March 28, 2002



Mr. John Carnahan State of Alaska Alaska Department of Environmental Conservation 610 University Avenue Fairbanks, Alaska

RECEIVED

**RE:** Remedial Soils Excavation and UST Removal

Former Chevron Service Station #9-2114 3350 College Road Fairbanks, Alaska MAR 2 9 2002

CONTAMINATED SITES FAIRBANKS

Dear Mr. Carnahan:

SECOR International Incorporated (SECOR), on behalf of Chevron Products Company, is pleased to submit this Letter Report to document remedial soils excavation at the former Chevron Service Station 9-2114, located at 3350 College Road, in Fairbanks, Alaska (the Site). Excavation activities occurred during the period extending from October 8 through October 23, 2001

#### SITE BACKGROUND

The former Chevron service station located in a business district in northern Fairbanks, Alaska (Figure 1). The legal description of the subject site is Lot 6 of Block 13 of the North Shanly Subdivision, located in the Northwest ¼ of Section 5, Township 1 South, Range 1 West, Fairbanks Baseline and Meridian system. The site address is 3350 College Road, Fairbanks, Alaska.

Site sediments are composed of fine-grained sand and fine silty sands in the shallow site subsurface. Isolated deposits of native loess are also found in the subsurface. Groundwater within the Fairbanks area is generally considered to flow to the northwest with localized variations caused by the presence of permafrost. The direction of groundwater flow seasonally reverses in response to stages of the Tanana and Chena Rivers.

In 1986, the known underground storage tanks (USTs) and buildings associated with the former Chevron Station were removed from the project site. Shannon & Wilson (S&W) of Fairbanks, Alaska, conducted drilling on the subject property in 1992. The Laboratory analytical results from the soil samples collected by S&W indicated the presence of volatile organics and petroleum hydrocarbons in the soil. Groundwater was encountered during the investigation and a petroleum-type sheen was observed on the water surface.

#### **EXCAVATION ACTIVITIES**

During the period from October 8 through October 24, 2001, Mr. Ronald Chinn (SECOR) worked with Rowcon Services (Rowcon) to perform a remedial overexcavation of the former underground storage tank (UST) complex and the fuel islands. During this period, a total of 1,232 tons of impacted soil were removed and transported to Organic Incineration Technologies, Inc. (OIT) for

thermal destruction. The material was handled and transported in accordance with applicable regulations governing RCRA exempt materials. Certification of RCRA exempt status is included in Attachment A. An e-mail documenting Alaska Department of Environmental Conservation (DEC) approval for transport and disposal at OIT is included in Attachment B.

#### EXPLORATORY POTHOLE SAMPLING

On October 8, 2001, SECOR oversaw the installation of four test pits in the former UST complex to evaluate the extent of hydrocarbon impact to the subsurface, and to collect pre-profiling samples for disposal at OIT. Samples were analyzed for Gasoline Range Organics (GRO) and benzene, toluene, ethylbenzene, and xylenes (BTEX) by Alaska Method AK101, and Diesel Range Organics (DRO) by AK102. Additionally, samples were collected for RCRA 8 Metals by EPA Method 3050. These samples were submitted to Northern Testing Laboratories under Chain of Custody protocols.

Analytical Results of the test pit samples indicated GRO was present at concentrations ranging from 212 mg/kg (Pothole C) to 2,680 mg/kg (Pothole D). DRO was present at concentrations ranging from 644 mg/kg (Pothole B) to 1,710 mg/kg (Pothole C). Benzene was found to be present at concentrations ranging from 1.22 mg/kg (Pothole C) to 22.1 mg/kg (Pothole D). Results of the RCRA 8 Metals tests indicated that the material did not contain sufficient metals to be considered hazardous waste. The analytical data are presented in tabular form in Table 1. Certified analytical reports are presented in Attachment C.

#### FORMER WASTE OIL AND HEATING OIL UST SAMPLING ACTIVITIES

On October 10, 2001, SECOR oversaw exploratory potholing activities of the former waste oil UST and former heating oil UST locations. The property owner, Mr. Mark Neilsen, provided historic knowledge of the station layout to direct the exploratory potholing activities. In both locations, exploratory potholing uncovered remains of abandoned tank facilities, however no tanks or soil staining were present. Soil samples were collected from the bottom of the potholes, and submitted to North Creek Analytical under Chain of Custody protocols for analysis of Residual Range Organics (RRO), DRO, and GRO.

Analytical Results of the test pit samples indicated GRO and RRO were not present at either pothole location. DRO was present at concentrations ranging from 5.07 mg/kg (Waste Oil Pothole) to 4.03 mg/kg (Heating Oil Pothole). Benzene was found to be present at concentrations ranging from 0.0331 mg/kg (Waste Oil Pothole) to 0.0179 mg/kg (Heating Oil Pothole). The analytical data are presented in tabular form in Table 2. Certified analytical reports are presented in Attachment C.

#### UST COMPLEX OVEREXCAVATION

From October 8 to October 12, 2001, SECOR oversaw the excavation of the UST complex. During this period, approximately 800 tons of material was removed from the tank pit. The dimensions of the excavation were approximately 40' by 50', and extended to a depth of approximately 10 feet. The lateral extent of the excavation is shown in Figure 2.

Excavated soils consisted primarily of native loess, and sand and gravel backfill material. The native loess extended to the total depth of the excavation, however in isolated locations, fine-grained sand was found to be present at the bottom of the excavation. Over ten tons of debris, consisting of piping, concrete, and various station debris were excavated and removed.

