GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009412
Report Issue Date: September 27, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/18/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009412
Report Issue Date: September 26, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date Sampled		09/11/90			
Date Analyzed		09/21/90			
Client Identification		[redacted]			
GTEL Sample Number		01			
Analyte	Detection Limit, ug/Kg	Concentration, ug/Kg			
Chloromethane	10	<10			
Bromomethane	10	<10			
Vinyl Chloride	10	<10			
Chloroethane	10	<10			
Methylene Chloride	5	<5			
Acetone	100	<100			
Carbon Disulfide	5	<5			
1,1-Dichloroethene	5	<5			
1,1-Dichloroethane	5	<5			
trans-1,2-Dichloroethene	5	<5			
Chloroform	5	<5			
1,2-Dichloroethane	5	<5			
2-Butanone	100	<100			
1,1,1-Trichloroethane	5	<5			
Carbon Tetrachloride	5	<5			
Vinyl Acetate	50	<50			
Bromodichloromethane	5	<5			
1,2-Dichloropropane	5	<5			
cis-1,3-Dichloropropene	5	<5			
Trichloroethene	5	<5			
Dibromochloromethane	5	<5			
1,1,2-Trichloroethane	5	<5			
Benzene	5	[redacted]			
trans-1,3-Dichloropropene	5	<5			
2-Chloroethylvinylether	10	<10			

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009412
Report Issue Date: September 26, 1990

Table 1 (continued)

ANALYTICAL RESULTS

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date Sampled		09/11/90			
Date Analyzed		09/21/90			
Client Identification		WOM			
GTEL Sample Number		01			
Analyte	Detection Limit,ug/Kg	Concentration, ug/Kg			
Bromoform	5	<5			
4-Methyl-2-Pentanone	50	<50			
2-Hexanone	50	<50			
Tetrachloroethene	5	<5			
1,1,2,2-Tetrachloroethane	5	<5			
Toluene	5	7.5			
Chlorobenzene	5	<5			
Ethylbenzene	5	6.4			
Styrene	5	<5			
1,2-Dichlorobenzene	5	7.8			
1,3-Dichlorobenzene	5	<5			
1,4-Dichlorobenzene	5	<5			
Xylene (total)	5	22			
Trichlorofluoromethane	5	<5			

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009412
Report Issue Date: September 26, 1990

QA Conformance Summary

Purgeable Hydrocarbons in Soil
EPA Method 8240

1.0 Blanks

Zero of 39 target compounds found in Reagent water blank and as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for _ of 8 QC check compounds in the aqueous QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Recovery limits were met for all three surrogate compounds for all samples as shown in Tables 4a, 4b, and 4c.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Accuracy:

Percent recovery limits were met for 10 of 10 compounds in the MS and MSD as shown in Table 5.

4.2 Precision:

Relative Percent Difference (RPD) criteria were met for 5 of 5 compounds in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT WATER BLANK DATA

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/19/90

Analyte	Observed Result, ug/Kg
Chloromethane	ND
Bromomethane	ND
Vinyl Chloride	ND
Chloroethane	ND
Methylene Chloride	ND
Acetone	ND
Carbon Disulfide	ND
1,1-Dichloroethene	ND
1,1-Dichloroethane	ND
trans-1,2-Dichloroethene	ND
Chloroform	ND
1,2-Dichloroethane	ND
2-Butanone	ND
1,1,1-Trichloroethane	ND
Carbon Tetrachloride	ND
Vinyl Acetate	ND
Bromodichloromethane	ND
1,2-Dichloropropane	ND
cis-1,3-Dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-Trichloroethane	ND
Benzene	ND
trans-1,3-Dichloropropene	ND
2-Chloroethylvinylether	ND

Table 2 (continued)

REAGENT WATER BLANK DATA

Purgeable Hydrocarbons in Soil
EPA Method 8240

Analyte	Observed Result, ug/Kg
Bromoform	ND
4-Methyl-2-Pentanone	ND
2-Hexanone	ND
Tetrachloroethene	ND
1,1,2,2-Tetrachloroethane	ND
Toluene	ND
Chlorobenzene	ND
Ethylbenzene	ND
Styrene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Xylene (total)	ND
Trichlorofluoromethane	ND

ND = Not detected above the statistical detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/06/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Trichloroethylene	50	57	114	60-140
Carbon Tetrachloride	50	58	116	80-120
1,1,1-Trichloroethane	50	62	124	60-140
1,1,2-Trichloroethane	50	58	116	60-140
Vinyl Chloride	50	53	100	60-140
Benzene	50	58	116	60-140
1,1-Dichloroethane	50	60	120	60-140
Chlorobenzene	50	56	112	60-140

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Hydrocarbons in Soil
EPA Method 8240

Analyte	Lot Number	Source
Trichloroethylene	LA21868	Purgeable A Supelco
Carbon Tetrachloride	LA21868	Purgeable A Supelco
1,1,1-Trichloroethane	LA21150	Purgeable B Supelco
1,1,2-Trichloroethane	LA21150	Purgeable B Supelco
Vinyl Chloride	LA21338	Purgeable C Supelco
Benzene	LA21150	Purgeable B Supelco
1,1-Dichloroethane	LA21868	Purgeable A Supelco
Chlorobenzene	LA21868	Purgeable A Supelco

Table 4a

SURROGATE COMPOUND RECOVERY

d8-Toluene

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 81 - 117 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	50	100
01	50	52	102
MS	50	53	106
MSD	50	54	108

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4b

SURROGATE COMPOUND RECOVERY

Bromofluorobenzene

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 74 - 121 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	48	96
01	50	45	90
MS	50	46	92
MSD	50	47	94

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4c

SURROGATE COMPOUND RECOVERY

d4-1,2-Dichloroethane

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 70 - 121 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	49	98
01	50	60	120
MS	50	58	116
MSD	50	60	120

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
RECOVERY AND RELATIVE PERCENT DEVIATION (RPD)
REPORT

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/21/90
Sample Spiked: C009474-01

Units: ug/Kg

Analyte	Sample Result	Amount Added	MS Result	MSD Result
1,1-Dichloroethene	ND	50	61	61
Trichloroethene	ND	50	45	50
Benzene	ND	50	58	62
Toluene	ND	50	56	60
Chlorobenzene	ND	50	50	56

60

Analyte	MS, % Recovery	MSD, % Recovery	RPD, %	Acceptability Limits[1]	
				Maximum RPD, %	% Recovery
1,1-Dichloroethene	122	122	0	22	59-172
Trichloroethene	90	100	10	24	62-137
Benzene	116	124	7	21	66-142
Toluene	112	120	7	21	59-139
Chlorobenzene	100	112	11	21	60-133

ND = Not Detected above the statistical detection limit
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

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

Chevron Facility Number 9-1991 C009201
Consultant Release Number
Consultant Project Number 203-175-3322
Consultant Name Groundwater Technology
Address 1040 Pike Lane Concord Ste D
Fax Number
Project Contact (Name) Fred Hayden / Joe Romaya
(Phone)

Chevron Contact (Name) Cynthia Wong
(Phone) 842 9103
Laboratory Name GTEL
Contract Number 4146670
Samples Collected by (Name) Fred Hayden
Collection Date
Signature

C-1

Newt C009412

Analyses To Be Performed

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	lead	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead Titrate DHS-Luft	EDB DHS-AB 1803	8 samples		HOLD	Remarks
SB1-N	Composite		S	C			X		X	X	X	X	X					Please use ND level at 1 PPM
SB1-S	2 soil sample		S	C														
SB2-MW	Composite		S	C														
SB2-BES	3 soil sample		S	C														per Joe R. run both 602 not 624
SB2-BE	Composite		S	C														
SB2-BW	3 soil sample		S	C														
SAN	Composite		S	C														
SAS	3 soil sample		S	C														
Trench-N			S	C														
Trench-S			S	C														
TWM		9	S	C				X		X	X	X					X	Hold

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
	GTI	9/11/90 1235		GTI	9/11/90 12:15	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
	GTI	9/11/90 1301				
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	10 Days
			Jamie Davis		9-11-90 15:57	

Jamie Davis 9-18-90 12:15

GTEL
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LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
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(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009473A
Report Issue Date: September 25, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/18/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009473
Report Issue Date: September 25, 1990

Table 1

ANALYTICAL RESULTS

Total Lead in Soil by ICP
EPA Method 6010[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg [2]
GTEL No.	Client ID				
C009473-1	ST1	09/18/90	09/19/90	09/20/90	14
C009473-2	[redacted]	09/18/90	09/19/90	09/20/90	22

1 = Extraction by EPA Method 3050
2 = Method detection limit = 5 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009473
Report Issue Date: September 25, 1990

QA Conformance Summary

Total Lead in Soil by ICP
EPA Method 6010

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 If applicable, the control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for 1 of 1 elements in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference criterion was met for the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

METHOD BLANK DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/20/90

Analyte	Concentration, mg/Kg
Total Lead	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/20/90

Standard Number	Concentration, mg/L
1	10

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009473
Report Issue Date: September 25, 1990

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/20/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	5.27	105	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	6.01	120	80 - 120

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Lead in Soil by ICP
EPA Method 6010

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	2-57-VS	SPEX
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	3-83-VS	SPEX

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009473
Report Issue Date: September 25, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/20/90
Sample Spiked: C009457-01
Client ID: P1-3-18
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %
Total Lead	59.7	6	53.7	50	108	80 - 120

<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/20/90
Sample Used: C009457-01
Client ID: P1-3-18
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Total Lead	59.7	59.8	0	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

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

Chevron Facility Number 9-6991
Consultant Release Number
Consultant Project Number 203 175 3322
Consultant Name Groundwater Technology
Address 4080 Pike Lane, Concord CA
Fax Number
Project Contact (Name) Fred Hayden / Joe Ramage
(Phone) (415) 631-2387

Chevron Contact (Name) Cynthia Wong
(Phone) 842-9103
Laboratory Name
Contract Number
Samples Collected by (Name) Fred Hayden
Collection Date
Signature

Sample Number	Lab Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline - Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr: 802	Arom. Volatiles - BTXE Soil: 8240/Wtr: 824	Total Lead DHS-LUFT	EDB DHS-AB 1803
TE		1	S	G	800		X		X		X			
TW	001	1	S	G	815		X	X			X			
STI	002	1	S	C	910	01	X		X		X		X	
SWO1	003	1	S	C	900	02	X		X		X		X	
							X							
WOWIS		1	S	G			X		X	X		X		
WOEIS		1	S	G			X		X	X		X		
WOMIS		1	S	G			X		X	X		X		
							X							
WOWATI		1	W			HCL	X		X	X		X		
WOWAT2		1	W			HCL	X		X	X		X		

Analyses To Be Performed

8240 a-1

Turnaround will be along 8240 work.

Remarks

Please use Method Detect Limit of 1 ppm-soil for TPH as D & G

Rq-9-19-90 24hr.

*Sample TE run TPH-D only (no TPH-G)

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	GTI	9/18/90 12PM			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) [signature]		9-18-90

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

GTEL
ENVIRONMENTAL
LABORATORIES, INC.
Southwest Region
20000/300 Mariner Avenue
Torrance, CA 90503

Project Number: SFB175020476
Contract Number: N46CWCO2449X
Facility Number: 9-6991
Work Order Number: T009371
Report Issue Date: Sept. 20, 1990

SEP 2[illegible]

Mr. Joe Ramage
Groundwater Technology, Inc.
4080 Pike Lane
Concord, CA 94520

Dear Mr. Ramage

Attached please find the analytical results for the samples received by GTEL on 9-18-90.

GTEL maintains a formal quality assurance program to ensure the integrity of the analytical results. All quality assurance criteria were achieved during the analysis unless otherwise noted in the footnotes to the analytical report.

The specific analytical methods used and cited in this report are approved by state and federal regulatory agencies. GTEL is certified for the analysis reported herein by the California State Department of Health Services under certificate number E723.

If you have any questions regarding this analysis, or if we may service any additional analytical needs, please give us a call.

Sincerely,
GTEL Environmental Laboratories, Inc.

