempted at 3' - No Flow **Collected at 5'**	**5'**
TVP-3	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Not attempted Vapor probe installed at 3' and 5'	**3' & 5'**
TVP-4	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Not attempted	--
TVP-5	**soil and soil vapor**	not required	--	Attempted at 3' - No Flow Attempted at 5' - No Flow	--
TVP-6	**soil and soil vapor**	not required	--	Not attempted	--
TVP-7	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Not attempted Vapor probe installed with Geoprobe	**5'**
TVP-8	**soil and soil vapor**	not required	--	Attemped - no flow 5' vapor probe installed with Geoprobe	**5'**
TVP-9	**soil and soil vapor**	not required	**3' & 5'**	**Collected at 3'** **Collected at 5'**	**3' & 5'**
TVP-10	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Not attempted	--
TVP-11	**soil and soil vapor**	**collected @ 3' 5'**	**3' & 5'**	Attempted at 3' - No Flow Attempted at 5' - No Flow	--
VP-2S	**shallow soil vapor point**	not required	**3'**	Installed and Collected	**3'**
PSS-2	**sub-slab soil vapor point**	not required	**0.5'**	Installed and Collected	**0.5'**
SB-35	**soil sample only**	**collected @ 2.5' 5** **7.5' 10' 12.5'**	--	not required	--
SB-36	**soil sample only**	**collected @ 2.5' 5'** **7.5' 10' 12.5'**	--	not required	--
SB-37	**soil sample only**	**collected @ 2.5' 5'** **7.5' 10' 12.5'**	--	not required	--

COMPLETED SAMPLE LOCATIONS



Work Plan Summary

1. Utility Survey

2. Surface Sweep for methane

3. Soil and soil vapor sample collection

4. Pressure readings at 3' and 5' vapor points

5. Install VP-2S and PSS-2

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PRESSURE READINGS

Proposed Sample Plan
Former Chevron Branded Service Station 91723

Location	Boring/Sample ID	Sample Type	Sample Depth	Install Date/Time	Barometric Pressure (inches Hg)	Vapor Pressure (inches H2O)
Temporary Vapor Probe						
TVP-1	SB-TVP1-3'	soil samples	3.0-3.5	NA	NA	--
	SB-TVP1-6'	soil samples	5.5-6.0	NA	NA	--
	TVP1-3'	soil vapor	3'	11/28/17 0932	30.06	0.01
	TVP1-5'	soil vapor	5'	11/28/17 0942	30.06	0
TVP-2	SB-TVP2-3'	soil samples	3.0-3.5	NA	NA	--
	SB-TVP2-6'	soil samples	5.5-6.0	NA	NA	--
	TVP2-3'	soil vapor	3'	11/27/17 1100	30.09	NA
	TVP2-5'	soil vapor	5'	11/27/17 1050	30.10	+0.05
TVP-3	SB-TVP3-3'	soil samples	3.0-3.5	NA	NA	--
	SB-TVP3-6'	soil samples	5.5-6.0	NA	NA	--
	TVP3-3'	soil vapor	3'	11/27/17 1115	30.09	NA
	TVP3-5'	soil vapor	5'	11/27/17 1138	30.10	NA
TVP-4	SB-TVP4-3'	soil samples	3.0-3.5	NA	NA	--
	SB-TVP4-6'	soil samples	5.5-6.0	NA	NA	--
	TVP4-3'	soil vapor	3'	11/27/17 1229	30.14	NA
	TVP4-5'	soil vapor	5'	11/27/17 1219	30.15	NA
TPV-5	TVP5-3'	soil vapor	3'	11/27/17 1418	30.2	+0.01
	TVP5-5'	soil vapor	6'	11/27/17 1425	30.2	+0.01
TVP-6	TVP6-3'	soil vapor	3'	--	--	--
	TVP6-5'	soil vapor	5'	--	--	--
TVP-7	SB-TVP7-3'	soil samples	3.0-3.5	NA	NA	NA
	SB-TVP7-6'	soil samples	5.5-6.0	NA	NA	NA
	TVP7-3'	soil vapor	3'	--	--	--
	TVP7-5'	soil vapor	5'	--	--	--
TVP-8	TVP8-3'	soil vapor	3'	11/27/17 1445	30.19	0
	TVP8-5'	soil vapor	5'	11/27/17 1500	20.17	0
TVP-9	TVP9-3'	soil vapor	3'	11/27/17 0954	30.035	+0.035
	TVP9-5'	soil vapor	5'	11/27/17 1008	30.08	+0.025
TVP-10	SB-TVP10-3'	soil samples	3.0-3.5	NA	NA	NA
	SB-TVP10-6'	soil samples	5.5-6.0	NA	NA	NA
	TVP10-3'	soil vapor	3'	--	--	--
	TVP10-5'	soil vapor	5'	--	--	--
TVP-11	SB-TVP11-3'	soil samples	3.0-3.5	NA	NA	NA
	SB-TVP11-6'	soil samples	5.5-6.0	NA	NA	NA
	TVP11-3'	soil vapor	3'	11/27/17 1309	30.25	o
	TVP11-5'	soil vapor	5'	11/27/17 1320	30.25	o

