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R. M. FITZGERALD 1858-1934
CARL H. ABBOTT 1867-1933
CHARLES A. BEARDSLEY 1882-1963

PLEASE REPLY TO:

P. O. Box 12867
OAKLAND, CALIFORNIA 94604-2867

FACSIMILE: (510) 451-1527

JAMES C. SOPER, INC.
PHILIP M. JELLEY, INC.
GERALD C. SMITH
LAWRENCE R. SHEPP
RICHARD T. WHITE
MICHAEL P. WALSH
J. BRITTAIN HABEGGER
VIRGINIA PALMER
TIMOTHY H. SMALLSREED
STEPHEN M. JUDSON
STEPHEN M. WILLIAMS
JONATHAN W. REDDING
BETH E. ASPEDON
KRISTIN A. FACE
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SARAH ROBERTSON McCUAIG
MARIA I. LAWLESS
PHILIP E. DRYSDALE
KRISTEN THALL PETERS
MATTHEW P. MATIASEVICH
PAUL B. SALVATY
CARLO C. MORMORUNNI

October 27, 1995

Mr. Roeal Mergillano
Alameda County Healthcare Services Agency,
Environmental Protection
1131 Harbor Bay Parkway
Alameda, California 94502

Re: 2528 Adeline Street, Oakland 94607

Dear Mr. Mergillano:

We represent Ms. Shirley Howkins who is seeking to obtain a letter of closure from Alameda County for the above-referenced property to facilitate the sale of the property.

On, or about, June 1, 1987, an underground storage tank was removed from the property under permit issued by the City of Oakland. See **Exhibit "A"**. Soil contamination (TPH 160 ppm), was apparently discovered in the proximity of the fill end of the tank as reflected by a Leak Report which was filed with the Oakland Fire Department. See **Exhibit "B"**.

The tank removal permit indicates that the tank passed the tank and equipment inspection -- i.e., was found not to be leaking. There is a discrepancy regarding the size of the tank -- the tank removal permit indicates that it was a 550 gallon tank, and the leak report indicates that it was a 1000 gallon tank. The leak report indicates that "Great Western Solvent 225" was the substance stored in the tank. A monitoring well was discovered at the property and has been properly closed. No groundwater monitoring data has been located for this well or otherwise for the property. The Leak Report indicates that groundwater was not affected. It is believed that the contaminated soil was removed and that no further action was required.

95 OCT 30 PM 2:54
ENVIRONMENTAL
PROTECTION

October 27, 1995

On, or about, August 4, 1988, a 1000 gallon kerosine underground storage tank was removed from the property under permit issued by the City of Oakland. See **Exhibit "C"**. The tank removal permit indicates that the tank passed the tank and equipment inspection. According to the excavation report prepared by Uriah, Inc., no petroleum contamination was found above detection limits and the tanks were found to be tight. See **Exhibit "D"**. ★

To expedite obtaining a closure letter, which we believe will be required as a condition of sale by a buyer of the property, Ms. Howkins has initiated an environmental investigation of the property by installing three groundwater wells thereon. Attached as **Exhibit "E"** is a site diagram identifying the location of these monitoring wells and the apparent groundwater gradient. Please find attached as **Exhibit "F"** the soil and monitoring results. The elevated VOC contamination found in Well No. 2, which is located proximate to the upgradient property boundary, indicates that this contamination results from an off-site source.

Ms. Howkins is living on a fixed income and desires to make every effort to expedite the sale of the property to obtain the sale proceeds. Any priority you might be able to give to this matter would be greatly appreciated.

If you have any questions or comments, please do not hesitate to contact me directly.

Very truly yours,

FITZGERALD, ABBOTT & BEARDSLEY

By


Robert F. Campbell

RFC:iun

Enclosures

cc: Client

Gerald C. Smith, Esq. (w/o encls)

Carlo C. Mormorunni, Esq. (w/o encls)

Copy for INSPECTOR

Excavation Permit Granted No. 8995

CITY OF OAKLAND

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks

Oakland, California; June 2, 1987

PERMISSION IS HEREBY GRANTED TO ~~XXXX~~ remove ~~XXXX~~ Gasoline tank and excavate commencing _____ feet inside property line

on the _____ side of _____ Street _____ Avenue _____ feet _____ of _____ Street _____ Avenue _____ Present Storage _____

House No. 2528 Adeline Street Street _____ Avenue _____

Owner Robert W. Vogel Address 4900 John Muir Rd. Martinez Phone 228-2507

Applicant Diablo Petroleum Inc. Address 3930 Pacheco Blvd. Martinez 94553 Phone 228-2222

Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of tanks 1 Capacity of tank 550 Gallons

Remarks: Tank removed 6-1-87 two soil samples taken

This Permit is granted in accordance with existing City Ordinances.
 Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
 When installing, removing or repairing tanks, no open flames to be on or near premises.

Approved _____ Fire Marshal

Approved _____ Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 6-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

Inspection Fee Paid \$ 50.00 ck# 45458 rec#117645

Received by G. Johnson

FIRE PREVENTION BUREAU

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on 6-1-87

By [Signature] Fire Marshal

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.
 When ready for inspection notify Fire Prevention Bureau, 273-1151

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) CONTAMINATION SITE REPORT

Alameda County did report

EMERGENCY HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED?
 YES NO YES NO

FOR LOCAL AGENCY USE ONLY
 I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.5 OF THE HEALTH AND SAFETY CODE.

REPORT DATE June 22 1987

CASE #

SIGNED DATE

REPORTED BY NAME OF INDIVIDUAL FILING REPORT: Richard Fahey
 PHONE: (415) 228 2222
 SIGNATURE: Richard Fahey
 REPRESENTING: OWNER/OPERATOR REGIONAL BOARD
 LOCAL AGENCY OTHER
 COMPANY OR AGENCY NAME: Diablo Petroleum, Inc.
 ADDRESS: 3930 Pacheco Blvd., Martinez, California 94553

RESPONSIBLE PARTY NAME: Robert Vogel UNKNOWN
 CONTACT PERSON: Robert Vogel
 PHONE: (415) 228 2507
 ADDRESS: 4900 John Muir Dr., Martinez, California 94553

SITE LOCATION FACILITY NAME (IF APPLICABLE): E-Z-Est Products
 OPERATOR: ()
 ADDRESS: 2528 Adeline St., Oakland, CA., Alameda
 CROSS STREET: 25th St.
 TYPE OF AREA: COMMERCIAL INDUSTRIAL RURAL
 RESIDENTIAL OTHER
 TYPE OF BUSINESS: RETAIL FUEL STATION FARM OTHER Packager

IMPLEMENTING AGENCIES LOCAL AGENCY: Ala. County Environmental Health
 AGENCY NAME: S.F. Bay Area
 CONTACT PERSON: Ted Garow
 PHONE: (415) 874-6434
 CONTACT PERSON: Roger James
 PHONE: ()

SUBSTANCES INVOLVED (1) NAME: Great Western Solvent 225
 QUANTITY LOST (GALLONS): UNKNOWN
 (2) UNKNOWN

DISCOVERY/ABATEMENT DATE DISCOVERED: June 01 1987
 HOW DISCOVERED: INVENTORY CONTROL SUBSURFACE MONITORING NUISANCE CONDITIONS
 TANK TEST TANK REMOVAL OTHER
 DATE DISCHARGE BEGAN: UNKNOWN
 METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY):
 REMOVE CONTENTS REPLACE TANK CLOSE TANK
 REPAIR TANK REPAIR PIPING CHANGE PROCEDURE
 OTHER
 HAS DISCHARGE BEEN STOPPED?
 YES NO - IF YES, DATE

SOURCE/CAUSE SOURCE OF DISCHARGE: TANK LEAK UNKNOWN
 PIPING LEAK OTHER
 TANKS ONLY: CAPACITY 1000 GAL, AGE 25 YRS
 MATERIAL: FIBERGLASS STEEL OTHER
 CAUSE(S): OVERFILL RUPTURE/FAILURE
 CORROSION UNKNOWN
 SPILL OTHER

CASE TYPE CHECK ONE ONLY: UNDETERMINED SOIL ONLY GROUNDWATER DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS CHECK ONE ONLY: SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) CLEANUP IN PROGRESS SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY)
 NO ACTION TAKEN POST CLEANUP MONITORING IN PROGRESS NO FUNDS AVAILABLE TO PROCEED EVALUATING CLEANUP ALTERNATIVES

REMEDIAL ACTION CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS):
 CAP SITE (CD) EXCAVATE & DISPOSE (ED) REMOVE FREE PRODUCT (FP) ENHANCED BIO DEGRADATION (IT)
 CONTAINMENT BARRIER (CB) EXCAVATE & TREAT (ET) PUMP & TREAT GROUNDWATER (GT) REPLACE SUPPLY (RS)
 TREATMENT AT HOOKUP (HU) NO ACTION REQUIRED (NA) OTHER (OT)

COMMENTS: Soil sample fom under fill end showed total hydrocarbons of 160 mg/kg

= Threat to Gw exists
 UNASSIGNED Case
 JF 7/1/87

120.001

Copy for INSPECTOR

Excavation Permit Granted No. _____

CITY OF OAKLAND

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks

Oakland, California, August 2, 1988

PERMISSION IS HEREBY GRANTED TO ~~REMOVE~~ **REMOVE** ~~REMOVE~~ **REMOVE** Gasoline tank and excavate commencing

on the east side of Adeline Street Avenue 20 feet south of 26th Avenue Street Avenue

House No. 2528 Adeline Street Street Avenue Present Storage _____

Owner Aerove Pacific Address P.F. BX 2216 San Leandro Phone 678-3400

Applicant TIES Address 30028 Industrial Parkway W.W. Hayward Phone 471-2100

Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 1 Capacity 1000 Gallons, each

Remarks:

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____
Fire Marshal

Approved _____
Drainage Division Engineering Dept.

EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 4-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

Inspection Fee Paid \$ 50.00 ck#1097 rec#105049

Received by G.M. JOHNSON
FIRE PREVENTION BUREAU

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on 9/13/91

by Christopher Myers
Fire Marshal

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 278-8851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.



Uriah Inc.

An Environmental Services Company

August 12, 1988

Mr. Dan Heath
Toxic Industrial Environmental Services
30028 Industrial Parkway, S.W.
Hayward, California 94544

Re: Subsurface Soil Sampling at E-Z-Est Products Company,
Inc. located at 2528 Adeline, Oakland, California

Dear Mr. Heath:

On Thursday, August 4, 1988, Uriah, Inc. staff performed subsurface soil sampling at the site indicated above to determine the presence (if any) of hydrocarbon contamination of the soil following the excavation of one (1) 1,000 gallon underground Kerosene storage tank.