Rebecca Hsu-Chou

Rebecca Hsu-Chou, Ph.D.
Laboratory Director

Table 1
ANALYTICAL RESULTS
Volatile Organics in Soil
Modified EPA Method 8240

GTEL Sample Number		1A	2A	3A	
Client Identification		WOW15	WOE15	WOM15	
Date Sampled		9-18-90	9-18-90	9-18-90	
Date Analyzed		9-19-90	9-19-90	9-19-90	
Analyte	Detection Limit, ug/Kg	Concentration, ug/Kg			
Chloromethane	500	500 U	500 U	500 U	
Bromomethane	500	500 U	500 U	500 U	
Vinyl Chloride	500	500 U	500 U	500 U	
Chloroethane	500	500 U	500 U	500 U	
Methylene Chloride	250	250 U	250 U	250 U	
Acetone	5000	5000 U	5000 U	5000 U	
Carbon Disulfide	250	250 U	250 U	250 U	
1,1-Dichloroethene	250	250 U	250 U	250 U	
1,1-Dichloroethane	250	250 U	250 U	250 U	
trans-1,2-Dichloroethene	250	250 U	250 U	250 U	
Chloroform	250	250 U	250 U	250 U	
1,2-Dichloroethane	250	250 U	250 U	250 U	
2-Butanone	5000	5000 U	5000 U	5000 U	
1,1,1-Trichloroethane	250	250 U	250 U	250 U	
Carbon Tetrachloride	250	250 U	250 U	250 U	
Vinyl Acetate	2500	2500 U	2500 U	2500 U	
Bromodichloromethane	250	250 U	250 U	250 U	
1,2-Dichloropropane	250	250 U	250 U	250 U	
cis-1,3-Dichloropropene	250	250 U	250 U	250 U	
Trichloroethene	250	250 U	250 U	250 U	
Dibromochloromethane	250	250 U	250 U	250 U	
1,1,2-Trichloroethane	250	250 U	250 U	250 U	
Benzene	250	250 U	250 U	250 U	
trans-1,3-Dichloropropene	250	250 U	250 U	250 U	
2-Chloroethylvinylether	250	250 U	250 U	250 U	

Table 1 continued on page 3

Project Number: SFB175020476
Contract Number: N46CWCO2449X
Facility Number: 9-6991
Work Order Number: T009371
Report Issue Date: Sept. 20, 1990

Table 1 con't

ANALYTICAL RESULTS

Volatile Organics in Soil
Modified EPA Method 8240

GTEL Sample Number		1A	2A	3A	
Client Identification		WOW15	WOE15	WOM15	
Date Sampled		9-18-90	9-18-90	9-18-90	
Date Analyzed		9-19-90	9-19-90	9-19-90	
Analyte	Detection Limit	Concentration, ug/Kg			
Bromoform	250	250 U	250 U	250 U	
4-Methyl-2-Pentanone	2500	2500 U	2500 U	2500 U	
2-Hexanone	2500	2500 U	2500 U	2500 U	
Tetrachloroethene	250	250 U	250 U	250 U	
1,1,2,2-Tetrachloroethane	250	250 U	250 U	250 U	
Toluene	250	250 U	250 U	250 U	
Chlorobenzene	250	250 U	250 U	250 U	
Ethylbenzene	250	250 U	250 U	250 U	
Styrene	250	250 U	250 U	250 U	
1,2-Dichlorobenzene	250	250 U	250 U	250 U	
1,3-Dichlorobenzene	250	250 U	250 U	250 U	
1,4-Dichlorobenzene	250	250 U	250 U	250 U	
Xylene (total)	250	250 U	250 U	250 U	
Trichlorofluoromethane	250	250 U	250 U	250 U	
Dilution Factor Multiplier		1	1	1	

QA Conformance Summary

Volatile Organics in Soil
Modified EPA Method 8240

1.0 Blanks

0 of 39 target compounds found in Reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 7 of 7 QC check compounds in the aqueous QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Recovery limits were met for all three surrogate compounds for all samples as shown in Tables 4a, 4b, and 4c.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Accuracy:

Percent recovery limits were met for 5 of 5 compounds in the MS and MSD as shown in Table 5.

4.2 Precision:

Relative Percent Difference (RPD) criteria were met for 4 of 5 compounds in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Volatile Organics in Soil
Modified EPA Method 8240

Date of Analysis: 9-19-90

Analyte	Observed Result, ug/Kg
Chloromethane	ND
Bromomethane	ND
Vinyl Chloride	ND
Chloroethane	ND
Methylene Chloride	ND
Acetone	ND
Carbon Disulfide	ND
1,1-Dichloroethene	ND
1,1-Dichloroethane	ND
trans-1,2-Dichloroethene	ND
Chloroform	ND
1,2-Dichloroethane	ND
2-Butanone	ND
1,1,1-Trichloroethane	ND
Carbon Tetrachloride	ND
Vinyl Acetate	ND
Bromodichloromethane	ND
1,2-Dichloropropane	ND
cis-1,3-Dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-Trichloroethane	ND
Benzene	ND
trans-1,3-Dichloropropene	ND
2-Chloroethylvinylether	ND

Table 2 continued on page 6

Table 2 con't

REAGENT BLANK DATA

Volatile Organics in Soil
Modified EPA Method 8240

Analyte	Observed Result, ug/Kg
Bromoform	ND
4-Methyl-2-Pentanone	ND
2-Hexanone	ND
Tetrachloroethene	ND
1,1,2,2-Tetrachloroethane	ND
Toluene	ND
Chlorobenzene	ND
Ethylbenzene	ND
Styrene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Xylene (total)	ND
Trichlorofluoromethane	ND

ND = Not detected above the statistical detection limit.

Table 3
INDEPENDENT QC CHECK SAMPLE RESULTS
Volatile Organics in Soil
Modified EPA Method 8240

Date of Analysis: 9-14-90

Analyte	Expected Result, ug/Kg	Observed Result, ug/Kg	Recovery, %	Acceptability Limits, %
Trichloroethylene	100	85.8	85.8	60-140
Carbon Tetrachloride	100	97.9	97.9	60-140
1,1,1-Trichloroethane	100	82.5	82.5	60-140
1,2- Dichloroethane	100	83.7	83.7	60-140
Benzene	100	75.6	75.6	60-140
1,1-Dichloroethylene	100	74.4	74.4	60-140
1,2-Dichlorobenzene	100	91.6	91.6	60-140

Table 3a
INDEPENDENT QC CHECK SAMPLE SOURCE
Volatile Organics in Soil
EPA Method 8240

Analyte	Lot Number	Source
Trichloroethylene	B0232	Ultra Scientific
Carbon Tetrachloride	B0232	Ultra Scientific
1,1.1-Trichloroethane	B0232	Ultra Scientific
1,2-Dichloroethane	B0232	Ultra Scientific
Vinyl Chloride	B0232	Ultra Scientific
Benzene	B0232	Ultra Scientific
1,2-Dichloroethylene	B0232	Ultra Scientific
Dichlorobenzene	B0232	Ultra Scientific

Table 4a

SURROGATE COMPOUND RECOVERY

d4-1,2-Dichloroethane

Volatile Organics in Soil
Modified EPA Method 8240

Recovery Acceptability Limits[1]: 70-121 %

GTEL No.	Expected Result, ug/Kg	Surrogate Result, ug/Kg	Surrogate Recovery, %
Blank	50	53.3	107
1A	50	57.3	115
2A	50	47.5	95.0
3A	50	54.3	109
MS	50	42.4	84.7
MSD	50	41.3	82.7

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4b

SURROGATE COMPOUND RECOVERY

d8-Toluene

Volatile Organics in Soil
Modified EPA Method 8240

Recovery Acceptability Limits[1]: 81 - 117 %

GTEL No.	Expected Result, ug/Kg	Surrogate Result, ug/Kg	Surrogate Recovery, %
Blank	50	51.3	103
1A	50	58.1	116
2A	50	50.5	101
3A	50	56.1	112
MS	50	43.0	86.1
MSD	50	43.4	86.7

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4c

SURROGATE COMPOUND RECOVERY

Bromofluorobenzene

Volatile Organics in Soil
Modified EPA Method 8240

Recovery Acceptability Limits[1]: 74 - 121 %

GTEL No.	Expected Result, ug/Kg	Surrogate Result, ug/Kg	Surrogate Recovery, %
Blank	50	51.4	103
1A	50	60.1	120
2A	50	50.8	102
3A	50	55.6	111
MS	50	42.4	84.7
MSD	50	45.6	91.1

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Project Number: SFB175020476
Contract Number: N46CWCO2449X
Facility Number: 9-6991
Work Order Number: T009371
Report Issue Date: Sept. 20, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
RECOVERY AND RELATIVE PERCENT DEVIATION (RPD)
REPORT

Volatile Organics in Soil
Modified EPA Method 8240

Date of Analysis: 9-13-90
Sample Spiked: Soil
Reference: T009195
Units: ug/Kg

Analyte	Sample Result	Amount Added	MS Result	MSD Result
1,1-Dichloroethene	ND	50.0	29.7	32.8
Trichloroethene	ND	50.0	35.8	40.6
Benzene	ND	50.0	24.3	42.8
Toluene	ND	50.0	36.8	43.6
Chlorobenzene	ND	50.0	37.3	43.7

Analyte	MS, % Recovery	MSD, % Recovery	RPD, %	Acceptability Limits[1]	
				Maximum RPD, %	% Recovery
1,1-Dichloroethene	59.4	65.6	9.92	22	59-172
Trichloroethene	71.6	81.2	12.6	24	62-137
Benzene	68.6	85.6	22.0	21	60-133
Toluene	73.6	87.2	16.9	21	59-139
Chlorobenzene	74.6	87.4	15.8	21	66-142

ND = Not Detected above the statistical detection limit
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

SFB-175-0204-76

Chain-of-Custody Record

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

Chevron Facility Number: 9-6991
Consultant Release Number:
Consultant Project Number: 203 175 3322
Consultant Name: Groundwater Technology
Address: 4080 Pike Lane, Concord CA
Fax Number:
Project Contact (Name): Fred Hayden / Joe Ramage
(Phone): (415) 631-2387

Chevron Contact (Name): Cynthia Wine
(Phone): 842-9100
Laboratory Name:
Contract Number:
Samples Collected by (Name): Fred Hayden
Collection Date:
Signature: Fred Hayden

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803			
TE		1	S	G	800		X		X		X	[redacted]					
TW		1	S	G	815		X	X			X						
TT		1	S	C	910		X		X		X						
SWO1		1	S	C	1000		X		X		X						
	TC-C9-371						X										
OWIS	1A	1	S	G			X		X	X		X					
DFIS	2A	1	S	G			X		X	X		X					
OMIS	3A	1	S	G			X		X	X		X					
							X					[redacted]					
OWAT1		1	W			HCL	X		X	X							
OWAT2		1	W			HCL	X		X	X							

Analyses To Be Performed

Jovance will be doing 8240 work.

9/18 sent to Jovance Lab KSC.

Remarks:
Please use Method Detect Limit of 1 ppm-soil for TPH-D & G
*Sample TE run TPH-D only (no TPH-G)
TT 9/19/90

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Fred Hayden	GT1	9/18/90 12PM			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature) Jamie Davis		9-18-90 12:05

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

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009393
Report Issue Date: September 20, 1990

Joe Ramage
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Ramage:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/17/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6891
Work Order Number: C009393
Report Issue Date: September 20, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01			
Client Identification		Composite: SS-1-4			
Date Sampled		09/14/90			
Date Extracted		09/17/90			
Date Analyzed		09/17/90			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.02			
Toluene	0.005	0.04			
Ethylbenzene	0.005	0.06			
Xylene (total)	0.015	0.7			
TPH as Gasoline	10	18			

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/17/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/17/90
MeOH Lot No: AX 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009393
Report Issue Date: September 20, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/14/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	53	106	85-115
Toluene	50	47	94	85-115
Ethylbenzene	50	47	94	85-115
Xylene (total)	150	153	102	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA14092	Supelco
Toluene	LA14092	Supelco
Ethylbenzene	LA14092	Supelco
Xylene (total)	LA14092	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	198	99
MeOH Blank	200	164	82
01	200	244	122
MS	200	131	66
MSD	200	139	69

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009393
Report Issue Date: September 20, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/17/90

Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	ND	2.86	2.27	79	2.34	82
Toluene	ND	2.86	2.07	72	2.13	74
Ethylbenzene	ND	2.86	2.11	74	2.17	76
Xylene (total)	ND	8.58	6.38	74	6.54	75

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	4	30	50 - 112
Toluene	3	30	50 - 108
Ethylbenzene	3	30	50 - 113
Xylene (total)	1	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Chain-of-Custody Record

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

Chevron Facility Number: 9-6991
Consultant Release Number: 4146671
Consultant Project Number: 203-175-3322
Consultant Name: GTI
Address: 4080 Pike ~~Lane~~/Ane, Ste D, Concord, CA
Fax Number:
Project Contact (Name): Joe Ramage / Fred Hayden
(Phone): (415) 671-2387

Chevron Contact (Name): C. Wong
(Phone): 842-9103
Laboratory Name: GTEL
Contract Number: 4146670
Samples Collected by (Name): Randy Ruiz
Collection Date: 9/14/90
Signature: Randy Ruiz

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803				Remarks
SS-1		1	S		3:45		X	X			X							
SS-2	composite	1	S		3:55													contractor put about 15 gal water on pile at this loc.
SS-3		1	S		4:05													
SS-4		1	S		4:15													
~~SS comp.~~		1																

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
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
			Jamie Davis		9-17 8:45 am

Turn Around Time (Circle Choice)
~~24 Hrs~~
48 Hrs
5 Days
10 Days

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-02040.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 96991
Work Order Number: C009266, C009267, C009269
Report Issue Date: September 19, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/11/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-173-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009266
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01	02	03	04
Client Identification		SB1-N SB1-S	SB2-AW SB2-AE	SB2-BE SB2-BW	SAN SAS
Date Sampled		09/11/90	09/11/90	09/11/90	09/11/90
Date Extracted		09/12/90	09/12/90	09/12/90	09/12/90
Date Analyzed		09/12/90	09/12/90	09/12/90	09/12/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.01	0.4	0.09	<0.005
Toluene	0.005	0.02	0.4	0.3	0.01
Ethylbenzene	0.005	0.2	2.7	1	0.01
Xylene (total)	0.015	0.7	3	6	0.1
TPH as Gasoline	10	16	140	72	<10