An exploratory pothole to approximately 18 feet below ground surface (bgs) was advanced in the center of the UST complex. Soil at this depth was saturated, indicating that groundwater had been reached. A moderate hydrocarbon odor was detected from the soil; however, no sheen was observed on the water surface.

On October 12, 2001, five sidewall samples were collected from the southern and eastern portion of the excavation to further evaluate the extent of contamination. Samples were collected at approximately 6' bgs, located at the halfway point on the excavation face. Soil samples were submitted to Northern Testing Laboratories under Chain of Custody protocols for analysis of DRO, GRO and BTEX. Sidewall sample locations are shown in Figure 2.

Analytical results of the sidewall samples showed that sample E Wall 2 contained the highest concentrations of petroleum hydrocarbons, with GRO, DRO, and benzene present at 4,720 mg/kg, 1,210 mg/kg, and 24.2 mg/kg, respectively. This sample was collected from a point immediately adjacent to the former pump island facilities. In a conversation with Mr. John Carnahan on October 15, 2001, it was agreed that the former pump island area should be excavated.

Analytical results of the remaining samples indicated that GRO was present at concentrations ranging from 3,270 mg/kg (W Wall 2 @ 6') to 54.47 mg/kg (S Wall 1 @ 6'). DRO was found to be present at concentrations ranging from 37,900 mg/kg (W Wall 1 @ 6') to 54.9 (E Wall 3 @ 6'). Benzene was present at concentrations ranging from 36.4 mg/kg (W Wall 1 @ 6') to below method reporting limits in S Wall 1 @ 6'. The analytical data are presented in tabular form in Table 3. Certified analytical reports are presented in Attachment C.

#### PUMP ISLAND OVEREXCAVATION

From October 18 through October 20, 2001, SECOR directed Rowcon in overexcavation of the former pump islands. The soils excavated were similar to the soils encountered during the overexcavation of the UST complex, consisting of native loess and sand and gravel backfill material. Additional station debris was removed from the former pump island area.

By October 20, 2001, overexcavation of the former pump island was complete, resulting in an increase of an approximately 20' by 40' area, to a depth of approximately 10' bgs. Three additional sidewall samples were collected to represent the newly excavated area, designated as E Wall 4 through 6.

Analytical results of the excavation samples indicated that GRO was present at concentrations ranging from 6,070 mg/kg (E Wall 4@6') to 8.78 mg/kg (E Wall 6@6'). DRO was found to be present at concentrations ranging from 1,060 mg/kg (E Wall 4@6') to 10.3 (E Wall 5@6'). Benzene compounds were found to be present at concentrations ranging from 8.90 mg/kg (E Wall 4@6') to 0.176 mg/kg (E Wall 6@6'). The analytical data are presented in tabular form in Table 3. Certified analytical reports are presented in Attachment C.

#### **BOTTOM SAMPLE COLLECTION**

On October 20, 2001, eight soil samples were collected from the excavation bottom, designated as Bottom A through Bottom H. Samples were collected at an approximate depth of 10' bgs, and submitted to an Alaska certified analytical laboratory under Chain of Custody protocols. The locations of the bottom samples are shown on Figure 3.

Analytical results of the remaining samples indicated that GRO was present at concentrations ranging from 3,430 mg/kg (Bottom A) to 4.81 mg/kg (Bottom C). DRO was found to be present at concentrations ranging from 116 mg/kg (Bottom H) to 7.44 (Bottom C). Benzene compounds were found to be present at concentrations ranging from 7.24 mg/kg (Bottom A) to 0.0632 mg/kg (Bottom C). The analytical data are presented in tabular form in Table 4. Certified analytical reports are presented in Attachment C.

#### SOIL IMPACT DELINEATION SAMPLES

On October 23, 2001, SECOR collected four soil impact delineation samples surrounding the excavation. The sample locations were chosen at points approximately 15 feet from the edge of the excavation. These samples were collected at a total depth of 6' bgs, and were designated Delineation I through Delineation 4. The locations of these sample points are presented on Figure 2.

Analytical results of the remaining samples indicated that GRO was present at concentrations ranging from 3,150 mg/kg (Delineation 2@6') to below method reporting limits (Delineation 4@6'). DRO was found to be present at concentrations ranging from 479 mg/kg (Delineation 2@6') to below method reporting limits (Delineation 3@6'). Benzene compounds were found to be present at concentrations ranging from 1.89 mg/kg (Delineation 2@6') to 0.0216 mg/kg (Delineation 1@6'). The analytical data are presented in tabular form in Table 5. Certified analytical reports are presented in Attachment C.

#### UNDERGROUND STORAGE TANK DISCOVERY

On October 23, 2001, an Underground Storage Tank (UST) was discovered during collection of soil delineation samples. The tank was located approximately 20 feet north of the western edge of the excavation. Upon discovery, the tank was accidentally ruptured by the excavator, however the tank's contents were not released. The tank appeared to have a 500-gallon capacity, and measured approximately 7 feet long, with a 3.5-foot diameter. In accordance with regulatory requirements, DEC was notified of the tank's discovery within 24 hours.