Work Plan Summary

1. Utility Survey

2. Surface Sweep for methane

3. Soil and soil vapor sample collection

4. Pressure readings at 3' and 5' vapor points

5. Install VP-2S and PSS-2 – completed and sampled

Stantec

DISCUSSION OF RESULT

1. Utility Survey

2. Methane Survey

3. Soil Samples

4. Soil Vapor Samples

DISCUSSION OF RESULT

1. Utility Survey – no utilities from Site into buildings

2. Methane Survey – no surface detections >0.1 %

3. Soil Samples

4. Soil Vapor Samples

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DISCUSSION OF RESULT

1. Utility Survey

2. Methane Survey

3. Soil Samples

4. Soil Vapor Samples

Stantec

Soil Sample Results

Table 1
Soil Analytical Results
9757 San Leandro Street
Oakland, California

			US EPA Method 8015B			US EPA METHOD 8260B				
Sample ID	Depth Interval *(feet bgs)*	Date Collected	Headspace PID *(units)*	TPH-DRO *(mg/kg)*	TPH-GRO *(mg/kg)*	Benzene *(mg/kg)*	Toluene *(mg/kg)*	Ethylbenzene *(mg/kg)*	Total Xylenes[1] *(mg/kg)*	Naphthalene *(mg/kg)*
SB-TVP-1-S	3	11/14/2017	**1.0/0.2**	<3.9	**0.8**	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	**0.5**	<4.0	**0.9**	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-TVP-2-S	3	11/14/2017	na	<3.9	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	na	<4.0	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-TVP-3-S	3	11/13/2017	na	<3.9	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/13/2017	na	<3.9	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-TVP-4-S	3	11/14/2017	na	**140**	**2.8**	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	na	**16**	**1.2**	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-TVP-7-S	3	11/14/2017	na	**49**	**0.8**	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	na	**53**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-TVP-10-S	3	11/14/2017	**0.4**	**180**	**36**	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	**107**	**1,800**	**120**	<0.026	<0.052	<0.052	<0.052	**0.095**
SB-TVP-11-S	3	11/14/2017	na	<3.9	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.5	11/14/2017	na	<4.0	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
Step Out Location										
SB-35-S	2.5	11/28/2017	0.0	<4.0	<0.5	<0.026	<0.051	<0.051	<0.051	<0.051
	5.0	11/28/2017	0.0	**19**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	7.5	11/28/2017	0.0	**8.0**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	10.0	11/28/2017	0.0	**17**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	12.5	11/28/2017	0.0	**15**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
SB-36-S	2.5	11/28/2017	0.0	**11**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.0	11/28/2017	0.0	**9.5**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	7.5	11/28/2017	0.0	<4.0	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	10	11/28/2017	**1.7**	**34**	**63**	<0.025	<0.050	<0.050	<0.050	**0.13**
	12.5	11/28/2017	**15.2/109**	**61**	**540**	<0.024	<0.049	**0.93**	**0.54**	**0.50**
SB-37-S	2.5	11/28/2017	0.0	**14**	<0.5	<0.0005	<0.001	<0.001	<0.001	<0.001
	5.0	11/28/2017	0.1	**13**	**2.5**	<0.0005	<0.001	<0.001	<0.001	<0.001
	7.5	11/28/2017	0.0	<3.9	**2.0**	<0.0005	<0.001	<0.001	<0.001	<0.001
	10	11/28/2017	na	**15**	**130**	<0.025	<0.049	<0.049	<0.049	**0.34**
	12.5	11/28/2017	10.3	**46**	**81**	<0.026	<0.052	**0.18**	**0.072**	**0.12**
Shallow Soil ESLs[2]				***110***	***500***	***0.044***	***2.9***	***3.3***	***2.3***	***1.2***
Deep Soil ESLs[3]				***110***	***770***	***0.044***	***2.9***	***3.3***	***2.3***	***1.2***