GTEL Sample Number		05	06		
Client Identification		Trench-N	Trench-S		
Date Sampled		09/11/90	09/11/90		
Date Extracted		09/12/90	09/12/90		
Date Analyzed		09/12/90	09/12/90		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	0.8		
Toluene	0.005	0.01	2		
Ethylbenzene	0.005	<0.005	0.5		
Xylene (total)	0.015	0.05	3		
TPH as Gasoline	10	<10	20		

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-173-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009266
Report Issue Date: September 14, 1990

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/12/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/12/90
MeOH Lot No: AX659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-173-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009266
Report Issue Date: September 14, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/07/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	49	98	85-115
Toluene	50	49	98	85-115
Ethylbenzene	50	50	100	85-115
Xylene (total)	150	159	106	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA18042	Supelco
Toluene	LA18042	Supelco
Ethylbenzene	LA18042	Supelco
Xylene (total)	LA18042	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	230	115
MeOH Blank	200	211	106
01	200	177	88
02	200	205	102
03	200	177	89
04	200	203	101
05	200	160	80
06	200	193	96
MS	200	173	87
MSD	200	162	81

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-173-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009266
Report Issue Date: September 14, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/11/90

Client ID: BH1-20
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	<0.005	2.86	2.22	78	2.32	81
Toluene	<0.005	2.86	2.21	77	2.36	83
Ethylbenzene	<0.005	2.86	2.23	78	2.35	82
Xylene (total)	<0.015	8.58	6.74	79	7.04	82

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	4	30	50 - 112
Toluene	8	30	50 - 108
Ethylbenzene	5	30	50 - 113
Xylene (total)	4	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009267
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[2]
GTEL No.	Client ID				
01	SB-1-N & S	09/11/90	09/12/90	09/13/90	<10
02	SB-2-AW & AE	09/11/90	09/12/90	09/13/90	<10
03	SB-2-BE & BW	09/11/90	09/12/90	09/13/90	<10
04	SAN & SAS	09/11/90	09/12/90	09/13/90	<10
05	Trench - N	09/11/90	09/12/90	09/13/90	<10
06	Trench - S	09/11/90	09/12/90	09/13/90	<10

1 = Extraction by EPA Method 3550
2 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

1.0 Blanks

The Reagent blank was below the detection limit as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for diesel in the aqueous independent QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for diesel in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for diesel in the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90

Analyte	Concentration, mg/Kg
Diesel	<10

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009267
Report Issue Date: September 14, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/11/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Diesel	1294	1122	87	80 - 120

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Analyte	Source
Diesel	SHELL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, mg/Kg	Surrogate Result, mg/Kg	Surrogate Recovery, %
Blank	100	92	92
01	100	103	103
02	100	98	98
03	100	87	97
04	100	96	96
05	100	96	96
06	100	97	97
MS	100	95	95

MS = Matrix Spike
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90
Sample Spiked: C009267-01
Client ID: SB1-N; SB1-S
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, %[1]
Diesel	<10	500	482	96	63 - 127

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.
< # = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90
Sample Used: C009267-01
Client ID: SB1-N; SB1-S
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Diesel	<10	<10	NA	30

NA = Not Applicable

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009269
Report Issue Date: September 16, 1990

Table 1

ANALYTICAL RESULTS

CAM WET - STLC Lead
EPA Method 6010[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/L[2]
GTEL No.	Client ID				
01	SB1N, SB1S	09/11/90	09/11/90	09/11/90	< 1
02	SB2AW,SBWAE	09/11/90	09/11/90	09/11/90	< 1
03	SB2BE,SBWBW	09/11/90	09/11/90	09/11/90	< 1
04	SAN,SAS	09/11/90	09/11/90	09/11/90	< 1
05	TRENCH-N	09/11/90	09/11/90	09/11/90	< 1
06	TRENCH-S	09/11/90	09/11/90	09/11/90	< 1

1 = Extraction by EPA Method 3050
2 = Method detection limit = 1 mg/L; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

CAM Wet - STLC Lead
EPA Method 6010

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 If applicable, the control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for 1 of 1 elements in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference criterion was met for the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

METHOD BLANK DATA

CAM Wet - STLC Lead
EPA Method 6010

Date of Analysis: 09/14/90

Analyte	Concentration, mg/Kg
Total Lead	<10

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

CAM Wet - STLC Lead
EPA Method 6010

Date of Analysis: 09/14/90

Standard Number	Concentration, mg/L
1	10

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009269
Report Issue Date: September 18, 1990

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

CAM Wet - STLC Lead
EPA Method 6010

Date of Analysis: 09/14/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.0	5.2	104	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.0	5.1	102	80 - 120

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

CAM Wet - STLC Lead
EPA Method 6010

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	2-57-VS	SPEX
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	3-83-VS	SPEX

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

CAM Wet - STLC Lead
EPA Method 6010

Date of Analysis: 09/14/90
Sample Spiked: C009269-01
Client ID: SB1N,SB1S
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %
Total Lead	1.02	0.02	1.00	1.00	100	80 - 120

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

CAM Wet - STLC Lead
EPA Method 6010

Date of Analysis: 09/14/90
Sample Used: C009269-01
Client ID: SB1N, SB1S
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Total Lead	'1.02	1.02	NA	20

NA = Not Applicable

GTEL ENVIRONMENTAL LABORATORIES, INC.

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

Chevron Facility Number: 9-6991
Consultant Release Number:
Consultant Project Number: 203-175-3322
Consultant Name: Groundwater Technology
Address: 5040 Pike Lane Concord Ste D
Fax Number:
Project Contact (Name): Fred Hayden / Joe Romaya
(Phone):

Chevron Contact (Name): Cynthia Wong
(Phone): 842 9103
Laboratory Name: GTEL
Contract Number:
Samples Collected by (Name): Fred Hayden
Collection Date:
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead THLA 22 DHS-Luft wet	EDB DHS-AB 1803	8240		HOLD	Remarks
SB1-N	Composite		S	C			X		X	X	X	X	X					Please use ND level of 1 PPM
SB1-S	Composite		S	C														
SB2-AW	Composite		S	C														
SB2-AES	Composite		S	C														
SB2-BE	Composite		S	C														per Joe R. run by 1602 not 624
SB2-BW	Composite		S	C														
SAN	Composite		S	C						X								
SAS	Composite		S	C						X								
Trench-N			S	C														
Trench-S			S	C														
WDM			S	C													X	HOLD

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI	9/11/90 12:15		GTI	9/11/90 12:15
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI	9/11/90 1101			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Jamie Davis		9-11-90 R:57

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

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009327, C009328
Report Issue Date: September 18, 1990

Fred Hayden
Groundwater Technology, Inc.
8040-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/11/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

EPP/Pam Sng

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N48CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009327
Report Issue Date: October 24, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01			
Client Identification		W0M			
Date Sampled		09/11/90			
Date Extracted		09/13/90			
Date Analyzed		09/13/90			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.07			
Toluene	0.005	<0.005			
Ethylbenzene	0.005	0.01			
Xylene (total)	0.015	0.05			
TPH as Gasoline	10	15			

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009327
Report Issue Date: September 16, 1990

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/13/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/13/90
MeOH Lot No: AX659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

<# = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/07/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	49	98	85-115
Toluene	50	49	98	85-115
Ethylbenzene	50	50	100	85-115
Xylene (total)	150	160	107	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA19042	Supelco
Toluene	LA19042	Supelco
Ethylbenzene	LA19042	Supelco
Xylene (total)	LA19042	Supelco

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	241	120
MeOH Blank	200	201	100
01	200	135	67
MS	200	152	76
MSD	200	143	71

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009327
Report Issue Date: September 16, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/13/90
Sample Used: C009302-03
Client ID: MW14 (Boring)
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	< 0.005	2.86	2.00	70	2.02	71
Toluene	< 0.005	2.86	1.99	70	2.00	70
Ethylbenzene	< 0.005	2.86	1.99	70	1.98	69
Xylene (total)	< 0.015	8.58	5.97	70	5.93	69

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	1	30	50 - 112
Toluene	0	30	50 - 108
Ethylbenzene	1	30	50 - 113
Xylene (total)	1	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009328
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	WOM	09/11/90	09/13/90	09/13/90	2000

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009328
Report Issue Date: September 14, 1990

QA Conformance Summary

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/13/90

Analyte	Concentration, mg/Kg
Oil and Grease	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/13/90

Standard Number	Concentration, mg/L
1	1.0
2	4.9
3	9.8
4	49.2
5	98.4

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/13/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.5	104	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.5	104	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	RO7/STK 11	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R06/STK 7	GTEL

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/13/90
Sample Spiked: Sand
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Oil and Grease	49.4	1.8	47.6	45.3	105	70 - 130

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/13/90
Sample Used: C009328-01
Client ID: WOM
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Oil and Grease	.2013	1979	1.7	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

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

Chevron Facility Number 9-6991 — 609300
Consultant Release Number
Consultant Project Number 203-175-3322
Consultant Name Groundwater Technology
Address 8040 Pike Lane Concord Ste D
Fax Number
Project Contact (Name) Fred Hayden / Joe Ramey
(Phone)

Chevron Contact (Name) Cynthia Wong
(Phone) 842 9103
Laboratory Name GTEL — C-1
Contract Number
Samples Collected by (Name) Fred Hayden
Collection Date
Signature

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead Tl, Pb, Zn wet DHS-Luft	EDB DHS-AB 1803	8240		7010	Remarks
B1-N	Composite		S	C			X		X	X	X	X						Please use ND level val. 1 PPM
B1-S	2 soil sample		S	C														
B2-MW	Composite		S	C														
B2-BES	2 soil sample		S	C														
B2-BE	Composite		S	C														per Joe R. run but not 624.
B2-BW	2 soil sample		S	C														
ATN	Composite		S	C														
AS	2 soil sample		S	C														
Beach-N			S	C														
Beach-S			S	C														
VOA		1	S	C				X		X		X					X	Hold

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
	GTI	9/11/90 12:15		GTI	9/11/90 12:15	24 Hrs
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs
	GTI	9/11/90 1101				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	10 Days
			Jamie Davis		9-11-90 15:57	

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009277, C009278
Report Issue Date: September 18, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/11/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204-72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009277
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	SAN & SAS Composite	09/11/90	09/12/90	09/12/90	28

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Analyte	Concentration, mg/Kg
Oil and Grease	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Standard Number	Concentration, mg/L
1	1.0
2	4.9
3	9.8
4	49.2
5	98.4

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.9	111	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	4.8	90	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R07/STK 11	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R06/STK 7	GTEL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204-72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009277
Report Issue Date: September 14, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90
Sample Spiked: Sand Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Oil and Grease	51.8	NA	51.8	51.1	101	70 - 130

NA = Not applicable

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90 Client ID: AW
Sample Used: C009278-01 Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Oil and Grease	837	815	2.7	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009278
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	AW	09/11/90	09/12/90	09/12/90	830
02	AE	09/11/90	09/12/90	09/12/90	1400

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009278
Report Issue Date: September 14, 1990

QA Conformance Summary

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Analyte	Concentration, mg/Kg
Oil and Grease	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Standard Number	Concentration, mg/L
1	1.0
2	4.9
3	9.8
4	49.2
5	98.4

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.9	111	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	4.8	90	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	RO7/STK II	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R06/STK 7	GTEL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009278
Report Issue Date: September 14, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90
Sample Spiked: Sand Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Oil and Grease	51.8	NA	51.8	51.1	101	70 - 130

NA = Not applicable

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/12/90 Client ID: AW
Sample Used: C009278-01 Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Oil and Grease	837	815	3	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

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

Chevron Facility Number: 9-6991
Consultant Release Number:
Consultant Project Number: 203175.32
Consultant Name: Groundwater Technology
Address: 8040 Pardee Lane Concord, Ca
Fax Number:
Project Contact (Name): Fred Hayden/Lee Ramsey
(Phone):

Chevron Contact (Name): Cynthia Wong
(Phone): 842 9103
Laboratory Name: GTEL
Contract Number:
Samples Collected by (Name): Fred Hayden
Collection Date:
Signature:

C009265

Analyses To Be Performed

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803				Remarks
AW	01		S	G				X		X	X	X						Please use
AE	02		S	G														ND level of
PITNC			S	G														1 PPM
PITE			S	G														
PITW			S	G														
T-SE			S	G					X									
T-SW			S	G				X										
T-NE			S	G					X									
T-NW			S	G				X										
PIT-WTR1		1	W					X			X							
PIT-WTR2		1	W					X			X							

9278

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
[signature]	GTI	9/11/90 12:19	[signature]	GTI	9/11/90 12:A	24 Hrs
[signature]	GTI	9/11/90 1:01	Received By (Signature)	Organization	Date/Time	48 Hrs
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	5 Days
			Jamie Davis		9-11 12:5?	10 Days

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009263, C009264, C009265, C009270
Report Issue Date: September 18, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/11/90.

