RPTS.

June 10, 1985

What qty of soil disposed - where did it come from - why did it have TPH ? . May be due to UST replacement The double-walled FG USTs were installed in 1985. Unknown if these USTs replaced another generation of Tanks. Yes, probably replace USTs installed in 1971.

1971 - Bulk 1-5K 2 10K

Signal oil
1950's had 1K (removed, 1-550)
1935 - 2-550, 1-1K

Ms. Gloria R. Fulton
California Regional Water Quality Control Board
San Francisco Bay Region
1111 Jackson Street, Room 6040
Oakland, California 94607

FILE 9-4463

Dear Ms. Fulton:

Attached are the test results of the soil samples taken from the Alameda landfill. It appears the soil does not contain any harmful levels of hydrocarbons, leads and phenols.

Chevron feels the soil levels are considered safe, and will not produce any environmental hazards. Chevron recommends to leave the soil at the landfill site.

Please advise us of your decision so we can act accordingly.

Very truly yours,

C. G. TRIMBACH

By V. L. Hobbs
V. L. Hobbs
Engineer

VLH:vjs:QK2-100

BLAINE
TECH SERVICES

P.O. BOX 5745
SAN JOSE, CA 9515(
(408) 723-397

May 28, 1985

Chevron U. S. A., Inc.
2 Annabel Lane, Suite 200
San Ramon, CA 94583

ATTN: Vicki Hobbs

RE: soil sampling at City of Alameda Landfill
Alameda, CA
on

May 21, 1985

Reason for sampling -- to resolve questions concerning the level of contamination in soil admitted to the Alameda City Landfill