Notes:

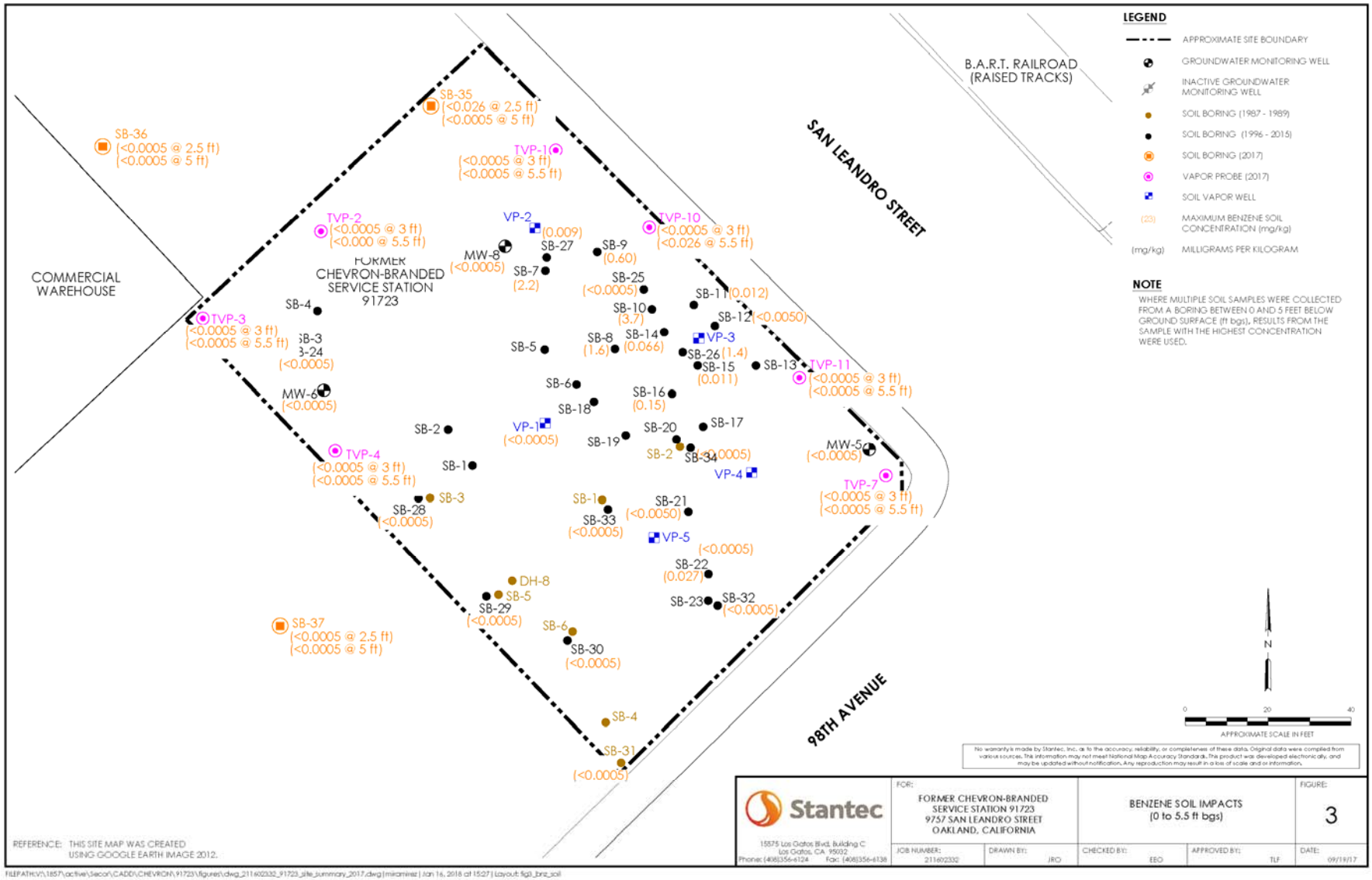
(1) Total xylenes is the sum of ortho-, meta-, and para-xylenes.

