

Detterman, Mark, Env. Health

From: Brent Wheeler [b.wheeler@ggtr.com]
Sent: Tuesday, October 28, 2014 9:46 AM
To: Detterman, Mark, Env. Health
Cc: Mark Youngkin; John Accacian; Brian Sheaff; Tim Hallen; Annette Chen; Gina Wee
Subject: Meeting Agenda for 5930 College Avenue Project

Hi Mark,

Our proposed agenda for this Thursday's meeting is as follows:

- 1) GGE's recent review of 5940 College Avenue Project
- 2) GGE 2Q14 GWM Report
- 3) Recent 4Q14 GWM Data (Will Bring Updated Report Tables to Meeting)
- 4) Draft Plume Maps & 9/18/14 Site Reconnaissance findings
- 5) Data Gap Work Plan

Thanks,

Brent Wheeler
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TABLE 1
Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft. MSL)	Depth to GW (ft. TOC)	Water Elevation (ft. MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)
MW-1	6/1/98	50.00 *	4.81	45.19	slight sheen	160000	NA	1900	28000 / 21000 / 3800 / 21000	NA
	9/10/98	50.00 *	7.5	42.5	Odor	290000	NA	440	<50 / 25000 / 7100 / 32000	NA
	10/7/99	50.00 *	10.04	39.96	Odor	85000	NA	1100	20000 / 13000 / 3800 / 17000	NA
	1/26/00	50.00 *	8.26	41.74	slight sheen	130000	NA	470	25000 / 18000 / 4500 / 22000	NA
	10/25/00	50.00 *	10.1	39.9	Odor	130000	NA	1300	23000 / 12000 / 3900 / 18000	NA
	2/2/01	50.00 *	9.61	40.39	Odor	128000	NA	780	19000 / 11000 / 3800 / 18000	NA
	4/25/01	195.9	7.39	188.51	Odor	120000	NA	900	21000 / 13000 / 390 / 18000	NA
	7/10/01		9.72	186.18	Odor	79000	NA	660	15000 / 7800 / 3000 / 15000	NA
	10/8/01		10.88	185.02	Odor/sheen	112000	NA	374	25300 / 11800 / 4280 / 20600	NA
	1/7/02		4.34	191.56	Odor	96100	NA	596	21100 / 13500 / 4160 / 21900	NA
	4/8/02		6.84	189.06	slight odor	111000	NA	679	21200 / 13400 / 4230 / 21000	NA
	7/9/02		9.4	186.5	slight odor	110000	NA	570	20300 / 13300 / 4060 / 19800	NA
	10/23/02		11.04	184.86	None	54100	NA	1010 (1080)**	10800 / 3870 / 2320 / 9440	NA
	10/15/03		10.8	185.1	None	90700	NA	724	17800 / 4740 / 3150 / 13900	NA
