



Weiss Associates

Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411

Fax: 510-547-5043 Phone: 510-547-5420

FAX TRANSMITTAL

DATE: 2-19-93

TO: SUSAN HUGO

FAX PHONE: 569-4757

COMPANY: ACDEM

BUSINESS PHONE: 271-4320

FROM: DAVID ELIAS

PROJECT #: 81-619-08

SUBJECT: SHELL

PAGES
(including this cover)

5755 BROADWAY

SAMPLE ANALYTICS

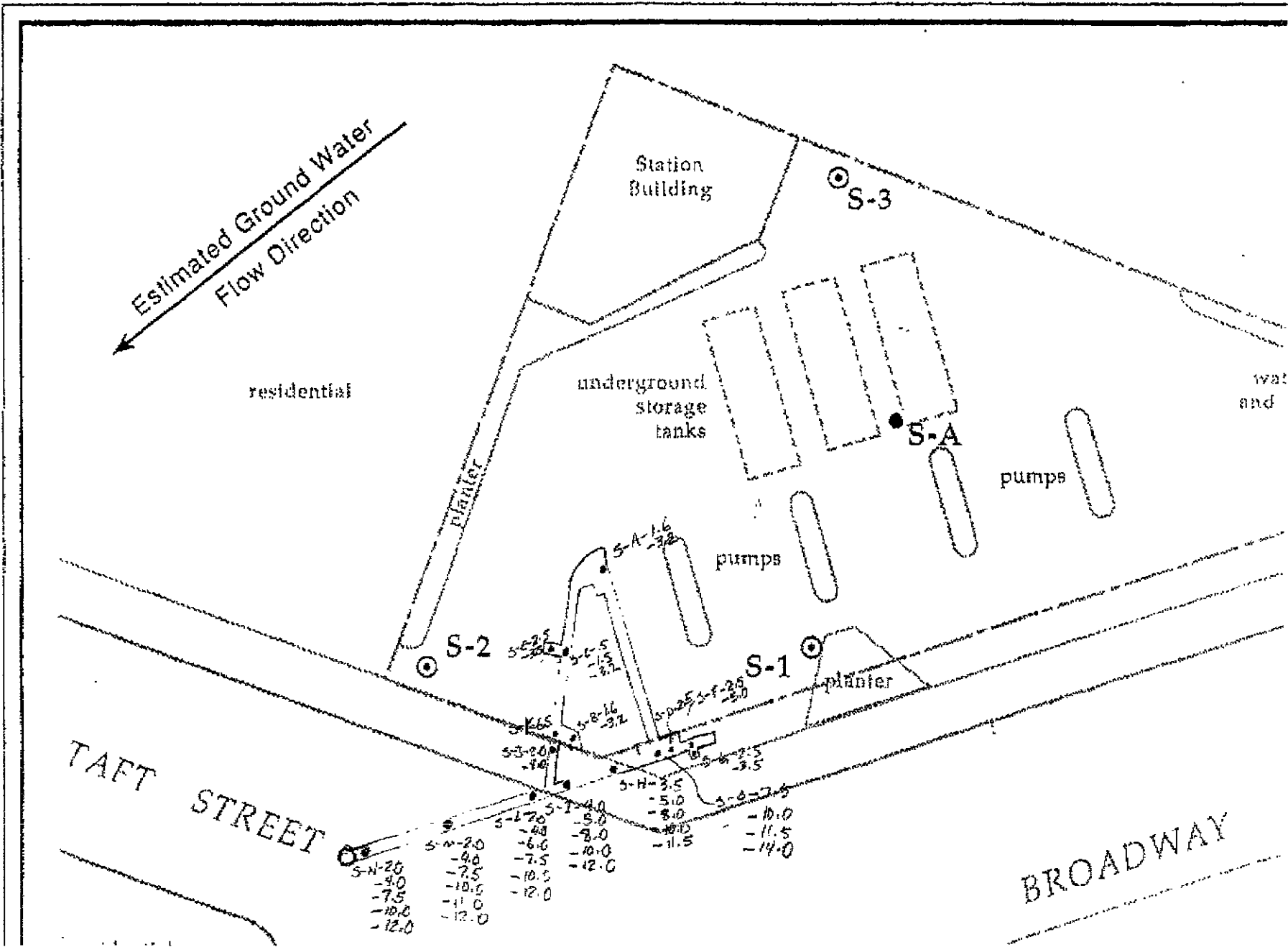
Hard Copy to follow
if checked

COMMENTS & ACTIONS REQUIRED:

HERE ARE ANALYTIC RESULTS
AND A SAMPLE LOCATION
MAP.