(2) California Regional Water Quality Control Board, San Francisco Bay Region, Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater - December 2013, Summary Table A, Environmental Screening Levels (ESLs). Shallow Soils (<3m bgs). Groundwater is a Current or Potential Source of Drinking Water. Commercial/Industrial Land Use.

(3) California Regional Water Quality Control Board, San Francisco Bay Region, Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater - December 2013, Summary Table C, Environmental Screening Levels (ESLs). Deep Soils (>3m bgs). Groundwater is a Current or Potential Source of Drinking Water. Commercial/Industrial Land Use.

Bold font denotes detected value. **Bold/blue** font denotes detected value equal to or above RWQCB ESLs (commercial and/or residential).

Soil Sample Results



DISCUSSION OF RESULT

1. Utility Survey

2. Methane Survey

3. Soil Samples

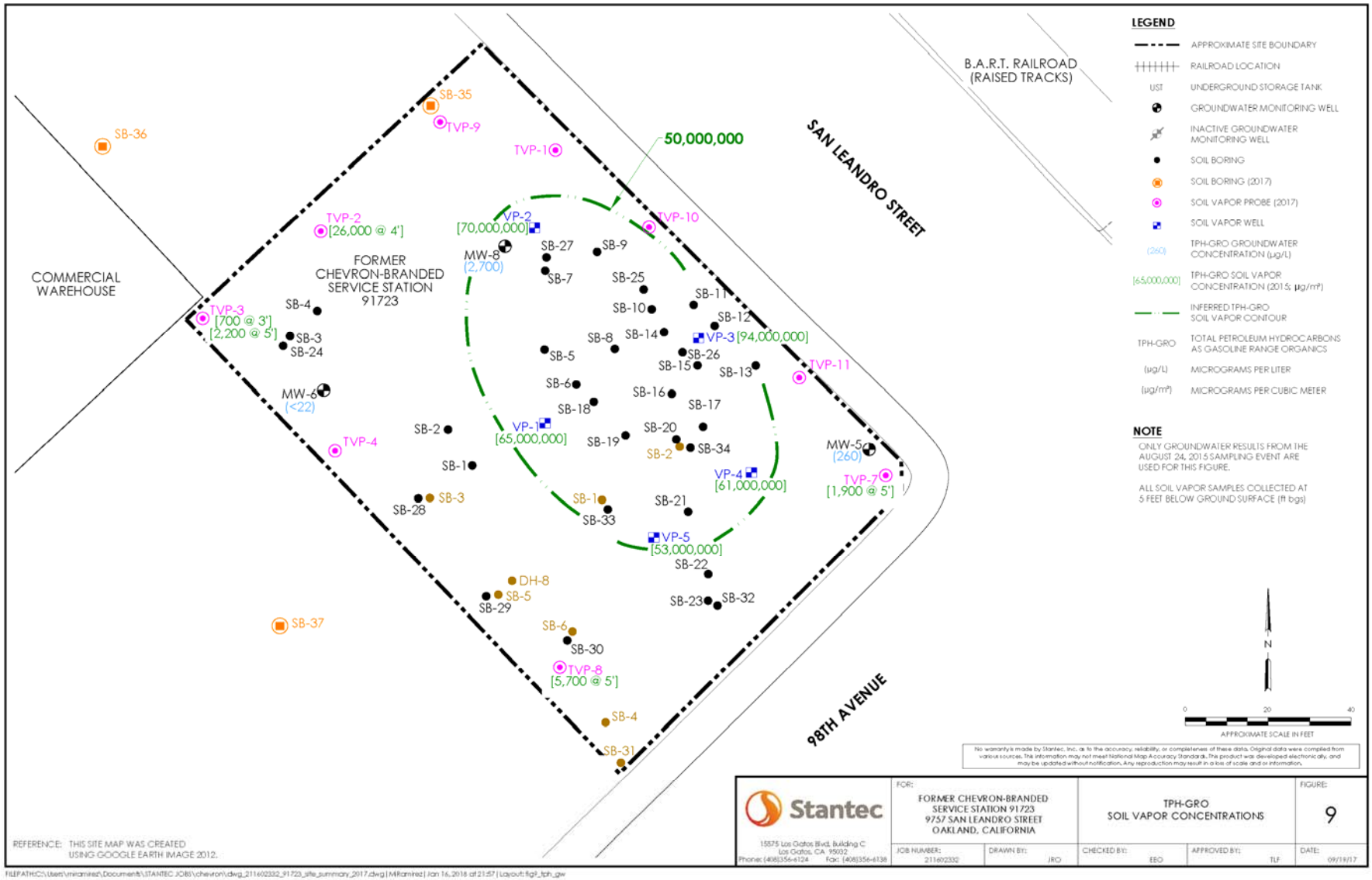
4. Soil Vapor Samples

Stantec

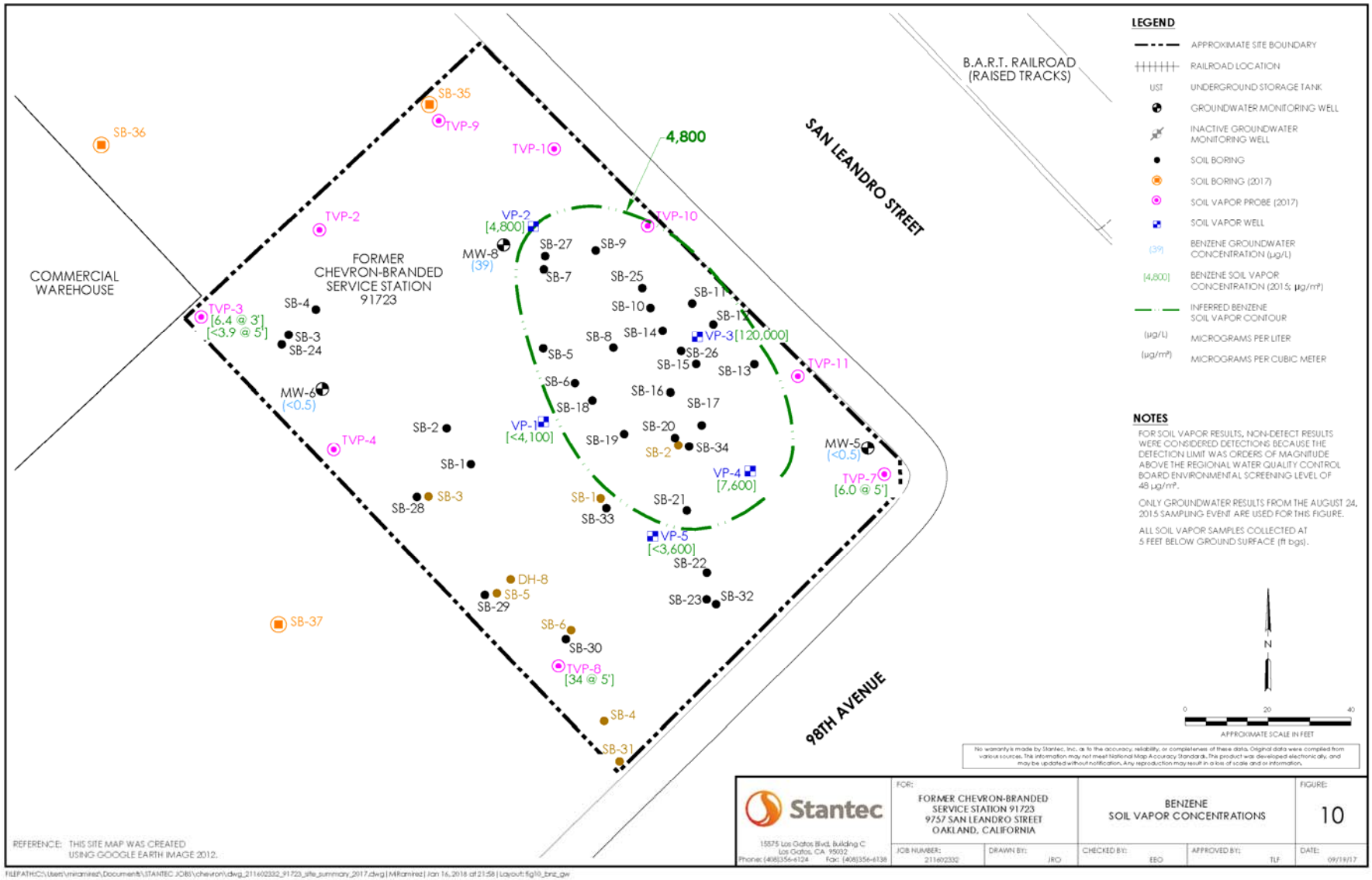
Soil Vapor Results

Sample ID	Depth Interval (feet bgs)	Date Collected	TPH-GRO (ug/m^3)	Benzene (ug/m^3)	Toluene (ug/m^3)	Ethylbenzene (ug/m^3)	Total Xylenes (ug/m^3)	Naphthalene (ug/m^3)	Methane %	Carbon Dioxide %	Oxygen %	Helium %	Naphthalene %
November 2017			US EPA METHOD 8260B (TEG Mobile Lab)						GC/TCD (TEG Mobile Lab)				TO-17
TVP2-5'	4.0	11/27/2017	26,000	<100	<200	<100	<300	<100	<0.1	<1.0	22	-	130
TVP9-3'	3.0	11/27/2017	<10,000	<100	390	<100	480	<100	<0.1	<1.0	21	-	21
TVP9-5'	5.0	11/27/2017	<10,000	<100	<200	<100	<300	<100	<0.1	<1.0	21	-	17
TVP9-5' DUP	5.0	11/27/2017	<10,000	<100	<200	<100	<300	<100	<0.1	<1.0	21	-	-
VP-2S	3.0	11/28/2017	30,000,000	1,500	<200	<100	<300	<100	23	16	3.9	-	17