On October 24, 2001, Rowcon transferred the tank's contents into a 55-gallon drum for eventual disposal. The tank contained approximately 20 gallons of weathered gasoline. A sample of the product was collected and submitted to Northern Testing Laboratories for analysis of GRO, DRO, and RRO. During tank removal, the tank was found to be in generally good condition, with no apparent holes or leaks. No soil staining was observed, however the soil immediately adjacent to the tank did possess a moderately strong hydrocarbon odor. The tank and 55 gallon drum were transported offsite by Rowcon for temporary storage, pending analytical results and approval for disposal at OIT.

During limited overexcavation of the 500-gallon UST tank pit, an additional tank was found. This tank was partially crushed, and did not contain any liquids. The tank was labeled "GAS" and "NO SMOKING WITHIN 50 FT". The tank's construction and labeling are consistent with an old Aboveground Storage Tank. The tank was removed and disposed of as debris at the local landfill.

The location of the tanks was ultimately overexcavated to the approximate dimensions of 20' by 8', with a 10' depth. Sidewall samples and a bottom samples were collected and submitted to Northern Testing Laboratories for analysis of GRO + BTEX and DRO. The sample locations are shown on Figures 2 and 3, respectively.

Analytical results of the tank contents indicated that GRO was present at a concentration of  $66,900,000 \mu g/L$ . DRO was found to be present at a concentration of 830,000 mg/kg. RRO was not found to be present at a concentration of above the method reporting limit.

Analytical results of the tank sidewall and tank bottom samples indicated that GRO was present at concentrations ranging from 677 mg/kg (Tank W Wall @6') to 176 mg/kg (Tank Bottom @10'). DRO was found to be present at concentrations ranging from 13,300 mg/kg (Tank E Wall @6') to 429 (Tank Bottom @10'). Benzene compounds were found to be present at concentrations ranging from 20.3 mg/kg (Tank S Wall @6') to 1.15 mg/kg (Tank Bottom @10'). The analytical data are presented in tabular form in Table 6. Certified analytical reports are presented in Attachment C.

#### HYDROCARBON MASS REMOVAL ESTIMATE

SECOR calculated an estimation of hydrocarbon mass removal. This estimation was based on the volume of soil excavated and the average petroleum hydrocarbon concentrations in sidewall samples collected from the UST complex overexcavation, the pump island overexcavation, and the overexcavation of the discovered UST. The sidewall samples are assumed to be representative of soil contamination from ground surface to 10 feet bgs. These calculations indicate that approximately 9,775 pounds (lbs.) of DRO, 4,117 lbs. of GRO, and 20 lbs. of benzene were removed from the site though excavation activities. A summary of the calculation of the mass removal estimate is included as Attachment D.

SECOR appreciates the opportunity to submit this Letter Report on behalf of Chevron and trust that it meets with your approval. If you have any questions or comments regarding this document, please do not hesitate to call us at (650) 691-0131.

Sincerely,

**SECOR International Incorporated** 

Mary Wackerman
Staff Scientist

Ronald D. Chinn Portfolio Manager Cc: Bob Cochran, Chevron Products Company Roger Hoffmore, SECOR International, Inc. Mark Nielson, Estate of Margaret Nielson

#### Attachments:

Table 1 - Soil Analytical Results - Pothole Sampling

Table 2 - Soil Analytical Results – UST Sampling

Table 3 - Soil Analytical Results - UST Overexcavation Sampling

Table 4 - Soil Analytical Results - Bottom Sampling

Table 5 - Soil Analytical Results - Delineation Sampling

Table 6 - Soil Analytical Results – UST Discovery Sampling

Figure 1 - Site Location Map

Figure 2 - Sidewall Soil Sample Locations

Figure 3 - Bottom Soil Sample Locations

Figure 4 - Delineation Soil Sample Locations

Attachment A - Certification of RCRA Exempt Status

Attachment B - ADEC Approval for Transport and Disposal at OIT

Attachment C - Certified Analytical Reports and Chain-of-Custody Documentation

Attachment D - Calculation of Mass Removal Estimate

# TABLE 1 SOIL ANALYTICAL RESULTS POTHOLE SAMPLING

POTHOLE SAMPLING
Former Chevron Service Station #9-2114
3350 College Road
Fairbanks, Alaska

	Date					Ethyl-	Total								
Sample ID	Sample ID Collected	GRO	DRO	Benzene	Toluene	benzene	Xylenes	Arsenic	Barium	Cadium (	Chromium	Lead	Selenium	Silver	Mercury
Pothole A	10/09/2001	490	026	3.22	49.8	23.6	221	<8	96.5	7	17	24	<3	17	<0.10
Pothole B	10/09/2001	9//	644	3.43	54.2	18.3	182.6	_ <7	74.5	۲۷	14	15	<3	<1	<0.10
Pothole C	10/09/2001	212	1,710	1.22	2.46	0.95	7.37	<8	102.5	۲	20	8	ςς	<1	<0.10
Pothole D	10/09/2001	2,680	1,660	22.1	256	49.1	401	<7	9.78	7	18	29	<2	-1	<0.10

#### Notes

(1) Estimated value

(2) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm)

# Abbreviations:

GRO = Gasoline Range Organics

# TABLE 2 SOIL ANALYTICAL RESULTS

UST SAMPLING
Former Chevorn Service Station #9-2114
3350 College Road
Fairbanks, Alaska

Sample ID	Date Collected	GRO	DRO	RRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes
FMR Waste Oil Location	10/11/2001	<3.92	5.07	<25.0	0.0331	0.109	<0.0392	<0.0783
FMR Heating Oil Location	10/11/2001	<3.82	4.031	<25.0	0.0179	<0.0382	<0.0382	<0.0763