SAMPLING METHODOLOGY

With the approval of Mr. Ariu Levi, Hazardous Materials Specialist and Mr. Gordon Gullett, Fire Prevention Bureau Inspector for the City of Oakland, Uriah, Inc. staff obtained two (2) soil samples from native soil 1 to 2 feet below the backfill-native soil interface. (See site map for specific sample locations).

The soil to be sampled was withdrawn from the tank excavation by backhoe. Both soil samples were obtained immediately upon access to the bucket of the backhoe by first removing the outer two to three inches of soil and driving a clean, brass tube (1.92 inches in diameter and 6 inches in length) into the exposed layer of soil. The brass tubes were promptly wrapped with aluminum foil, capped, sealed with black electrical tape, placed on blue ice and transported to a certified hazardous waste analytical laboratory under chain of custody. Each sample was analyzed for total Petroleum Hydrocarbons as Diesel Fuel using EPA methods 3550/8015. (Kerosene and Diesel fuel are considered analogous under the EPA analytical method 3550/8015).

VISUAL OBSERVATIONS

No odor or discoloration of the soil was noted at the time of sampling. The tank was rusted and pitted with no holes found.

RESULTS

All laboratory results as received from the certified hazardous waste analytical laboratory are enclosed.

CONCLUSIONS AND RECOMMENDATIONS

The levels of Total Petroleum Hydrocarbons as diesel fuel were found to be below detection limits (<10 ppm) in both samples #1 and #2.

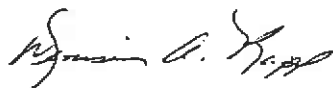
Copies of this report have been provided for your convenience. It is recommended that a copy be forwarded to each of the following agencies:

San Francisco Bay Region Water Quality Control Board
1111 Jackson Street, 6th Floor
Oakland, California 94607
Attention: Lisa McCann

Alameda County Hazardous Materials Management Program
80 Swan Way, Room 200
Oakland, California 94621
Attention: Mr. Ariu Levi

If you have any further questions or if I may otherwise be of assistance please contact me at (209) 579-2007.

Sincerely,

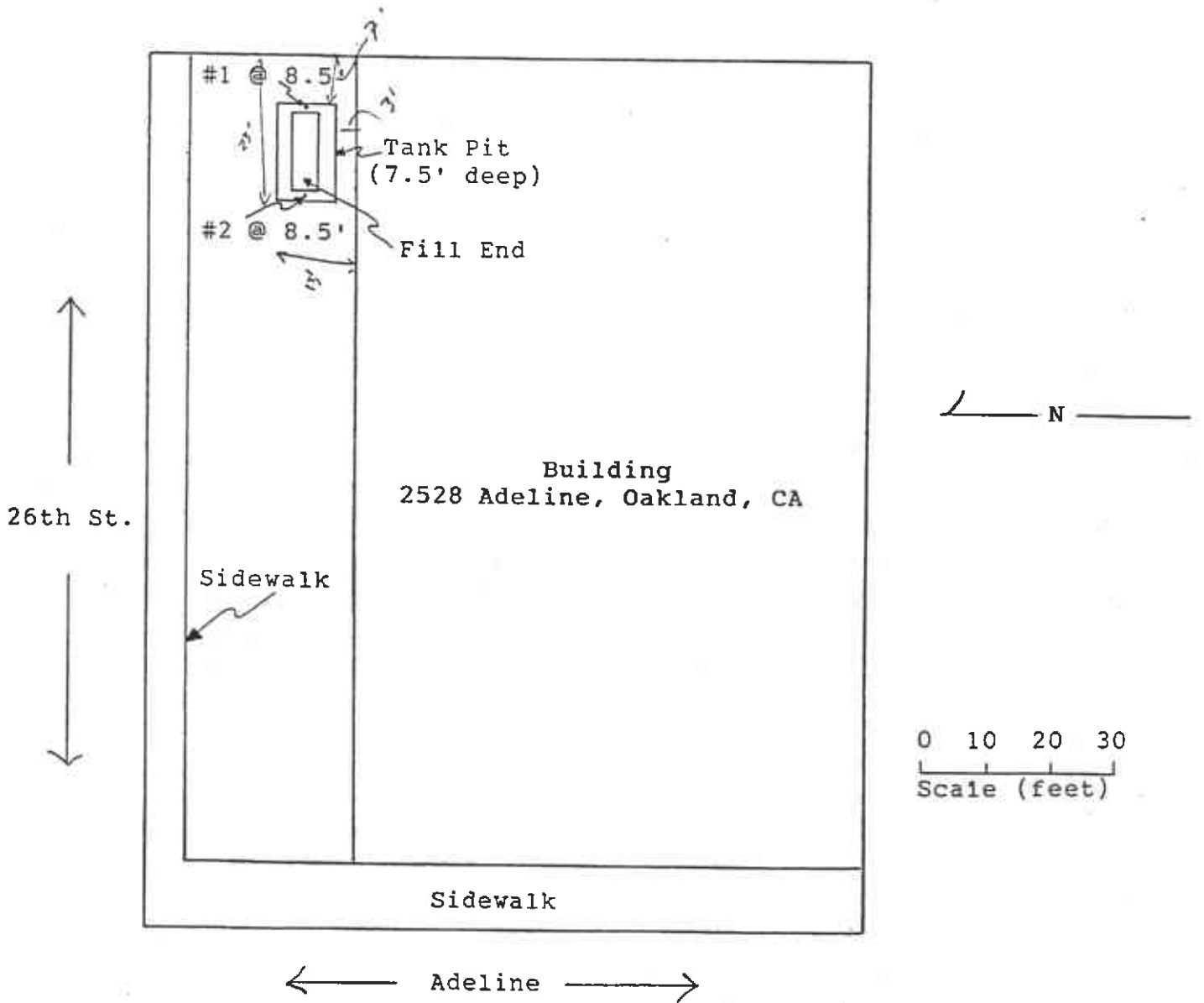


Denise A. Rapp
Vice-President

DAR:br
enc.

Site Map

Kerosene UST.



Prepared For:
Mr. Dan Heath
Toxic Industrial Environmental
Services
30028 Industrial Prkwy, S. W.
Hayward, CA 94544



HAZCAT Mobile Organics Lab

733 Dartmouth Avenue
San Carlos, CA 94070 • (415) 591-5820

Uriah Environmental Services Inc.
945 Coffee Rd. Suite 5
Modesto CA 95352
Attn: John Rapp
President

Date Sampled: 08-04-88
Date Received: 08-04-88
Date Reported: 08-06-88

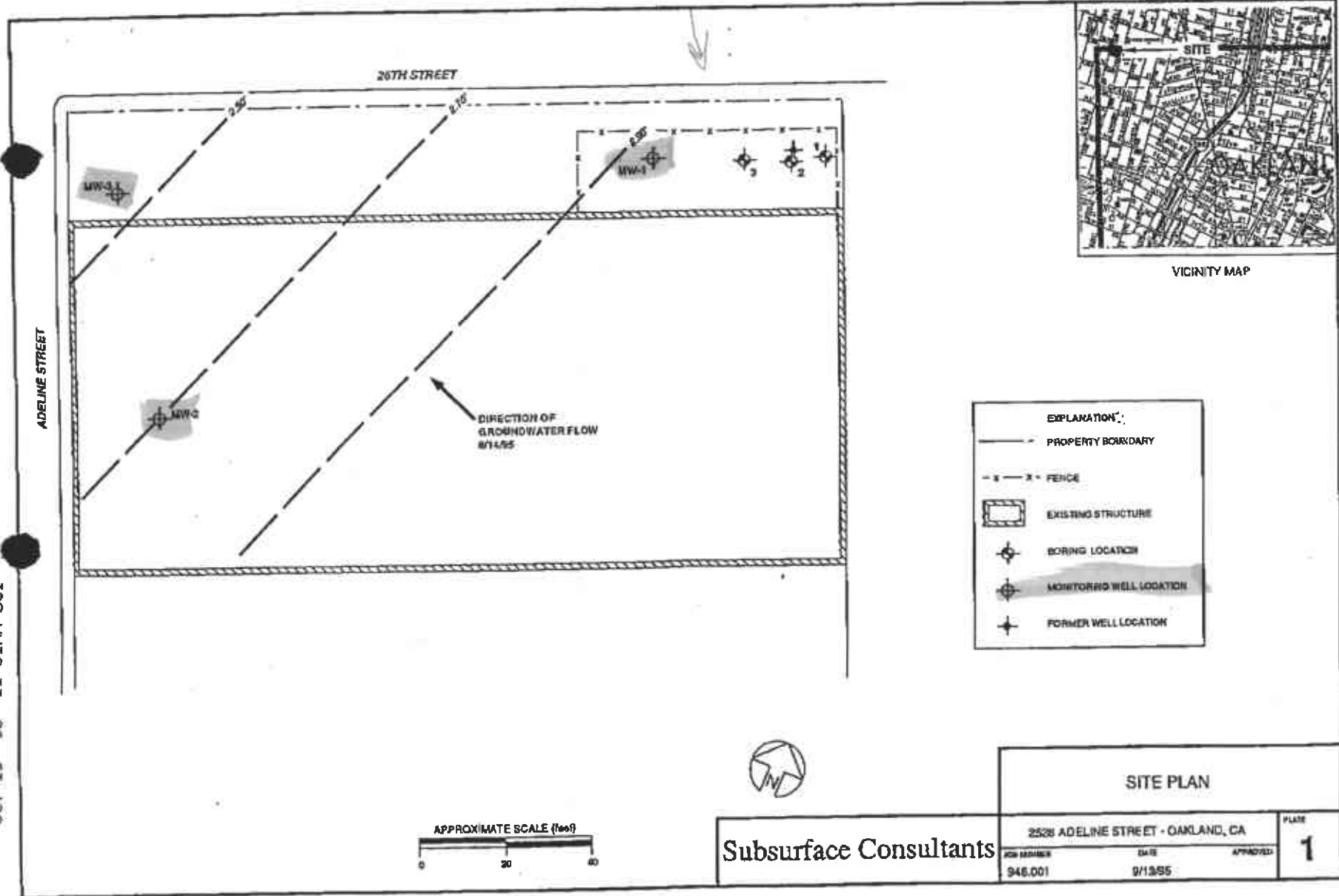
<u>Sample Number</u>	<u>Sample Description</u>	<u>Detection Limit</u>	<u>Total Petroleum Hydrocarbons as Diesel</u>
		ppm	ppm
	21788T1S 2528 Adeline-Oakland		
088048	#1	10	<10
088049	#2	10	<10

Note: Analysis was performed using EPA methods 3550 and 8015

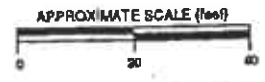
HAZCAT

Ronald G. Evans
Lab Director

near former
Kerosene
WST.



