



August 25, 1993

Mr. Jeff Granberry
Shell Oil Company
P.O. Box 5278
Concord, California

*need lab reports
+ COC*

*4022
JE*

93 AUG 27 AM 11:43

Re: Soil Sampling and Excavation
Shell Service Station
2120 Montana Street
Oakland, California
WIC #204-5508-0208
WA Job #81-741

Dear Mr. Granberry,

As requested by Dan Kirk of Shell Oil Company, Weiss Associates conducted soil sampling and supervised the excavation of hydrocarbon-bearing soil beneath the remote fill piping at the site referenced above. This letter presents a summary of our activities.

On July 6, 1993 Weiss Associates collected three soil samples (SS-1, SS-2, SS-3) from about one foot beneath former remote fill line piping. We also collected one sample (SS-4) from the sidewall of the excavation near the fill line. Ronald Owcarz of the Alameda County Department of Environmental Health (ACDEH) supervised sample collection. Soil sample locations are shown in Figure 1.

The samples were submitted to a certified laboratory and analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and xylenes (BTEX), and total lead. The analytical results indicated that SS-1, SS-3 and SS-4 contained a maximum of 13 parts per million (ppm) TPH-G (Table 1). Sample SS-2 contained 560 ppm TPH-G, 3.3 ppm benzene and 61.9 ppm total lead.

On July 12, 1993 Paradise Construction excavated hydrocarbon-bearing soil in the vicinity of sample SS-2. Paradise hand excavated approximately three feet below grade, where they encountered several underground lines including sewer, water and electrical conduits. On July 14, hydrocarbons were detected in the soil by a photoionization detector (PID). Therefore, the excavation was enlarged to 5 feet below grade, the maximum depth allowable for hand excavation. Machine excavation was not possible due to the utilities crossing the area.

Jeff Granberry
August 25, 1993

Weiss Associates



² ~~SS-5-8 floor~~
~~SS-6-8 side~~

On July 19, 20 and 21 two excavation sidewall samples (SS-6 and SS-8) and two floor samples from about five feet depth (SS-5 and SS-9) were collected as requested by Ronald Owcarz. Although no benzene was detected in any of the samples, up to 73 ppm TPH-G were detected in samples SS-5 and SS-6. Additional lead analyses requested by Jennifer Eberle of the ACDEH indicated that organic lead was present in sample SS-5 at 9.9 ppm and in SS-6 at 31.8 ppm. A waste extraction test (WET) for soluble lead in sample SS-2 indicated the presence of only 3.32 ppm soluble lead.

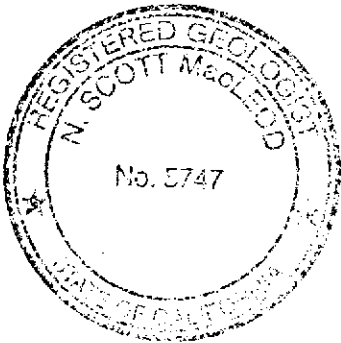
I requested TOTAL lead results?

Since further excavation was not possible, and since the analytic results documented that all soil containing over 100 ppm TPH-G had been excavated, ~~Ronald Owcarz of the ACDEH indicated that no additional excavation would be required.~~ Mr. Owcarz also approved the backfilling of the excavation with clean fill material.

Approximately four yards of soil were excavated and are currently stockpiled at the site and covered with plastic sheeting. A composite soil sample (SS-11A-D) has been collected and submitted to the lab for analysis. Weiss Associates is in the process of arranging for the disposal of this soil at an appropriate disposal facility.

Please contact us if you have any questions,

results?



Sincerely,
Weiss Associates

David Weiss FOR:

Alison Watts
Senior Staff Geologist

N. Scott MacLeod, R.G.
Project Geologist

AWW/NSM:aww
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cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998
Jennifer Eberle, Alameda County Department of Environmental Health, 80 Swan Way, Rm 200, Oakland, California, 94621
Steven Ritchie, Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland 94612