A formal quality control/quality assurance program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

GTEL Concord, CA
C009263A.DOC

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009263
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01	02	03	04
Client Identification		PIT NC	PIT E	PIT W	T-SW
Date Sampled		09/11/90	09/11/90	09/11/90	09/11/90
Date Extracted		09/11/90	09/11/90	09/11/90	09/11/90
Date Analyzed		09/11/90	09/11/90	09/11/90	09/11/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.05	<0.005	<0.005	0.16
Toluene	0.005	0.01	<0.005	<0.005	<0.005
Ethylbenzene	0.005	0.52	<0.005	<0.005	0.57
Xylene (total)	0.015	2	<0.015	<0.015	0.53
TPH as Gasoline	10	63	1	<1	52

GTEL Sample Number		05			
Client Identification		T-NW			
Date Sampled		09/11/90			
Date Extracted		09/11/90			
Date Analyzed		09/11/90			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.24			
Toluene	0.005	<0.005			
Ethylbenzene	0.005	0.09			
Xylene (total)	0.015	0.24			
TPH as Gasoline	10	5			

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009263
Report Issue Date: September 14, 1990

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/11/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

< # = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/11/90
MeOH Lot No: AX659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

< # = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/06/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	55	110	85-115
Toluene	50	51	102	85-115
Ethylbenzene	50	54	108	85-115
Xylene (total)	150	168	112	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA18042	Supelco
Toluene	LA18042	Supelco
Ethylbenzene	LA18042	Supelco
Xylene (total)	LA18042	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	192	96
MeOH Blank	200	201	101
01	200	282	141
02	200	177	88
03	200	177	88
04	200	227	113
05	200	174	87
MS	200	193	97
MSD	200	198	99

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009263
Report Issue Date: September 14, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/12/90
Sample Used: C009202-11
Client ID: MW-6-C
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	<0.005	2.86	1.87	65	1.94	68
Toluene	<0.005	2.86	1.87	65	1.92	67
Ethylbenzene	<0.005	2.86	1.92	67	1.95	68
Xylene (total)	<0.015	8.58	5.86	68	5.95	69

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	5	30	50 - 112
Toluene	3	30	50 - 108
Ethylbenzene	1	30	50 - 113
Xylene (total)	1	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009264
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[2]
GTEL No.	Client ID				
01	T-SE	09/11/90	09/12/90	09/13/90	1000
02	T-NE	09/11/90	09/12/90	09/13/90	<10

1 = Extraction by EPA Method 3550
2 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009264
Report Issue Date: September 14, 1990

QA Conformance Summary

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

1.0 Blanks

The Reagent blank was below the detection limit as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for diesel in the aqueous independent QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for diesel in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for diesel in the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90

Analyte	Concentration, mg/Kg
Diesel	<10

<# = Not detected at the indicated detection limit.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Diesel	1294	1043	81	80 - 120

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Analyte	Source
Diesel	Shell

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, mg/Kg	Surrogate Result, mg/Kg	Surrogate Recovery, %
Blank	100	91	91
01	100	97	97
02	100	95	95
MS	100	102	102

MS = Matrix Spike
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90
Sample Spiked: C009264-02
Client ID: T-NE
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, %[1]
Diesel	<10	500	455	91	63 - 127

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.
<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/13/90
Sample Used: C009264-02
Client ID: T-NE
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Diesel	<10	<10	NA	30

NA = Not Applicable

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009265
Report Issue Date: September 14, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015[1]

GTEL Sample Number		01	02		
Client Identification		PIT-WTR1	PIT-WTR2		
Date Sampled		09/11/90	09/11/90		
Date Analyzed		09/11/90	09/11/90		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	5800	6200		
Toluene	0.3	9600	10000		
Ethylbenzene	0.3	960	1100		
Xylene (total)	0.6	13000	14000		
TPH as Gasoline	50	51000	54000		

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009265
Report Issue Date: September 14, 1990

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Water EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for 4 of 4 compounds in the MS as shown in Table 5.

5.0 Reagent Water Spike (WS) and Reagent Water Spike (WSD) Duplicate Precision

Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the WS and WSD as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Date of Analysis: 09/11/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

< # = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Date of Analysis: 09/05/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	45	90	85 - 115
Toluene	50	43	86	85 - 115
Ethylbenzene	50	45	90	85 - 115
Xylene (total)	150	138	92	85 - 115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA18042	Supelco
Toluene	LA18042	Supelco
Ethylbenzene	LA18042	Supelco
Xylene (total)	LA18042	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	200	210	105
01	200	211	106
02	200	217	109
MS	200	222	111
WS	200	190	95
WSD	200	207	104

MS = Matrix Spike
WS = Reagent Water Spike
WSD = Reagent Water Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009265
Report Issue Date: September 14, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Date of Analysis: 09/12/90
Sample Spiked: C009179-02

Client ID: MW-1 Dup
Units: ug/L

Analyte	Sample Result	Concentration Added	Concentration Recovered	MS Result	MS, % Recovery	Acceptability Limits[1], %
Benzene	<0.3	25	21.6	21.6	86	71 - 123
Toluene	<0.3	25	21	21	84	69 - 120
Ethylbenzene	<0.3	25	21.7	21.7	87	72 - 121
Xylene (total)	<0.6	75	66.9	66.9	89	75 - 123

<# = Not detected at the indicated detection limit.
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009265
Report Issue Date: September 14, 1990

Table 6

REAGENT WATER SPIKE (WS) AND REAGENT WATER SPIKE DUPLICATE (WSD)
RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8020/8015

Date of Analysis: 09/11/90 Units: ug/L

Analyte	Concentration Added	WS Result	WS, % Recovery	WSD Result	WSD, % Recovery
Benzene	25	20.9	84	20.6	82
Toluene	25	20.5	82	20.9	84
Ethylbenzene	25	22.1	88	21.8	87
Xylene (total)	75	68.6	91	70.2	94

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	2	30	76 - 120
Toluene	2	30	72 - 117
Ethylbenzene	1	30	73 - 123
Xylene (total)	3	30	81 - 125

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009270
Report Issue Date: September 19, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Halocarbons in Soil
EPA Method 8010[1]

Date Sampled		09/11/90	09/11/90		
Date Extracted		09/12/90	09/12/90		
Date Analyzed		09/12/90	09/12/90		
Client Identification		AW	AE		
GTEL Sample Number		01	02		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Chloromethane	0.5	< 0.5	< 0.5		
Bromomethane	0.5	< 0.5	< 0.5		
Dichlorodifluoromethane	0.5	< 0.5	< 0.5		
Vinyl chloride	1	< 1	< 1		
Chloroethane	0.5	< 0.5	< 0.5		
Methylene chloride	0.5	< 0.5	< 0.5		
Trichlorofluoromethane	0.5	< 0.5	< 0.5		
1,1-Dichloroethene	0.2	< 0.2	< 0.2		
1,1-Dichloroethane	0.5	< 0.5	< 0.5		
trans-1,2-Dichloroethene	0.5	< 0.5	< 0.5		
Chloroform	0.5	< 0.5	< 0.5		
1,2-Dichloroethane	0.5	< 0.5	< 0.5		
1,1,1-Trichloroethane	0.5	< 0.5	< 0.5		
Carbon tetrachloride	0.5	< 0.5	< 0.5		
Bromodichloromethane	0.5	< 0.5	< 0.5		
1,2-Dichloropropane	0.5	< 0.5	< 0.5		
trans-1,3-Dichloropropene	0.5	< 0.5	< 0.5		
Trichloroethene	0.5	< 0.5	< 0.5		
Dibromochloromethane	0.5	< 0.5	< 0.5		
1,1,2-Trichloroethane	0.5	< 0.5	< 0.5		
cis-1,3-Dichloropropene	0.5	< 0.5	< 0.5		
2-Chloroethylvinyl ether	1	< 1	< 1		
Bromoform	0.5	< 0.5	< 0.5		
1,1,2,2-Tetrachloroethane	0.5	< 0.5	< 0.5		
Tetrachloroethene	0.5	< 0.5	< 0.5		
Chlorobenzene	0.5	< 0.5	< 0.5		
1,3-Dichlorobenzene	0.5	< 0.5	< 0.5		
1,2-Dichlorobenzene	0.5	< 0.5	< 0.5		
1,4-Dichlorobenzene	0.5	< 0.5	< 0.5		

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009270
Report Issue Date: September 19, 1990

QA Conformance Summary

Purgeable Halocarbons in Soil
EPA Method 8010

1.0 Blanks

Zero of 29 target compounds found in Reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 8 out of 8 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Bromofluorobenzene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 3 of 3 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria were met for 3 of 3 compounds in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Purgeable Halocarbons in Soil
EPA Method 8010

Date of Analysis: 09/12/90

Analyte	Observed Result, mg/Kg
Chloromethane	<0.5
Bromomethane	<0.5
Dichlorodifluoromethane	<0.5
Vinyl chloride	<1
Chloroethane	<0.5
Methylene chloride	<0.5
Trichlorofluoromethane	<0.5
1,1-Dichloroethene	<0.2
1,1-Dichloroethane	<0.5
trans-1,2-Dichloroethene	<0.5
Chloroform	<0.5
1,2-Dichloroethane	<0.5
1,1,1-Trichloroethane	<0.5
Carbon tetrachloride	<0.5
Bromodichloromethane	<0.5
1,2-Dichloropropane	<0.5
trans-1,3-Dichloropropene	<0.5
Trichloroethene	<0.5
Dibromochloromethane	<0.5
1,1,2-Trichloroethane	<0.5
cis-1,3-Dichloropropene	<0.5
2-Chloroethylvinyl ether	<0.5
Bromoform	<1
1,1,2,2-Tetrachloroethane	<0.5
Tetrachloroethene	<0.5
Chlorobenzene	<0.5
1,3-Dichlorobenzene	<0.5
1,2-Dichlorobenzene	<0.5
1,4-Dichlorobenzene	<0.5

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009270
Report Issue Date: September 19, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Halocarbons in Soil
EPA Method 8010

Date of Analysis: 09/13/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Vinyl Chloride	50	49.0	98	85 - 115
1,1-Dichloroethene	50	54.7	109	85 - 115
1,1-Dichloroethene	50	47.1	94	85 - 115
t-1,2-Dichloroethene	50	45.3	91	85 - 115
Chloroform	50	48.0	96	85 - 115
1,2-Dichloroethane	50	41.3	83	85 - 115
1,1,1-Trichloroethane	50	51.0	102	85 - 115
Chlorobenzene	50	49.7	100	85 - 115

low

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Halocarbons in Soil
EPA Method 8010

Analyte	Lot Number	Source
Vinyl Chloride	LA21062	Supelco Purgeable Mix C
1,1-Dichloroethene	LA21173	Supelco Purgeable Mix A
1,1-Dichloroethane	LA21173	Supelco Purgeable Mix A
t-1,2-Dichloroethene	LA20674	Supelco Purgeable Mix B
Chloroform	LA21173	Supelco Purgeable Mix A
1,2-Dichloroethane	LA20674	Supelco Purgeable Mix B
1,1,1-Trichloroethane	LA20674	Supelco Purgeable Mix B
Chlorobenzene	LA21173	Supelco Purgeable Mix A

Table 4

SURROGATE COMPOUND RECOVERY

Bromofluorobenzene

Purgeable Halocarbons in Soil
EPA Method 8010

Acceptability Limits[1]: 55 - 110 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	100	72	72
01	100	88	88
02	100	88	88
MS	100	106	106
MSD	100	109	109

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009270
Report Issue Date: September 19, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Halocarbons in Soil
EPA Method 8010

Date of Analysis: 09/12/90
Sample Spiked: C009270-02

Client ID: AE
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MSD Result	MS, % Recovery	MSD, % Recovery
1,1-Dichloroethene	< 0.2	2.5	2.50	2.51	100	100
Chlorobenzene	< 0.5	2.5	2.45	2.66	98	106
Trichloroethene	< 0.5	2.5	1.70	1.78	68	71

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
1,1-Dichloroethene	0	30	60 - 110
Chlorobenzene	12	30	60 - 110
Trichloroethene	4	30	60 - 110

<# = Not detected at the indicated detection limit.
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

T = trench

Chain-of-Custody Record

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

Chevron Facility Number: 9-6991
Consultant Release Number:
Consultant Project Number: 203175 2.2
Consultant Name: Groundwater Technology
Address: 8046 Pimlico Court, Stockton
Fax Number:
Project Contact (Name): Fred Hayden/Joe Berry
(Phone):

Chevron Contact (Name): Cynthia Wong
(Phone): 842 9103
Laboratory Name: GTEL
Contract Number:
Samples Collected by (Name): Fred Hayden
Collection Date:
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803	PNA			Remarks
AW			S	G				X		X	X	X						Please use
AE			S	G						X	X	X						ND level of
PITNC			S	G							X							1 PPM
PITE			S	G														
PITW			S	G														
T-SE			S	G					X									
T-SW			S	G				X										
T-NE			S	G					X									
T-NW			S	G				X										
PIT-WTR1		1	W					X			X							
PIT-WTR2		1	W					X			X							

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Fred Hayden	GTI	9/11/90 12:19		GTI	9/11/90 12:A	24 Hrs
	GTI	9/11/90 1:01				48 Hrs
			Received For Laboratory By (Signature): Jamie Davis		9-11 12:5?	5 Days
						10 Days

APPENDIX C
STANDARD OPERATING PROCEDURES

GROUNDWATER TECHNOLOGY
STANDARD OPERATING PROCEDURE
CONCERNING OPERATION/CALIBRATION OF
PHOTO-IONIZATION ANALYZER
SOP 19

The HNU Model 101 Photo-ionization Analyzer shall be used to measure the concentration of trace gases over a range of less than 1 part per million (ppm) to 2,000 ppm by employing the principle of photo-ionization for detection. The specific instrument used for investigations related to hydrocarbon contamination should be calibrated for direct readings in ppm volume/volume of benzene. This portable field analyzer consists of two components: 1) probe which contains a fan for moving air into the sensor, an ultra-violet light (provides ionization energy), an ionization chamber and signal amplifier; 2) readout assembly which contains a battery, ion chamber bias, meter-readout and control panel. Specifics of the detection principle/theory and functions of various components can be found in the manufacture's instruction manual (HNU Systems, Inc.).