#### Johns:

(1) This sample was prepared outside of the method established holding time

(2) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm)

# Abbreviations:

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

RRO = Residual Range Organics

Former Chevron Service Station #9-2114 3350 College Road Fairbanks, Alaska SOIL ANALYTICAL RESULTS
UST OVEREXCAVATION SAMPLING TABLE 3

Total Xylenes	3.03	166.7	166.2	1,247	26.36	762	1.45	0.704	68.9	492	229
Ethylbenzene	<0.15	12.3	21.3	86.2	2.57	124	0.204	0.125	14.3	37.3	18.9
Toluene	0.21	31.7	53.3	589	11.9	174	2.88	0.495	24.6	64.3	64.3
Benzene	<0.15	2.33	2.32	24.4	1.09	8.90	9/2:0	0.176	36.4	2.87	8.85
DRO	64.4	279	300	871	54.9	1,060	10.3	22.9 <sup>1</sup>	37,900	549	436
GRO	54.47	772	555	4,720	160	6,070	29.2	8.78	1,650	3,270	1,600
Date Collected	10/12/2001	10/12/2001	10/12/2001	10/12/2001	10/12/2001	10/20/2001	10/20/2001	10/20/2001	10/20/2001	10/20/2001	10/20/2001
Sample Depth (ft bgs)	9	9	9	9	9	9	9	9	9	9	9
Sample ID	S Wall 1	S Wall 2	E Wall 1	E Wall 2	E Wall 3	E Wall 4	E Wall 5	E Wall 6	W Wall 1	W Wall 2	W Wall 3

(1) Results in the diesel organics range are primarily due to overlap from a heavy oil range product (2) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm)

# Abbreviations:

GRO = Gasotine Range Organics

TABLE 4
SOIL ANALYTICAL RESULTS
BOTTOM SAMPLING

Former Chevron Station #9-2114 3350 College Road Fairbanks, Alaska

	Date					Ethyl-	Total
Sample ID	Collected	GRO	DRO	Benzene	Toluene	benzene	Xylenes
Bottom A	10/20/2001	3,430	32.5	7.24	103	37.2	323
Bottom B	10/20/2001	225	18.9	0.936	9.86	2.21	23.3
Bottom C	10/20/2001	4.81	7.44	0.0632	0.287	0.0705	0.497
Bottom D	10/20/2001	837	155	0.485	17.9	5.95	69.1
Bottom E	10/20/2001	471	29.2	968.0	16.6	4.80	53.4
Bottom F	10/20/2001	78.5	44.6	0.981	9.82	2.01	18.9
Bottom G	10/20/2001	1,100	6'62	2.39	48.8	14.0	144
Bottom H	10/20/2001	1,330	116	4.53	74.0	22.6	162

#### Notes:

(1) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm)

# Abbreviations:

GRO = Gasoline Range Organics

# TABLE 5 SOIL ANALYTICAL RESULTS DELINEATION SAMPLING

Former Chevron Service Station #9-2114 3350 College Road Fairbanks, Alaska

	Sample							
	Depth	Date					Ethyl-	Total
Sample ID	(tt pgs)	Collected	GRO	DRO	Benzene	Toluene	benzene	Xylenes
Delineation 1	9	10/23/2001	6.42	62.0	0.0216	0.0953	<0.0376	0.227
Delineation 2	9	10/23/2001	3,150	479	1.89 2	19.2	15.3	259
Delineation 3	9	10/23/2001	5.69	<4.00	0.133	0.337	<0.0500	0.199
Delineation 4	9	10/23/2001	<4.14	2.60	0.0336	<0.0414	0.0549	0.296

#### Notes

- (1) Results reported for the gasoline range are primarily due to overlap from diesel range hydrocarbons
  - (2) The analyte concentration may be artificially elevated due to coeluting compounds or components
    - (3) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm)

# Abbreviations:

GRO = Gasoline Range Organics

# TABLE 6 SOIL ANALYTICAL RESULTS UST DISCOVERY SAMPLING

Former Chevron Service Station #9-2114 3350 College Road Fairbanks, Alaska

	Sample Depth	Date					Ethyl-	Total
Sample ID	(ft bgs)	Collected	GRO	DRO	Benzene	Toluene	benzene	Xylenes
Tank E Wall	9	10/24/2001	673	13,300	5.79	2.30	14.2	68.2
Tank S Wall	9	10/24/2001	230	069'6	20.3	51.5	6.39	49.1
Tank N Wall	9	10/24/2001	248	8,150	2.05	1.40	7.13	53.4
Tank W Wall	9	10/24/2001	<b>2</b> 29	12,300	4.49	<2.80	8.13	83.0
Tank Bottom	10	10/24/2001	176	429	1.15	4.65	0.912	6.55