	2/2/04		7.35	188.55	None	108000	NA	194	14200 / 7420 / 3450 / 19800	NA
	4/23/04		6.83	189.07	slight odor	49200	NA	114	7910 / 1480 / 1810 / 10100	NA
	7/19/04		8.95	186.95	Odor	63900	NA	303	7260 / 2270 / 2510 / 10100	NA
	10/22/04		10.15	185.75	None	80700	NA	493 (296)**	13900 / 1670 / 3550 / 15200	NA
	1/21/05		5.45	190.45	Odor	278000	NA	271 (174)**	14700 / 25300 / 10800 / 73500	NA
	4/14/05		5.3	190.6	Odor /sheen	116000	NA	366 (410)**	15100 / 7080 / 4220 / 20700	NA
	7/26/05		7.6	188.3	Odor	82000	NA	ND<250	12000 / 4500 / 3300 / 14000	NA
	10/14/05		9.58	186.32	Odor/sheen	64000	NA	ND<250	13000 / 5700 / 3400 / 16000	NA
	1/13/06		4.6	191.3	Odor/sheen	49000	NA	ND<250	12000 / 5300 / 3500 / 17000	NA
	4/14/06		3.08	192.82	Odor	51000	NA	270	14000 / 5300 / 3500 / 17000	NA
	10/26/06		9.22	186.68	Odor	34000	NA	ND<250	12000 / 1600 / 3100 / 8600	NA
	1/30/07		9.6	186.3	Odor	39000	NA	ND<200	10000 / 2200 / 2900 / 10000	NA
	4/13/07		9.24	186.66	NM	52000	NA	150	9100 / 2600 / 3100 / 11000	NA
	7/24/07		10.67	185.23	None	46000	NA	240	10000 / 1200 / 3500 / 6200	NA
	4/21/08		7.24	188.66	None	50000	NA	ND<100	7800 / 1500 / 3000 / 12000	NA
	7/22/08		9.71	186.19	Odor	60000	NA	470 ¹	8100 / 1500 / 2700 / 9800	NA
	10/21/08		11.63	184.27	Odor	15000	NA	110	4900 / 430 / 1900 / 2260	NA
	1/19/09		10.91	184.99	Odor/Sheen	33000	NA	143	8830/837/2160/3880	NA
	4/27/09		7.7	188.2	Odor	75000	NA	53	8500/2100/2300/11000	NA
10/27/09	9.34		186.56	Odor	61000	NA	75	8300/1500/2600/7900	NA	
10/14/10	10.3		185.6	Clear/Odor	24000 ²	NA	220	8100/820/2200/4400	NA	
6/9/11	6.38		189.5	Clear/Odor	53000	NA	NA	14000/3000/3800/16900	NA	
10/7/11	9.08		186.82	None	50000 ²	NA	89	9200/1500/4200/13500	NA	
10/16/13	10.83		185.07	Clear	12000 ²	NA	ND<21	2400/330/1500/2780	NA	
4/4/14	10.92		184.98	Clear	25000 ⁶	3000 ^{7,8}	ND<21	3000/480/2100/6700	500 ⁹	
10/20/14	11.2	184.7	Clear/Odor	18000 ²	2000 ^{7,8}	63	5600/300/2000/910	300 ⁹		
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24