VP-2S DUP	3.0	11/28/2017	32,000,000	1,700	<200	<100	<300	<100	23	17	3.2	-	-
PSS2	1.0	11/28/2017	-	-	-	-	-	-	7.6	4.2	3.5	-	-
December 2017			US EPA METHOD TO-15						ASTM D-1946				TO-17
TVP-3-3'	3.0	12/6/2017	3,700	21	46	9.9	52	<14	0.0025	<0.026	9.7	54	14
TVP-3-5'	5.0	12/4/2017	6,100	18	62	13	71	<14	0.011	0.12	15	26	20
TVP-7	5.0	12/4/2017	3,900	36	120	11	53	<12	0.00089	<0.024	11	42	17
TVP-8	5.0	12/4/2017	5,700	34	160	35	171	<12	0.00066	<0.022	12	9.6	12
January 2018			US EPA METHOD TO-15						ASTM D-1946				TO-17
TVP-3-3'	3.0	1/3/2018	700	6.4	8.7	<4.7	6.6	<11	0.00034	0.034	15	29	<17
TVP-3-5'	5.0	1/3/2018	2,200	<3.9	20	<5.4	26	<13	0.00150	2.0	15	13	<17
TVP-7	5.0	1/3/2018	1,900	6.0	20	<5.1	5.7	<12	0.00057	<0.024	13	16	<17
ESLs [2]			*50,000*	*420*	*1,300,000*	*4,900*	*220,000*	*360*	*NA*	*NA*	*NA*	*NA*	*360*