PLEASE CALL W/QUESTIONS

NOTE: Please call Paul at (510) 547-5420 if you do not receive all pages



S-N-20	S-N-20	S-2-20	S-1-20	S-H-3.5	S-0-2.5
-4.0	-4.0	-4.0	-4.0	-5.0	-7.5
-7.5	-7.5	-6.6	-8.0	-8.0	-10.0
-10.0	-7.5	-10.0	-10.0	-10.0	-11.5
-10.0	-11.0	-10.5	-11.5	-11.5	-14.0
-12.0	-12.0	-12.0	-12.0		



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

David Elias
Weiss Associates
5500 Shellmound St.
Emeryville, CA 94608

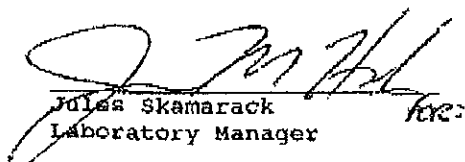
Date: 02/12/1993
NET Client Acct. No: 1809
NET Pacific Job No: 93.00386
Received: 02/04/1993

Client Reference Information

Shell, 5755 Broadway, Oakland, Job No. 81-619-08

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:


Jules Skamarack
Laboratory Manager

Enclosure(s)



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00386

Date: 02/12/1993
 Page: 2

Ref: Shell, 5755 Broadway, Oakland, Job No. 81-619-08

SAMPLE DESCRIPTION: S-C-1.5
 Date Taken: 02/02/1993
 Time Taken:
 LAB Job No: (-150434)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)	--			
METHOD 5030 (GC, FID)	--			
DATE ANALYZED	02-08-93			
DILUTION FACTOR*	1			
as Gasoline	7.9	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	--			
DATE ANALYZED	02-08-93			
DILUTION FACTOR*	1			
Benzene	0.094	0.0025	mg/Kg	8020
Ethylbenzene	0.12	0.0025	mg/Kg	8020
Toluene	0.0098	0.0025	mg/Kg	8020
Xylenes (Total)	1.1	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	113		% Rec.	5030



Client Acct: 1809
Client Name: Weiss Associates
NET Log No: 93.00386

Date: 02/12/1993
Page: 3

Ref: Shell, 5755 Broadway, Oakland, Job No. 81-619-08

QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verif Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Gasoline	1.0	mg/Kg	105	ND	80	86	7.4
Benzene	0.0025	mg/Kg	98	ND	89	94	5.4
Toluene	0.0025	mg/Kg	98	ND	88	93	5.2

COMMENT: Blank Results were ND on other analytes tested.



KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Daily Summary for DH between 02/01/93 and 03/04/93

Terminating all WHILE and IF blocks

Switching input back to keyboard

-WARNING- No rows satisfy the WHERE clause

-ERROR- Unrecognized command - retype it

-ERROR- Unrecognized command - retype it



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 1977

Date: 2-2-93

Page 1 of 1

Site Address: 5755 BROADWAY, OAKLAND

Analysis Required

LAB: NET

WIC#: 204-2004-0204

Shell Engineer: DAN KIRK

Phone No.: 675-6168
Fax #: 675-6172

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: DAVID ELIAS

Phone No.: (510) 547-5420
Fax #: 547-5043

WA JOB # 81-619-08

Comments:

Sampled by: David Elias

Printed Name: DAVID ELIAS

Sample ID	Date	Sludge	Soil	Water	Air	No. of confs.
S-A-1.6	<u>2/2/93</u>		<u>X</u>			<u>1</u>
S-A-3.2						
S-B-1.6						
S-B-3.2						
S-C-1.5						
S-C-1.5						
S-C-3.2						
S-D-2.5						

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/802)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N
					<u>HOLD</u>				

CHECK ONE (1) BOX ONLY	CT/DY	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	4461	48 hours <input type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	16 days <input checked="" type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

UST AGENCY:

MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
<u>SOIL/GAS</u>	<u>Samples kept on hold till 2/15/93</u> <u>S-C-1.5 taken on hold 2/15/93 per Dave Elias</u> <u>Box 5-long</u>
	<u>This sample was read but not written on</u>