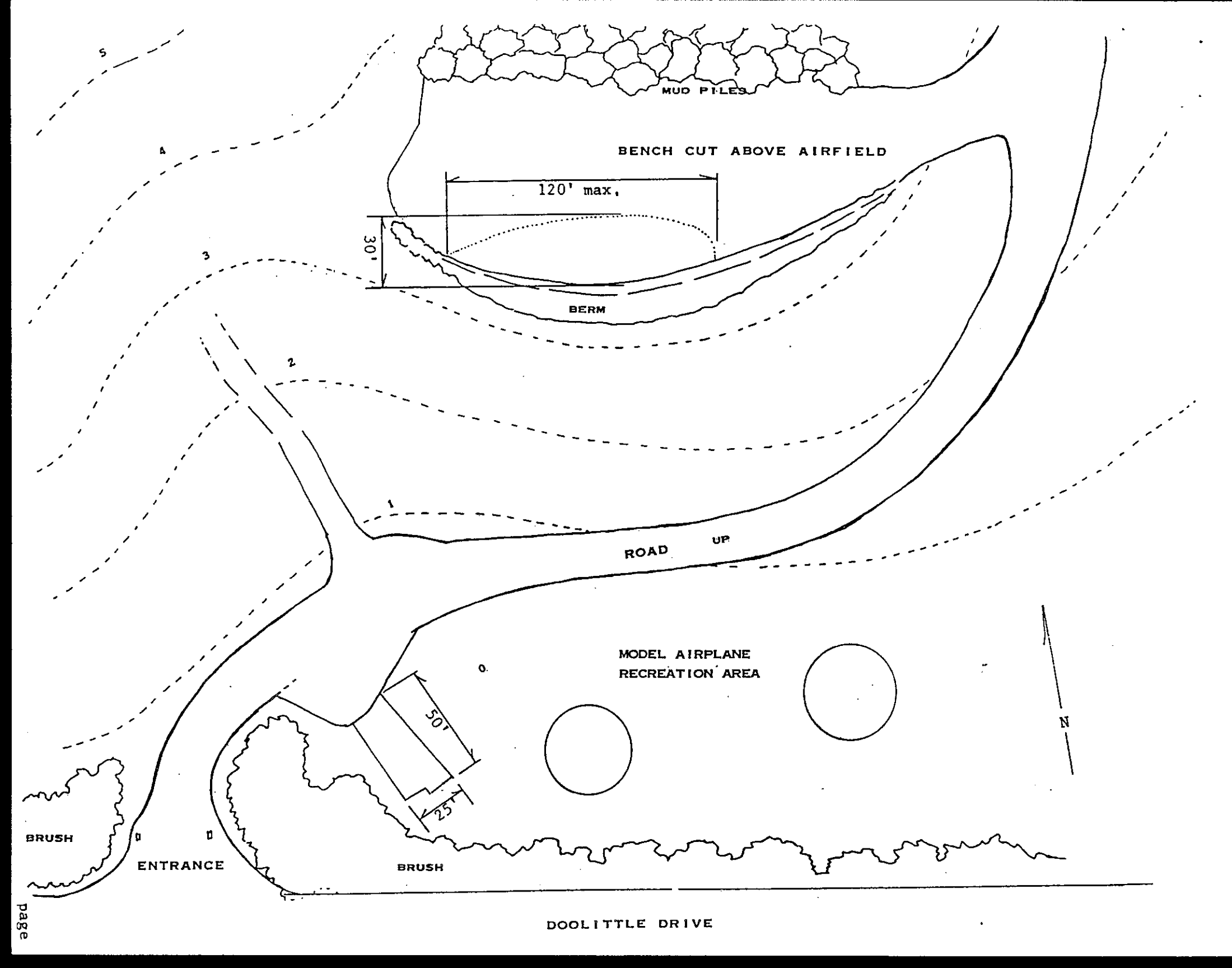
SAMPLING REPORT

Sampling was performed in accordance with approved methodology at the locations shown in the accompanying site diagram. A detailed description of the sampling is provided in the section covering exploration. Samples were collected in appropriate containers, which were sealed, chilled and transported to the laboratory for analysis. Analytical services will be provided by IT Stoner Laboratories and McIntosh Laboratories. Pending the arrival of the laboratory's written report, space is provided for lab results obtained over the telephone.

SOIL SURVEY

At the site I met Ms. Vicki Hobbs of Chevron U.S.A., Inc. and Mr. Edgar D. Howell III, R.S. from the office of Haz/Mat Management for the Alameda County Health Agency. We discussed the probable location of the soil brought to the site, the type of samples to be taken, and the analyses to be run.

We would be concerned with two areas where the soil was spread out. The first area was along the outer edge of a bench cut on the hillside where the majority of the soil had been spread inside of an existing berm. The second location was near the entrance and immediately west of the model airplane field on Doolittle Rd.


MUD PILES
BENCH CUT ABOVE AIRFIELD
120' max.
30'
BERM
ROAD UP
MODEL AIRPLANE
RECREATION AREA
50'
25'
N
BRUSH
ENTRANCE
BRUSH
DOOLITTLE DRIVE