Table & Notes Following

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Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft. MSL)	Depth to GW (ft. TOC)	Water Elevation (ft. MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)
MW-2	10/7/99	51.42*	11.49	39.93	slight/odor	18000	NA	490	3000 / 1700 / 1000 / 3900	NA
	1/26/00	51.42*	7.85	43.57	None	42000	NA	560	9300 / 2200 / 2300 / 7700	NA
	10/25/00	51.42*	11.57	39.85	slight/odor	31000	NA	500	5500 / 370 / 1700 / 2600	NA
	2/2/01	51.42*	10.77	40.65	Odor	36000	NA	400	4300 / 530 / 1800 / 4500	NA
	4/25/01	197.28	8.52	188.76	Odor	56000	NA	460	6700 / 1700 / 2600 / 8200	NA
	7/10/01		11.05	186.23	Odor	39000	NA	180	6200 / 730 / 2300 / 6100	NA
	10/8/01		12.79	184.49	Odor/sheen	40700	NA	6460	6310 / 399 / 2100 / 5320	NA
	1/7/02		4.92	192.36	Odor	59600	NA	366**	10300 / 3250 / 4180 / 14400	NA
	4/8/02		8.4	188.88	slight odor	66700	NA	583**	10200 / 2670 / 3840 / 13200	NA
	7/9/02		10.55	186.73	slight odor	37100	NA	303 (298)**	5340 / 890 / 2110 / 6920	NA
	10/23/02		13.85	183.43	None	13300	NA	322 (360)**	2420 / 216 / 922 / 1470	NA
	10/15/03		12.38	184.9	None	11300	NA	264 (322)**	2660 / 51 / 1180 / 1220	NA
	2/2/04		8.8	188.48	None	21700	NA	168 (200)**	2130 / 51 / 1030 / 2060	NA
	4/23/04		8.4	188.88	Slight odor	30400	NA	112 (203)**	3570 / 322 / 1620 / 4140	NA
	7/19/04		10.3	186.98	Odor	28300	NA	283 (373)**	2540 / 239 / 1320 / 2300	NA
	10/22/04		10.25	187.03	Mod odor	13500	NA	273 (229)**	1790 / 54 / 892 / 915	NA
	1/21/05		6.65	190.63	Mod odor	278000	NA	161 (163)**	5980 / 1030 / 2890 / 9070	NA
	4/14/05		8.7	188.58	None	46100	NA	155 (150)**	5170 / 787 / 2530 / 6010	NA
	7/26/05		8.95	188.33	Mod odor	41000	NA	ND (ND)**	5600 / 550 / 2600 / 4600	NA
	10/14/05		10.92	186.36	Odor/sheen	13000	NA	130	2900 / 100 / 1300 / 1200	NA
	1/13/06		5.48	191.8	Odor	20000	NA	ND<100	4900 / 490 / 2400 / 4200	NA
	4/14/06		3.61	193.67	Odor	21000	NA	ND<100	4000 / 740 / 2300 / 5100	NA
	10/26/06		10.58	186.7	Odor	8200	NA	68	1400 / 51 / 840 / 500	NA
	1/30/07		10.98	186.3	Odor	17000	NA	62	3200 / 150 / 2200 / 1800	NA
	4/13/07		10.54	186.74	NM	19000	NA	57	2000 / 85 / 1300 / 1100	NA
	7/24/07		12.04	185.24	None	10000	NA	84	1300 / 41 / 710 / 270	NA
	4/21/08		8.01	189.27	None	17000	NA	48	1800 / 100 / 1400 / 1300	NA
	7/22/08		11.12	186.16	None	16000	NA	100 ¹	1900 / 98 / 1600 / 741	NA
	10/21/08		13.11	184.17	Odor/sheen	4900	NA	65	700 / 20 / 370 / 52	NA
	1/19/09		12.31	184.97	Odor	2500	NA	90	167/8.49/114/50.3	NA