Relinquished by (signature): <u>David Elias</u>	Printed Name: <u>DAVID ELIAS</u>	Date: <u>2/2/93</u>	Time: <u>13:23</u>	Received (signature): <u>R. Jensen</u>	Printed Name: <u>R. JENSEN</u>	Date: <u>2/3/93</u>	Time: <u>14:45</u>
Relinquished by (signature): <u>R. Jensen</u>	Printed Name: <u>R. JENSEN</u>	Date: <u>2/3/93</u>	Time: <u>14:50</u>	Received (signature): <u>Andy Mackay</u>	Printed Name: <u>ANDY MACKAY</u>	Date: <u>2/3/93</u>	Time: <u>14:50</u>
Relinquished by (signature): <u>Andy Mackay</u>	Printed Name: <u>ANDY MACKAY</u>	Date: <u>2-3-93</u>	Time: <u>14:50</u>	Received (signature): <u>Andy Lore</u>	Printed Name: <u>ANDY LORE</u>	Date: <u>2/14/93</u>	Time: <u>09:00</u>

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

ANNUAL CHAIN OF CUSTODY
@ 1900

RELEASED TO A SECURE PLACE

RECEIVED FROM SECURE AREA

FEB 19 '93 10:23 WEISS ASSOCIATES 261 P07



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

David Elias
Weiss Associates
5500 Shellmound St.
Emeryville, CA 94608

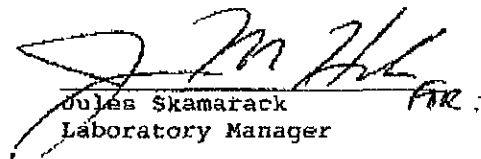
Date: 02/16/1993
NET Client Acct. No: 1809
NET Pacific Job No: 93.00420
Received: 02/06/1993

Client Reference Information

SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

A handwritten signature in dark ink, appearing to read "Jules Skamarack", is written over a horizontal line. To the right of the signature, the word "FOR:" is written in a smaller, handwritten font.
Jules Skamarack
Laboratory Manager

Enclosure(s)



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 2

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-E-3.5
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150548)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)				
METHOD 5030 (GC, FID)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	10			
as Gasoline	150	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	10			
Benzene	0.90	0.0025	mg/Kg	8020
Ethylbenzene	1.5	0.0025	mg/Kg	8020
Toluene	2.3	0.0025	mg/Kg	8020
Xylenes (Total)	7.7	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	97		% Rec.	5030



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 3

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-F-5.0
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150549)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)				
METHOD 5030 (GC, FID)	---			
DATE ANALYZED	02-08-93			
DILUTION FACTOR*	1			
as Gasoline	ND	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	---			
DATE ANALYZED	02-08-93			
DILUTION FACTOR*	1			
Benzene	0.021	0.0025	mg/Kg	8020
Ethylbenzene	ND	0.0025	mg/Kg	8020
Toluene	ND	0.0025	mg/Kg	8020
Xylenes (Total)	ND	0.0025	mg/Kg	8020
SURROGATE RESULTS	---			
Bromofluorobenzene	81		% Rec.	5030



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 4

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-G-2.5
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150550)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)	--			
METHOD 5030 (GC, FID)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
as Gasoline	ND	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
Benzene	ND	0.0025	mg/Kg	8020
Ethylbenzene	ND	0.0025	mg/Kg	8020
Toluene	ND	0.0025	mg/Kg	8020
Xylenes (Total)	ND	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	81		% Rec.	5030

NET

Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 5

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-H-3.5
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150551)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX,Solid)	--			
METHOD 5030 (GC,FID)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
as Gasoline	ND	1	mg/Kg	5030
METHOD 8020 (GC,Solid)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
Benzene	0.024	0.0025	mg/Kg	8020
Ethylbenzene	ND	0.0025	mg/Kg	8020
Toluene	ND	0.0025	mg/Kg	8020
Xylenes (Total)	ND	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	83		% Rec.	5030



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 6

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-H-5.0
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150552)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX,Solid)				
METHOD 5030 (GC,FID)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	100			
as Gasoline	290	1	mg/Kg	5030
METHOD 8020 (GC,Solid)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	100			
Benzene	0.55	0.0025	mg/Kg	8020
Ethylbenzene	1.8	0.0025	mg/Kg	8020
Toluene	1.8	0.0025	mg/Kg	8020
Xylenes (Total)	6.5	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	90		% Rec.	5030



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 7

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: S-I-5.0
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150553)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)				
METHOD 5030 (GC, FID)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
as Gasoline	1.7	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	--			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	1			
Benzene	0.074	0.0025	mg/Kg	8020
Ethylbenzene	0.0038	0.0025	mg/Kg	8020
Toluene	0.095	0.0025	mg/Kg	8020
Xylenes (Total)	0.10	0.0025	mg/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	79		% Rec.	5030