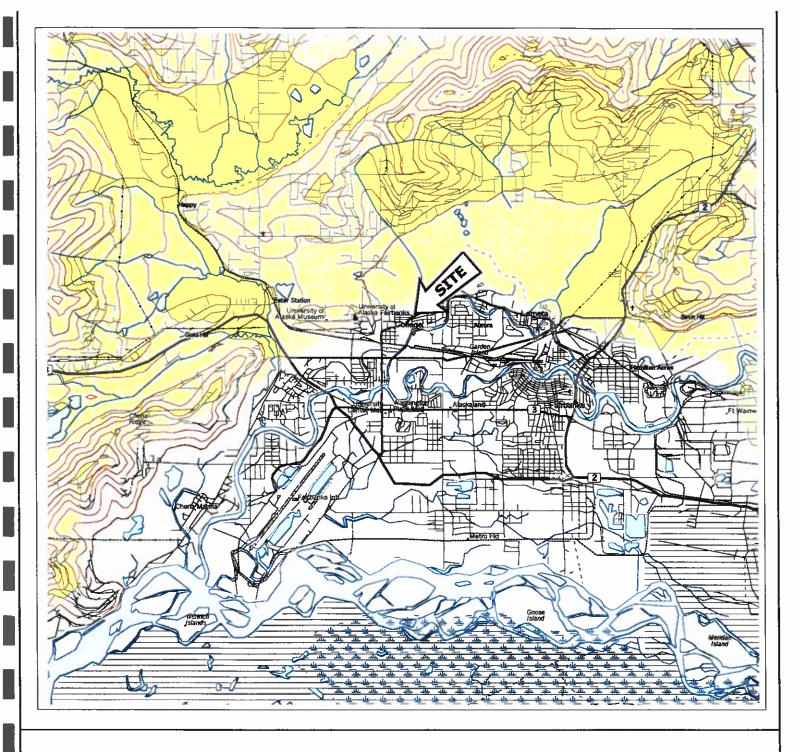
#### Votos.

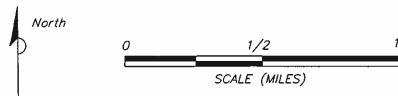
(1) Appropriate BTEX dilution analyzed 2 days out of hold time

(2) All results are reported in milligrams per kilogram (mg/kg) or part per million (ppm).

# Abbreviations:

GRO = Gasoline Range Organics





REFERENCE: USGS 7.5 MINUTE QUADRANGLE; FAIRBANKS SW, ALASKA, 1992

SECOR International Incorporated

2301 LECHORN STREET MOUNTIAN VIEW, CALIFORNIA 94043 (650) 691-0131 FIGURE 1 SITE LOCATION MAP CHEVRON SERVICE STATION 9-2114 3350 COLLEGE ROAD FAIRBANKS, ALASKA FIGURE:

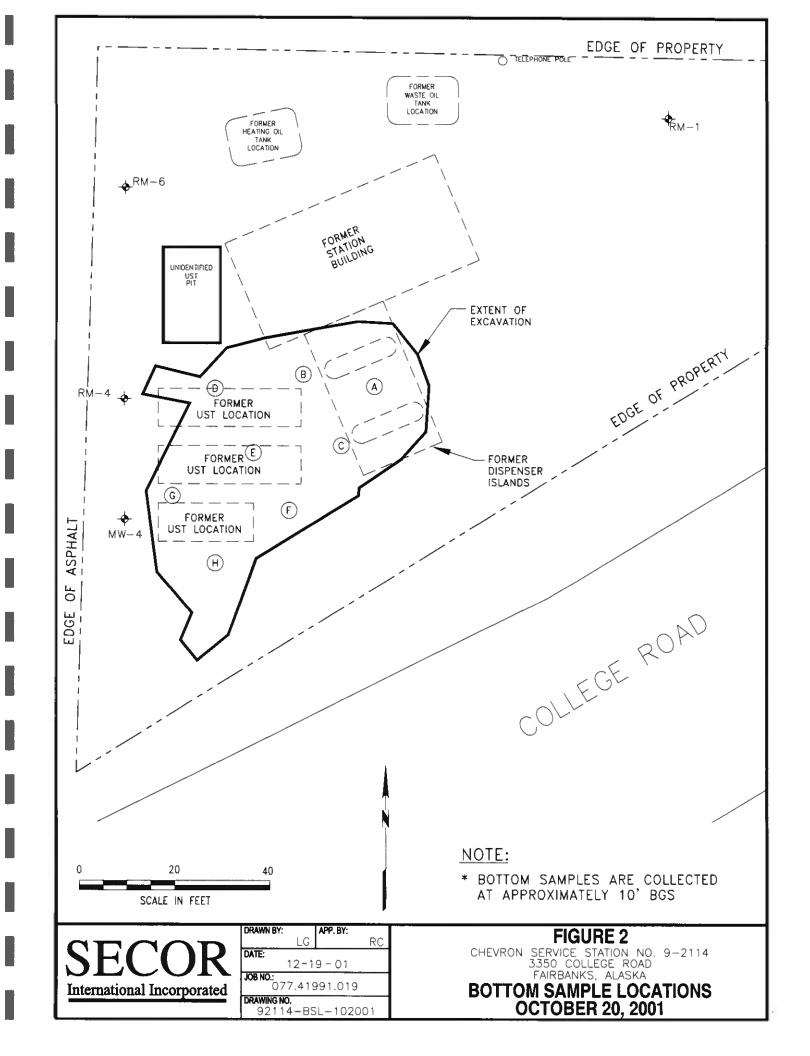
1

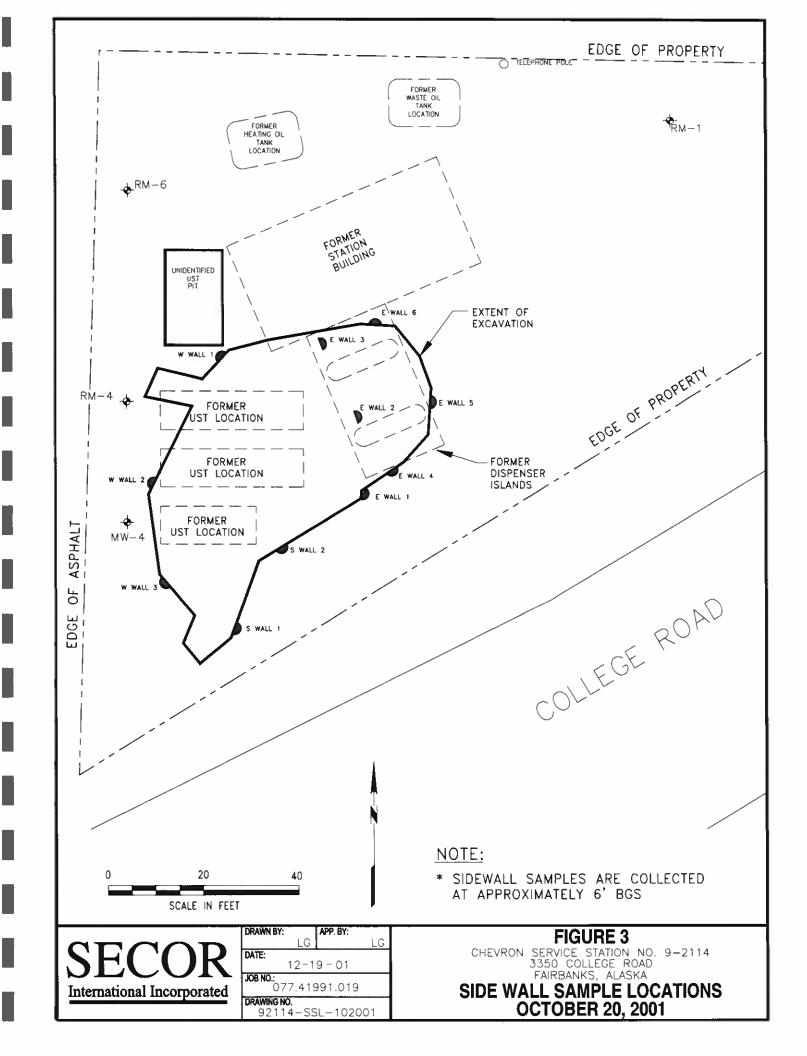
JŪB#:

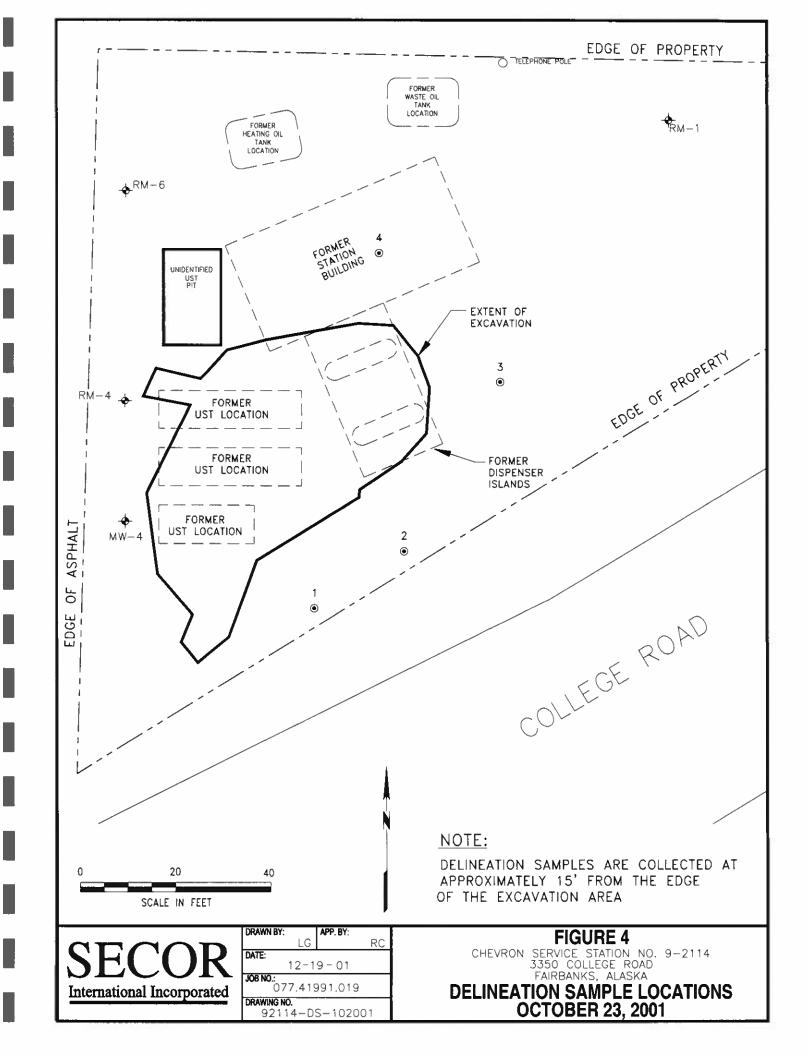
APPR:

DWN:

DATE: 12-19-01







## ATTACHMENT A CERTIFICATION OF RCRA EXEMPT STATUS



P.O. Box 55878, North Pole, AK 99705 • (907) 488-4899 • FAX (907) 488-4823

# CERTIFICATION OF RCRA EXEMPT STATUS

CLIENT NAME: CHENRON	PRODUCTS COMPANY
CONTRACT NAME:	81
CONTRACT NUMBER:	DATE:
CONSULTANT ADVISOR: SECOL IN	TELNATION AL
that material presented to OIT, Inc. contract and any subsequent contract Act) exempt waste, and does not mee applicable code of Federal and State Reference (and if signed by Consultant Act further agree to indemnify OIT, Inc. for the material presented for treat	dvisor, Consultant Advisor on behalf of client), or any liability that may be incurred as a result ment being classified as a RCRA hazardous indemnification for cost of proper disposal and
Signed by client o	and/or client's consultant.
Chevron Trochects Comp	DONY SECOR WEENATIONAL
CLIENT'S NAME	CONSULTANT ADVISOR  RONALD CHINN
BY CLIENT'S REPRESENTATIVE	BY CONSULTANT FIRM REPRESENTATIVE
Project Manager	PROJECT MANAGER
TITLE	
6001 Bollinger Cenyon Rd.	2301 LEGHORN ST. MOUNTAIN VIEW (
ADDRESS (\$25) 842-9655	(650) 691-0131
PHONE NUMBER	PHONE NUMBER
10/0/	10/12/01

DATE

# ATTACHMENT B ADEC APPROVAL FOR TRANSPORT AND DISPOSAL AT OIT

Close Previous Next Move Delete Forward Reply Info

#### -<u>1</u> Mail Message

From: "Ron Chinn" <rchinn@secor.com>
To: Dom-Main:amec.com:keri.depalma

Subject: FW: Chevron 9-2114 - Soil Transportation for Treatment

Attachments: A Mime.822 (Save As: Binary, Size=3046 bytes)

Message:

----Original Message-----

From: Carnahan, John [mailto:John\_Carnahan@envircon.state.ak.us]

Sent: Friday, October 12, 2001 5:07 PM

To: 'rchinn@secor.com'

Subject: Chevron 9-2114 - Soil Transportation for Treatment

Ron - The ADEC approves of the transportation of petroleum contaminated soil

from Secor and Chevron's 9-2114 facility, located on College Road. We understand that there may be approximately 1,000-cubic yards of soil that will be transported via covered trucks to OIT's facility for thermal treatment. If you have any questions pertaining to this approval to remove soil from the site for treatment, please contact me.

#### Regards,

John B. Carnahan Alaska Department of Environmental Conservation Spill Prevention and Response 610 University Avenue Fairbanks, Alaska 99709 Phane: (907) 151-2166

Facsimile: (907) 451-2155

John Carnahan@envircon.state ak us

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5761 SILVERADO WAY: UNIT N POUCH 340043

ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc.

2301 Leghorn St.

Mountain View, CA 94043

Attn: Phone: Ronald Chinn

(650) 691-0131

Fax:

NTL Lab#:

F302465

Client Sample ID:

Pothole A Chevron 9-2114 Excavation

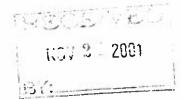
Location/Project: COC#:

30808

Sample Matrix:

Soil

Comments:



Report Date: 10/13/01 Date Arrived: 10/9/01 Date Sampled: 10/9/01 Time Sampled: 8:40 Collected By: **RDC** 

#### Flag Definitions

MDL = Method Detection Limit MCL = Maximum Contaminant Level B = Below Regulatory Minimum H = Above Regulatory Maximum

M = Matrix Interference J= Best Available Estimate U= Less Than Detection Limit

Parameter	Result	Units	Flag	MDL	MCL	Prep Method	Prep Date	Analysis Method	Analysis Date
Arsenic	< MDL	mg/dry kg	U	8		EPA 3050	10/12/01	EPA 6010B	10/12/01
Barium	96.5	mg/dry kg		0.9		EPA 3050	10/12/01	EPA 6010B	10/12/01
Cadmium	< MDL	mg/dry kg	U	l		EPA 3050	10/12/01	EPA 6010B	10/12/01
Chromium	17	mg/dry kg		3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Lead	24	mg/dry kg		6		EPA 3050	10/12/01	EPA 6010B	10/12/01
Selenium	< MDL	mg/dry kg	U	3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Silver	< MDL	mg/dry kg	U	1		EPA 3050	10/12/01	EPA 6010B	10/12/01
Mercury	< MDL	mg/dry kg	U	0.10				EPA 7471A	10/10/01
Percent Solids	87.2	%						SM 2540-G	10/10/01

Reported by Jeremy Nicoll Fairbanks Chemistry Supervisor



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn St.