	4/27/09		9.01	188.27	Odor/sheen	21000	NA	ND<0.5	1700/130/1100/1800	NA
	10/27/09		10.52	186.76	Odor	7000	NA	ND<0.5***	510/19/330/160	NA
	10/14/2010		11.56	185.72	None	3200 ²	NA	35	460/16/230/110	NA
	6/9/2011		7.67	189.61	Clear/Odor	9900	NA	NA	1900/75/1100/1013	NA
10/7/2011	10.42		186.86	Clear/Odor	9200 ⁴	NA	ND<22	810/34/610/100	NA	
10/16/2013	12.18		185.1	Clear/Odor	4400 ^{2,5}	NA	ND<4.2	780/33/200/39.8	NA	
4/14/2014	12.34		184.94	Clear/Odor	6100 ²	2500 ^{7,8}	ND<2.1	530/270/19/47.6	86 ⁹	
10/20/2014	12.54		184.44	Clear/Odor	8600 ²	3700 ^{7,8}	15	140/5.6/73/20.9	24 ⁹	
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MW-3	10/7/99	49.39*	9.67	39.72	None	6600	NA	390	310 / 110 / 430 / 1000	NA
	1/26/00	49.39*	5.4	43.99	None	3300	NA	40	110 / 8 / 100 / 32	NA
	10/25/00	49.39*	9.24	40.15	Slight odor	4500	NA	ND	100 / 2 / 120 / 130	NA
	2/2/01	49.39*	8.73	40.66	Slight odor	2900	NA	35	35 / 3 / 160 / 298	NA
	4/25/01	195.22	6.61	188.61	Slight odor	8400	NA	56	260 / 33 / 290 / 510	NA
	7/10/01		8.85	186.37	Slight odor	12000	NA	35	39 / 10 / 690 / 1600	NA
	10/8/01		9.75	185.47	Odor/sheen	4913	NA	52	108 / 4 / 99 / 133	NA
	1/7/02		4.25	190.97	Odor/sheen	7260	NA	81.7**	723 / 138 / 492 / 887	NA
	4/8/02		6.33	188.89	Odor	11700	NA	ND**	540 / 108 / 706 / 1710	NA
	7/9/02		8.56	186.66	Odor	2320	NA	28.3 (20)**	37.1 / 4.7 / 98.5 / 187	NA
	10/23/02		10.02	185.2	Odor/sheen	2830	NA	ND (ND)**	46.8 / 4.7 / 43.6 / 65.5	NA
	10/15/03		9.8	185.42	Odor/sheen	3040	NA	ND (ND)**	91.3 / 8.4 / 169.9 / 148	NA
	2/2/04		6.85	188.37	Odor/sheen	5140	NA	ND (ND)**	126 / 8.7 / 134 / 238	NA
	4/23/04		6.17	189.05	None	7210	NA	ND (ND)**	227 / 39.5 / 448 / 879	NA
	7/19/04		8.25	186.97	Slight odor	9860	NA	ND (ND)**	20.4 / 3.2 / 30.6 / 117	NA
	10/22/04		9.25	185.97	None	7420	NA	96 (21)**	152 / 12.8 / 267 / 480	NA
	1/21/05		5.22	190	Slight odor	2420	NA	ND (ND)**	111 / 11.4 / 139 / 265	NA
	4/14/05		6.64	188.58	Odor/sheen	5130	NA	54 (41.4)**	357 / 19.4 / 287 / 510	NA
	7/26/05		6.9	188.32	None	9800	NA	ND (21)**	200 / 23 / 220 / 360	NA
	10/14/05		8.83	186.39	Odor/sheen	6100	NA	ND	76 / 19 / 170 / 350	NA
	1/13/06		4.61	190.61	Odor	3900	NA	24	380 / 17 / 230 / 300	NA
	4/14/06		3.41	191.81	Odor	5000	NA	69	760 / 44 / 230 / 190	NA
	10/26/06		8.57	186.65	Odor	3100	NA	17	120 / 9.8 / 55 / 54	NA
	1/30/07		8.83	186.39	Odor	4500	NA	ND<10	90 / 7.6 / 75 / 44	NA
	4/13/07		8.57	186.65	NM	2800	NA	ND<5	55 / 4.9 / 19 / 6.1	NA
