SIERRA
Environmental Services

October 3, 1994

Mark Miller
Chevron USA Products Company
P.O. Box 5004
San Ramon, CA 94583

Re: Chevron Service Station #9-4463
1801 Park Street
Alameda, California
SES Project #1-385-04

Dear Mr. Miller:

This report presents the results of ground water sampling at Chevron Service Station #9-4463, located at 1801 Park Street in Alameda, California. Four wells, C-2 through C-5 were sampled (Figure 1).

On August 25, 1994, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not present in any of the site wells checked. One well, C-1, was dry. Water level data are shown in Table 1 and ground water elevation contours are included on Figure 1.

The ground water samples were collected on August 25, 1994 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are included. All analyses were performed by Superior Precision Analytical, Inc. of Martinez, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.

REGISTERED PROFESSIONAL ENGINEER
CHRIS J. BRAMER
C 048846
Exp 9/96
CIVIL
STATE OF CALIFORNIA

Sincerely,
Sierra Environmental Services

Argy Leyton
Staff Geologist

Chris J. Bramer
Professional Engineer #C48846

AML/CJB/lmo
38504QM.OC4

cc: Sheldon Nelson, CRTC

Attachments
Figure
Table
SES Standard Operating Procedure
Field Water Sampling Forms
Chain of Custody Document and Laboratory Analytic Reports

