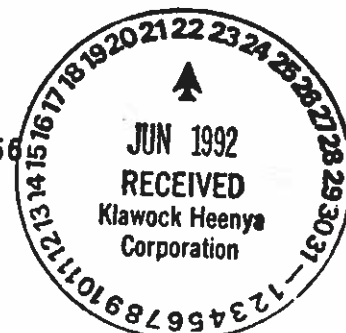


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by fax to 755-2966

Doc Waterman
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Klawock Island Tank Farm
Soil Testing Results and Oily Soil Volume Estimate

As promised during Friday's telephone call, here's my estimate of diesel contaminated soil at the Klawock Island tank farm. Take care to understand that this rough estimate is based on seven test pits and eleven samples taken last September. Assumptions include

the ADEC cleanup level of 200 ppm diesel (with proper justification, ADEC might raise this limit to 1000 ppm);
all soil underneath the black liner is contaminated;
"ballpark" guesses of extent of contamination around sample sites; and
good field screening to exclude layers of clean soil above and below dirty soil during excavation.

I'm not entirely happy with some of the results and Quality Control measures in this testing. More testing may be in order. But even with five times as many samples as we took in September, it's still possible to miscalculate these kinds of estimates by plus or minus fifty percent.

I've attached a rough site sketch of the area, showing sample locations and results. On the right hand margin, I've shown my estimates of the area and depth of contaminated soil in excess of 200 ppm. I've calculated about 2,700 cubic yards of oily soil. With the limited information available, this estimate could easily range from 1,000 cu yds to 10,000 cu yds.

Randolph Bayliss

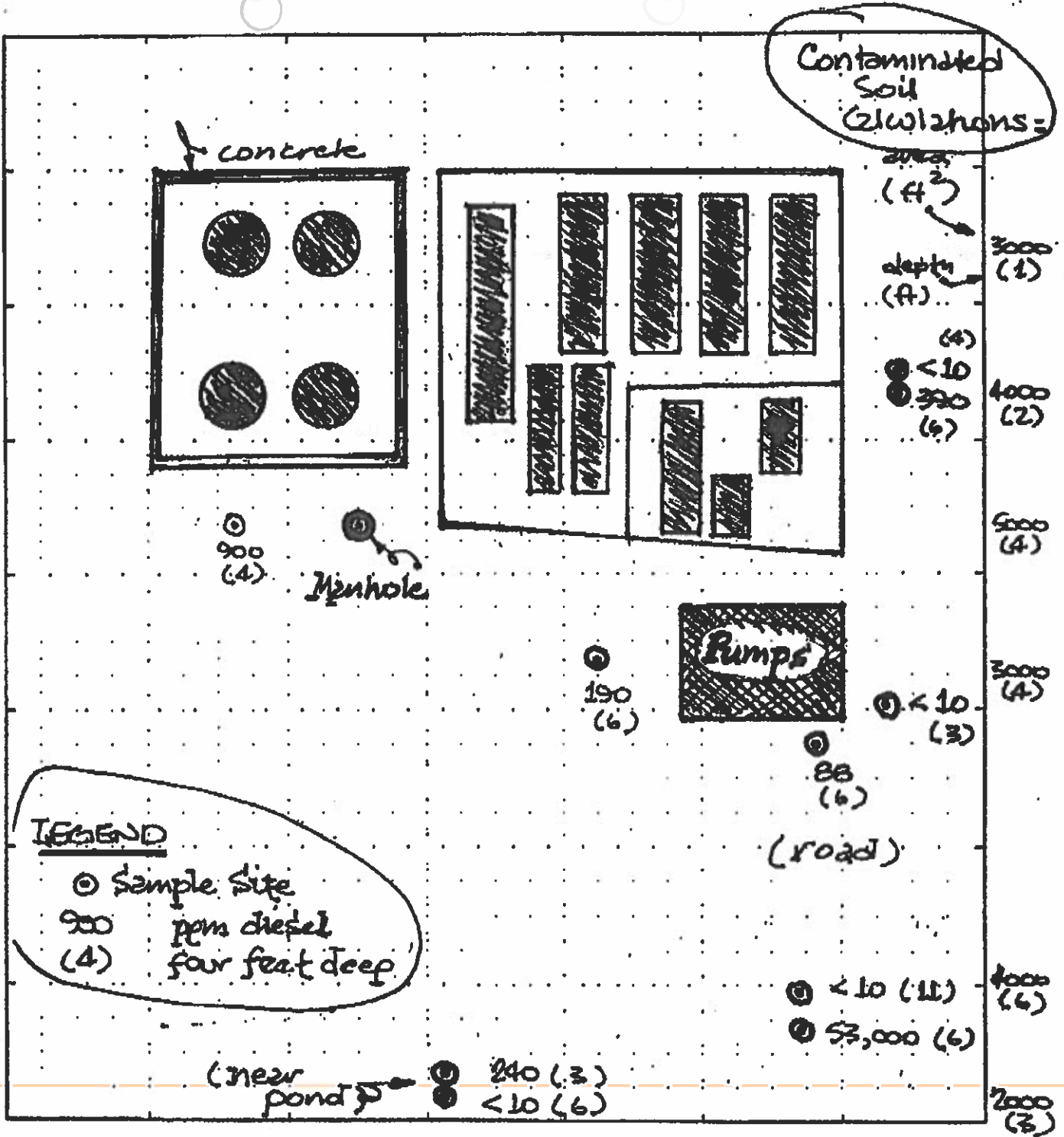
Randolph Bayliss, P.E.
Environmental Engineer