NET

Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 8

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

SAMPLE DESCRIPTION: Comp
 Date Taken: 02/04/1993
 Time Taken:
 LAB Job No: (-150554)

Parameter	Results	Reporting Limit	Units	Method
Soil pH measured in water	8.6	N/A	pH units	9040
Flashpoint/Ignitability	>140	N/A	Degree F	1010
Sulfide	19	10	mg/Kg	376.1
Cyanide (Total)	ND	0.2	mg/Kg	335.2
CAM METALS (Solid, TTLC)				
Antimony (ICP)	ND	10	mg/Kg	EPA 6010
Arsenic (GFAA)	3.9	0.5	mg/Kg	EPA 7060
Barium (ICP)	95	2.0	mg/Kg	EPA 6010
Beryllium (ICP)	ND	2.0	mg/Kg	EPA 6010
Cadmium (ICP)	ND	2.0	mg/Kg	EPA 6010
Chromium (ICP)	90	2.0	mg/Kg	EPA 6010
Chromium+6 (FLAA)	NA	2.0	mg/Kg	EPA 7197
Cobalt (ICP)	16	5.0	mg/Kg	EPA 6010
Copper (ICP)	13	2.0	mg/Kg	EPA 6010
Lead (GFAA)	8.4	0.2	mg/Kg	EPA 7421
Mercury (CVAA)	ND	0.1	mg/Kg	EPA 7471
Molybdenum (ICP)	ND	5.0	mg/Kg	EPA 6010
Nickel (ICP)	110	5.0	mg/Kg	EPA 6010
Selenium (GFAA)	ND	0.5	mg/Kg	EPA 7740
Silver (ICP)	ND	2.0	mg/Kg	EPA 6010
Thallium (ICP)	ND	20	mg/Kg	EPA 6010
Vanadium (ICP)	35	5.0	mg/Kg	EPA 6010
Zinc (ICP)	38	2.0	mg/Kg	EPA 6010
TPH (Gas/BTEX, Solid)				
METHOD 5030 (GC, FID)	---			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	10			
as Gasoline	51	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	---			
DATE ANALYZED	02-06-93			
DILUTION FACTOR*	10			
Benzene	ND	0.0025	mg/Kg	8020
Ethylbenzene	0.15	0.0025	mg/Kg	8020
Toluene	0.076	0.0025	mg/Kg	8020
Xylenes (Total)	0.83	0.0025	mg/Kg	8020
SURROGATE RESULTS				
Bromofluorobenzene	89		% Rec.	5030



Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00420

Date: 02/16/1993
 Page: 9

Ref: SHELL, 5755 Broadway, Oakland, WA Job: 81-619-08

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verif Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	1	mg/Kg	105	ND	80	86	7.4
Benzene	0.0025	mg/Kg	98	ND	89	94	5.4
Toluene	0.0025	mg/Kg	98	ND	88	93	5.2
Gasoline	1	mg/Kg	96	ND	84	85	<1
Benzene	0.0025	mg/Kg	93	ND	100	95	4.0
Toluene	0.0025	mg/Kg	90	ND	95	93	2.0
pH	N/A	pH units	100	N/A	N/A	N/A	<1
Flashpoint	N/A	Degree	F101	N/A	N/A	N/A	N/A
Sulfide	10	mg/Kg	N/A	ND	98	98	<1
Cyanide	0.20	mg/Kg	91	ND	94	88	6.6
Antimony	10	mg/Kg	95	ND	92	90	1.5
Arsenic	0.5	mg/Kg	98	ND	88	90	1.8
Barium	2	mg/Kg	96	ND	92	98	4.5
Beryllium	2	mg/Kg	97	ND	85	86	<1
Cadmium	2	mg/Kg	107	ND	92	94	1.4
Chromium	2	mg/Kg	101	ND	94	95	1.0
Cobalt	5	mg/Kg	108	ND	94	95	<1
Copper	2	mg/Kg	108	ND	82	86	3.8
Lead	20	mg/Kg	105	ND	90	90	<1
Mercury	0.1	mg/Kg	92	ND	108	111	2.7
Molybdenum	5	mg/Kg	102	ND	98	96	2.1
Nickel	5	mg/Kg	109	ND	81	84	3.0
Selenium	0.5	mg/Kg	99	ND	88	89	<1
Silver	2	mg/Kg	97	ND	90	91	<1
Thallium	20	mg/Kg	99	ND	92	92	<1
Vanadium	5	mg/Kg	106	ND	99	105	5.2
Zinc	2	mg/Kg	107	ND	96	90	4.5



KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ (Value 1 - Value 2) / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

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Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 2020

Date: 2-4-93

Page 1 of 2

Site Address: 5755 BROADWAY, OAKLAND

Analysis Required

LAB: NET

WIC#: 204-2004-0204

Shell Engineer: DON KIRK

Phone No.: 675-6168
Fax #: 675-6172

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94609

Consultant Contact: DAVID ELIAS

Phone No.: (510) 547-5420
Fax #: 547-5043

WA JOB # 81-619-08

Comments:

Sampled by: David Elias

Printed Name: DAVID ELIAS

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.
S-E-2.5	2-4-93		X			1
S-E-3.5						
S-F-2.5						
S-F-5.0						
S-G-2.5						
S-G-3.5						
S-H-3.5						
S-H-5.0						

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N
					<u>HOLD</u>				

CHECK ONE (1) BOX ONLY	CI/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hour <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	4441	48 hour <input type="checkbox"/>
Soil Classify/Disposal <input checked="" type="checkbox"/>	4442	15 days <input checked="" type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

UST AGENCY: _____

MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS

Relinquished By (signature): <u>David Elias</u>	Printed Name: <u>DAVID ELIAS</u>	Date: <u>2-4-93</u>	Time: <u>10:30</u>	Received (signature): <u>David Elias</u>	Printed Name: <u>DAVID ELIAS</u>	Date: <u>2-5-93</u>	Time: <u>10:09</u>
Relinquished By (signature): <u>David Elias</u>	Printed Name: <u>DAVID ELIAS</u>	Date: <u>2-5-93</u>	Time: <u>10:43</u>	Received (signature): <u>Andy Mackay</u>	Printed Name: <u>ANDY MACKAY</u>	Date: <u>2-5-93</u>	Time: <u>10:43</u>
Relinquished By (signature): <u>Andy Mackay</u>	Printed Name: <u>ANDY MACKAY</u>	Date: <u>2-5-93</u>	Time: <u>10:43</u>	Received (signature): <u>Andy Lopez</u>	Printed Name: <u>ANDY LOPEZ</u>	Date: <u>2/6/93</u>	Time: <u>10:00</u>

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

CUSTODY SEALED 2-5-93
David Elias

STARTED IN SECURED PLACE

261 P18

WEISS ASSOCIATES

FEB 19 '93 10:29

Shell Oil Company



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 2020

Date: 2-4-93

Page 2 of 2

Site Address: 5755 BROADWAY, OAKLAND

Analysis Required

LAB: NET

WIC#: 204-2004-0204

Shell Engineer: DAN KIRK Phone No: 675-6168
Fax #: 675-6112

Consultant Name & Address: WEISS ASSOCIATES
5500 SHELLMOUND ST EMERYVILLE CA 94608

Consultant Contact: DAVID ELIAS Phone No: (510) 547-5420
WA JOB # 81-619-08 Fax #: 547-5043

Comments:

Sampled by: David Elias

Printed Name: DAVID ELIAS

CHECK ONE (BY BOX ONLY)	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	4441	48 hours <input type="checkbox"/>
Soil Classify/Disposal <input checked="" type="checkbox"/>	4442	15 days <input checked="" type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. of Sys. O & M <input type="checkbox"/>	4452	
Water Rem. of Sys. O & M <input type="checkbox"/>	4455	
Other <input type="checkbox"/>		

NOTE: Notify Lab or soon as possible of 24/48 hrs. TAT.

UST AGENCY:

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.
S-I-4.0	2/4/93		X			1
S-I-5.0						1
LOMP						4

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N
					<u>NOLO</u>				
					X				
				X					

MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SOIL & GAS	
	<u>RUSH</u>
	PLEASE REPORT
	TPH-6/BTEX
	AND TOTAL
	LEAD ON SITE
	REPORT 2-5-93

Relinquished By (signature): David Elias Printed Name: DAVID ELIAS
Date: 2-5-93 Time: 12:30

Relinquished By (signature): David Elias Printed Name: DAVID ELIAS
Date: 2-5-93 Time: 12:30

Relinquished By (signature): Andy Mackay Printed Name: Andy Mackay
Date: 2-16-93 Time: 10:00

Received (signature): David Elias Printed Name: DAVID ELIAS
Date: 2-5-93 Time: 12:30