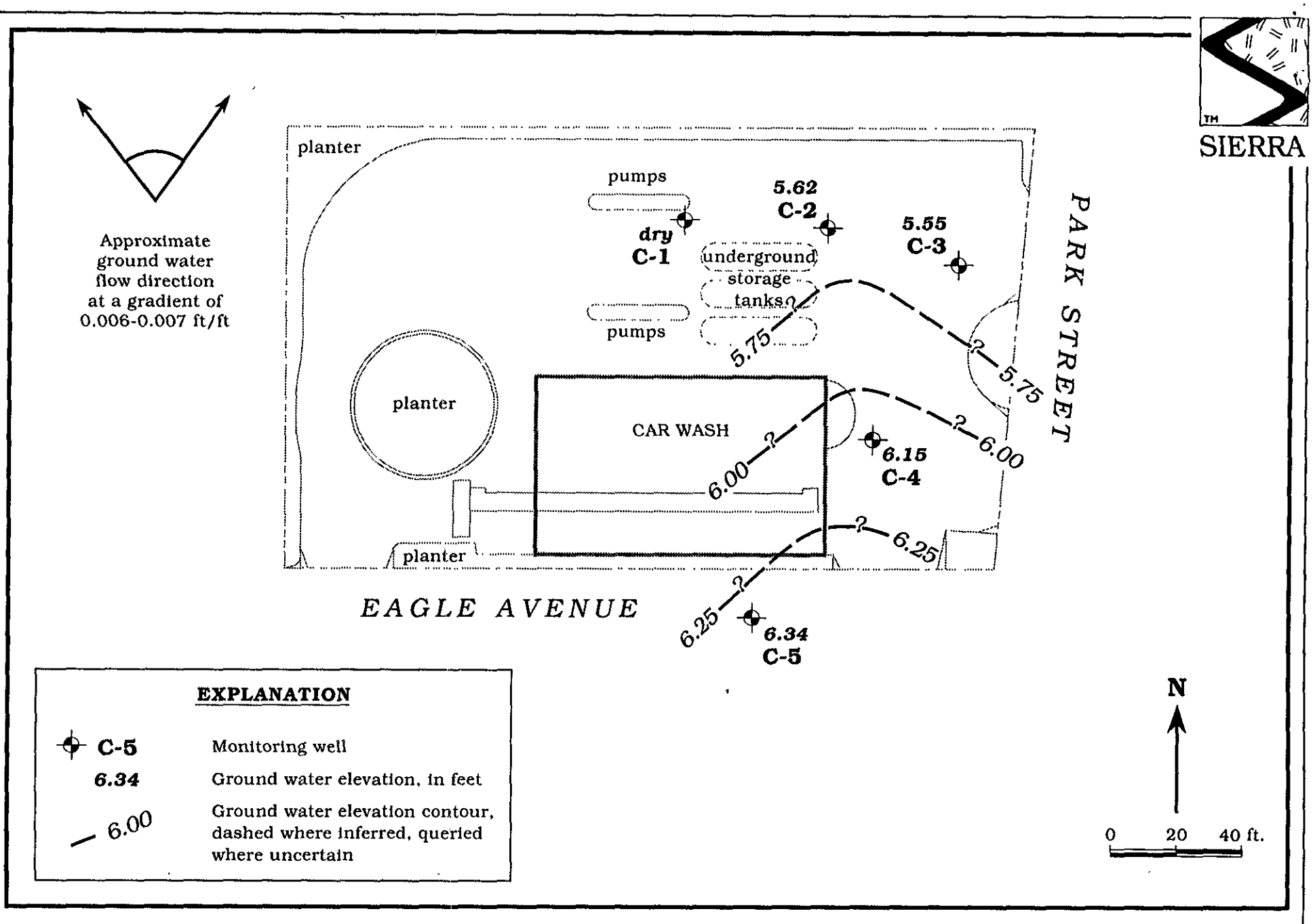

Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - August 25, 1994 - Chevron Service Station #9-4463, 1801 Park Street, Alameda, California

1-385-04 9/30/94

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-4463, 1801 Park Street, Alameda, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
						<----------ppb---------->				
C-1/ 12.93	8/25/94	Dry	---	---	---	---	---	---	---	---
C-2/ 11.96	8/25/94	6.34	5.62	0	8015/8020	<50	<0.5	0.8	<0.5	<0.5
C-3/ 11.70	8/25/94	6.15	5.55	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
C-4/ 12.87	8/25/94	6.72	6.15	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
C-5/ 13.35	8/25/94	7.01	6.34	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
TB-LB	8/25/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5

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Table 1. Water Level Data and Ground Water Analytic Results - Chevron Service Station #9-4463, 1801 Park Street, Alameda, California (continued)

EXPLANATION:

TOC = Top of casing elevation
DTW = Depth to water
GWE = Ground water elevation
msl = Mean sea level
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
--- = Not measured/not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPPH(G)
8020 = EPA Method 8020 for BTEX

NOTES:

Top of casing elevations surveyed on September 16, 1994 by Ronald C. Miller, Professional Engineer #15816.

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SES STANDARD OPERATING PROCEDURE
GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed ±0.5°F, 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with Chevron designated disposable bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank accompanies each sampling set, or 5% trip blanks are included for sets of greater than 20 samples. The trip blank is analyzed for some or all of the same compounds as the ground water samples.

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WATER SAMPLING DATA

Job Name PARIC ST Job Number 1-385-01 Sampler TF

Well Number C-2 Date 8/25/94 Well Diameter 3

Sample Point Location/Description SE OF PUMPS Well Depth (spec.) _____

Depth to Water (static) 6.34 Well Depth (sounded) 12.63

Initial height of water in casing 6.29 Volume 2.31 gallons

Volume to be purged 6.93 gallons

Purged With PUMP Sampled With D. B.

Pumped or Bailed Dry? ___ Yes ✓ No Time ____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1459	1504	2	2	—	—	—	
		3	5	—	—	—	
		2	7	—	—	—	

SAMPLES COLLECTED Time 1508 Total volume purged (gal.) 7

Water color CLEAR Odor NONE

Description of sediments or material in sample: BROWN

Additional Comments: NO DATA DUE TO DEAD BATTERY

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-2	3	1	N/A	HCL	Y	SPA	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name PARIC ST | Job Number 1-321-04 | Sampler [illegible]

Well Number C-3 | Date 8/25/94 | Well Diameter 3

Sample Point Location/Description SOUTH OF PUMPS | Well Depth (spec.) _____

Depth to Water (static) 6.15 | Well Depth (sounded) 13.21

Initial height of water in casing 7.06 | Volume 2.59 gallons

Volume to be purged 7.77 gallons

Purged With PUMP | Sampled With D. B.