To assure optimum performance, the photo-ionization analyzer should be calibrated with a standard gas mixture of known concentration from a pressurized container. A daily procedure for calibration involves bringing the probe and readout in close proximity to the calibration gas, cracking the valve on the tank and checking the instrument reading. This provides a useful spot check for the instrument.

A procedure conducted weekly for more accurate calibration of the instrument from a pressurized container is to connect one side of a "T" to the pressurized container of calibration gas, another side of the "T" to a rotameter and the third side of the "T" directly to the 8-inch extension to the photo-ionization probe. Crack the valve of the pressurized container until a slight flow is indicated on the rotameter. The instrument draws in the volume of sample required for detection, and the flow in the rotameter indicates an excess of sample. Now adjust the span pot so that the instrument is reading the exact value of the calibration gas. (If the instrument span setting is changed, the instrument should be turned back to the standby position and the electronic zero should be readjusted, if necessary).

GROUNDWATER TECHNOLOGY
STANDARD OPERATING PROCEDURE
CONCERNING WATER SAMPLING METHODOLOGY
SOP 9

Prior to water sampling, each well shall be purged by pumping a minimum of four well volumes or until the discharge water indicates stabilization of temperature, conductivity,and pH. If the well is evacuated before four well volumes are removed or stabilization is achieved, the sample should be taken when the water level in the well recovers to 80% of its initial level.

Retrieval of the water sample, sample handling and sample preservation shall be conducted in accordance with Groundwater Technology Laboratory Standard Operating Procedure (GTL SOP 10) concerning Sampling For Volatiles in Water". The sampling equipment used shall consist of a teflon and/or stainless steel samplers, which meets EPA regulations. Glass vials with teflon lids should be used to store the collected samples.

To insure sample integrity, each vial shall be filled with the sampled water such that the water stands above the lip of the vial. The cap should then be quickly placed on the vial and tightened securely. The vial should then be checked to ensure that air bubbles are not present prior to labeling of the sample. Label information should include a sample identification number, job identification, date, time, type of analysis requested and the sampler's name. Chain-of-Custody forms shall be completed as per Groundwater Technology Laboratory Standard Operating Procedure (SOP 11) concerning Chain of Custody.

The vials should be immediately placed in high quality coolers for shipment to the laboratory. The coolers should be packed with sufficient ice or freezer packs to ensure that the samples are kept below 4C. Samples which are received at the Groundwater Technology Laboratory above 10 C. will be considered substandard. To minimize sample degradation the prescribed analysis shall take place within seven days of sample collection unless specially prepared acidified vials are used.

To minimize the potential for cross contamination between wells, all the well development and water sampling equipment which contacts the groundwater shall be cleaned between each well sampling. As a second precautionary measure, the wells shall be sampled in order of increasing contaminant concentrations as established by previous analysis.

GT ENVIRONMENTAL LABORATORY (GTEL)
STANDARD OPERATING PROCEDURE
CONCERNING SAMPLING FOR VOLATILES IN WATER (DISSOLVED GASOLINE, SOLVENTS, ETC.).
SOP 10

1. Use only vials properly washed and baked, available from GTEL or I-Chem.

2. Use clean sampling equipment. Scrub with Alconox or equivalent laboratory detergent and water followed by a thorough water rinse. Complete with a distilled water rinse.

   Sampling equipment which has come into contact with liquid hydrocarbons (free product) should be regarded with suspicion. Such equipment should have tubing and cables replaced and all resilient parts washed with laboratory detergent solution, as above. Visible deposits may have to be removed with hexane. Solvent washing should be followed be detergent washing as above.

   This procedure is valid for volatile organics analysis only. For extractable organics (for example, pesticides, or base neutrals for EPA method 625) a final rinse with pesticide grade isopropyl alcohol, followed by overnight or oven drying, will be necessary.

3. Take duplicate samples for GTEL. Mark on forms as a single sample with two containers to avoid duplication of analysis.

4. Take a site blank using distilled water or known uncontaminated source. This sample will be run at the discretion of the project manager.

5. Fill out labels and forms as much as possible ahead of time. Use an indelible marker.

6. Preservatives are required for some types of samples. Use specially prepared vials from GTEL, marked as indicated below, or use the appropriate field procedure (SOP 12 for acidification). Make note on forms that samples were preserved. Always have extra vials in case of problems. Samples for volatile analysis should be acidified below pH 2 with hydocloric acid. Use vials with care and keep them upright. Eye protection, foot protection, and disposable vinyl gloves are required for handling. Samples designated for expedited service and analyzed within seven (7) days of sampling will be acceptable without preservation.

   Acid causes burns. Glasses or goggles (not contact lenses) are necessary for protection of the eyes. Flush eyes with water for 15 minutes if contact occurs and seek medical attention. Rinse off hands frequently with water during handling.

   For sampling chlorinated drinking water supplies for chlorinated volatiles, samples shall be preserved with sodium thiosulfate. Use vials labeled "CONTAINS THIOSULFATE". No particular cautions are necessary.

7. Fill vial to overflowing with water, avoiding turbulence and bubbling as much as possible. Water should stand above lip of vial.

8. Carefully but quickly slip cap onto vial. Avoid dropping the teflon septum from cap by not inverting cap until in contact with vial. Disc should have teflon face toward the water. Also avoid touching white teflon face with dirty fingers.

9. Tighten cap securely, invert vial and tap against hand to see that there are no bubbles inside.

10. Label vial using indelible ink as follows:

    a) Sample I.D. No.
    b) Job I.D. No.
    c) Date and Time.
    d) Type of analysis requested.
    e) Your name.

11. Unless the fabric type label is used, place scotch tape over the label to preserve its integrity.

12. For Chain of Custody reasons, sample vial should be wrapped end-for-end with scotch tape or evidence tape and signed with indelible ink where the end of the tape seals on itself. The septum needs to be covered.

13. Chill samples immediately. Samples to be stored should be kept at 4°C (39°F). Samples received at the laboratory above 10°C (as measured at glass surface by a thermocouple probe), after overnight shipping will be considered substandard, so use a high quality cooler with sufficient ice or freezer packs. (Coolers are available from GTEL).

14. Fill out Chain of Custody and Analysis Request form. (See Chain of Custody Procedures SOP 11).

GT ENVIRONMENTAL LABORATORY (GTEL)
STANDARD OPERATING PROCEDURE
CONCERNING CHAIN OF CUSTODY
SOP 11

1. Samples must be maintained under custody until shipped or delivered to the laboratory. The laboratory will then maintain custody. A sample is under custody if:

    a) It is in your possession
    b) It is in your view after being in your possession
    c) You locked it up after being in your possession
    d) It is in a designated secure area

2. Custody of samples may be transferred from one person to the next. Each transferee and recipient must date, sign and note the time on the chain-of-custody form.

3. In shipping, the container must be sealed with tape, bearing the sender's signature across the area of bonding at the ends of the tape in order to prevent undetected tampering. Each sampling jar should be taped and signed as well. Scotch tape works well.

4. Write "sealed by" and sign in the "Remarks" box at the bottom of the form before sealing up the box. Place form in a plastic bag and seal it inside the box.

5. The "REMARKS" section in the upper right part of the form is for documenting details such as:

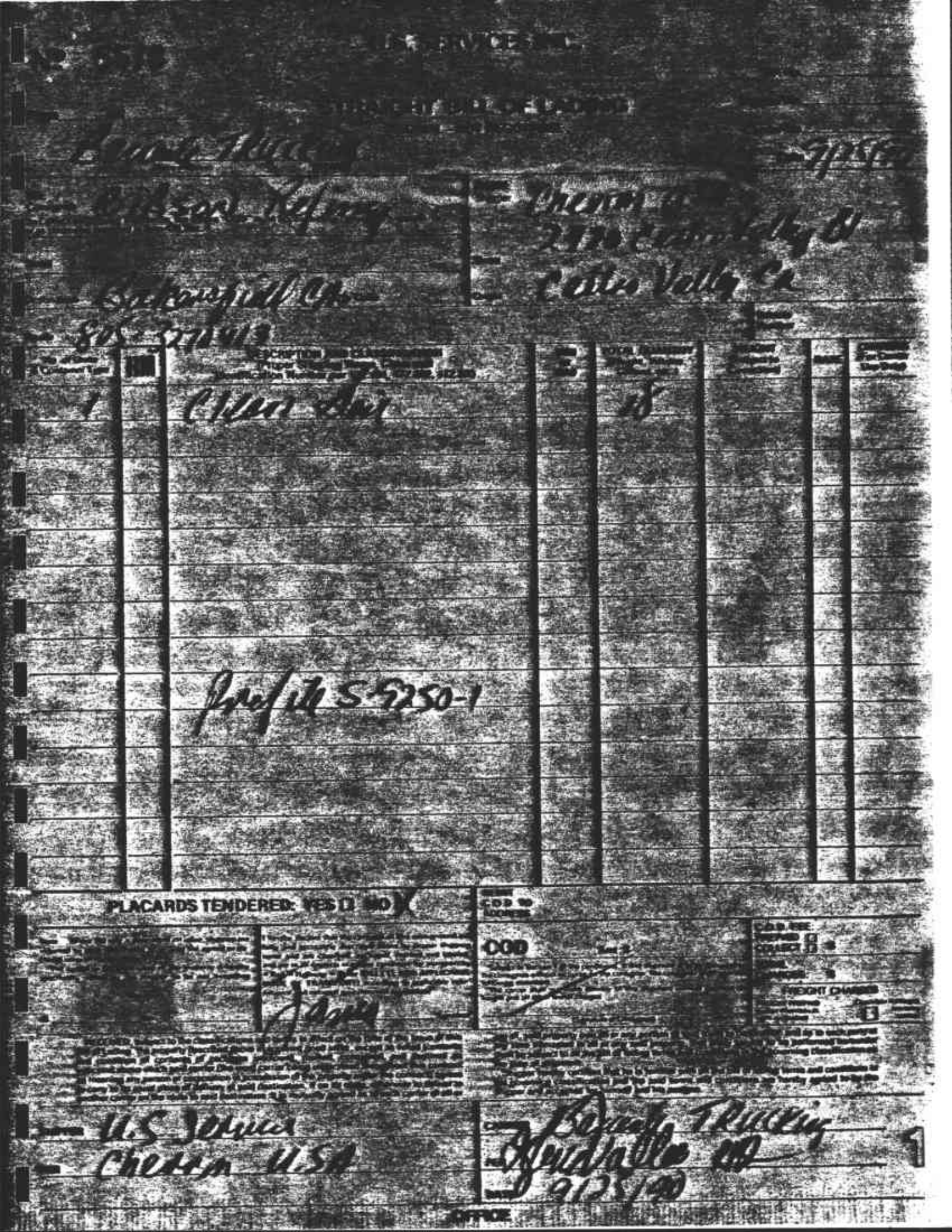
    a) Correlation of sample numbers if samples are split between labs.
    b) QC numbers when lab is logging in the samples.
    c) Sample temperature and condition when received by lab.
    d) Preservation notation.
    e) pH of samples when opened for analysis (if acidified).
    f) Sampling observation or sampling problem

6. The chain-of-custody form should be included inside the shipping container. A copy should be sent to the project manager.

7. When the samples are received by the lab, the chain-of-custody form will be dated, signed, and a note of the time made by a laboratory representative. The form along with shipping bills and receipts will be retained in the laboratory files.

8. At the time of receipt of samples by the laboratory, the shipping container will be inspected and the sealing signature will be checked, the samples will be inspected for condition and bubbles and the temperature of a representative sample container will be measured externally by a thermocouple probe (held tightly between two samples) and recorded. The laboratory QC numbers will be placed on the labels, in the accession log, and on the chain-of-custody form. If samples are acidified their pH will be measured by narrow range pH paper at the time of opening for analysis. All comments concerning procedures requiring handling of the samples will be dated and initialed on the form by the laboratory person performing the procedure. A copy of the completed chain-of-custody form with the comments on sample integrity will be returned to the sampler.