G-1314 VAPOR READINGS

V1 = 0. ppm

V2 = 50. ppm

V3 = 20. ppm

V4 = 10. ppm *

V5 = 310. ppm peak
280. ppm stable
240. ppm test end

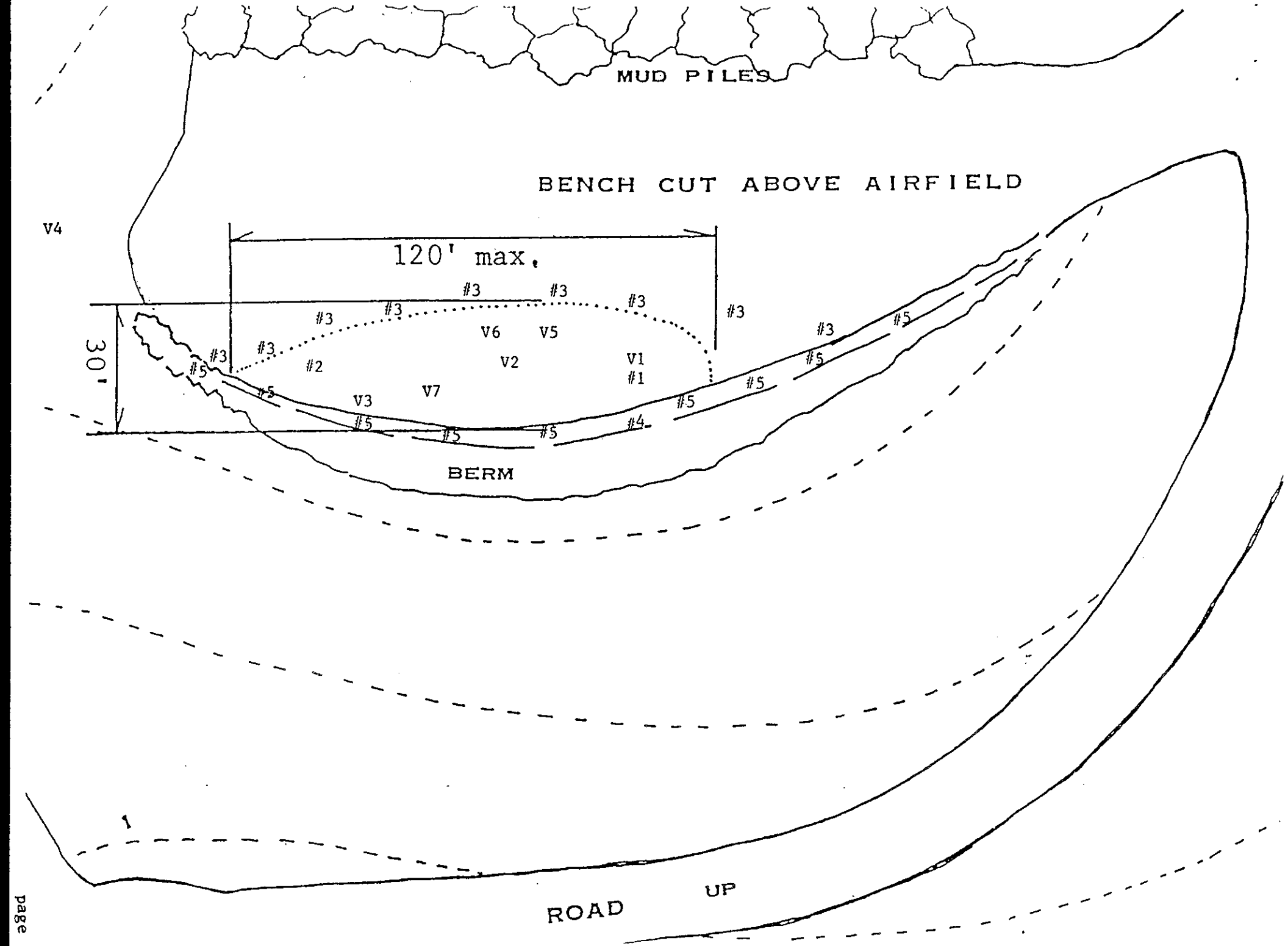
V6 = 30. ppm

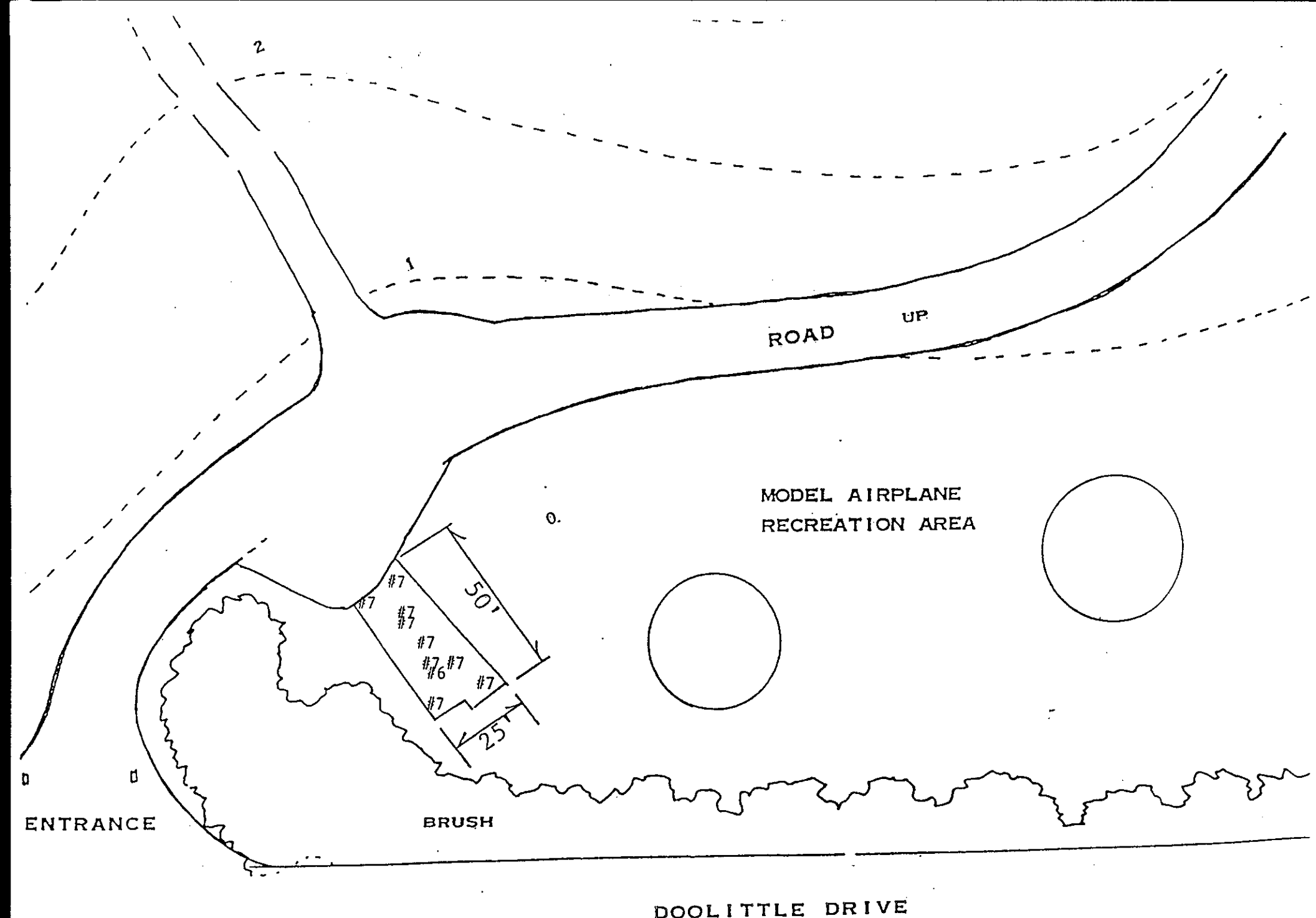
V7 = 65. ppm

* V4 was taken on the hillside above the site as a background check.

SOIL SAMPLING POINTS

	ANALYSIS FOR HYDROCARBONS DUE TO GASOLINE	ANALYSIS FOR TOTAL LEAD	ANALYSIS FOR PHENOL
		units = ug/g	
UPPER BENCH SERIES			
#1 @ 6" depth; 10' N, of N toe of berm, in cntr of spread soil area, @ point of (V5) highest vapor meter reading 310 PPM	10 PPM	23	<0.10
#2 @ 6" depth; 75' W of sample #1; 10' N of N toe of berm. Vapor 65 PPM	nd PPM	7.7	0.12
#3 @ 4"-6" depth; total of nine equal cores taken along N perimeter of spread soil area, No significant vapor.	not required	Sample #3 placed on HOLD pending significant positives in the rest of the series	
#4 @ 8" depth; on N face of berm, 15' N or #1 No significant vapor	not required	72	
#5 @ 6"-8" depth; total of nine equal cores taken along N face of berm just S of spread soil area. No significant vapor	not required	58	0.10
ENTRANCE AREA SERIES			
#6 @ 5" depth; in cntr of spread soil area opened by bulldozer. Taken at highest vapor reading 78 PPM	not required	79	0.10
#7 @ 4"-8" depth; total of nine equal cores taken in an X pattern survey, No significant vapor.	not required	Sample #7 place on HOLD pending significant positives in the rest of the series	


MUD PILES
BENCH CUT ABOVE AIRFIELD
V4
120' max.
30'
#3
#2
#4
#5
V1
V2
V3
V5
V6
V7
BERM
ROAD
UP


2
1
ROAD
UP
MODEL AIRPLANE
RECREATION AREA
0.
#7
#7
#7
#7
#7
#7
#6
#7
#7
50'
25'
ENTRANCE
BRUSH
DOOLITTLE DRIVE

Upper Bench

The soil in this location was reported to have been spread thin inside the berm which encircles the downslope side of the bench. The area over which the soil was spread was indicated by the employee who had performed the bulldozer work. We were told the soil would range from 0" at the north to approximately 8" in depth at the inside toe of the berm. I used a G-1314 to spot check the soil for combustible vapors in several locations in the central portion of this area. Vapor check locations are shown on the site diagram.

Vapor readings were generally low. The highest reading peaked at 310 ppm and fell back to 280 ppm. Soil sample #1 was taken from this material. Additional soil samples were obtained from other areas as requested by Mr. Howell. Sample points are shown on the site diagram for the upper bench.