Pumped or Bailed Dry? ___ Yes ✓ No | Time ____ After _____ gallons

Water level at sampling _____ | Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1514	1520	3	3	—	—	—	
		2	5	—	—	—	
		3	8	—	—	—	

SAMPLES COLLECTED Time 1525 | Total volume purged (gal.) 8

Water color CLEAR | Odor NONE

Description of sediments or material in sample: BROWN / WEEDS

Additional Comments: NO DATA DUE TO DEAD BATTERY

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-3	3	1	FLD	HCL	Y	CPA	6/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

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WATER SAMPLING DATA

Job Name PARK ST Job Number 1-385-04 Sampler A

Well Number C-4 Date 6/25/94 Well Diameter 3"

Sample Point Location/Description IN FRONT OF CAR WASH Well Depth (spec.) _____

Depth to Water (static) 6.72 Well Depth (sounded) 13.43

Initial height of water in casing 6.71 Volume 2.46 gallons

Volume to be purged 7.39 gallons

Purged With PUMP Sampled With D.B.

Pumped or Bailed Dry? ___ Yes ___ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1530	1537	3	3	—	—	—	
		2	5	—	—	—	
		3	8	—	—	—	

SAMPLES COLLECTED Time 1547 Total volume purged (gal.) 8

Water color CLEAR Odor NONE

Description of sediments or material in sample: BROWN

Additional Comments: NO DATA DUE TO DEAD BATTERY

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-4	3	1	N/F	HCL	Y	SPL	6/1537 CX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size); 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size); 5 = Other _____; 6 = Other _____

SIERRA

WATER SAMPLING DATA

Job Name PARK CT. Job Number 1-385-01 Sampler AA

Well Number C-5 Date 8/25/94 Well Diameter 2"

Sample Point Location/Description 1W EAGLE RD Well Depth (spec.) _____

Depth to Water (static) 7.01 Well Depth (sounded) 17.50

Initial height of water in casing 10.49 Volume 1.71 gallons

Volume to be purged 5.13 gallons

Purged With PUMP Sampled With D.B

Pumped or Bailed Dry? ___ Yes ___ No Time _____ After _____ gallons

Water level at sampling _____ Percent Recovery _____

Formulas/Conversions
r = well radius in ft
h = ht of water col. in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft³
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1551	1556	2	2	—	—	—	
		2	4	—	—	—	
		2	6	—	—	—	

SAMPLES COLLECTED Time 1601 Total volume purged (gal.) 6

Water color CLEAR Odor NONE

Description of sediments or material in sample: BROWN

Additional Comments: NO DATA DUE TO DEAD BATTERY

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
C-5	3	1	N/A	HCL	Y	SPL	8/8270

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);
3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);
5 = Other _____; 6 = Other _____

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

30729

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number: 9-4463
Facility Address: 1801 PARK ST. ALAMEDA
Consultant Project Number: 1-385-04
Consultant Name: SIERRA ENVIRONMENTAL SERVICES
Address: P.O. BOX 2546 MARTINEZ, CA 94553
Project Contact (Name): ED MORALES
(Phone) 370-1280 (Fax Number) 370-7959

Chevron Contact (Name): MARK Miller
(Phone) 842-8134
Laboratory Name: SCA
Laboratory Release Number: 161054C
Samples Collected by (Name): BILL HUSTON
Collection Date: 5/25/94
Signature:

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
TBLB		3	W	G		HCL	Y	✓								Note: Do Not Bill TB-LB Samples
C-2					1505			✓								ANALYZE
C-3					1525			✓								
C-4					1542			✓								
C-5					1601			✓								

Please Initial:
Samples Stored in ice. yes SVC
Appropriate containers yes
Samples preserved yes
Samples without headspace None

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SCS	5/29/94 1140			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

8/26/94

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

Sierra Environmental
Attn: ED MORALES

Project 1-385-04
Reported 09/07/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30729- 1	TBLB	08/25/94	09/02/94	Water
30729- 2	C-2	08/25/94	09/03/94	Water
30729- 3	C-3	08/25/94	09/03/94	Water
30729- 4	C-4	08/25/94	09/03/94	Water
30729- 5	C-5	08/25/94	09/03/94	Water

RESULTS OF ANALYSIS

Laboratory Number:	30729- 1	30729- 2	30729- 3	30729- 4	30729- 5
Gasoline:	ND<50	ND<50	ND<50	ND<50	ND<50
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene:	ND<0.5	0.8	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Total Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit I
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 30729

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	114/116	2%	70-130
Benzene:	104/110	6%	70-130
Toluene:	111/118	6%	70-130
Ethyl Benzene:	89/95	7%	70-130
Total Xylenes:	107/112	5%	70-130

Michael R. Veron
Senior Chemist

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit I
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

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 an older generation of Tanks. Yes, probably replace USTs installed in 1971.