EXPLANATION:	
	PROPERTY BOUNDARY
	FENCE
	EXISTING STRUCTURE
	BORING LOCATION
	MONITORING WELL LOCATION
	FORMER WELL LOCATION



Subsurface Consultants			SITE PLAN	
2528 ADELIN STREET - OAKLAND, CA			JOB NUMBER	
946.001			DATE	
9/13/95			APPROVED	
				1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 17-AUG-95
Lab Job Number: 122134
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by:

Mary Plessas

Reviewed by:

[Signature]

This package may be reproduced only in its entirety.

CLIENT: Subsurface Consultants
PROJECT ID: 946.001
LOCATION: 2528 Adeline St.
MATRIX: Soil

DATE REPORTED: 08/17/95

Metals Analytical Report

Barium

Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
MW-2 @ 1'	122134-001	08/09/95	08/10/95	37	0.49	22602	EPA 6010A	08/15/95
MW-3 @ 2'	122134-002	08/09/95	08/10/95	100	0.49	22602	EPA 6010A	08/15/95



Curtis & Tompkins, Ltd.



Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 122134

DATE REPORTED: 08/17/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Barium	ND	0.5	mg/Kg	22602	EPA 6010A	08/15/95

ND = Not Detected at or above reporting limit

CLIENT: Subsurface Consultants
 JOB NUMBER: 122134

DATE REPORTED: 08/17/95

BATCH QC REPORT
 BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Barium	2000	2030	2040	ug/L	102	102	102	1	22602	EPA 6010A	08/15/95



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 11-AUG-95
Lab Job Number: 122021
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by:

May Plessan

Reviewed by:

[Signature]

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CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Soil

DATE REPORTED: 08/11/95

Metals Analytical Report

Barium

Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
1 3.5'	122021-001	03/31/95	08/03/95	91	0.50	22409	EPA 6010A	08/11/95
1 5.5'	122021-002	03/31/95	08/03/95	1900	0.50	22409	EPA 6010A	08/11/95
1 10.5'	122021-003	03/31/95	08/03/95	820	0.50	22409	EPA 6010A	08/11/95
1 4'	122021-004	03/31/95	08/03/95	2100	0.50	22409	EPA 6010A	08/11/95
1 8'	122021-005	03/31/95	08/03/95	2900	0.49	22409	EPA 6010A	08/11/95
-1 @ 8'	122021-006	03/31/95	08/03/95	160	0.49	22409	EPA 6010A	08/11/95



Curtis & Tompkins, Ltd.

CLIENT: Subsurface Consultants
JOB NUMBER: 122021

DATE REPORTED: 08/11/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Barium	ND	0.5	mg/Kg	22409	EPA 6010A	08/11/95

ND = Not Detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 122021

DATE REPORTED: 08/11/95

BATCH QC REPORT
SAMPLE SPIKE

Compound	Spike Amount	Sample	Sample Result	Spike Result	Units	Percent Rec.	QC Batch	Method	Analysis Date
Barium	500	122021-001	90.9	471.7	mg/Kg	76	22409	EPA 6010A	08/11/95

CLIENT: Subsurface Consultants
JOB NUMBER: 122021

DATE REPORTED: 08/11/95

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD	QC Batch	Method	Analysis Date
Barium	122021-001	90.9	87.18	mg/Kg	4	22409	EPA 6010A	08/11/95

CLIENT: Subsurface Consultants
 JOB NUMBER: 122021

DATE REPORTED: 08/11/95

BATCH QC REPORT
 BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Barium	10000	9849	9705	ug/L	98	97	98	2	22409	EPA 6010A	08/11/95



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 13-APR-95
Lab Job Number: 120527
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by:

May Plessar

Reviewed by:

[Signature]

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LABORATORY NUMBER: 120527
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 04/03/95
DATE RECEIVED: 04/04/95
DATE ANALYZED: 04/06/95
DATE REPORTED: 04/13/95
BATCH NO: 19822

Total Volatile Hydrocarbons as Gasoline in Aqueous Solution
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	STODDARD RANGE (ug/L)
120527-001	MW-1	730	**
METHOD BLANK	N/A	ND(50)	ND(50)

** Stoddard range not reported due to overlap of hydrocarbon ranges.

ND = Not detected at or above reporting limit. Reporting limit indicated in parantheses.

QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY, %	104



LABORATORY NUMBER: 120527
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELIN ST.

DATE SAMPLED: 04/03/95
DATE RECEIVED: 04/04/95
DATE EXTRACTED: 04/06/95
DATE ANALYZED: 04/07/95
DATE REPORTED: 04/13/95
BATCH NO: 19849

Extractable Petroleum Hydrocarbons in Aqueous Solutions
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT (ug/L)
120527-001	MW-1	310*	***	50
METHOD BLANK	N/A	ND	ND	50

ND = Not detected at or above reporting limit. Reporting limit applies to all analytes.

* Sample chromatogram does not resemble hydrocarbon standard.

*** Diesel range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: BS/BSD

RPD, %	9
RECOVERY, %	92

SAMPLE ID: **MW-1**
 LAB ID: 120527-001
 CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Filtrate

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
Antimony	ND	60	19931	EPA 6010A	04/11/95
Arsenic	ND	5.0	19931	EPA 6010A	04/11/95
Barium	160	10	19931	EPA 6010A	04/11/95
Beryllium	ND	2.0	19931	EPA 6010A	04/11/95
Cadmium	ND	1.0	19931	EPA 6010A	04/11/95
Chromium (total)	ND	10	19931	EPA 6010A	04/11/95
Cobalt	ND	20	19931	EPA 6010A	04/11/95
Copper	ND	10	19931	EPA 6010A	04/11/95
Lead	ND	3.0	19931	EPA 6010A	04/11/95
Mercury	ND	0.20	19901	EPA 7470	04/09/95
Molybdenum	ND	20	19931	EPA 6010A	04/11/95
Nickel	ND	20	19931	EPA 6010A	04/11/95
Selenium	11	5.0	19931	EPA 6010A	04/11/95
Silver	ND	10	19931	EPA 6010A	04/11/95
Thallium	ND	5.0	19931	EPA 6010A	04/11/95
Vanadium	ND	10	19931	EPA 6010A	04/11/95
Zinc	ND	20	19931	EPA 6010A	04/11/95

ND = Not detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 120527

DATE REPORTED: 04/13/95

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Antimony	500	479	498	ug/L	96	100	98	4	19931	EPA 6010A	04/11/95
Arsenic	2000	1920	1930	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Barium	2000	2020	2030	ug/L	101	102	102	1	19931	EPA 6010A	04/11/95
Beryllium	50	51.1	51.6	ug/L	102	103	103	1	19931	EPA 6010A	04/11/95
Cadmium	50	48.8	48.9	ug/L	98	98	98	0	19931	EPA 6010A	04/11/95
Chromium (total)	200	200	202	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Cobalt	500	490	497	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95
Copper	250	251	253	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Lead	500	481	487	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Mercury	4	4.132	3.784	ug/L	103	95	99	9	19901	EPA 7470	04/09/95
Molybdenum	400	376	382	ug/L	94	96	95	2	19931	EPA 6010A	04/11/95
Nickel	500	502	507	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Selenium	2000	1920	1940	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Silver	50	45.59	46.5	ug/L	91	93	92	2	19931	EPA 6010A	04/11/95
Thallium	2000	1940	1950	ug/L	97	98	98	1	19931	EPA 6010A	04/11/95
Vanadium	500	499	505	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Zinc	500	490	496	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95

CLIENT: Subsurface Consultants
 JOB NUMBER: 120527

DATE REPORTED: 04/13/95

 BATCH QC REPORT
 PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	19931	EPA 6010A	04/11/95
Arsenic	ND	5	ug/L	19931	EPA 6010A	04/11/95
Barium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Beryllium	ND	2	ug/L	19931	EPA 6010A	04/11/95
Cadmium	ND	1	ug/L	19931	EPA 6010A	04/11/95
Chromium (total)	ND	10	ug/L	19931	EPA 6010A	04/11/95
Cobalt	ND	20	ug/L	19931	EPA 6010A	04/11/95
Copper	ND	10	ug/L	19931	EPA 6010A	04/11/95
Lead	ND	3	ug/L	19931	EPA 6010A	04/11/95
Mercury	ND	0.2	ug/L	19901	EPA 7470	04/09/95
Molybdenum	ND	20	ug/L	19931	EPA 6010A	04/11/95
Nickel	ND	20	ug/L	19931	EPA 6010A	04/11/95
Selenium	ND	5	ug/L	19931	EPA 6010A	04/11/95
Silver	ND	10	ug/L	19931	EPA 6010A	04/11/95
Thallium	ND	5	ug/L	19931	EPA 6010A	04/11/95
Vanadium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Zinc	ND	20	ug/L	19931	EPA 6010A	04/11/95

ND = Not Detected at or above reporting limit



Client: Subsurface Consultants

Laboratory Login Number: 120527

Project Name: 2528 Adeline St.

Report Date: 13 April 95

Project Number: 946.001

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
120527-001	MW-1	Water	03-APR-95	04-APR-95	12-APR-95	5.8	mg/L	5	TR	19974

ND = Not Detected at or above Reporting Limit (RL).



Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: 2528 Adeline St.
Project Number: 946.001

Laboratory Login Number: 120527
Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 19974

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	12-APR-95

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	12-APR-95
BSD	84%	SMWW 17:5520BF	12-APR-95

		Control Limits
Average Spike Recovery	84%	80% - 120%
Relative Percent Difference	1.6%	< 20%



LABORATORY NUMBER: 120527-001
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.
 SAMPLE ID: MW-1

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE ANALYZED: 04/05/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	Detected(4.2)	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	Detected(3.1)	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	39	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	13	5.0
Styrene	ND	5.0
Total xylenes	75	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	113 %
Toluene-d8	101 %
Bromofluorobenzene	97 %

LABORATORY NUMBER: 120519-METHOD BLANK
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.
 SAMPLE ID: ~~NB~~ *method blank*

DATE ANALYZED: 04/05/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	123 %
Toluene-d8	96 %
Bromofluorobenzene	100 %



8240 MS/MSD Report

Matrix Sample Number: 120527-001

Date Analyzed: 05-APR-95

Lab No: QC89041 QC89042

Spike File: DD514

Matrix: WATER

Spike Dup File: DD515

Batch No: 19818 435095218014 435095224015 435095212013 Analyst: TW

	Instrdrg	SpikeAmt	% Rec	Limits
<u>MS RESULTS</u>				
1,1-Dichloroethene	56	50	104 %	61-145%
Trichloroethene	40.5	50	81 %	71-120%
Benzene	42.1	50	78 %	76-127%
Toluene	81.2	50	84 %	76-125%
Chlorobenzene	44.2	50	89 %	75-130%
Surrogate Recoveries				
1,2-Dichloroethane-d4	56.2	50	112 %	75-143%
Toluene-d8	50.8	50	102 %	77-134%
Bromofluorobenzene	47.5	50	95 %	65-129%
<u>MSD RESULTS</u>				
1,1-Dichloroethene	49.3	50	90 %	61-145%
Trichloroethene	37.5	50	75 %	71-120%
Benzene	40.3	50	75 %	76-127% *
Toluene	78.4	50	78 %	76-125%
Chlorobenzene	41.8	50	84 %	75-130%
Surrogate Recoveries				
1,2-Dichloroethane-d4	57.1	50	114 %	75-143%
Toluene-d8	49.8	50	100 %	77-134%
Bromofluorobenzene	50.7	50	101 %	65-129%
<u>MATRIX RESULTS</u>				
1,1-Dichloroethene	4.19			
Trichloroethene	0			
Benzene	3.05			
Toluene	39.3			
Chlorobenzene	0			
<u>RPD DATA</u>				
1,1-Dichloroethene	13 %			< 14%
Trichloroethene	8 %			< 14%
Benzene	5 %			< 11%
Toluene	3 %			< 13%
Chlorobenzene	6 %			< 13%



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A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 13-APR-95
Lab Job Number: 120519
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by:

Mary Plossac

Reviewed by:

[Signature]

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LABORATORY NUMBER: 120519
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE ANALYZED: 04/05,06/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19829

Total Volatile Hydrocarbons as Gasoline in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (mg/Kg)	STODDARD RANGE (mg/Kg)
120519-001	1 @ 2.0'	ND(1.0)	ND(1.0)
120519-003	2 @ 4.0'	ND(1.0)	ND(1.0)
120519-004	2 @ 11'	24*	**
120519-005	3 @ 2.0'	ND(1.0)	ND(1.0)
120519-006	MW-1 @ 3.0'	ND(1.0)	ND(1.0)
120519-007	MW-1 @ 7.0'	ND(1.0)	ND(1.0)
METHOD BLANK	N/A	ND(1.0)	ND(1.0)

* Sample chromatogram does not resemble the gasoline standard.
 ** Stoddard range not reported due to overlap of hydrocarbon ranges.
 ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD of 120525-001

RPD, %	1
RECOVERY, %	98

LABORATORY NUMBER: 120519
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE ANALYZED: 04/07/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19865

Total Volatile Hydrocarbons as Gasoline in Soils & Wastes
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (mg/Kg)	STODDARD RANGE (mg/Kg)
120519-008	1 @ 10.5'	14*	**
METHOD BLANK	N/A	ND(1.3)	ND(1.3)

* Sample chromatogram does not resemble the gasoline standard.
 ** Stoddard range not reported due to overlap of hydrocarbon ranges.
 ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	17
RECOVERY, %	98



LABORATORY NUMBER: 120519
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE ANALYZED: 04/06/95
DATE REPORTED: 04/13/95
BATCH NO: 19865

Total Volatile Hydrocarbons as Gasoline in Aqueous Solution
California DOHS Method
LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	STODDARD RANGE (ug/L)
120519-009	FORMER WELL	2,800	**
METHOD BLANK	N/A	ND(0.5)	ND(0.5)

** Stoddard range not reported due to overlap of hydrocarbon ranges.
ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, %	17
RECOVERY, %	98



LABORATORY NUMBER: 120519
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE EXTRACTED: 04/07/95
DATE ANALYZED: 04/08,09/95
DATE REPORTED: 04/13/95
BATCH NO: 19895

Extractable Petroleum Hydrocarbons in Soils & Wastes
California DOHS Method
LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT (mg/Kg)
120519-001	1 @ 2.0'	ND	ND	1.0
120519-003	2 @ 4.0'	**	37*	1.0
120519-004	2 @ 11'	ND	ND	1.0
120519-005	3 @ 2.0'	**	41*	1.0
120519-006	MW-1 @ 3.0'	ND	ND	1.0
120519-007	MW-1 @ 7.0'	ND	ND	1.0
120519-008	1 @ 10.5'	ND	ND	1.0
METHOD BLANK		ND	ND	1.0

ND = Not detected at or above reporting limit; reporting limit applies to all analytes.

* Sample chromatogram does not resemble hydrocarbon standard.

** Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: MS/MSD of 120464-003

RPD, %	11
RECOVERY, %	91

LABORATORY NUMBER: 120519
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE EXTRACTED: 04/05/95
 DATE ANALYZED: 04/06/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19817

Extractable Petroleum Hydrocarbons in Aqueous Solutions
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT (ug/L)
120519-009	FORMER WELL	**	1,600*	500
METHOD BLANK	N/A	ND	ND	50

ND = Not detected at or above reporting limit. Reporting limit applies to all analytes.

* Sample chromatogram does not resemble hydrocarbon standard.

** Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: BS/BSD

RPD, %	4
RECOVERY, %	93

Client: Subsurface Consultants

Laboratory Login Number: 120519

 Project Name: 2528 Adeline St.
 Project Number: 946.001

Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520EF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
120519-001	1 @ 2.0'	Soil	31-MAR-95	03-APR-95	12-APR-95	60	mg/Kg	50	TR	19975
120519-003	2 @ 4.0'	Soil	31-MAR-95	03-APR-95	12-APR-95	140	mg/Kg	50	TR	19975
120519-004	2 @ 11'	Soil	31-MAR-95	03-APR-95	12-APR-95	110	mg/Kg	50	TR	19975
120519-005	3 @ 2.0'	Soil	31-MAR-95	03-APR-95	12-APR-95	200	mg/Kg	50	TR	19975
120519-006	MW-1 @ 3.0'	Soil	31-MAR-95	03-APR-95	12-APR-95	140	mg/Kg	50	TR	19975
120519-007	MW-1 @ 7.0'	Soil	31-MAR-95	03-APR-95	12-APR-95	150	mg/Kg	50	TR	19975
120519-008	1 @ 10.5'	Soil	31-MAR-95	03-APR-95	12-APR-95	80	mg/Kg	50	TR	19975

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

 Client: Subsurface Consultants
 Project Name: 2528 Adeline St..
 Project Number: 946.001

 Laboratory Login Number: 120519
 Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 19975

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	50	mg/Kg	SMWW 17:5520EF	12-APR-95

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	86%	SMWW 17:5520EF	12-APR-95
BSD	89%	SMWW 17:5520EF	12-APR-95

		Control Limits
Average Spike Recovery	87%	80% - 120%
Relative Percent Difference	3.3%	< 20%

Client: Subsurface Consultants

Laboratory Login Number: 120519

Project Name: 2528 Adeline St.

Report Date: 13 April 95

Project Number: 946.001

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric) METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
120519-009	FORMER WELL	Water	31-MAR-95	03-APR-95	12-APR-95	37.	mg/L	5	TR	19974

ND = Not Detected at or above Reporting Limit (RL).

Q C B a t c h R e p o r t

Client: Subsurface Consultants
 Project Name: 2528 Adeline St.
 Project Number: 946.001

Laboratory Login Number: 120519
 Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 19974

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	12-APR-95

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	12-APR-95
BSD	84%	SMWW 17:5520BF	12-APR-95

		Control Limits
Average Spike Recovery	84%	80% - 120%
Relative Percent Difference	1.6%	< 20%

LABORATORY NUMBER: 120519-001
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.
 SAMPLE ID: 1 @ 2.0'

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE ANALYZED: 04/08/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19876

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	Detected(7.5)	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	128 %
Toluene-d8	101 %
Bromofluorobenzene	97 %



LABORATORY NUMBER: 120519-003
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELIN ST.
SAMPLE ID: 2 @ 4.0'

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE ANALYZED: 04/10/95
DATE REPORTED: 04/13/95
BATCH NO: 19913

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	Detected(9.1)	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	119 %
Toluene-d8	111 %
Bromofluorobenzene	91 %



LABORATORY NUMBER: 120519-005
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.
SAMPLE ID: 3 @ 2.0'

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE ANALYZED: 04/08/95
DATE REPORTED: 04/13/95
BATCH NO: 19876

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	18	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	131 %
Toluene-d8	92 %
Bromofluorobenzene	102 %



LABORATORY NUMBER: 120519-006
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.
 SAMPLE ID: MW-1 @ 3.0'

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE ANALYZED: 04/08/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19876

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	60	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	117 %
Toluene-d8	105 %
Bromofluorobenzene	98 %



LABORATORY NUMBER: 120519-009
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.
SAMPLE ID: FORMER WELL

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE ANALYZED: 04/05/95
DATE REPORTED: 04/13/95
BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	24	20
Carbon disulfide	Detected(4.1)	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	Detected(7.7)	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	Detected(4.5)	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	57	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	49	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	34	5.0
Styrene	ND	5.0
Total xylenes	270	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	113 %
Toluene-d8	104 %
Bromofluorobenzene	95 %



LABORATORY NUMBER: 120519-METHOD BLANK
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.
SAMPLE ID: MB

DATE ANALYZED: 04/05/95
DATE REPORTED: 04/13/95
BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	123 %
Toluene-d8	96 %
Bromofluorobenzene	100 %



LABORATORY NUMBER: 120519-METHOD BLANK
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 946.001
LOCATION: 2528 ADELINE ST.
SAMPLE ID: MB

DATE ANALYZED: 04/07/95
DATE REPORTED: 04/13/95
BATCH NO: 19876

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	113 %
Toluene-d8	101 %
Bromofluorobenzene	104 %



LABORATORY NUMBER: 120519-METHOD BLANK
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELIN ST.
 SAMPLE ID: MB

DATE ANALYZED: 04/10/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19913

EPA METHOD 8240: VOLATILE ORGANICS IN SOILS & WASTES

COMPOUND	Result (ug/Kg)	Reporting Limit (ug/Kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	116 %
Toluene-d8	101 %
Bromofluorobenzene	103 %



8240 Laboratory Control Sample Report

Lab No: QC89039
Date Analyzed: 06-APR-95
Matrix: WATER
Batch No: 19818 435096032023

LCS Datafile: DD523

Operator: TW

Compound	Instrdg	SpikeAmt	% Rec	Limits
1,1-Dichloroethene	45.3	50	91 %	61-145%
Trichloroethene	38.7	50	77 %	71-120%
Benzene	40.2	50	80 %	76-127%
Toluene	43.4	50	87 %	76-125%
Chlorobenzene	43.8	50	88 %	75-130%

Surrogate Recoveries

1,2-Dichloroethane-d4	57.8	50	116 %	75-143%
Toluene-d8	49.7	50	99 %	77-134%
Bromofluorobenzene	48.0	50	96 %	65-129%

Results within Specifications - PASS

Note: Instrument C and D surrogates based on LCS data.



