

## **Nowell, Keith, Env. Health**

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**From:** James Gribi <jgribi@gribiassociates.com>  
**Sent:** Tuesday, April 19, 2016 3:51 PM  
**To:** Nowell, Keith, Env. Health; Roe, Dilan, Env. Health  
**Cc:** M Kara; joehernon@gmail.com  
**Subject:** Groundwater and Soil Gas Results for 411 W. MacArthur site  
**Attachments:** 411 W MacArthur SBI RESULTS v04-19-2016.pdf

Keith and Dilan,

Attached please find the recent groundwater and soil gas sampling results for 411 W MacArthur. We will see you tomorrow at 10:00 AM.

Thanks  
Jim

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Table 1							
GRAB GROUNDWATER LABORATORY ANALYTICAL RESULTS							
411 W. MacArthur Blvd., Oakland, CA							
Sample ID	Sample Depth (ft)	Concentration (micrograms per liter, ug/L)					
		TPH-G	B	T	E	X	Naphth.
Soil Boring Investigation, ARS, April 8, 2016							
GW-1	(20 ft)	42,000	110	67	2,600	4,800	2,300
GW-2	(20 ft)	21,000	39	540	850	3,900	490
GW-3	(20 ft)	7,800	<5.0	81	230	1,000	190
ESL-Vapor Intrusion (res.)		NL	30	100,000	370	38,000	180
ESL-Vapor Intrusion (comm.)		NL	260	NL	3,300	NL	1,600

**Table Notes**

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene,

T = Toluene

E = Ethylbenzene

X = Xylenes

Naphth. = Naphthalene

<0.5 = Not detected above the expressed detection level.

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, February 2016.

Table 2													
SOIL GAS LABORATORY ANALYTICAL RESULTS													
411 W. MacArthur Blvd., Oakland, CA													
Sample ID	Date	Sample Depth	TPH-G (ug/m3)	B (ug/m3)	T (ug/m3)	E (ug/m3)	X (ug/m3)	Naphth. (ug/m3)	Methane (%)	CO2 (%)	N (%)	O2 (%)	Helium (%)
SG-1	4/15/2016	16.0 ft	150,000	39	210	360	1,100	<53	0.50	0.12	NA	11.0	<0.050
SG-2	4/8/2016	5.5 ft	1,900,000	450	<190	<220	<660	<530	21	5.2	NA	2.5	4.3
SG-3	4/8/2016	5.5 ft	2,700,000	<160	<190	390	<660	<530	23	4.2	NA	0.76	<0.050
Soil Gas ESL-Residential			300,000	48	1.6E+05	560	5.2E+04	41	LEL = 4.4 UEL = 17	--	--	--	--
Soil Gas ESL-Commercial			2,500,000	420	1.3E+06	4,900	4.4E+05	360	LEL = 4.4 UEL = 17	--	--	--	--