1971 - Bubble 1-5K 2 10K

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

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

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 95150
(408) 723-3974

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

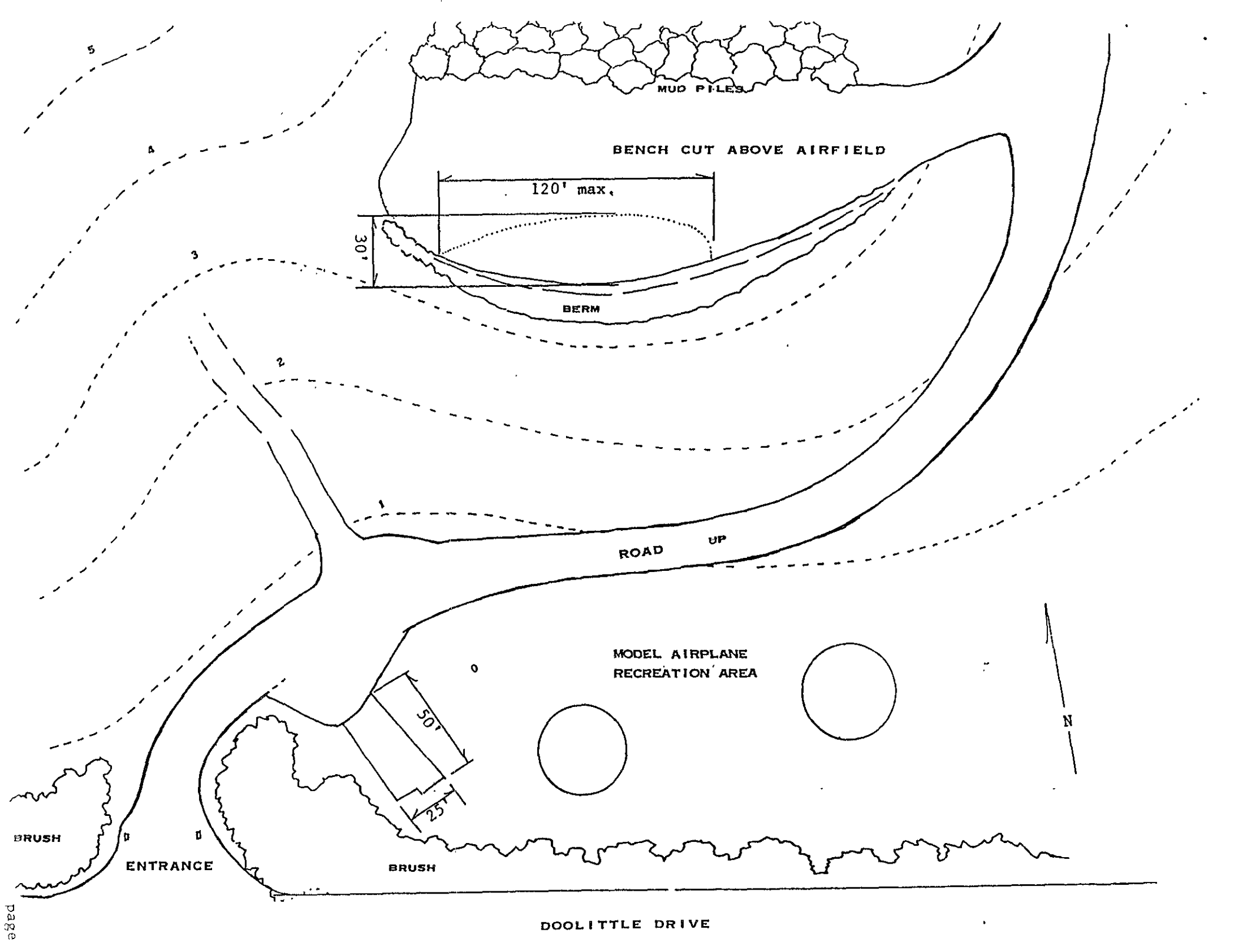
SAMPLING REPORT

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 *

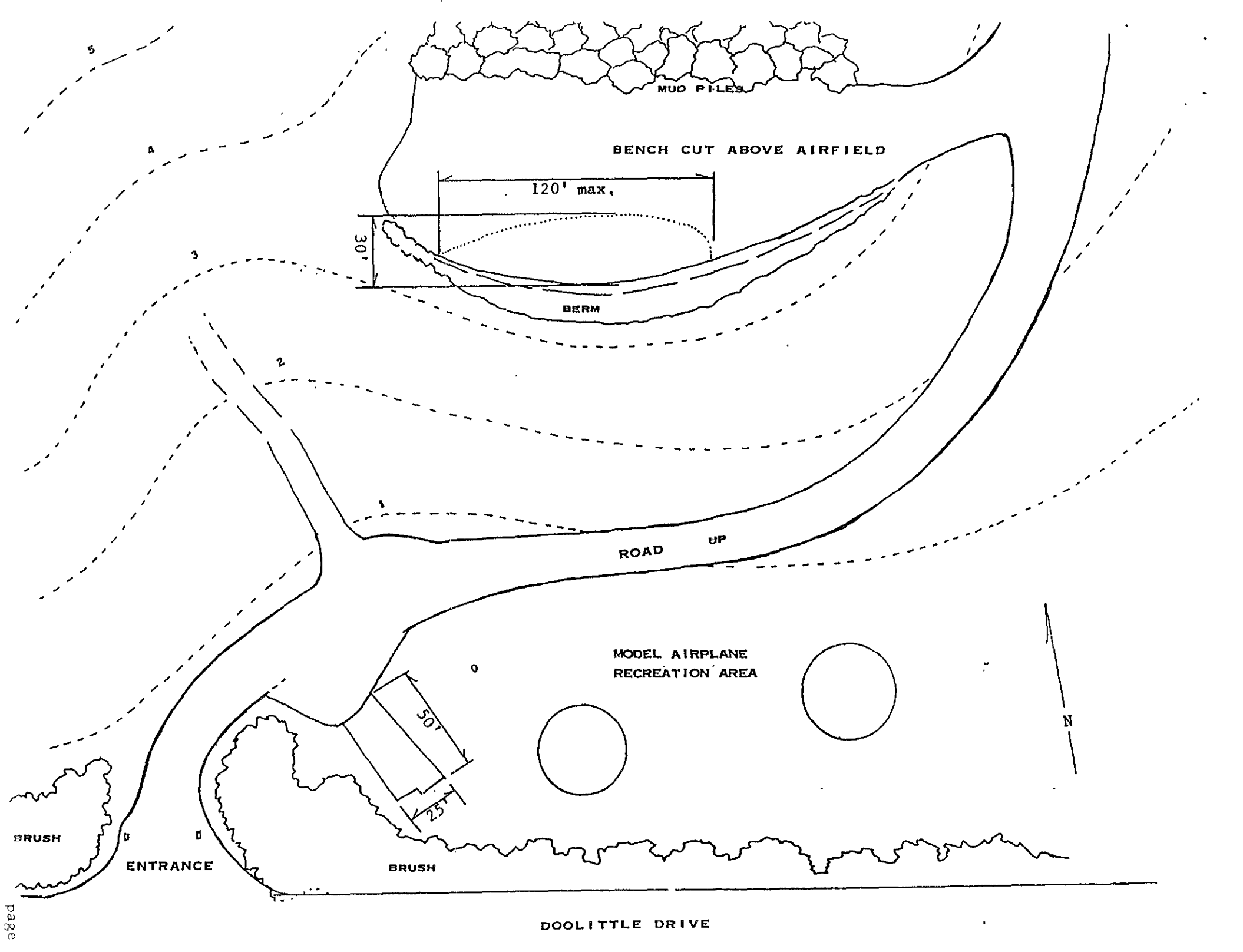
V5 = 310. ppm peak
280. ppm stable
240. ppm test end