8240 Laboratory Control Sample Report

Lab No: QC89315
 Date Analyzed: 07-APR-95
 Matrix: SOIL
 Batch No: 19876 425097222018

LCS Datafile: CD718

Operator: ATR

Compound	Instrdg	SpikeAmt	% Rec	Limits
1,1-Dichloroethene	65.2	50	130 %	59-172%
Trichloroethene	46.0	50	92 %	62-137%
Benzene	48.2	50	96 %	66-142%
Toluene	50.3	50	101 %	59-139%
Chlorobenzene	46.9	50	94 %	60-133%

Surrogate Recoveries

1,2-Dichloroethane-d4	59.2	50	118 %	75-143%
Toluene-d8	52.5	50	105 %	77-134%
Bromofluorobenzene	50.4	50	101 %	65-129%

Results within Specifications - PASS

Note: Instrument C and D surrogates based on LCS data



8240 Laboratory Control Sample Report

Lab No: QC89488
Date Analyzed: 10-APR-95
Matrix: SOIL
Batch No: 19913 425100114003

LCS Datafile: CDA03

Operator: ATR

Compound	Instrdg	SpikeAmt	% Rec	Limits
1,1-Dichloroethene	65.9	50	132 %	59-172%
Trichloroethene	48.6	50	97 %	62-137%
Benzene	49.4	50	99 %	66-142%
Toluene	52.8	50	106 %	59-139%
Chlorobenzene	49.1	50	98 %	60-133%

Surrogate Recoveries

1,2-Dichloroethane-d4	53.6	50	107 %	75-143%
Toluene-d8	51.1	50	102 %	77-134%
Bromofluorobenzene	51.3	50	103 %	65-129%

Results within Specifications - PASS

Note: Instrument C and D surrogates based on LCS data

SAMPLE ID: 1 @ 2.0'
 LAB ID: 120519-001
 CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Soil

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
Antimony	ND	2.9	19887	EPA 6010A	04/10/95
Arsenic	2.8	2.5	19912	EPA 7060	04/10/95
Barium	83	0.49	19887	EPA 6010A	04/11/95
Beryllium	0.61	0.098	19887	EPA 6010A	04/10/95
Cadmium	ND	0.25	19887	EPA 6010A	04/10/95
Chromium (total)	35	0.49	19887	EPA 6010A	04/10/95
Cobalt	8.5	0.98	19887	EPA 6010A	04/10/95
Copper	38	0.49	19887	EPA 6010A	04/10/95
Lead	3.8	1.5	19912	EPA 7421	04/12/95
Mercury	ND	0.10	19900	EPA 7471	04/09/95
Molybdenum	ND	0.98	19887	EPA 6010A	04/10/95
Nickel	34	0.98	19887	EPA 6010A	04/10/95
Selenium	ND	2.5	19912	EPA 7740	04/10/95
Silver	ND	0.49	19887	EPA 6010A	04/10/95
Thallium	ND	2.5	19912	EPA 7841	04/12/95
Vanadium	25	0.49	19887	EPA 6010A	04/10/95
Zinc	61	0.98	19887	EPA 6010A	04/10/95

ND = Not detected at or above reporting limit

SAMPLE ID: 2 @ 4.0'
 LAB ID: 120519-003
 CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Soil

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
Antimony	3.0	3.0	19887	EPA 6010A	04/10/95
Arsenic	3.1	2.5	19912	EPA 7060	04/10/95
Barium	67000	8.0	19887	EPA 6010A	04/11/95
Beryllium	0.16	0.10	19887	EPA 6010A	04/10/95
Cadmium	ND	0.25	19887	EPA 6010A	04/10/95
Chromium (total)	19	0.50	19887	EPA 6010A	04/10/95
Cobalt	19	1.0	19887	EPA 6010A	04/10/95
Copper	63	0.50	19887	EPA 6010A	04/10/95
Lead	21	1.5	19912	EPA 7421	04/12/95
Mercury	ND	0.10	19900	EPA 7471	04/09/95
Molybdenum	1.5	1.0	19887	EPA 6010A	04/10/95
Nickel	65	1.0	19887	EPA 6010A	04/10/95
Selenium	ND	2.5	19912	EPA 7740	04/10/95
Silver	ND	0.50	19887	EPA 6010A	04/10/95
Thallium	ND	2.5	19912	EPA 7841	04/12/95
Vanadium	85	0.50	19887	EPA 6010A	04/10/95
Zinc	190	1.0	19887	EPA 6010A	04/10/95

ND = Not detected at or above reporting limit



SAMPLE ID: 3 @ 2.0'
LAB ID: 120519-005
CLIENT: Subsurface Consultants
PROJECT ID: 946.001
LOCATION: 2528 Adeline St.
MATRIX: Soil

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
Antimony	3.6	3.0	19887	EPA 6010A	04/10/95
Arsenic	3.4	2.4	19912	EPA 7060	04/10/95
Barium	14000	3.9	19887	EPA 6010A	04/11/95
Beryllium	0.20	0.099	19887	EPA 6010A	04/10/95
Cadmium	ND	0.25	19887	EPA 6010A	04/10/95
Chromium (total)	21	0.49	19887	EPA 6010A	04/10/95
Cobalt	6.1	0.99	19887	EPA 6010A	04/10/95
Copper	42	0.49	19887	EPA 6010A	04/10/95
Lead	49	1.5	19912	EPA 7421	04/12/95
Mercury	ND	0.10	19900	EPA 7471	04/09/95
Molybdenum	1.2	0.99	19887	EPA 6010A	04/10/95
Nickel	19	0.99	19887	EPA 6010A	04/10/95
Selenium	ND	2.4	19912	EPA 7740	04/10/95
Silver	ND	0.49	19887	EPA 6010A	04/10/95
Thallium	ND	2.4	19912	EPA 7841	04/12/95
Vanadium	24	0.49	19887	EPA 6010A	04/10/95
Zinc	250	0.99	19887	EPA 6010A	04/10/95

ND = Not detected at or above reporting limit



SAMPLE ID: MW-1 @ 3.0'
LAB ID: 120519-006
CLIENT: Subsurface Consultants
PROJECT ID: 946.001
LOCATION: 2528 Adeline St.
MATRIX: Soil

DATE SAMPLED: 03/31/95
DATE RECEIVED: 04/03/95
DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	QC Batch	Method	Analysis Date
Antimony	6.5	2.9	19887	EPA 6010A	04/10/95
Arsenic	3.9	2.5	19912	EPA 7060	04/11/95
Barium	220	0.49	19887	EPA 6010A	04/11/95
Beryllium	0.41	0.097	19887	EPA 6010A	04/10/95
Cadmium	ND	0.24	19887	EPA 6010A	04/10/95
Chromium (total)	35	0.49	19887	EPA 6010A	04/10/95
Cobalt	6.4	0.97	19887	EPA 6010A	04/10/95
Copper	20	0.49	19887	EPA 6010A	04/10/95
Lead	4.4	1.5	19912	EPA 7421	04/12/95
Mercury	ND	0.10	19900	EPA 7471	04/09/95
Molybdenum	ND	0.97	19887	EPA 6010A	04/10/95
Nickel	51	0.97	19887	EPA 6010A	04/10/95
Selenium	ND	2.5	19912	EPA 7740	04/11/95
Silver	ND	0.49	19887	EPA 6010A	04/10/95
Thallium	ND	2.5	19912	EPA 7841	04/12/95
Vanadium	28	0.49	19887	EPA 6010A	04/10/95
Zinc	63	0.97	19887	EPA 6010A	04/10/95

ND = Not detected at or above reporting limit

SAMPLE ID: FORMER WELL
 LAB ID: 120519-009
 CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Filtrate

DATE SAMPLED: 03/31/95
 DATE RECEIVED: 04/03/95
 DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
Antimony	ND	60	19931	EPA 6010A	04/11/95
Arsenic	ND	5.0	19931	EPA 6010A	04/11/95
Barium	28000	10	19931	EPA 6010A	04/11/95
Beryllium	ND	2.0	19931	EPA 6010A	04/11/95
Cadmium	ND	1.0	19931	EPA 6010A	04/11/95
Chromium (total)	ND	10	19931	EPA 6010A	04/11/95
Cobalt	ND	20	19931	EPA 6010A	04/11/95
Copper	ND	10	19931	EPA 6010A	04/11/95
Lead	ND	3.0	19931	EPA 6010A	04/11/95
Mercury	ND	0.20	19901	EPA 7470	04/09/95
Molybdenum	ND	20	19931	EPA 6010A	04/11/95
Nickel	ND	20	19931	EPA 6010A	04/11/95
Selenium	7.4	5.0	19931	EPA 6010A	04/11/95
Silver	ND	10	19931	EPA 6010A	04/11/95
Thallium	ND	5.0	19931	EPA 6010A	04/11/95
Vanadium	ND	10	19931	EPA 6010A	04/11/95
Zinc	24	20	19931	EPA 6010A	04/11/95

ND = Not detected at or above reporting limit



CLIENT: Subsurface Consultants
 JOB NUMBER: 120519

DATE REPORTED: 04/13/95.