APPENDIX D
TRUCKING MANIFESTS



1 Cisco Set

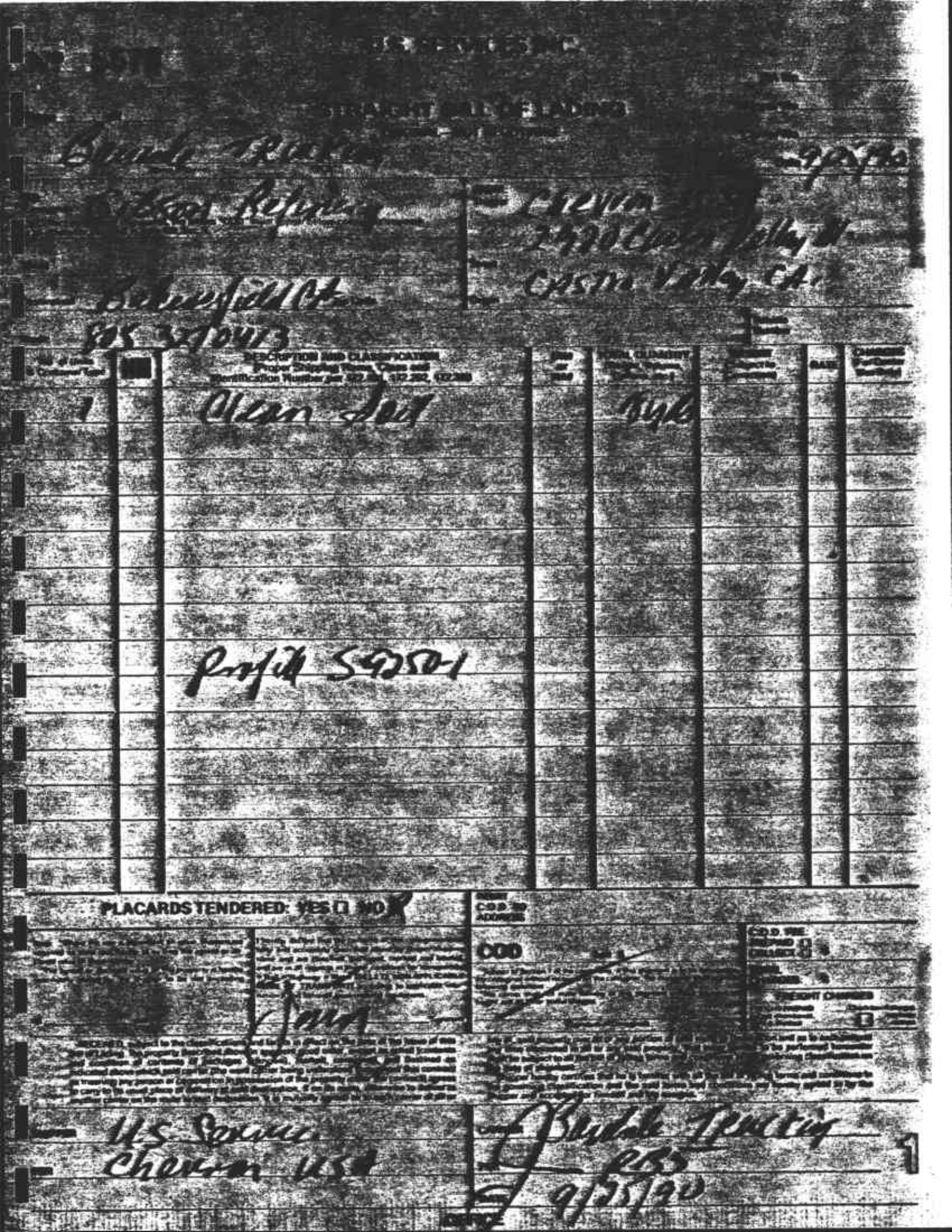
Prof Ck S-9250-1

PLACARDS TENDERED: YES ☐ NO ☒

COD

U.S. Jewish Chronicle USA

Bonded Trucking


1
Clean dust
Profit 54501
PLACARDS TENDERED: YES NO
COD
U.S. Service
Chevron USA
Bulk Trucking
LLC
9/15/20

Boyle Terminal

Clarkson Refinery

Shipped to

SP 32 DV 13

RBB

DESCRIPTION AND CLASSIFICATION

1 Clean Sol

None

Bruff 5-9250-1

PLACARDS TENDERED: YES ☐ NO ☒

Jones

COD FEE

COD TO

ADDRESS

COD

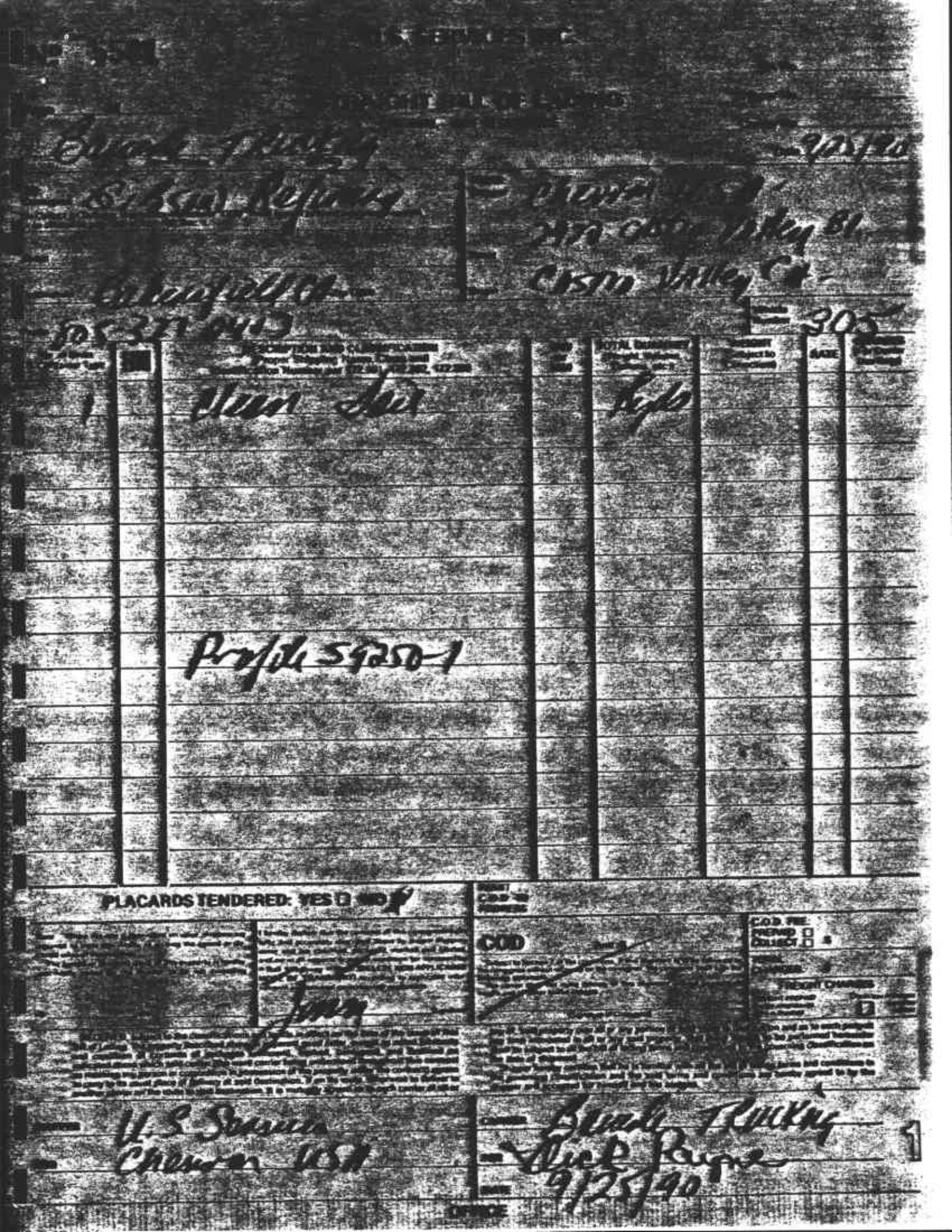
FREIGHT CHARGES

U. S. Steam

Clarkson U.S.A.

Boyle Terminal

9P174


PLACARDS TENDERED: YES NO
COD
COD FEE
PREPAID
COLLECT
FREIGHT CHARGES
OFFICE

1 Clean Soil

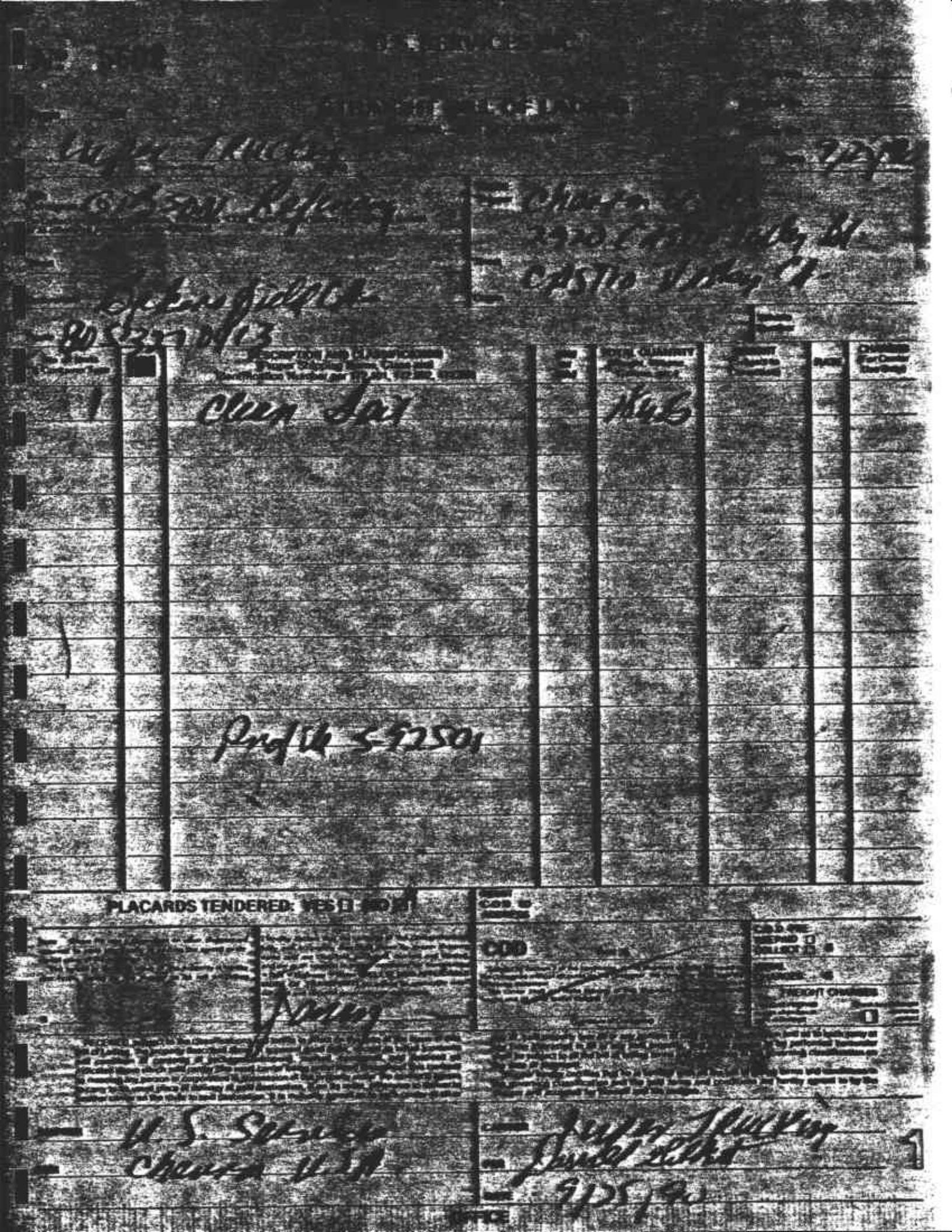
PMS 5-250-1

PLACARDS TENDERED: YES ☐ NO ☒

Yes

U.S. Steel
Chevron USA

Logan Trucking
San Diego



U.S. SERVICES INC

STRAIGHT BILL OF LADING

9/25/90

Chevron Refinery

[illegible] STANDARD ST.

Bakersfield CA

805 327 0713

Chevron [illegible]

2970 CASTO [illegible]

CASTO Valley CA.

No. of Units & Container Type		DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)	WT (Subject to Correction)	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Clean - Non Hazardous Soil		1			
		Profile #S-9250-1					

PLACARDS TENDERED: YES ☐ NO ☒

Note—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding [illegible]

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transportation [illegible] DELETE NON-APPLICABLE according to TRANSPORT according to applicable [illegible]

Signature

RENT
C.O.D. TO
ADDRESS

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Signature of Consignor

C.O.D. FEE:
PREPAID ☐
COLLECT ☐ $

SPECIAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID (Check box when charges are prepaid)
Check box if charges are to be collected ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER U.S. SERVICES

PER Chevron U.S.A.

CARRIER E.C. Trucking

PER + R Caballero

DATE 9/25/90

1

DESTINATION

NS 5505

Bill of Lading

Bolton Refractory
221 Stanford St
Bridgeport CT

Shipper
2400 Castro Valley Blvd
Castro Valley, CA

80-321043

266

No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.300)	Wgt. or Vol.	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT Subject to Correction	RATE	CHARGES (For Carrier Use Only)
1		Ref Hazardous		1 Byb			
		Prod# 58250-1					

PLACARDS TENDERED: YES ☐ NO ☐

RENT COD TO ADDRESS

COD

COD FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

RECEIVED, subject to the Classifications and tariffs in effect on the date of the issue of this Bill of Lading. The property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth in the Uniform Classification in effect on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing Classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

U.S Seismic
Chevron USA

Shipper's Signature

Date 2/6/96

1

DESTINATION

No. Units & Container Type		Description and Classification (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)	Gross Weight	Total Quantity (Weight, Volume, Optional, etc.)	Freight (Subject to Correction)	Rate	Charges (For Carrier Use Only)
1		N/A Hazardous Sol	Nyb				
		Profile S-G230-1					

PLACARDS TENDERED: YES ☐ NO ☒

COD

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

FREIGHT CHARGES

RECEIVED, subject to the classifications and tariffs in effect on the date of the issuance of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper	U.S. Semca Oberson USA
Carrier	Brandy Trucking Inc. 9 Feb 90

DESTINATION

U.S. SERVICES INC.