	7/24/07		9.98	185.24	None	4800	NA	ND<5	140 / 8.3 / 66 / 22	NA
	4/21/08		9.3	185.92	None	4300	NA	ND<5	200 / 11 / 30 / 14	NA
	7/22/08		9.05	186.17	None	2400	NA	53 ¹	140 / 13 / 26 / 18.5	NA
	10/21/08		11.12	184.1	Slight Odor	2900	NA	2.2	170 / 9.2 / 99 / 25.8	NA
	1/19/09		10.29	184.93	Odor	3600	NA	ND<0.5	148/6.73/24.5/22.1	NA
	4/27/09		7.15	188.07	Odor/sheen	5800	NA	8.8	370/12/82/84	NA
	10/27/09		8.96	186.26	Odor	4900 ²	NA	ND<0.5***	130/8.5/89/130	NA
	10/14/2010		9.76	185.46	None	2700 ²	NA	ND<4.4	270/11/290/399.2	NA
6/9/2011	5.92		189.3	Clear/Odor	3200 ²	NA	NA	220/ND<4.4/37/20	NA	
10/7/2011	8.6		186.62	None	5400 ²	NA	ND<4.4	140/7.0/160/67	NA	
10/16/2013	10.56		184.66	Lt. Gray/Odor	3400 ²	NA	ND<4.2	990/58/75/71	NA	
4/14/2014	11.07		184.15	Clear	3600 ²	700 ^{7,8}	ND<1.1	400/22/24/13.3	4.0 ⁹	
10/20/2014	10.09	185.13	Clear/Odor	9200 ²	25000 ^{7,8}	9.2	180/8.4/21/11	ND<2.1 ⁹		
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PW-1	4/14/05	197.17	6.4	190.77	None	3360	NA	ND (ND**)	62.8 / 6.7 / 79.5 / 317	NA
	7/26/05		8.63	188.54	None	1300	NA	ND (ND**)	22 / ND / 48 / 110	NA
	10/14/05		10.71	186.46	None	4300	NA	ND	93 / 1.2 / 100 / 140	NA
	1/13/06		4.87	192.3	None	450	NA	ND<2.0	10 / ND / 37 / 72	NA
	4/14/06		2.27	194.9	Odor	120	NA	ND<2.0	2.3 / ND<1.0 / 3.5 / 9.3	NA
	10/26/06		10.3	186.87	Odor	2800	NA	ND<10	61 / ND<5.0 / 130 / 34	NA
	1/30/07		10.8	186.37	Odor	1200	NA	ND<2	22 / ND<1.0 / 100 / 200	NA
	4/13/07		10.31	186.86	NM	510	NA	ND<1	6 / ND<0.5 / 30 / 56	NA
	7/24/07		11.81	185.36	None	3400	NA	ND<5	63 / ND<2.5 / 180 / 5.6	NA
	4/21/08		9.08	188.09	None	300	NA	ND<1	3 / ND<0.5 / 16 / 26	NA
	7/22/08		9.83	187.34	None	710	NA	3.1 ¹	9.3 / 1.2 ¹ / 49 / 67.86	NA
	10/21/08		12.9	184.27	None	1500 ²	NA	1	20 / ND<0.5 / 57 / 20	NA
	1/19/09		12.11	185.06	Odor/sheen	1100 ²	NA	ND<0.5	12.3/ND<0.5/30.8/9.20	NA
	4/27/2009		8.69	188.48	None	360 ³	NA	ND<0.5	2.7/ND<0.5/12/18	NA
	10/27/2009		10.32	186.85	None	1100 ²	NA	ND<0.5	12/ND<0.5/36/34	NA
	10/14/2010		11.38	185.79	None	860 ³	NA	ND<0.5	8.8/55/44/44	NA
	6/9/2011		7.43	189.74	None	96 ³	NA	ND<0.5	ND<0.5/ND<0.5/3.1/2.5	NA
	10/7/2011		9.79	187.38	None	260 ⁵	NA	ND<0.5	ND<0.5/ND<0.5/5.9/4.5	NA
	10/16/2013		11.91	185.26	Clear	150 ^{2,5}	NA	ND<0.5	0.87/ND<0.5/ND<0.5/ND<1.0	NA
	4/14/2014		12.14	185.03	Clear	ND<50	ND<0.1 ⁸	ND<0.5	ND<0.5/ND<0.5/ND<0.5/ND<1.0	ND<0.5 ⁹
10/20/2014	12.28	184.89	Clear	380 ²	140 ^{7,8}	ND<0.5	2.4/ND<0.5/11/4.0	2.3 ⁹		
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24