BATCH QC REPORT
 PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	19887	EPA 6010A	04/10/95
Antimony	ND	60	ug/L	19931	EPA 6010A	04/11/95
Arsenic	ND	2.5	mg/Kg	19912	EPA 7060	04/10/95
Arsenic	ND	5	ug/L	19931	EPA 6010A	04/11/95
Barium	ND	0.5	mg/Kg	19887	EPA 6010A	04/11/95
Barium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Beryllium	ND	0.1	mg/Kg	19887	EPA 6010A	04/10/95
Beryllium	ND	2	ug/L	19931	EPA 6010A	04/11/95
Cadmium	ND	0.25	mg/Kg	19887	EPA 6010A	04/10/95
Cadmium	ND	1	ug/L	19931	EPA 6010A	04/11/95
Chromium (total)	ND	0.5	mg/Kg	19887	EPA 6010A	04/10/95
Chromium (total)	ND	10	ug/L	19931	EPA 6010A	04/11/95
Cobalt	ND	1	mg/Kg	19887	EPA 6010A	04/10/95
Cobalt	ND	20	ug/L	19931	EPA 6010A	04/11/95
Copper	ND	0.5	mg/Kg	19887	EPA 6010A	04/10/95
Copper	ND	10	ug/L	19931	EPA 6010A	04/11/95
Lead	ND	1.5	mg/Kg	19912	EPA 7421	04/12/95
Lead	ND	3	ug/L	19931	EPA 6010A	04/11/95
Mercury	ND	0.1	mg/Kg	19900	EPA 7471	04/09/95
Mercury	ND	0.2	ug/L	19901	EPA 7470	04/09/95
Molybdenum	ND	1	mg/Kg	19887	EPA 6010A	04/10/95
Molybdenum	ND	20	ug/L	19931	EPA 6010A	04/11/95
Nickel	ND	1	mg/Kg	19887	EPA 6010A	04/10/95
Nickel	ND	20	ug/L	19931	EPA 6010A	04/11/95
Selenium	ND	2.5	mg/Kg	19912	EPA 7740	04/10/95
Selenium	ND	5	ug/L	19931	EPA 6010A	04/11/95
Silver	ND	0.5	mg/Kg	19887	EPA 6010A	04/10/95
Silver	ND	10	ug/L	19931	EPA 6010A	04/11/95
Thallium	ND	2.5	mg/Kg	19912	EPA 7841	04/12/95
Thallium	ND	5	ug/L	19931	EPA 6010A	04/11/95

ND = Not Detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 120519

DATE REPORTED: 04/13/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Vanadium	ND	0.5	mg/Kg	19887	EPA 6010A	04/10/95
Vanadium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Zinc	ND	1	mg/Kg	19887	EPA 6010A	04/10/95
Zinc	ND	20	ug/L	19931	EPA 6010A	04/11/95

ND = Not Detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 120519

DATE REPORTED: 04/13/95

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Antimony	500	453.8	484	ug/L	91	97	94	6	19887	EPA 6010A	04/10/95
Antimony	500	479	498	ug/L	96	100	98	4	19931	EPA 6010A	04/11/95
Arsenic	40	451.3	433.6	ug/L	113	108	111	4	19912	EPA 7060	04/10/95
Arsenic	2000	1920	1930	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Barium	2000	1937	1933	ug/L	97	97	97	0	19887	EPA 6010A	04/11/95
Barium	2000	2020	2030	ug/L	101	102	102	1	19931	EPA 6010A	04/11/95
Beryllium	50	49.02	48.63	ug/L	98	97	98	1	19887	EPA 6010A	04/10/95
Beryllium	50	51.1	51.6	ug/L	102	103	103	1	19931	EPA 6010A	04/11/95
Cadmium	50	55.02	58.85	ug/L	110	118	114	7	19887	EPA 6010A	04/10/95
Cadmium	50	48.8	48.9	ug/L	98	98	98	0	19931	EPA 6010A	04/11/95
Chromium (total)	200	197.6	196.9	ug/L	99	99	99	0	19887	EPA 6010A	04/10/95
Chromium (total)	200	200	202	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Cobalt	500	486.9	486.9	ug/L	97	97	97	0	19887	EPA 6010A	04/10/95
Cobalt	500	490	497	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95
Copper	250	242.5	240.8	ug/L	97	96	97	1	19887	EPA 6010A	04/10/95
Copper	250	251	253	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Lead	30	276.7	289.6	ug/L	92	97	95	5	19912	EPA 7421	04/12/95
Lead	500	481	487	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Mercury	0.004	0.004	0.004	mg/Kg	102	92	97	10	19900	EPA 7471	04/09/95
Mercury	4	4.132	3.784	ug/L	103	95	99	9	19901	EPA 7470	04/09/95
Molybdenum	400	381.3	364.7	ug/L	95	91	93	5	19887	EPA 6010A	04/10/95
Molybdenum	400	376	382	ug/L	94	96	95	2	19931	EPA 6010A	04/11/95
Nickel	500	501.3	512.8	ug/L	100	103	102	2	19887	EPA 6010A	04/10/95
Nickel	500	502	507	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Selenium	30	289.1	247.2	ug/L	96	82	89	16	19912	EPA 7740	04/10/95
Selenium	2000	1920	1940	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Silver	50	52.45	50.63	ug/L	105	101	103	4	19887	EPA 6010A	04/10/95
Silver	50	45.59	46.5	ug/L	91	93	92	2	19931	EPA 6010A	04/11/95
Thallium	40	387.1	391.5	ug/L	97	98	98	1	19912	EPA 7841	04/12/95
Thallium	2000	1940	1950	ug/L	97	98	98	1	19931	EPA 6010A	04/11/95
Vanadium	500	490.6	492.6	ug/L	98	99	99	0	19887	EPA 6010A	04/10/95
Vanadium	500	499	505	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Zinc	500	466.3	470.7	ug/L	93	94	94	1	19887	EPA 6010A	04/10/95
Zinc	500	490	496	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95

120519

CHAIN OF CUSTODY FORM

PROJECT NAME: 2528 Adeline St

JOB NUMBER: 946.001

PROJECT CONTACT: M. Watada

SAMPLED BY: M. Mendoza

LAB: C+T

TURNAROUND: normal

REQUESTED BY: M. Watada

PAGE 1 OF 1

ANALYSIS REQUESTED

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX				CONTAINERS				METHOD PRESERVED					SAMPLING DATE				NOTES
		WATER	SOIL	WASTE	AIR	VOA	LITER	PINT	TUBE	HCL	H ₂ SO ₄	HNO ₃	ICE	NONE	MONTH	DAY	YEAR	TIME	
-1	1e2.0'		X					X					X		03	31	95		TVH as gas + standard solvent
-2	1e6.0'		X					X					X						TEH
-3	2e3.540		X					X					X						GTG
-4	2e11'		X					X					X						VOC EPA 8240
-5	3e2.0'		X					X					X						Title 26 Metals (filter)
-6	MW-1e3.0'		X					X					X						
-7	MW-1e7.0'		X					X					X						
-8	1e10.5		X					X					X						
-9	Former Well	X											X		03	31	95		HOLD
-10	Former Well-Prms												X						X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature) <u>Marianne Watada</u>	DATE / TIME <u>4/3/95 4:45p</u>	RECEIVED BY: (Signature) <u>Michael May</u>	DATE / TIME <u>4-3-95 4:45</u>
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:
 Please filter before metals analysis.
 Please quantitate TVH as gas + standard solvent.

Subsurface Consultants, Inc.
 171 12TH STREET, SUITE 201, OAKLAND, CALIFORNIA 94607
 (510) 268-0461 • FAX: 510-268-0137



VERBAL ADDITIONS/CANCELLATIONS TO ANALYSIS REQUEST SHEET

Client: SCI Date: 4/4/95

Requested By: Marcum W Time: 11 AM PM

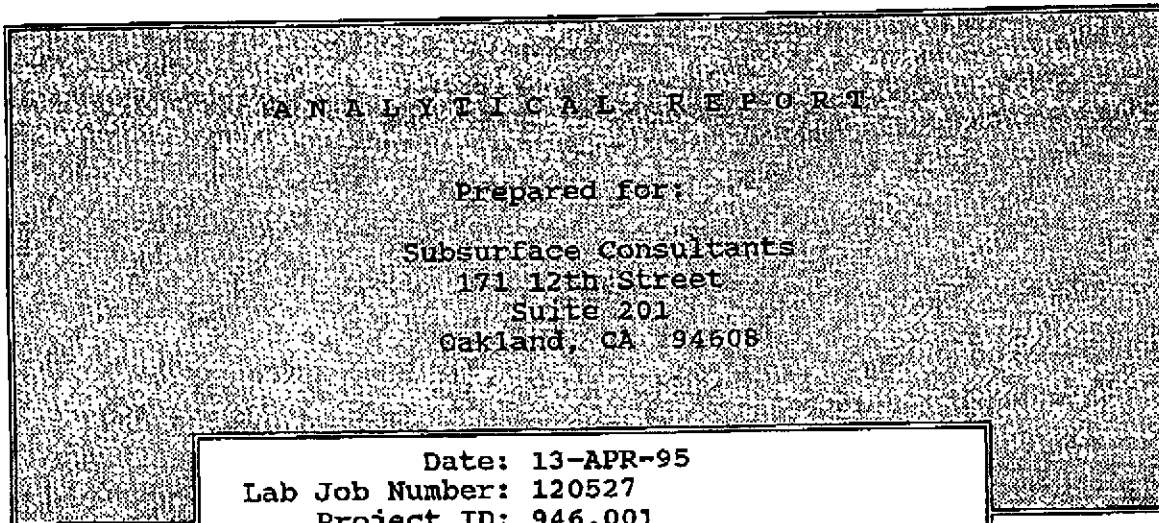
Recorded By: MBT

Current Lab ID (Previous Lab ID)	Client ID	Circle Matrix	Specify add or cancel	Analysis	Due Date
()	1 @ 6'	water <u>soil</u> waste oil other	cancel	TVH, TEH, OEG	
()	1 @ 10	water <u>soil</u> waste oil other	add	TVH (or gas + Standard) TEH, OEG	
()		water soil waste oil other			
()		water soil waste oil other			
()		water soil waste oil other			
()		water soil waste oil other			



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900



ANALYTICAL REPORT

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 13-APR-95
Lab Job Number: 120527
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by: May Plessas

Reviewed by: [Signature]

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Berkeley

Irvine



LABORATORY NUMBER: 120527
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE ANALYZED: 04/06/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19822

Total Volatile Hydrocarbons as Gasoline in Aqueous Solution
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	STODDARD RANGE (ug/L)
120527-001	MW-1	730	**
METHOD BLANK	N/A	ND(50)	ND(50)

** Stoddard range not reported due to overlap of hydrocarbon ranges.

ND = Not detected at or above reporting limit. Reporting limit indicated in parantheses.

QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY, %	104



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LABORATORY NUMBER: 120527
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE EXTRACTED: 04/06/95
 DATE ANALYZED: 04/07/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19849

Extractable Petroleum Hydrocarbons in Aqueous Solutions
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT (ug/L)
120527-001	MW-1	310*	***	50
METHOD BLANK	N/A	ND	ND	50

ND = Not detected at or above reporting limit. Reporting limit applies to all analytes.

* Sample chromatogram does not resemble hydrocarbon standard.
 *** Diesel range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: BS/BSD

RPD, %	9
RECOVERY, %	92



SAMPLE ID: MW-1
 LAB ID: 120527-001
 CLIENT: Subsurface Consultants
 PROJECT ID: 946.001
 LOCATION: 2528 Adeline St.
 MATRIX: Filtrate

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE REPORTED: 04/13/95

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
Antimony	ND	60	19931	EPA 6010A	04/11/95
Arsenic	ND	5.0	19931	EPA 6010A	04/11/95
Barium	160	10	19931	EPA 6010A	04/11/95
Beryllium	ND	2.0	19931	EPA 6010A	04/11/95
Cadmium	ND	1.0	19931	EPA 6010A	04/11/95
Chromium (total)	ND	10	19931	EPA 6010A	04/11/95
Cobalt	ND	20	19931	EPA 6010A	04/11/95
Copper	ND	10	19931	EPA 6010A	04/11/95
Lead	ND	3.0	19931	EPA 6010A	04/11/95
Mercury	ND	0.20	19901	EPA 7470	04/09/95
Molybdenum	ND	20	19931	EPA 6010A	04/11/95
Nickel	ND	20	19931	EPA 6010A	04/11/95
Selenium	11	5.0	19931	EPA 6010A	04/11/95
Silver	ND	10	19931	EPA 6010A	04/11/95
Thallium	ND	5.0	19931	EPA 6010A	04/11/95
Vanadium	ND	10	19931	EPA 6010A	04/11/95
Zinc	ND	20	19931	EPA 6010A	04/11/95

ND = Not detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 120527

DATE REPORTED: 04/13/95

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Antimony	500	479	498	ug/L	96	100	98	4	19931	EPA 6010A	04/11/95
Arsenic	2000	1920	1930	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Barium	2000	2020	2030	ug/L	101	102	102	1	19931	EPA 6010A	04/11/95
Beryllium	50	51.1	51.6	ug/L	102	103	103	1	19931	EPA 6010A	04/11/95
Cadmium	50	48.8	48.9	ug/L	98	98	98	0	19931	EPA 6010A	04/11/95
Chromium (total)	200	200	202	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Cobalt	500	490	497	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95
Copper	250	251	253	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Lead	500	481	487	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Mercury	4	4.132	3.784	ug/L	103	95	99	9	19901	EPA 7470	04/09/95
Molybdenum	400	376	382	ug/L	94	96	95	2	19931	EPA 6010A	04/11/95
Nickel	500	502	507	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Selenium	2000	1920	1940	ug/L	96	97	97	1	19931	EPA 6010A	04/11/95
Silver	50	45.59	46.5	ug/L	91	93	92	2	19931	EPA 6010A	04/11/95
Thallium	2000	1940	1950	ug/L	97	98	98	1	19931	EPA 6010A	04/11/95
Vanadium	500	499	505	ug/L	100	101	101	1	19931	EPA 6010A	04/11/95
Zinc	500	490	496	ug/L	98	99	99	1	19931	EPA 6010A	04/11/95



CLIENT: Subsurface Consultants
JOB NUMBER: 120527

DATE REPORTED: 04/13/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Antimony	ND	60	ug/L	19931	EPA 6010A	04/11/95
Arsenic	ND	5	ug/L	19931	EPA 6010A	04/11/95
Barium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Beryllium	ND	2	ug/L	19931	EPA 6010A	04/11/95
Cadmium	ND	1	ug/L	19931	EPA 6010A	04/11/95
Chromium (total)	ND	10	ug/L	19931	EPA 6010A	04/11/95
Cobalt	ND	20	ug/L	19931	EPA 6010A	04/11/95
Copper	ND	10	ug/L	19931	EPA 6010A	04/11/95
Lead	ND	3	ug/L	19931	EPA 6010A	04/11/95
Mercury	ND	0.2	ug/L	19901	EPA 7470	04/09/95
Molybdenum	ND	20	ug/L	19931	EPA 6010A	04/11/95
Nickel	ND	20	ug/L	19931	EPA 6010A	04/11/95
Selenium	ND	5	ug/L	19931	EPA 6010A	04/11/95
Silver	ND	10	ug/L	19931	EPA 6010A	04/11/95
Thallium	ND	5	ug/L	19931	EPA 6010A	04/11/95
Vanadium	ND	10	ug/L	19931	EPA 6010A	04/11/95
Zinc	ND	20	ug/L	19931	EPA 6010A	04/11/95

ND = Not Detected at or above reporting limit



Client: Subsurface Consultants

Laboratory Login Number: 120527

Project Name: 2528 Adeline St.
Project Number: 946.001

Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
120527-001	MU-1	Water	03-APR-95	04-APR-95	12-APR-95	5.8	mg/L	5	TR	19974

ND = Not Detected at or above Reporting Limit (RL).



Q C B a t c h R e p o r t

Client: Subsurface Consultants
 Project Name: 2528 Adeline St.
 Project Number: 946.001

Laboratory Login Number: 120527
 Report Date: 13 April 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 19974

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
BLANK	ND	5	mg/L	SMWW 17:5520BF	12-APR-95

Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	85%	SMWW 17:5520BF	12-APR-95
BSD	84%	SMWW 17:5520BF	12-APR-95

		Control Limits
Average Spike Recovery	84%	80% - 120%
Relative Percent Difference	1.6%	< 20%



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LABORATORY NUMBER: 120527-001
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELIN ST.
 SAMPLE ID: MW-1

DATE SAMPLED: 04/03/95
 DATE RECEIVED: 04/04/95
 DATE ANALYZED: 04/05/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	Detected(4.2)	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	Detected(3.1)	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	39	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	13	5.0
styrene	ND	5.0
Total xylenes	75	5.0

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

1,2-Dichloroethane-d4	113 %
Toluene-d8	101 %
Bromofluorobenzene	97 %



LABORATORY NUMBER: 120519-METHOD BLANK
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.
 SAMPLE ID: MB

DATE ANALYZED: 04/05/95
 DATE REPORTED: 04/13/95
 BATCH NO: 19818

EPA METHOD 8240: VOLATILE ORGANICS IN WATER

COMPOUND	Result (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	ND	20
Acetone	ND	20
Carbon disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon tetrachloride	ND	5.0
Vinyl acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethyl benzene	ND	5.0
Styrene	ND	5.0
Total xylenes	ND	5.0

ND = Not detected at or above reporting limit.
 SURROGATE RECOVERIES

1,2-Dichloroethane-d4	123 %
Toluene-d8	96 %
Bromofluorobenzene	100 %

Curtis & Tompkins, Ltd



Curtis & Tompkins, Ltd.

8240 Laboratory Control Sample Report

Lab No: QC89039
Date Analyzed: 06-APR-95
Matrix: WATER
Batch No: 19818 435096032023

LCS Datafile: DD523

Operator: TW

Compound	Instrdc	SpikeAmt	% Rec	Limits
1,1-Dichloroethene	45.3	50	91 %	61-145%
Trichloroethene	38.7	50	77 %	71-120%
Benzene	40.2	50	80 %	76-127%
Toluene	43.4	50	87 %	76-125%
Chlorobenzene	43.8	50	88 %	75-130%

Surrogate Recoveries

1,2-Dichloroethane-d4	57.8	50	116 %	75-143%
Toluene-d8	49.7	50	99 %	77-134%
Bromofluorobenzene	48.0	50	96 %	65-129%

Results within Specifications - PASS

Note: Instrument C and D surrogates based on LCS data

Curtis & Tompkins, Ltd



Curtis & Tompkins, Ltd.

8240 MS/MSD Report

Matrix Sample Number: 120527-001

Date Analyzed: 05-APR-95

Lab No: QC89041 QC89042

Spike File: DD514

Matrix: WATER

Spike Dup File: DD515

Batch No: 19818 435095218014 435095224015 435095212013 Analyst: TW

	Instrdrg	SpikeAmt	% Rec	Limits
<u>MS RESULTS</u>				
1,1-Dichloroethene	56	50	104 %	61-145%
Trichloroethene	40.5	50	81 %	71-120%
Benzene	42.1	50	78 %	76-127%
Toluene	81.2	50	84 %	76-125%
Chlorobenzene	44.2	50	89 %	75-130%
Surrogate Recoveries				
1,2-Dichloroethane-d4	56.2	50	112 %	75-143%
Toluene-d8	50.8	50	102 %	77-134%
Bromofluorobenzene	47.5	50	95 %	65-129%
<u>MSD RESULTS</u>				
1,1-Dichloroethene	49.3	50	90 %	61-145%
Trichloroethene	37.5	50	75 %	71-120%
Benzene	40.3	50	75 %	76-127%
Toluene	78.4	50	78 %	76-125%
Chlorobenzene	41.8	50	84 %	75-130%
Surrogate Recoveries				
1,2-Dichloroethane-d4	57.1	50	114 %	75-143%
Toluene-d8	49.8	50	100 %	77-134%
Bromofluorobenzene	50.7	50	101 %	65-129%
<u>MATRIX RESULTS</u>				
1,1-Dichloroethene	4.19			
Trichloroethene	0			
Benzene	3.05			
Toluene	39.3			
Chlorobenzene	0			
<u>RPD DATA</u>				
1,1-Dichloroethene	13 %			< 14%
Trichloroethene	8 %			< 14%
Benzene	5 %			< 11%
Toluene	3 %			< 13%
Chlorobenzene	6 %			< 13%



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
171 12th Street
Suite 201
Oakland, CA 94608

Date: 23-AUG-95
Lab Job Number: 122199
Project ID: 946.001
Location: 2528 Adeline St.

Reviewed by: _____

Reviewed by: _____

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LABORATORY NUMBER: 122199
 CLIENT: SUBSURFACE CONSULTANTS
 PROJECT ID: 946.001
 LOCATION: 2528 ADELINE ST.