Received (signature): Andy Mackay Printed Name: Andy Mackay
Date: 2-5-93 Time: 12:30

Received (signature): Andy Lopez Printed Name: Andy Lopez
Date: 2-16-93 Time: 10:00

Relinquished By (signature): David Elias Printed Name: DAVID ELIAS
Date: 2-5-93 Time: 10:00

Relinquished By (signature): Andy Mackay Printed Name: Andy Mackay
Date: 2-5-93 Time: 12:47

Relinquished By (signature): Andy Lopez Printed Name: Andy Lopez
Date: 2-16-93 Time: 10:00

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Seals intact - 42
(CUSTODY SEALED 2-5-93)

STORED IN SECURE PLACE

SEE CONT.

281 P19 WEISS ASSOCIATES FEB 19 '93 10:30

avg Elias
Weiss Associates
500 Shellmound St.
Berkeley, CA 94608

Date: 02/16/1993
NET Client Acct. No: 1809
NET Pacific Job No: 93.00478
Received: 02/10/1993

From: W. W. ...
4 pages
1600

Client Reference Information

HELL, 5755 Broadway, Oakland, WA Job No: 81-619-08

A complete analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Elias Skamarack
Laboratory Manager

Closure(s)

PRELIMINARY REPORT

Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00478

Date: 02/16/1993
 Page: XXX

Ref: SHELL, 5755 Broadway, Oakland, WA Job No: 81-619-08

SAMPLE DESCRIPTION: S-J-2.0
 Date Taken: 02/09/1993
 Time Taken:
 LAB Job No: (-190794)

Parameter	Results	Reporting Limit	Units	Method
PH (Gas/BTEX, Solid)	--			
METHOD 5030 (GC, FID)	--			
DATE ANALYZED	02-10-93			
DILUTION FACTOR*	1			
Gas Gasoline	140	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	--			
DATE ANALYZED	02-10-93			
DILUTION FACTOR*	1			
Benzene	400	2.5	ug/Kg	8020
Ethylbenzene	710	2.5	ug/Kg	8020
Toluene	1,100	2.5	ug/Kg	8020
Xylenes (Total)	4,100	2.5	ug/Kg	8020
SURROGATE RESULTS	--			
Bromofluorobenzene	98		% Rec.	5030

PRELIMINARY REPORT

Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00478

Date: 02/16/1993
 Page: xxx

Ref: SHELL, 5755 Broadway, Oakland, WA Job No: 81-619-08

SAMPLE DESCRIPTION: S-J-4.0
 Date Taken: 02/09/1993
 Time Taken:
 LAB Job No: (-150795)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)	---			
METHOD 5030 (GC, FID)	---			
DATE ANALYZED	02-10-93			
DILUTION FACTOR*	100			
as Gasoline	1,300	1	mg/Kg	5030
METHOD 8020 (GC, Solid)	---			
DATE ANALYZED	02-10-93			
DILUTION FACTOR*	100			
Benzene	1,100	2.5	ug/Kg	8020
Ethylbenzene	8,100	2.5	ug/Kg	8020
Toluene	9,500	2.5	ug/Kg	8020
Xylenes (Total)	44,000	2.5	ug/Kg	8020
SURROGATE RESULTS	---			
Bromofluorobenzene	115		% Rec.	5030

PRELIMINARY REPORT

Client Acct: 1809
 Client Name: Weiss Associates
 NET Log No: 93.00478

Date: 02/16/1993
 Page: xxx

Ref: SHELL, 5755 Broadway, Oakland, WA Job No: 81-619-08

SAMPLE DESCRIPTION: S-K-6.5
 Date Taken: 02/09/1993
 Time Taken:
 LAB Job No: (-150796)

Parameter	Results	Reporting Limit	Units	Method
TPH (Gas/BTEX, Solid)	---			
METHOD 8030 (GC, FID)	---			
DATE ANALYZED	02-15-93			
DILUTION FACTOR*	1			
as Gasoline	1.0	1	mg/Kg	8030
METHOD 8020 (GC, Solid)	---			
DATE ANALYZED	02-11-93			
DILUTION FACTOR*	10			
Benzene	350	2.5	ug/Kg	8020
Ethylbenzene	310	2.5	ug/Kg	8020
Toluene	230	2.5	ug/Kg	8020
Xylenes (Total)	640	2.5	ug/Kg	8020
SURROGATE RESULTS	---			
Bromofluorobenzene	96		% Rec.	8030

PRELIMINARY REPORT