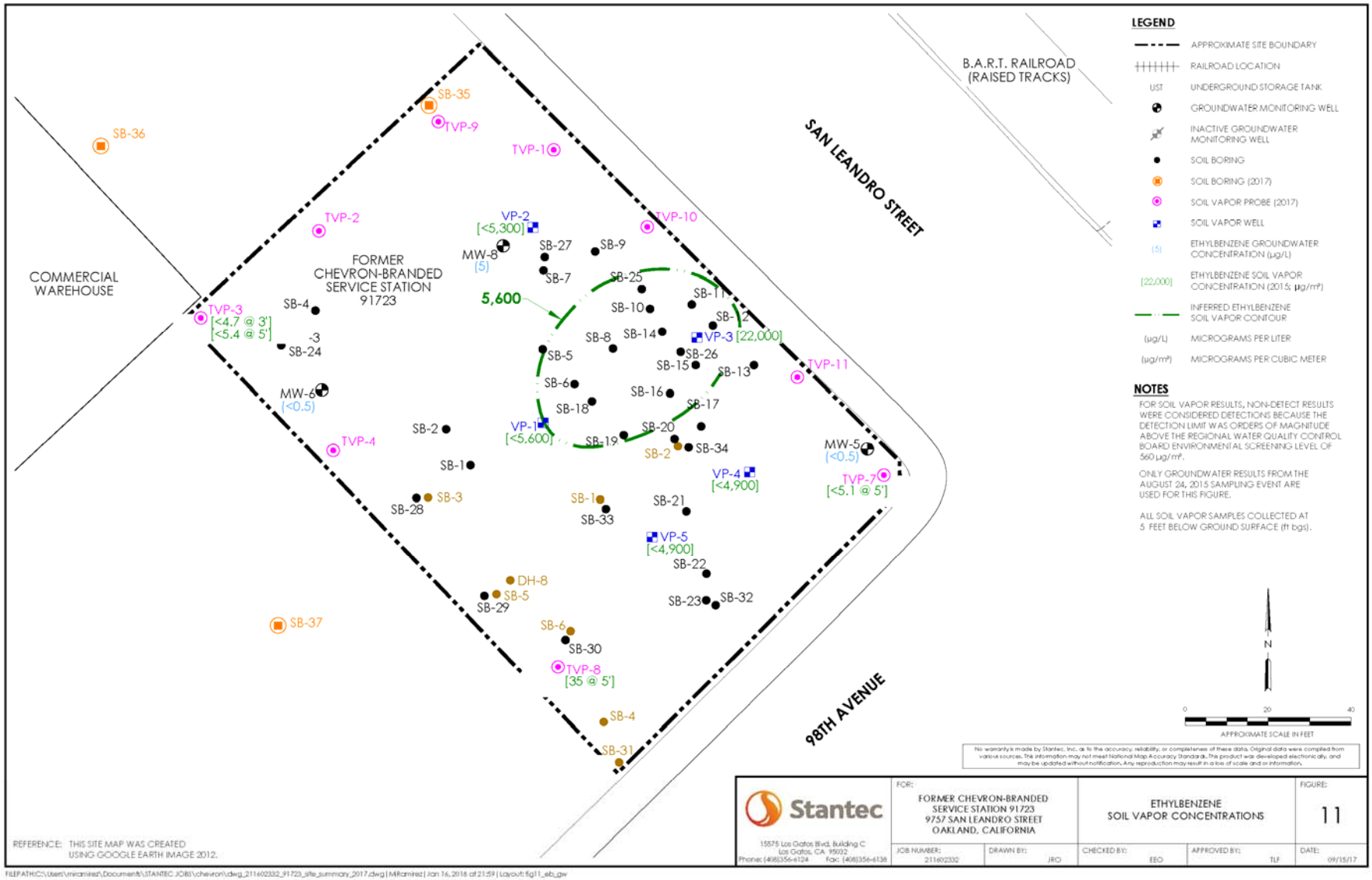
Soil Vapor Results – TPH-GRO



Soil Vapor Results - Benzene



Soil Vapor Results - Ethylbenzene



NEXT STEPS?

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