DATE SAMPLED: 08/15/95
 DATE RECEIVED: 08/15/95
 DATE ANALYZED: 08/18/95
 DATE REPORTED: 08/23/95
 BATCH NO: 22697

Total Volatile Hydrocarbons as Gasoline in Aqueous Solutions
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	TVH AS GASOLINE (ug/L)	TVH AS STODDARD SOLVENT (ug/L)
122199-001	MW-2	83*	**
122199-002	MW-3	ND(50)	ND(50)
METHOD BLANK	N/A	ND(50)	ND(50)

** Stoddard Solvent not reported due to overlap of hydrocarbons.
 * Sample chromatogram does not resemble Gasoline standard pattern.

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: MS/MSD of sample no: 122146-001

RPD, %	<1
RECOVERY, %	102



Volatile Organics by GC/MS

Client: Subsurface Consultants
 Project#: 946.001
 Location: 2528 Adeline St.

Analysis Method: EPA 8240
 Prep Method: EPA 5030

Field ID: MW-2
 Lab ID: 122199-001
 Matrix: Water
 Batch#: 22717
 Units: ug/L
 Diln Fac: 2.5

Sampled: 08/15/95
 Received: 08/15/95
 Extracted: 08/19/95
 Analyzed: 08/19/95

Analyte	Result	Reporting Limit
Chloromethane	ND	25
Bromomethane	ND	25
Vinyl Chloride	ND	25
Chloroethane	ND	25
Methylene Chloride	ND	50
Acetone	ND	50
Carbon Disulfide	ND	13
Trichlorofluoromethane	ND	13
1,1-Dichloroethene	260	13
1,1-Dichloroethane	62	13
trans-1,2-Dichloroethene	ND	13
cis-1,2-Dichloroethene	ND	13
Chloroform	ND	13
Freon 113	ND	13
1,2-Dichloroethane	ND	13
2-Butanone	ND	25
1,1,1-Trichloroethane	170	13
Carbon Tetrachloride	ND	13
Vinyl Acetate	ND	130
Bromodichloromethane	ND	13
1,2-Dichloropropane	ND	13
cis-1,3-Dichloropropene	ND	13
Trichloroethene	ND	13
Dibromochloromethane	ND	13
1,1,2-Trichloroethane	ND	13
Benzene	ND	13
trans-1,3-Dichloropropene	ND	13
Bromoform	ND	13
2-Hexanone	ND	13
4-Methyl-2-Pentanone	ND	25
1,1,2,2-Tetrachloroethane	ND	13
Tetrachloroethene	ND	13
Toluene	ND	13
Chlorobenzene	ND	13
Ethylbenzene	ND	13
Styrene	ND	13
m,p-Xylenes	ND	13
o-Xylene	ND	13
Surrogate	%Recovery	Recovery Limits
Toluene-d8	94	88-110
Bromofluorobenzene	86	86-115
1,2-Dichloroethane-d4	107	76-114
Dibromofluoromethane	102	86-118



Volatile Organics by GC/MS

Client: Subsurface Consultants
 Project#: 946.001
 Location: 2528 Adeline St.

Analysis Method: EPA 8240
 Prep Method: EPA 5030

Field ID: MW-3
 Lab ID: 122199-002
 Matrix: Water
 Batch#: 22717
 Units: ug/L
 Diln Fac: 1

Sampled: 08/15/95
 Received: 08/15/95
 Extracted: 08/19/95
 Analyzed: 08/19/95

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	4.1 J	5.0
1,1-Dichloroethane	3.3 J	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	2.9 J	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	8.8	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	10
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Surrogate	%Recovery	Recovery Limits
Toluene-d8	91	88-110
Bromofluorobenzene	85	86-115
1,2-Dichloroethane-d4	114	76-114
Dibromofluoromethane	103	86-118



Lab #: 122199

BATCH QC REPORT

Page 1 of 1

EPA 8240 Volatile Organics

Client: Subsurface Consultants
 Project#: 946.001
 Location: 2528 Adeline St.

Analysis Method: EPA 8240
 Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
 Batch#: 22717
 Units: ug/L
 Diln Fac: 1

Prep Date: 08/19/95
 Analysis Date: 08/19/95

MB Lab ID: QC01805

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl Chloride	ND	10
Chloroethane	ND	10
Methylene Chloride	ND	20
Acetone	ND	20
Carbon Disulfide	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
Freon 113	ND	5.0
1,2-Dichloroethane	ND	5.0
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
Vinyl Acetate	ND	50
Bromodichloromethane	ND	5.0
1,2-Dichloropropane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Benzene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Bromoform	ND	5.0
2-Hexanone	ND	5.0
4-Methyl-2-Pentanone	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Chlorobenzene	ND	5.0
Ethylbenzene	ND	5.0
Styrene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Surrogate	%Rec	Recovery Limits
Toluene-d8	92	88-110
Bromofluorobenzene	84	86-115
1,2-Dichloroethane-d4	105	76-114
Dibromofluoromethane	101	86-118



Lab #: 122199

BATCH QC REPORT

Page 1 of 1

EPA 8240 Volatile Organics

Client: Subsurface Consultants
Project#: 946.001
Location: 2528 Adeline St.

Analysis Method: EPA 8240
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 22717
Units: ug/L
Diln Fac: 1

Prep Date: 08/19/95
Analysis Date: 08/19/95

LCS Lab ID: QC01804

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	40.12	50	80	61-145
Trichloroethene	39.43	50	79	71-120
Benzene	41.58	50	83	76-127
Toluene	42.5	50	85	76-125
Chlorobenzene	40.87	50	82	75-130
Surrogate	%Rec	Limits		
Toluene-d8	79	88-110		
Bromofluorobenzene	75	86-115		
1,2-Dichloroethane-d4	87	76-114		
Dibromofluoromethane	83	86-118		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

Client: Subsurface Consultants

Laboratory Login Number: 122199

 Project Name: 2528 Adeline St.
 Project Number: 946.001

Report Date: 23 August 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

METHOD: SMWW 17:5520BF

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Result	Units	RL	Analyst	QC Batch
122199-001	MW-2	Water	15-AUG-95	15-AUG-95	18-AUG-95	ND	mg/L	5	TR	22721
122199-002	MW-3	Water	15-AUG-95	15-AUG-95	18-AUG-95	ND	mg/L	5	TR	22721

ND = Not Detected at or above Reporting Limit (RL).



Q C B a t c h R e p o r t

Client: Subsurface Consultants
Project Name: 2528 Adeline St.
Project Number: 946.001

Laboratory Login Number: 122199
Report Date: 23 August 95

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

QC Batch Number: 22721

Blank Results

Sample ID	Result	MDL	Units	Method	Date Analyzed
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Spike/Duplicate Results

Sample ID	Recovery	Method	Date Analyzed
BS	84%	SMWW 17:5520BF	18-AUG-95
BSD	83%	SMWW 17:5520BF	18-AUG-95

		Control Limits
Average Spike Recovery	84%	80% - 120%
Relative Percent Difference	1.7%	< 20%

CLIENT: Subsurface Consultants
PROJECT ID: 946.001
LOCATION: 2528 Adeline St.
MATRIX: Water

DATE REPORTED: 08/22/95

Metals Analytical Report

Barium

Sample ID	Lab ID	Sample Date	Receive Date	Result (ug/L)	Reporting Limit (ug/L)	QC Batch	Method	Analysis Date
MW-2	122199-001	08/15/95	08/15/95	180	10	22704	EPA 6010A	08/18/95
MW-3	122199-002	08/15/95	08/15/95	62	10	22704	EPA 6010A	08/18/95





CLIENT: Subsurface Consultants
JOB NUMBER: 122199

DATE REPORTED: 08/22/95

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS % Recovery	BSD % Recovery	Average Recovery	RPD	QC Batch	Method	Analysis Date
Barium	2000	2040	2050	ug/L	102	103	103	1	22704	EPA 6010A	08/18/95



CLIENT: Subsurface Consultants
JOB NUMBER: 122199

DATE REPORTED: 08/22/95

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	QC Batch	Method	Analysis Date
Barium	ND	10	ug/L	22704	EPA 6010A	08/18/95

ND = Not Detected at or above reporting limit



CLIENT: Subsurface Consultants
JOB NUMBER: 122199

DATE REPORTED: 08/22/95

BATCH QC REPORT
SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD	QC Batch	Method	Analysis Date
Barium	122199-001	181	179	ug/L	1	22704	EPA 6010A	08/18/95



CLIENT: Subsurface Consultants
JOB NUMBER: 122199

DATE REPORTED: 08/22/95

BATCH QC REPORT
SAMPLE SPIKE

Compound	Spike Amount	Sample	Sample Result	Spike Result	Units	Percent Rec.	QC Batch	Method	Analysis Date
Barium	2000	122199-001	181	1950	ug/L	88	22704	EPA 6010A	08/18/95

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 946.001
Location: 2528 Adeline St.

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
122199-001	MW-2	22671	08/15/95	08/16/95	08/21/95	
122199-002	MW-3	22671	08/15/95	08/16/95	08/21/95	

Analyte	Units	122199-001	122199-002
Diln Fac:		1	1
Diesel Range	ug/L	<50	<50
Motor Oil Range	ug/L	<1300	<1300
Surrogate			
Hexacosane	%REC	100	99



Lab #: 122199

BATCH QC REPORT

Page 1 of 1

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 946.001
Location: 2528 Adeline St.

Analysis Method: CA LUFT (EPA 8015M)
Prep Method: 3520

METHOD BLANK

Matrix: Water
Batch#: 22671
Units: ug/L
Diln Fac: 1

Prep Date: 08/16/95
Analysis Date: 08/19/95

MB Lab ID: QC01613

Analyte	Result		
Diesel Range	<50		
Motor Oil Range	<1300		
Surrogate	%Rec	Recovery Limits	
Hexacosane	101	60-140	



Lab #: 122199

BATCH QC REPORT

Page 1 of 1

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
 Project#: 946.001
 Location: 2528 Adeline St.

Analysis Method: CA LUFT (EPA 8015M)
 Prep Method: 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 22671
 Units: ug/L
 Diln Fac: 1

Prep Date: 08/16/95
 Analysis Date: 08/18/95

BS Lab ID: QC01614

Analyte	Spike Added	BS	%Rec #	Limits
Diesel Range	2565	2104	82	60-140
Surrogate	%Rec	Limits		
Hexacosane	102	60-140		

BSD Lab ID: QC01615

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel Range	2565	2178	85	60-140	3	<35
Surrogate	%Rec	Limits				
Hexacosane	100	60-140				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