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
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 *

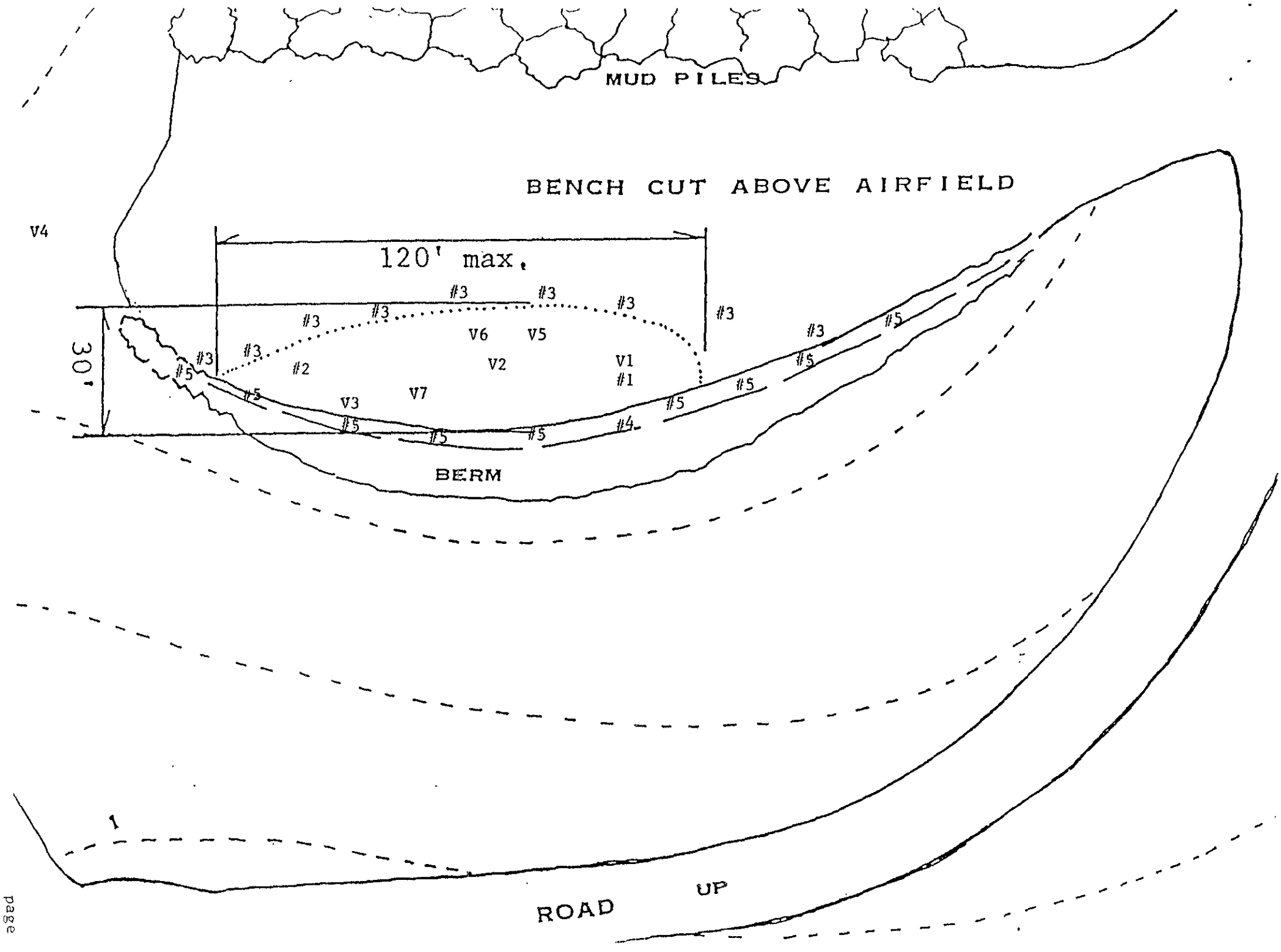
V5 = 310. ppm peak
280. ppm stable
240. ppm test end