BP 3607

STRAIGHT BILL OF LADING

Bowie Trucking — 9/26/90

Edwin Reyes
[redacted] Standard
Bakersfield Ave.

Chevron U.S.A. Inc.
2720 Camino Tassajara
CASTO Valley, CA

Vehicle Number RB7

No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)	PKG GR VOL	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous Soil		Bulk			

PLACARDS TENDERED: YES ☐ NO ☑

RESET C.O.D. TO ADDRESS

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

FREIGHT CHARGES

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the Consignor, the Consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Signature of Consignor

Note: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transportation according to the applicable regulations of the DEPARTMENT OF TRANSPORTATION. DELETE NON-APPLICABLE

Signature

RECEIVED, subject to the Classifications and tariffs in effect on the date of the issue of this Bill of Lading. The property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in the National Motor Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER U.S. Services
Chevron USA

CARRIER Bowie Trucking
PER
DATE 9/26/90

1

DESTINATION

P 5600

BILL OF LADING

Chandler Trucking

Gibson Refining

1201 Stanford St

Bakersfield CA

9pl fib

Chevron

3200 Camino Ramon Rd

Castro Valley CA

305

No. of Units, Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per §§172.101, 172.202, 172.300)	WEIGHT (Subject to Correction)	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous Soil		5yds			

PLACARDS TENDERED: YES ☐ NO ☒

RESHIP C.O.D. TO ADDRESS

C.O.D.

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is hereby agreed as to each carrier of all or any portion of said route to destination and as to each party at any time interested in all or any part of said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER: U.S. Samuel

PER: Chevron USA

CARRIER: Brent Trucking

PER: Mark Fisher

DATE: 9 Dec

1

DESTINATION

No. of Packages	HM	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Hazard Class, Identification Number per 172.101, 172.202, 172.203	Wt.	TOTAL QUANTITY Gross, Volume or Gallonage	RATE	CHARGES For Carrier Use Only
1		Non Flammable Gas		Dyes		

PLACARDS TENDERED: YES ☐ NO ☒

C.O.D. TO ADDRESS

C.O.D.

C.O.D. FEE
PREPAID ☐
COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES
PREPAID ☐
COLLECT ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading. The property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classifications and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

U.S. Service
Chevron USA

Bill Adams

DATE 9-24-79

DESTINATION

1

U.S. MAIL

BILL OF LADING

Original

Chevron Refinery

Standard St.

Richmond CA

Chevron USA

2300 Clayton Rd

Concord Valley CA

1

76

No. of Units (If Container Type)		DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203	DWT or Gals	TOTAL QUANTITY Weight, Volume, Gallons, etc.)	Subject to Correction	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous Soil		15 cy			
		Profile S-9301					

PLACARDS TENDERED: YES ☐ NO ☒

C.O.D. No.
ADDRESS

C.O.D.

C.O.D. FEE:
PREPAID ☐
COLLECT ☐
$

TOTAL CHARGES $

FREIGHT CHARGES

RECEIVED, subject to the Classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to the usual place of delivery at said destination, if on its own route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the governing classifications on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

U.S. Service

Richmond USA

Non Hazardous Soil

Tom Brooks

4/26/94

1

DESTINATION

STRAIGHT BILL OF LADING

Lyles Trucking

9/26

Chevron Refinery

Standard Oil

Bakersfield

Driver

2920 Castle Valley Dr

Ciudad Valley, Ca

KW 78

No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203	Wgt. or Vol.	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous		18yds			
		Prefix S-9201					

PLACARDS TENDERED: YES ☐ NO ☒

RESHIP C.O.D. TO ADDRESS

C.O.D.

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is hereby agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

DRIVER U.S. Services

TRUCK Chevron US #

CARRIER Lyles Trucking

PER Darrell Stubbert

DATE 9/26/90

1

DESTINATION

U.S. SERVICES INC.

No. 3782

UNIFORM BILL OF LADING

Triple B Trucking — Date 9/26/95

From: Chevron Richmond Refinery
Stevens St.
Richmond Ca.

To: Chevron Oil
2700 Camino Ramon Rt 1
Casto Valley CA.

Vehicle Number B20

DS-327 94B

No. of Units Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per §172.101, 172.202, 172.203)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		NON Hazardous Soil	8 yds		
		Profile S 9250-1			

PLACARDS TENDERED: YES ☐ NO ☒

REMIT C.O.D. TO: ADDRESS

COD

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transportation ... ACCORDING TO APPLICABLE ... TRANSPORTATION ... according to applicable ... and government regulations.

Shipper

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER U.S. Services

PER Chevron U.S.A.

CARRIER Triple B Trucking

PER William B Bee

DATE 9/26/95

1

DESTINATION

BILL OF LADING

E.C. Trucking

Robert Bryant

Stanford St

Bakersfield CA

805-327-0413

Chevron

2725 Collier Canyon Rd

Castro Valley, CA

9/26/96

No. of Units (& Container Type)	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per §172.101, §172.202, §172.203)	PKG GR.	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Nat Hydrocarbon Solv		1K			
		Krafft S92501					

PLACARDS TENDERED: YES ☐ NO ☐

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transportation according to applicable regulations of the DEPARTMENT OF TRANSPORTATION.

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading. The property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the Shipper and accepted for himself and his assigns.

REMIT C.O.D. TO ADDRESS

C.O.D.

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

SHIPPER: US Secret Chevron USA

CARRIER: E.C. Trucking — Robert Bryant

DESTINATION: 9/26/96

NP 5150

BILL OF LADING

W Lyon

9P648

Oakridge Depot

Stanford St

Oakridge Oregon

Chevron

2930 Cotton Valley Rd

Cotton Valley La

No. of Units & Container Type		DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203)		TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous Soil		1 Pail			
		Pail 5-9250-1					

PLACARDS TENDERED: YES ☐ NO ☒

COD

COD FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading. The property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination. If on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER: U.S. Salmon Chevron USA

CARRIER: W Lyon

PER: B Pollons

DATE: 4/24/85

1

DESTINATION

(USPS 7531)

STRAIGHT BILL OF LADING

Shipper Number 9264

Shipper: Kaiser Refining
2300 Stonehead St.
Bakersfield CA

Consignee: Chevron USA
2420 Camino Ramon
San Ramon, Valley CA.

Vehicle Number

No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION (Proper Shipping Name, Class and Identification Number per §172.101, §172.202, §172.203)	Kind of Unit	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		Non Hazardous Soil		1 Cyd			
		Profile S-9250 1					

PLACARDS TENDERED: YES ☐ NO ☒

Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded and are in all respects in proper condition for transportation according to the applicable regulations of the DOT. TRANSPORT ACCORDING TO APPLICABLE REGULATIONS

Shipper

Agent
C.O.D. to
ADDRESS

COD
Amt. $

Subject to Section 7 of the conditions of the applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Signature of Consignor

C.O.D. FEE:
PREPAID ☐
COLLECT ☐ $

SPECIAL CHARGES $

FREIGHT CHARGES
Prepaid / Collect / Third Party
Check box indicating who will be billed

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Straight Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Driver U.S Services
Chevron USA

Carrier Bobtail Trucking
Per N. Tolan
Date 9/26/90

1

DESTINATION

NO. 0695

SHIPPER'S NO.

SHIPPER'S NO.

NO. OF UNITS		DESCRIPTION AND CLASSIFICATION		TOTAL QUANTITY	WEIGHT	RATE	CHARGES
1		UN Hazardous Soil		Liquid			
		Prod # 59250-1					