Entrance Area

A bulldozer was used to cut away material that had been spread on top of the soil from Chevron. The G-1314 was used to spot check the freshly cut soil, but there was only one area with significant vapors. This soil was sampled and designated sample #6. A precautionary X patterned survey of the entire area was taken as well. This composite was designated sample #7.

I have arranged to have the laboratory reports sent directly to you.

I will be happy to answer any questions you or anyone else concerned with the project may have.

Richard C. Blaine

RCB/sjw

McINTOSH LABORATORIES

409 MATHEW STREET SANTA CLARA, CALIFORNIA 95050 (408) 727-6134

Blaine Technical Services
P. O. Box 5745
San Jose, Calif. 95150

Attn: Richard Blaine

Reference: Chevron Alameda
Muni Dump Landfill
BTS/P. O. 8514A
(original to Chevron/San Ramon)

Report Date: 5/23/85
Date Received: 5/21/85
Date Sampled:
By Whom: Client

Lab Number	Sample Identification	
24170	85141A - #5	Soil
24171	85141A - #6	

All Units in mg / Unless Otherwise Noted. *

DETERMINATION	LAB NO. 24170	LAB NO.	LAB NO. 24171
001 Acidity Total ($CaCO_3$)			
003 Alkalinity Total ($CaCO_3$)			
005 Alkalinity Phth ($CaCO_3$)			
100 Aluminum (Al)			
200 Ammonia ( )			
103 Arsenic (As)			
105 Barium (Ba)			
107 Beryllium (Be)			
007 Bicarbonate (HCO_3)			
300 Bio Oxygen Demand (O_2)			
009 Boron (B)			
011 Bromide (Br)			
109 Cadmium (Cd)			
111 Calcium (Ca)			
301 Carbon, Ttl Organic (C)			
012 Carbonate (CO_3)			
303 Chem. Oxygen Demand (O_2)			
013 Chloride (Cl)			
015 Chlorine, Residual (Cl_2)			
305 Chlorophyll ( )			
113 Chromium (Cr^{+6})			
115 Chromium, Total (Cr)			
117 Cobalt (Co)			
017 Color (APHA)			
019 Conductivity Specific (umhos/cm)			
119 Copper (Cu)			
120 Cyanide, Total (CN)			
023 Fluoride (F)			
025 Hardness ($CaCO_3$)			
121 Iron (Fe)			
123 Lead (Pb)	58		79
125 Magnesium (Mg)			
127 Manganese (Mn)			
129 Mercury (Hg)			
131 Molybdenum (Mo)			

DETERMINATION	LAB NO. 24170	LAB NO.	LAB NO. 24171
133 Nickel (Ni)			
201 Nitrate ( )			
203 Nitrite ( )			
205 Nitrogen, Kjeldahl (N)			
207 Nitrogen, Organic (N)			
027 Odor (TON)			
401 Oil & Grease			
029 pH (Std Units)			
403 Phenolics	0.10		0.10
290 Phosphate, Ortho ( )			
211 Phosphorus, Total ( )			
137 Potassium (K)			
139 Selenium (Se)			
031 Silica (SiO_2)			
141 Silver (Ag)			
143 Sodium (Na)			
033 Solids, Dissolved (TDS)			
035 Solids, Settleable (ml/l/h)			
037 Solids, Suspended			
039 Solids, Total			
041 Solids, Volatile			
043 Sulfate (SO_4)			
045 Sulfide (S)			
047 Sulfite (SO_3)			
405 Surfactants (MBAS)			
051 Turbidity (FTU)			
145 Zinc (Zn)			
307 Total Coliform (MPN/100 ml)			
309 Fecal Coliform (MPN/100 ml)			
311 96 Hour Bioassay TL^{50}			
% Survival			

Comments: All units in ug/g

By

McINTOSH LABORATORIES

409 MATHEW STREET SANTA CLARA, CALIFORNIA 95050 (408) 727-6134

Rex MacIntosh

Blaine Technical Services
P. O. Box 5745
San Jose, Calif. 95150

Attn: Richard Blaine

Reference: Chevron Alameda
Muni Dump Landfill
BTS/ P. O. 8514A
(Original to Chevron/San Ramon)

Report Date: 5/23/85
Date Received: 5/21/85
Date Sampled:
By Whom: Client

Lab Number	Sample Identification	
24167	85141A - #1	Soil
24168	85141A - #2	
24169	85141A - #4	