NOTES:

ft. MSL = feet Above Mean Sea Level

TOC = Top of Well Casing

GW = Depth to Groundwater in feet Below TOC

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl Tertiary Butyl Ether

BTEX = Benzene / Toluene / Ethylbenzene / Total Xylenes

ug/L = micrograms per liter

ND = Not detected above laboratory reporting limit

¹ = Presence confirmed, but Relative Percentage Difference (RPD) between columns exceeds 40%

² = Sample exhibit chromatographic pattern that does not resemble standard; See laboratory report for additional information

³ = Although TPH-gas compounds are present, value is elevated due to discrete peak (PCE) within C5-C12 range quantified as gasoline

⁴ = Result is elevated due to contribution from heavy end hydrocarbons within C5-C12 range quantified as gasoline

⁵ = Result is elevated due to contribution from heavy end hydrocarbons and discrete peak of non-fuel compound within C5-C12 range quantified as gasoline

⁶ = Reported TPH value includes amount due to discrete peak (See 8260B results - elevated aromatic compounds)

⁷ = Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.

⁸ = Sample also analyzed for TPH as Motor Oil (EPA Method SW8015B); Result ND (See Lab Report)

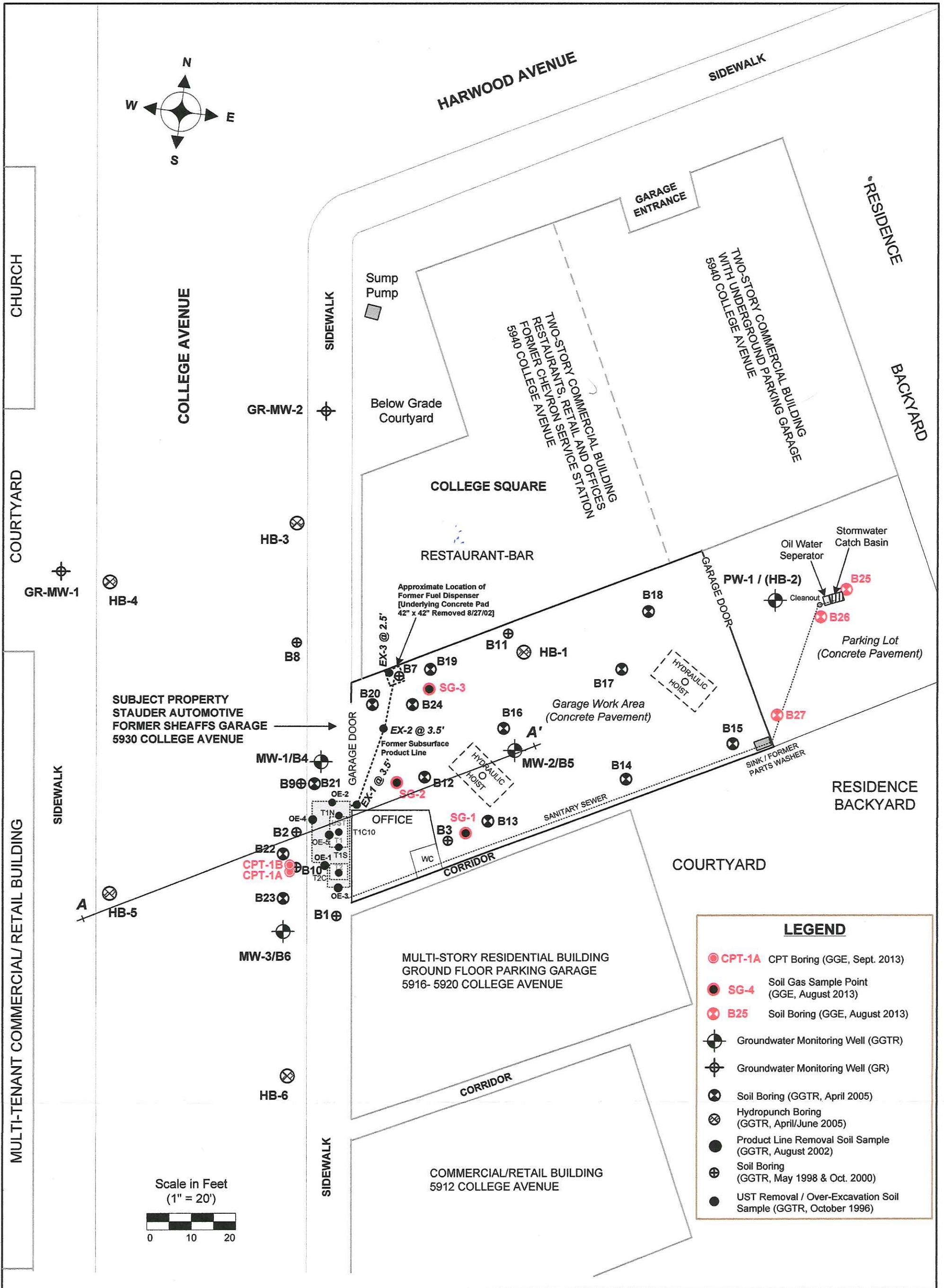
⁹ = Sample also analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method SW8270C; See Lab Report for Sample Results

* = Arbitrary datum point with assumed elevation of 50 ft used prior to MSL survey on 4/ 25/01

** = Concentration confirmed by EPA Method 8260

** = Sample also analyzed for other Fuel oxygenates (EPA Method 8260); All results ND (See Lab Report)

SF Bay RWQCB/ESL = San Francisco Bay Regional Water Quality Control Board's Interim Final - December 2013, Environmental Screening Level at a residential or commercial/industrial use permitted sites with groundwater that is Not a potential source of drinking water.



GOLDEN GATE ENVIRONMENTAL, INC.
 1455 Yosemite Avenue, San Francisco, CA 94124
 Phone (415) 970-9088 Fax (415) 970-9089

SITE PLAN
 Former Sheaff's Service Garage
 5930 College Avenue, Oakland, CA 94618