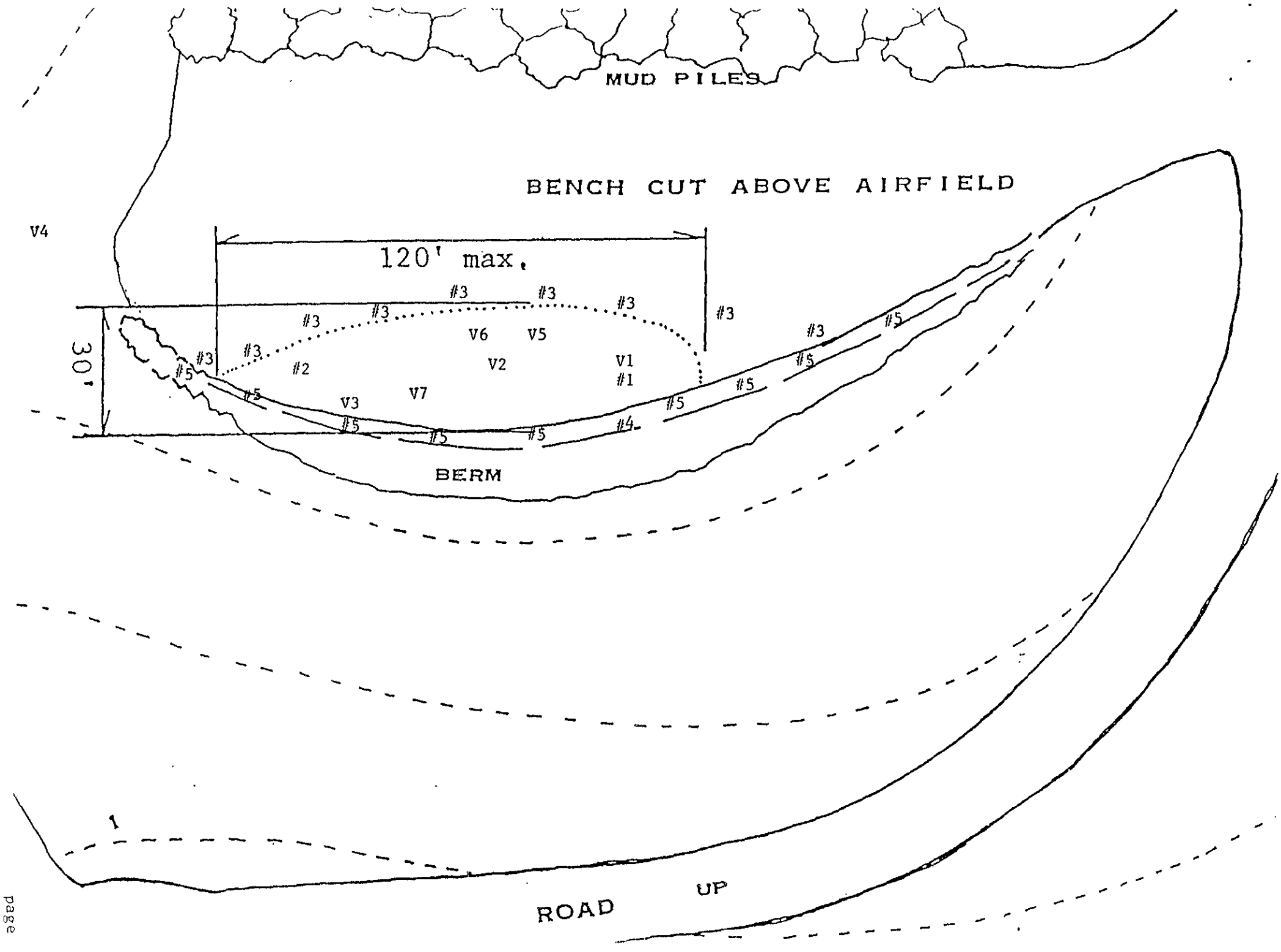
V6 = 30. ppm

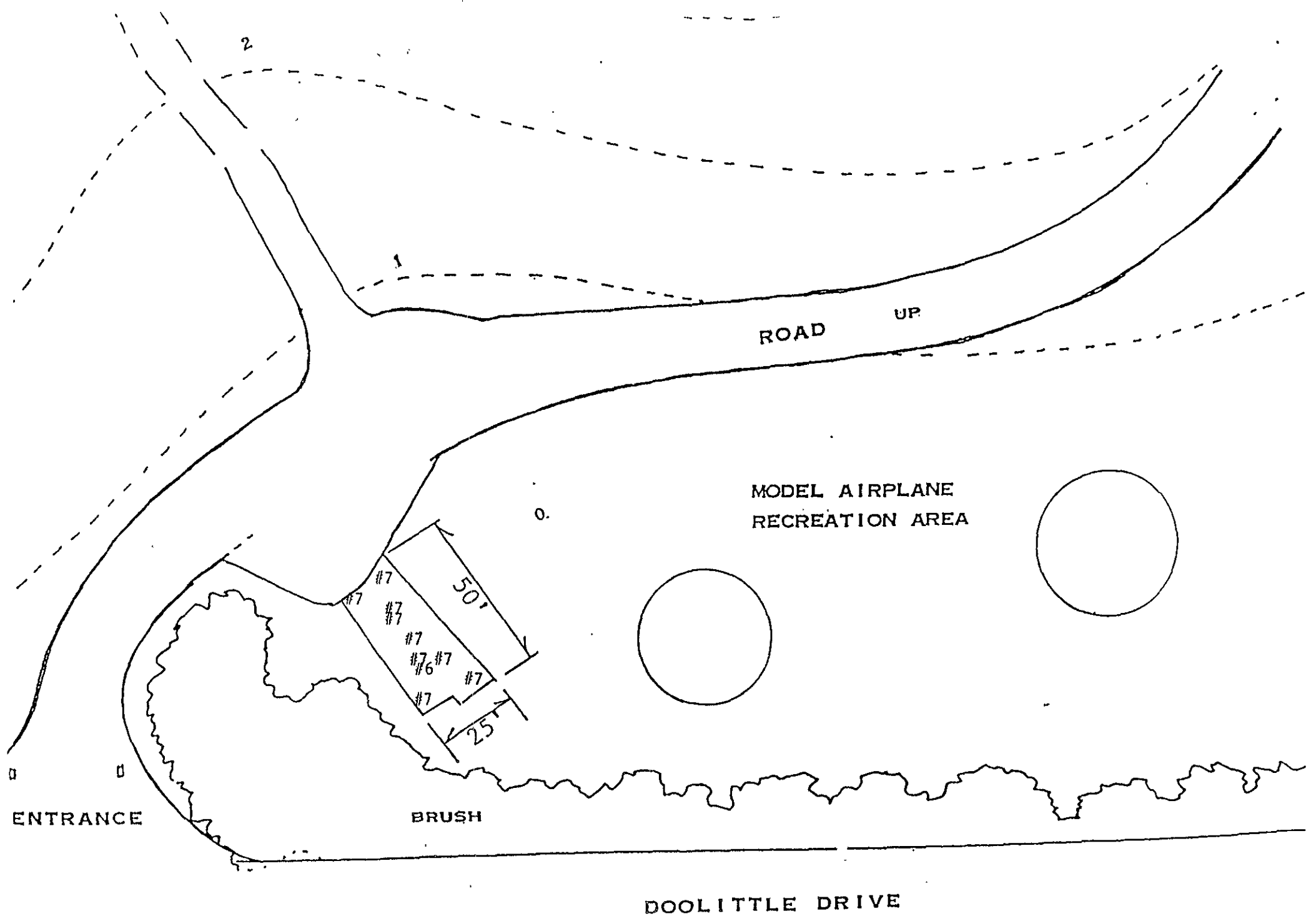
V7 = 65. ppm

* 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
#5
#4
V1
V2
V3
V5
V6
V7
BERM
ROAD
UP


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


2
1
ROAD
UP
MODEL AIRPLANE
RECREATION AREA
50'
25'
#7
#6
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 McIntosh

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 [signature]

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