All Units in mg / Unless Otherwise Noted*

DETERMINATION	LAB NO. 24167	LAB NO. 24168	LAB NO. 24169
001 Acidity Total ($CaCO_3$)			
003 Alkalinity Total ($CaCO_3$)			
005 Alkalinity Phth ($CaCO_3$)			
100 Aluminum (Al)			
200 Ammonia ( )			
103 Arsenic (As)			
105 Barium (Ba)			
107 Beryllium (Be)			
007 Bicarbonate (HCO_3)			
300 Bio Oxygen Demand (O_2)			
009 Boron (B)			
011 Bromide (Br)			
109 Cadmium (Cd)			
111 Calcium (Ca)			
301 Carbon, Ttl Organic (C)			
012 Carbonate (CO_3)			
303 Chem. Oxygen Demand (O_2)			
013 Chloride (Cl)			
015 Chlorine, Residual (Cl_2)			
305 Chlorophyll ( )			
113 Chromium (Cr^{+6})			
115 Chromium, Total (Cr)			
117 Cobalt (Co)			
017 Color (APHA)			
019 Conductivity Specific (umhos · cm)			
119 Copper (Cu)			
120 Cyanide, Total (CN)			
023 Fluoride (F)			
025 Hardness ($CaCO_3$)			
121 Iron (Fe)			
123 Lead (Pb) (as rec'd)	20	6.5	72
125 Magnesium (Mg)			
127 Manganese (Mn)			
129 Mercury (Hg)			
131 Molybdenum (Mo)			

DETERMINATION	LAB NO. 24167	LAB NO. 24168	LAB NO. 24169
133 Nickel (Ni)			
201 Nitrate ( )			
203 Nitrite ( )			
205 Nitrogen, Kjeldahl (N)			
207 Nitrogen, Organic (N)			
027 Odor (TON)			
401 Oil & Grease			
029 pH (Std Units)			
403 Phenolics (as rec'd)	<0.10	0.12	<0.10
290 Phosphate, Ortho ( )			
211 Phosphorus, Total ( )			
137 Potassium (K)			
139 Selenium (Se)			
031 Silica (SiO_2)			
141 Silver (Ag)			
143 Sodium (Na)			
033 Solids, Dissolved (TDS)			
035 Solids, Settleable (ml/l/h)			
037 Solids, Suspended			
039 Solids, Total			
041 Solids, Volatile			
043 Sulfate (SO_4)			
045 Sulfide (S)			
047 Sulfite (SO_3)			
405 Surfactants (MBAS)			
051 Turbidity (FTU)			
145 Zinc (Zn)			
307 Total Coliform (MPN/100 ml)			
309 Fecal Coliform (MPN/100 ml)			
311 96 Hour Bioassay TL^{50}			
%Survival			
Lead - dry weight	23	7.7	
Phenolics - dry weight	<0.1	0.14	

Comments: * All units in ug/g

microgram/g

By Rex McIntosh

STONER LABORATORIES

397 MATHEW STREET, SANTA CLARA, CALIFORNIA 95050-3158 (408) 727-4277

May 31, 1985

Chevron USA Inc.
2 Annabel Ln, Suite 200
San Ramon, CA 94583

ATTN: Vicki Hobbs

Following are the results of our analysis for the presence of volatile hydrocarbons due to gasoline in two samples of soil received on May 21, 1985 from Blaine Tech Services.

The samples were examined using the purge and trap technique. Final detection was by gas chromatography using a flame ionization detector and a Carbopack B/3% SP-1500 column. This method allows for the detection of aliphatic hydrocarbons from C_5 through C_{10} and aromatic hydrocarbons through substituted benzenes. Hydrocarbons C_5-C_7, benzene and toluene were calculated by comparing the sample chromatogram to a fresh gasoline standard. Hydrocarbons C_8-C_{10} ethyl benzene, xylenes and other substituted aromatics were calculated by comparing to a standard of gasoline which had been evaporated to 35% of its original weight. The results given below are the sum of hydrocarbons in these two ranges.

nd = none detected

Lab. #	Sample Identification	Results Parts per Million (dry soil basis) Volatile Hydrocarbons Due to Gasoline
	BTS #85141A Chevron @ Alameda Muni Dump	
28836	#1	10.
28837	#2	nd
Detection Limit		2.

Patricia L. Murphy

Patricia L. Murphy

PLM/jd

cc: Richard Blaine
Blaine Tech Services