**Table Notes**

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

Naphth. = Naphthalene

ug/m3 = micrograms per cubic meter

% = Percent

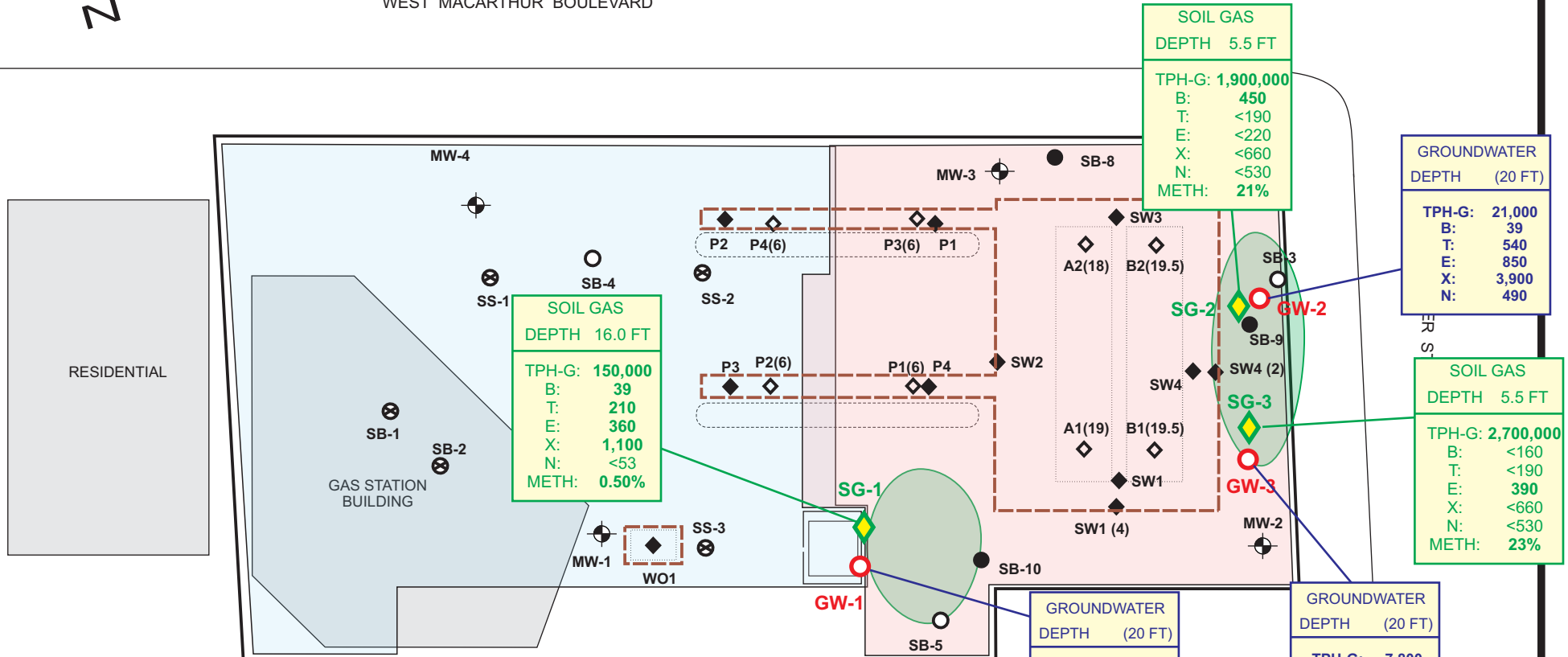
<0190 = Not detected above the expressed detection level.

LEL = Lower explosion limit

UEL = Upper explosion limit



WEST MACARTHUR BOULEVARD

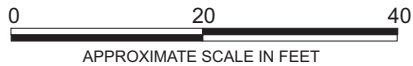


- ◇ - UST REMOVAL SOIL SAMPLE, 09/1998
- ◆ - UST REMOVAL SOIL SAMPLE, 07/1989
- ⊗ - SOIL BORING LOCATION (SLR, 2014)
- - SOIL BORING LOCATION (DELTA, 2010)
- - SOIL BORING LOCATION (TRC, 2006)
- ⊕ - GROUNDWATER MONITORING WELL LOCATION

- ◇ - SOIL GAS SAMPLE LOCATION
- - GROUNDWATER SAMPLE LOCATION

■ - COMMERCIAL/RETAIL SUITE ON GROUND FLOOR, 14 FEET CEILING.

■ - BASEMENT, CAR STACKER & MECH./STORAGE, 9 FEET CEILING; PARKING ON GROUND FLOOR, 14 FEET CEILING.



DESIGNED BY: JG	CHECKED BY: MK
DRAWN BY: JG	SCALE:
PROJECT NO: ARS-16-29-01	

**GROUNDWATER & SOIL GAS  
 SAMPLE RESULTS**  
 411 W. MAC ARTHUR BLVD.  
 OAKLAND, CALIFORNIA

DATE: 04/19/2016      FIGURE: 1