attached:

site sketch
ARI QC Report 9156

cc: Theresa O'Carroll, fax to 452-3064

22 June 1992



SCALE: 1" = 30' SUBJECT: KAWOCK ISLAND TANK FARM

2,700 gal³

Date: 6/21/92
 Notes: Sampled 9/28/91
80LS Diesel

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Project: ASSESSMENT
 Client: K-H



**ANALYTICAL
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**TOTAL DIESEL RANGE HYDROCARBONS BY GC/FID
Modified EPA Method 8015**

Matrix: Soils

GC Report No: 9156-R. Bayliss
Project: Klawock Fuels

VTSR: 10/02/91

Data Release Authorized *[Signature]*
Data Prepared: 10/14/91 - MAC:K kas

Date extracted: 10/03/91
Date Analyzed: 10/8-10/9/91

Lab ID	Client Sample ID	Diesel Range Hydrocarbons †	Diesel ID *	Surrogate Recovery
9156 MB	Method Blank	10 U	No	83%
9156 A	TP1-11'	10 U	No	85%
9156 Adup	TP1-11' dup.	10 U	No	85%
9156 B	TP1-6'	45000 X	Yes	NR
9156 C2	TP2-6'	190	Yes	83%
9156 D	TP4-2.8	10 U	No	96%
9156 E	TP3CL-6.3	10 U	No	73%
9156 F	D TP3CL-6.3	390	Yes	97%
9156 G	N Wall Pit3-4.3	10 U	No	115%
9156 H	TP5-6.5	88	Yes	106%
9156 I	TP6 S Wall-2.8	240	Yes	97%
9156 J	TP6 S Wall-5.6	10 U	No	87%
9156 K	TP7 N Wall-3.6	900	No	NR
9156 B 50X	TP1-6' dilution	53000	Yes	D

NR Indicates surrogate not recovered due to high diesel level or matrix effect.
D Indicates surrogate diluted out.

Surrogate is Me-Arachidate.

Values reported in ppm (mg/Kg).

U Indicates compound was analyzed for but not detected at the given detection limit.

X Indicates a value above the linear range of the detector. Dilution required.

* In the opinion of the analyst, was there a pattern match for diesel (yes or no).

† Value based on total peaks in C12-C24 range.