EXPLANATION

■ SS-1 Soil sample location

NOTES: Excavation -5 ft below ground surface

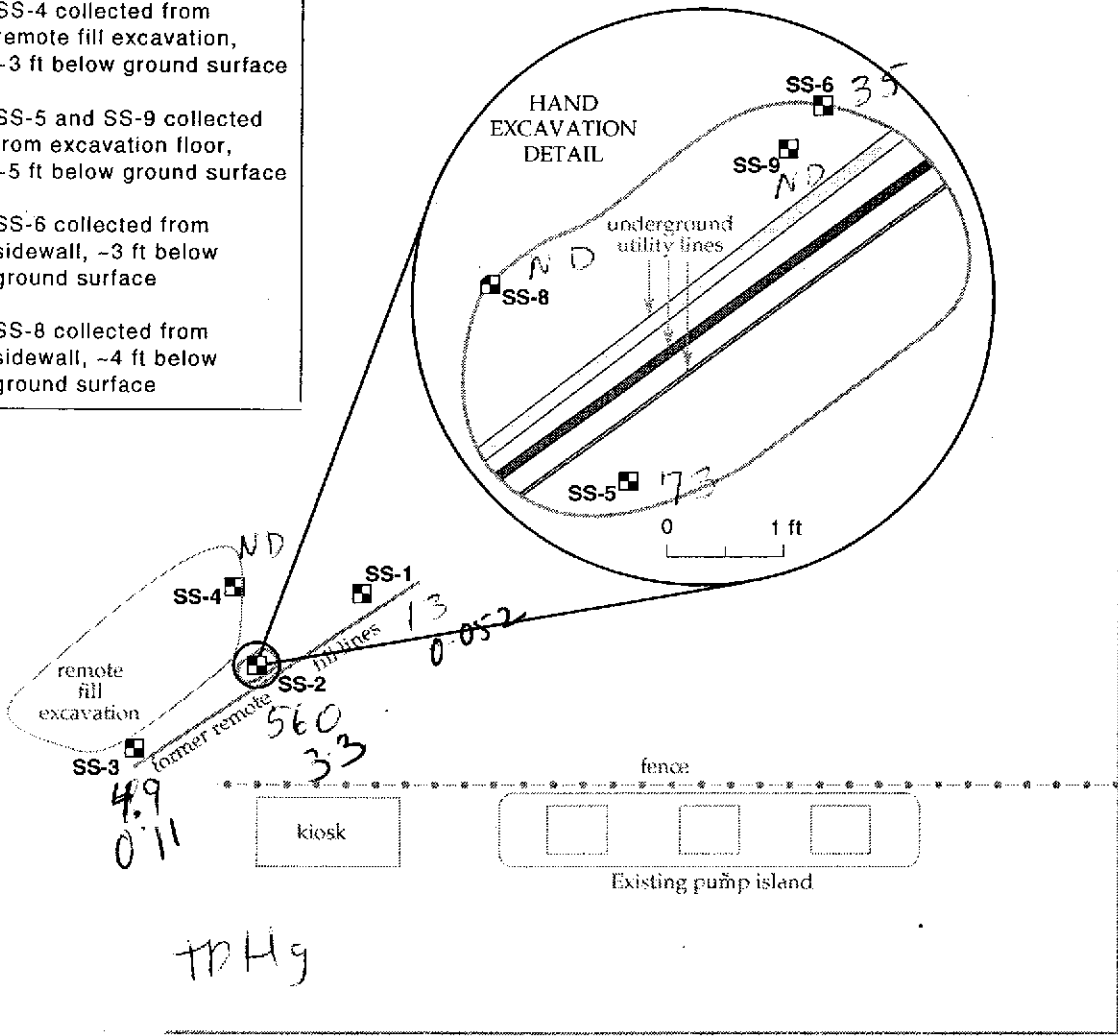
SS-1, SS-2 and SS-3 collected from ~1 ft below ground surface

SS-4 collected from remote fill excavation, -3 ft below ground surface

SS-5 and SS-9 collected from excavation floor, -5 ft below ground surface

SS-6 collected from sidewall, -3 ft below ground surface

SS-8 collected from sidewall, -4 ft below ground surface



FRUITVALE AVENUE

MONTANA STREET

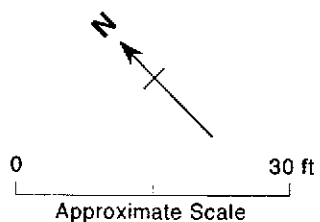


Figure 1. Soil Sampling Locations - Shell Service Station WIC #204-5508-0208, 2120 Montana Street, Oakland, California [Scale and Locations Are Estimated]

RMP →

- a. location map showing contamination area
- b. How will they handle future construction - health & safety
- c. If they ever develop the site - will re-evaluate also - couple of grab & W samples

Table 1. Analytic Results for Soil - Shell Service Station WIC #204-5508-0208, 2120 Montana Street, Oakland, California

Sample ID	Depth Sampled (ft)	Date Sampled	TPH-G	B	E	T	X	Total Lead	WET Lead
			-----parts per million (mg/L)-----						
SS-1	1	07/06/93	13 ✓	0.052 ✓	0.046	0.055	0.041	47.4 ✓	---
SS-2	1	07/06/93	560 ✓	3.3 ✓	8.0	<0.005	100	61.9 ✓	3.32 ✓
SS-3	1	07/06/93	4.9 ✓	0.11 ✓	0.061	0.10	0.14	30.0 ✓	---
SS-4	3	07/06/93	<0.5 ✓	<0.005 ✓	<0.005	0.013	0.006	2.2 ✓	---
SS-5	5	07/19/93	73 ✓	<0.005 ✓	0.47	0.073	2.0	9.9 ✓	---
SS-6	3	07/20/93	35 ✓	<0.005 ✓	<0.005	<0.005	0.090	31.8 ✓	---
SS-8	4	07/20/93	<0.5 ✓	<0.005 ✓	<0.005	<0.005	<0.005	---	---
SS-9	5	07/21/93	<0.5 ✓	<0.005 ✓	<0.005	<0.005	<0.005	---	---

Abbreviations:

TPH-G = Total petroleum hydrocarbons by modified EPA Method 8015
 B = Benzene by modified EPA Method 8020
 E = Ethylbenzene by modified EPA Method 8020
 T = Toluene by modified EPA Method 8020
 X = Xylenes by modified EPA Method 8020
 Total Lead = Organic and Inorganic Lead by EPA Method 7421
 WET Lead = Waste Extraction Test for Lead by Modified EPA Method 6010
 ft = feet below ground surface

Weiss Associates

