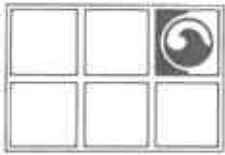


R0480



# GROUNDWATER TECHNOLOGY, INC.

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May 20, 1993

Project No. 020503392

Mr. Scott O. Seery  
Senior Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621

Attn: Mr. Tom Peacock

Re: PROPOSED CHANGES TO GROUNDWATER ANALYSES  
Former Sears Automotive Center  
2633 Telegraph Avenue  
Oakland, California

Dear Mr. Seery:

On behalf of Sears, Roebuck and Co., Groundwater Technology proposes a revised quarterly groundwater sampling and analytical schedule for the site referenced above. The Alameda County Health Care Services Agency, in a correspondence to Sears dated October 7, 1992, stipulated the quarterly analytical program as shown on Table 1. Two rounds of quarterly groundwater sampling have been completed using these methods. Table 2 presents a summary of analytical results.

Concentrations of TPH-as-diesel fuel and volatile organic compounds (VOCs) were not detected in the groundwater samples on December 30, 1992 and March 24, 1993. Concentrations of semi-volatile organic compounds (SVOCs) have not been detected in the groundwater samples from wells MW-2, MW-4, and MW-5. The sample from MW-2 showed 14  $\mu\text{g/l}$  and 26  $\mu\text{g/l}$  2-methylnaphthalene, the well which exhibits the highest concentrations of gasoline and total petroleum hydrocarbons (Table 2). This compound is typically present in gasoline and motor oil.

Although TPH-as-diesel fuel has not been detected in groundwater samples, hydrocarbons are evidently present that fall outside of the diesel fuel range on the chromatograph (Table 2, footnote \*). Because motor oil was stored in underground storage tanks on the facility, Groundwater Technology recommends future analysis for TPH-as-motor oil in each of the monitoring wells, and elimination of the TPH-by infrared (IR) analysis in wells MW-1, MW-2, MW-4, and MW-5. Groundwater samples from well MW-3 will continue to be analyzed for TPH-IR because of the high concentrations detected in the past.

Groundwater Technology recommends a revision of the quarterly sampling program. Table 3 presents the proposed analytical work which includes the addition of TPH-as-motor oil in each of the wells, and

elimination of analyses for TPH-as-diesel fuel, VOCs, and SVOCs. The addition of analyses for TPH-as-motor oil will replace the TPH-as-diesel fuel analyses in wells MW-1, MW-2, MW-4, and MW-5. Additionally, Groundwater Technology proposes to add cadmium, chromium, nickel and zinc analyses for the sample from well MW-2, which is located directly downgradient of the former waste oil tank. Currently, only well MW-5 is analyzed for these metals. Since well MW-5 is located upgradient of the former tank pits, detected concentrations should represent background levels.

If you have any questions regarding the proposed changes, please contact either Ms. Bernadine Palka at (708) 286-8864, or Mike Wray at (510) 671-2387. The next sampling round for the Telegraph Avenue site is scheduled for the month of June 1993.

Sincerely,  
Groundwater Technology, Inc.



DEBORAH H. HORNER  
Project Geologist



MICHAEL J. WRAY  
Project Manager

cc: Ms. Bernadine Palka, Sears, Roebuck and Co.

**TABLE 1  
CURRENT GROUNDWATER ANALYSES**

<b>ANALYSES</b>	<b>MW-1</b>	<b>MW-2</b>	<b>MW-3</b>	<b>MW-4</b>	<b>MW-5</b>
BTEX (8020)	X	X	X	X	X
TPH-GASOLINE (8015)		X	X	X	X
TPH-DIESEL (8015)	X	X	X	X	X
TPH-IR (5520)	X	X	X	X	X
HALOCARBONS (601)		X	X	X	X
TOTAL LEAD		X	X	X	X
Cd, Cr, Ni, Zn					X
SEMIVOLATILES (8270)		X	X	X	X

**TABLE 2**  
**SUMMARY OF HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
 (Compounds micrograms per liter except where noted otherwise)

Well ID	Date	B	T	E	X	TPH-G	TPH-D	VOCs	SVOCs	TPH (mg/l)	Total Lead
MW-1	12/30/92	1	1	2	2	--	ND	--	--	1	--
	03/24/93	0.4	1	ND	10	--	ND*	--	--	1	--
MW-2	12/30/92	0.7	ND	ND	3	190	ND	ND	ND	1	ND
	03/24/93	0.6	ND	ND	2	120	ND*	ND	ND	ND	ND
MW-3	12/30/92	11	0.9	ND	2	910	ND	<sup>c</sup> ND	<sup>a</sup> 14	20	ND
	03/24/93	28	0.7	1	8	3,300	ND*	ND	<sup>a</sup> 26	28	15**
MW-4	12/30/92	2	ND	1	ND	1,200	ND	ND	ND	ND	ND
	03/24/93	ND	ND	ND	ND	750	ND*	ND	ND	2	7**
MW-5	12/30/92	ND	ND	ND	ND	37	ND	ND	ND	ND	<sup>b</sup> 5
	03/24/93	ND	ND	ND	0.5	19	ND	ND	ND	2	<sup>d</sup> 15**

- BTEX = Benzene, toluene, ethylbenzene, and total xylenes (EPA Methods 5030, 8020)  
 TPH-G = Total petroleum hydrocarbons-as-gasoline (EPA Methods 5030 and modified EPA Method 8015)  
 TPH-D = Total petroleum hydrocarbons-as-diesel fuel (EPA Methods 3510, 8015)  
 VOCs = Volatile organic compounds (EPA Method 601)  
 SVOCs = Semi-volatile organic compounds (EPA Method 8270/625)  
 TPH = Total petroleum hydrocarbons (EPA Method 418.1 [SM 5520 FC])  
 $\mu\text{g/l}$  = Micrograms per liter  
 mg/l = Milligrams per liter  
 -- = Not analyzed  
 ND = Nondetectable (Detection limits for each compound are listed in laboratory reports, which are included in Appendix D.)  
 \* = Hydrocarbons present that are not indicative of diesel fuel  
 \*\* = Water samples were not filtered, analytical results represent total metals present, not dissolved concentrations.  
 a = 2-Methylnaphthalene detected  
 b = Cadmium, chromium, nickel, and zinc were also analyzed but were nondetectable.  
 c = Duplicate sample was also analyzed and reported nondetectable concentrations.  
 d = Additional metals analyzed were: Cadmium, detected at  $15\mu\text{g/l}$ ; total chromium, detected at  $97\mu\text{g/l}$ ; nickel, detected at  $110\mu\text{g/l}$ ; and zinc, detected at  $104\mu\text{g/l}$  \*\*. Note: These samples were not filtered before preservation and analysis.

**TABLE 3  
PROPOSED GROUNDWATER ANALYSES**

<b>ANALYSES</b>	<b>MW-1</b>	<b>MW-2</b>	<b>MW-3</b>	<b>MW-4</b>	<b>MW-5</b>
BTEX (8020)	X	X	X	X	X
TPH-GASOLINE (8015)		X	X	X	X
TPH-MOTOR OIL (8015)	X	X	X	X	X
TPH-IR (5520)	○	○	X	○	○
TOTAL LEAD (FILTERED)		X	X	X	X
Cd, Cr, Ni, Zn (FILTERED)		X			X