PLACARDS TENDERED: YES ☐ NO ☐

COD

COD FEE: PREPAID ☐ COLLECT ☐

FREIGHT CHARGES

DESTINATION

1	Non Hazardous	Bulk	
	Psyth S-9250-1		

PLACARDS TENDERED: YES ☐ NO ☐

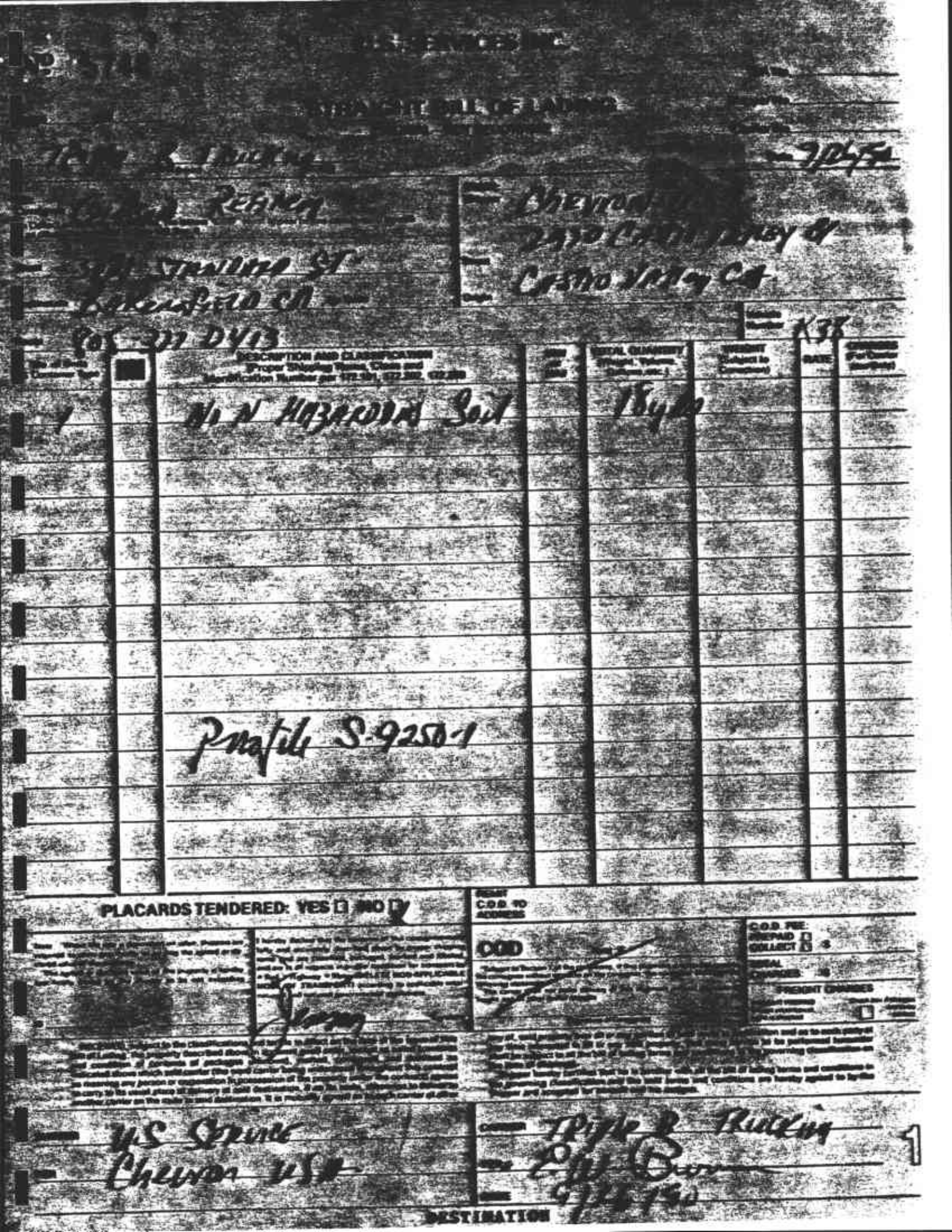
COD

Jerry

U.S. Services
Chevron 1151

Bonnie Tracy
Gas Oil
7/22/94

DESTINATION



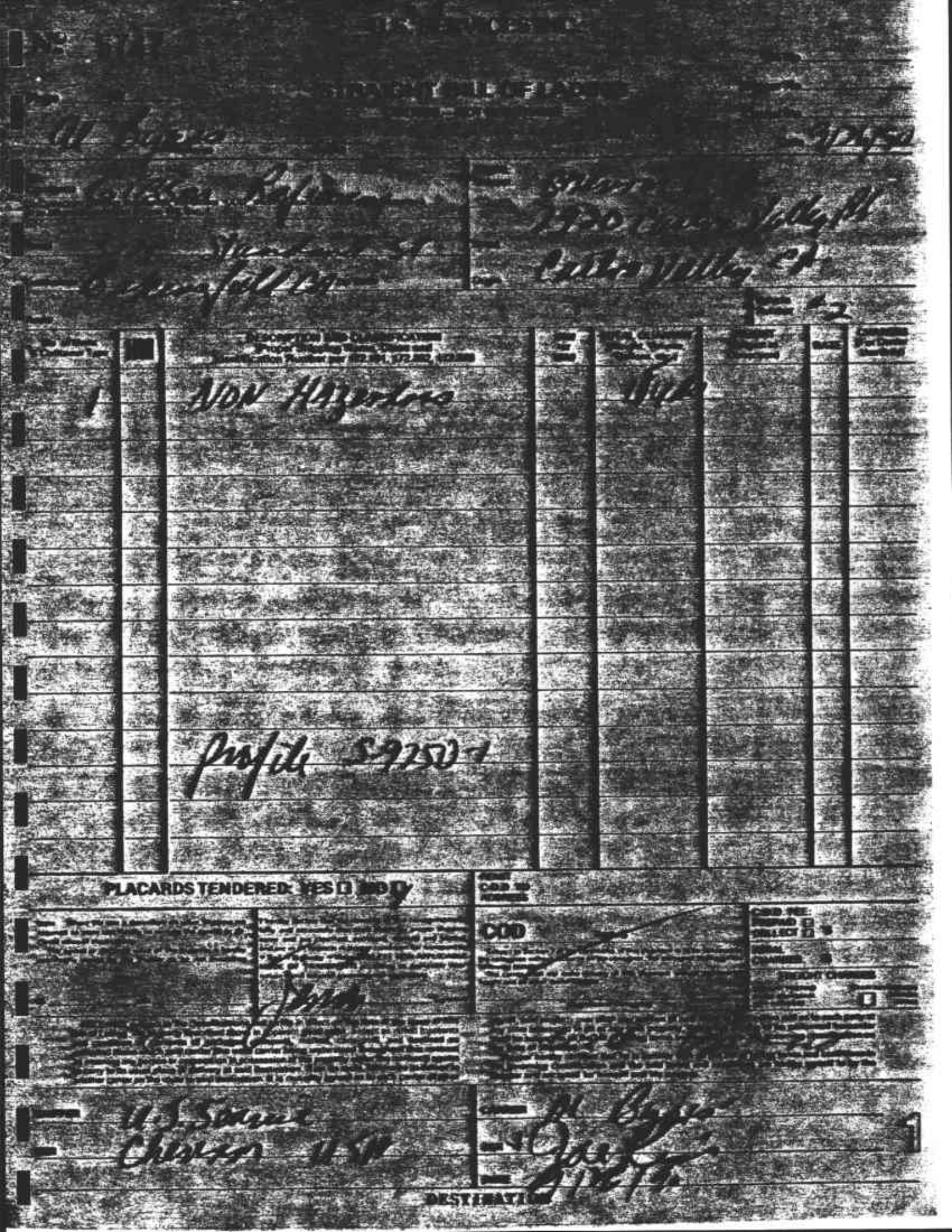
DESCRIPTION AND CLASSIFICATION
Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203

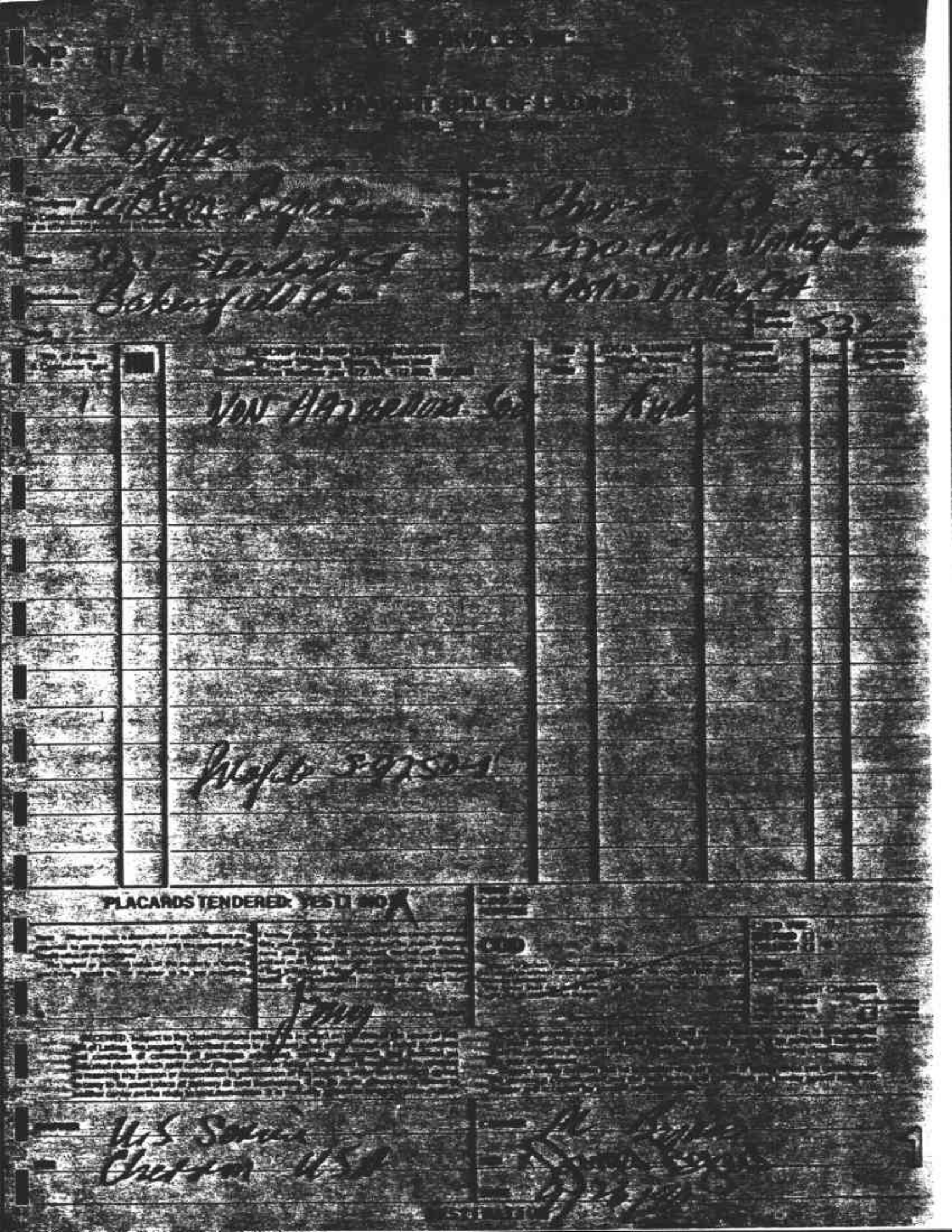
Profile S-9250-1

PLACARDS TENDERED: YES ☐ NO ☐

COD

DESTINATION


1
Adv Hydrotreo
Profit $2500
PLACARDS TENDERED: YES NO
COD
DESTINATION



PLACARDS TENDERED: YES ☐ NO ☒

NR [redacted] CTS SERVICES INC

STRAIGHT BILL OF LADING

Date

Carrier

Vehicle Number 9216

From

[redacted]

Stanley St

Brownsville CA

To

[redacted]

2900 Calle Vista Bl

Chula Vista CA

No. of Units & Container Type	HM	DESCRIPTION AND CLASSIFICATION Proper Shipping Name, Class and Identification Number per 172.101, 172.202, 172.203	PKG GR. OR VOL	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1		VW Hazardous Sol		15gal			
		Profile S-920-1					

PLACARDS TENDERED: YES ☐ NO ☒

Agent

Permanent post office address of shipper

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport by [redacted] Highway according to applicable regulations.

DRIVER

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word Carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment, or (2) in the National Motor Freight Classification in effect on the date hereof, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

[redacted]

CARRIER

[redacted]

DESTINATION

[redacted]

REMIT C.O.D. TO ADDRESS

C.O.D.

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Signature of Consignor

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES

Prepaid ☐ Collect ☐ Check if charges will be collected

1

#3956

LOCATIONS & ELEVATIONS OF MONITORING WELLS @ CHEVRON STATION - 2990 CASTRO VALLEY BLVD. FOR GROUNDWATER TECHNOLOGY, INC.

BENCHMARK - ALA. CO. BRASS DISC SET IN EAST END OF HENDRICK & BACK/WALK, SLY SIDE C.V. BLVD 62'± EAST OF ℄ PARKWAY EXTENDED, STAMPED "CVB-2G" ELEVATION = 159.860 PER ALAMEDA COUNTY

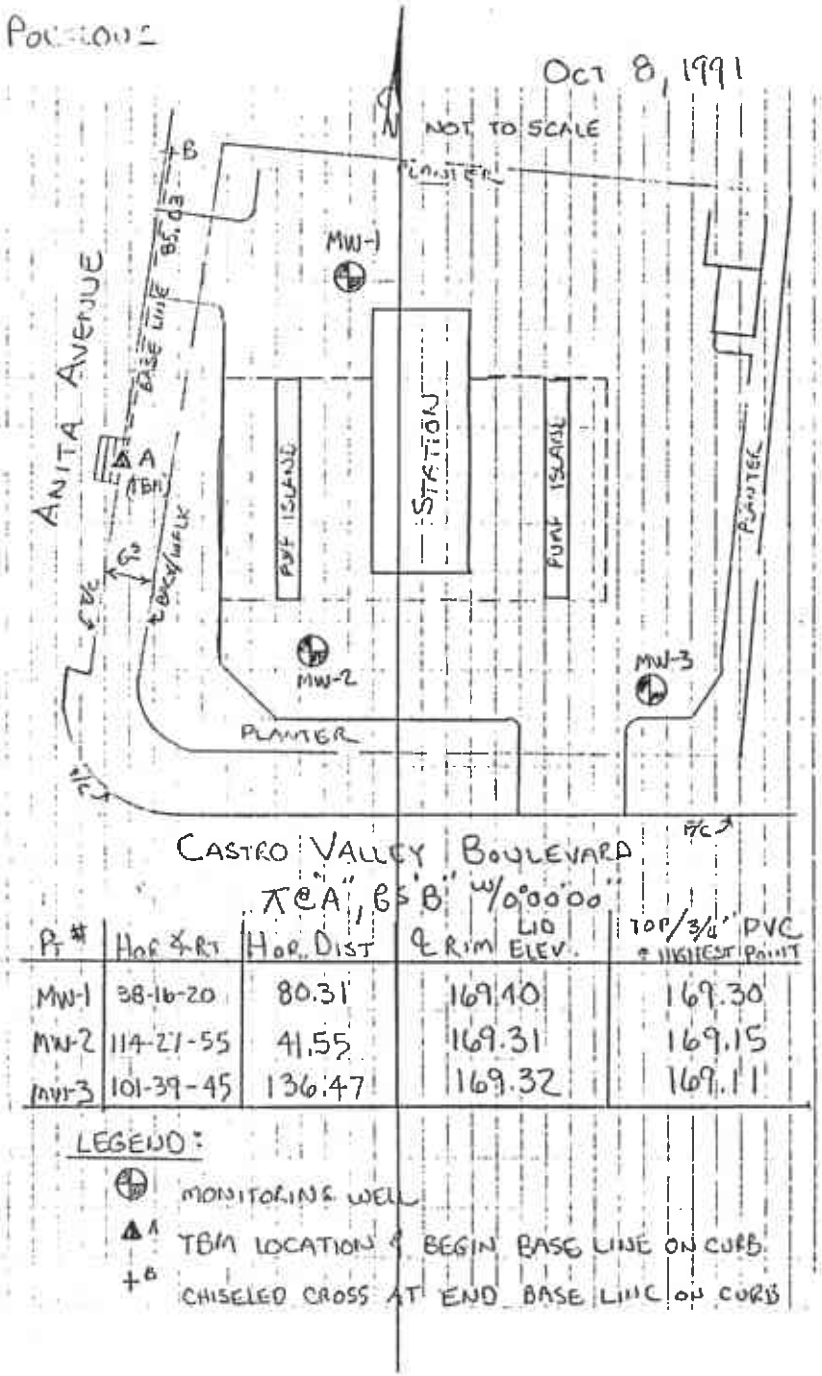
TBM - EXISTING BRASS DISC ON T/C @ ℄ SWI ON ANITA AVE, STAMPED "ANITA-CVB" ELEVATION = 168.06

LEVEL LOOP

STA	+	HI	-	ELEV	DESC.
BM				159.86	"CVB-2G"
	5.50	165.36			
TP#1			4.86	160.50	T/C @ FH RET POINTING SLY SIDE CVB
	6.92	167.42			
TP#2			3.11	164.31	TC RET @ 2803 CVB SLY SIDE
	7.93	172.24			
TBM			4.18	168.06	"ANITA-CVB" BRASS DISC @ ℄ SWI ON ANITA
	4.25	172.31			
TP#2			8.00	164.31	TC RET 2803
	3.13	167.44			
TP#1			6.94	160.50	T/C @ FH RET POINTING
	4.99	165.49			
BM			5.63	159.86 ✓	"CVB-2G"

POSITION:

OCT 8, 1991



Pt #	Hor ∠s-Rt	Hor. Dist	℄ Rim Elev.	TOP/¾" PVC @ highest Point
MW-1	38-16-20	80.31	169.40	169.30
MW-2	114-27-55	41.55	169.31	169.15
MW-3	101-39-45	136.47	169.32	169.11

LEGEND:

- ⊕ MONITORING WELL
- ▲A TBM LOCATION & BEGIN BASE LINE ON CURB
- +B CHISELED CROSS AT END BASE LINE ON CURB