Mountain View, CA 94043

Attn:

Ronald Chinn

Phone:

(650) 691-0131

Fax:

NTL Lab#:

F302466

Client Sample ID:

Pothole B

Location/Project:

Chevron 9-2114 Excavation

COC #:

30808

Sample Matrix:

Soil

Comments:

Report Date: 10/13/01 Date Arrived: 10/9/01 Date Sampled: 10/9/01 Time Sampled: 8:50 Collected By: RDC

Flag Definitions

MDL = Method Detection Limit
MCL = Maximum Contaminant Level
B = Below Regulatory Minimum
H = Above Regulatory Maximum

M = Matrix Interference J= Best Available Estimate U= Less Than Detection Limit

Parameter	Result	Units	Flag	MDL	MCL	Prep Method	Prep Date	Analysis Method	Analysis Date
Arsenic	< MDL	mg/dry kg	U	7	umuummeen meisen siksliminen kilikumuulikuu muuluudia	EPA 3050	10/12/01	EPA 6010B	10/12/01
Barium	74.5	mg/dry kg		0.8		EPA 3050	10/12/01	EPA 6010B	10/12/01
Cadmium	< MDL	mg/dry kg	U	1		EPA 3050	10/12/01	EPA 60108	10/12/01
Chromium	14	mg/dry kg		3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Lead	15	mg/dry kg	J	6		EPA 3050	10/12/01	EPA 6010B	10/12/01
Selenium	< MDL	mg/dry kg	U	3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Silver	< MDL	mg/dry kg	U	I		EPA 3050	10/12/01	EPA 6010B	10/12/01
Mercury	< MDL	mg/dry kg	U	0.10				EPA 7471A	10/10/01
Percent Solids	91.9	%						SM 2540-G	10/10/01

Reported by Jeremy Nicoll Fairbanks Chemistry Supervisor



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc.

2301 Leghorn St.

Mountain View, CA 94043

Attn:

Ronald Chinn

Phone:

(650) 691-0131

Fax:

NTL Lab#:

F302467

Client Sample ID:

Pothole C

Location/Project:

Chevron 9-2114 Excavation

COC#:

30808

Sample Matrix:

Soil

5011

Comments:

Report Date: 10/13/01
Date Arrived: 10/9/01
Date Sampled: 10/9/01
Time Sampled: 9:10
Collected By: RDC

Flag Definitions

MDL = Method Detection Limit MCL = Maximum Contaminant Level B = Below Regulatory Minimum H = Above Regulatory Maximum

M = Matrix Interference J= Best Available Estimate U= Less Than Detection Limit

Parameter	Result	Units	Flag	MDL	MCL	Prep Method	Prep Date	Analysis Method	Analysis Date
Arsenic	< MDL	mg/dry kg	U	8	radrandrabidalikarrdrakraville. Addrov	EPA 3050	10/12/01	EPA 6010B	10/12/01
Barium	102.5	mg/dry kg		0.9		EPA 3050	10/12/01	EPA 6010B	10/12/01
Cadmium	< MDL	mg/dry kg	U	l		EPA 3050	10/12/01	EPA 6010B	10/12/01
Chromium	20	mg/dry kg		3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Lead	8	mg/dry kg	J	6		EPA 3050	10/12/01	EPA 6010B	10/12/01
Selenium	< MDL	mg/dry kg	U	3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Silver	< MDL	mg/dry kg	U	l		EPA 3050	10/12/01	EPA 6010B	10/12/01
Mercury	< MDL	mg/dry kg	U	0.10				EPA 7471A	10/10/01
Percent Solids	89.3	%						SM 2540-G	10/10/01

Reported by Jeremy Nicoll

Fairbanks Chemistry Supervisor



5761 SILVERADO WAY; UNIT N POUCH 340043

ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc.

2301 Leghorn St.

Mountain View, CA 94043 Ronald Chinn

Attn: Phone:

(650) 691-0131

Fax:

NTL Lab#:

F302468

Client Sample ID:

Pothole D

Location/Project:

Chevron 9-2114 Excavation

COC #:

30808

Sample Matrix:

Soil

Report Date: 10/13/01 Date Arrived: 10/9/01 Date Sampled: 10/9/01 Time Sampled: 9:40 Collected By: **RDC** 

Flag Definitions

MDL = Method Detection Limit MCL = Maximum Contaminant Level B = Below Regulatory Minimum H = Above Regulatory Maximum

M = Matrix Interference J= Best Available Estimate U= Less Than Detection Limit

Comments: Heterogeneous sample matrix. Duplicate value for Lead was 51.5 mg/dry kg.

		and the second second second second							
Parameter	Result	Units	Flag	MDL	MCL	Prep Method	Prep Date	Analysis Method	Analysis Date
Arsenic	< MDL	mg/dry kg	U	7		EPA 3050	10/12/01	EPA 6010B	10/12/01
Barium	87.6	mg/dry kg		0.8		EPA 3050	10/12/01	EPA 6010B	10/12/01
Cadmium	< MDL	mg/dry kg	U	1		EPA 3050	10/12/01	EPA 6010B	10/12/01
Chromium	18	mg/dry kg		3		EPA 3050	10/12/01	EPA 6010B	10/12/01
Lead	29	mg/dry kg		5		EPA 3050	10/12/01	EPA 6010B	10/12/01
Selenium	< MDL	mg/dry kg	U	2		EPA 3050	10/12/01	EPA 6010B	10/12/01
Silver	< MDL	mg/dry kg	U	1		EPA 3050	10/12/01	EPA 6010B	10/12/01
Mercury	< MDL	mg/dry kg	U	0.10				EPA 7471A	10/10/01
Percent Solids	94.9	%						SM 2540-G	10/10/01

Jeremy Nicoll

Fairbanks Chemistry Supervisor



5761 SILVERADO WAY; UNIT N POUCH 340043

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Secor International, Inc.

2301 Leghorn St.

Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Pothole A

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176007

Sample Matrix:

Soil

Comments:

Report Date: 10/23/01 Date Arrived: 10/10/01 Sample Date: 10/9/01 Sample Time: 8:40 Collected By: RC \*\*Legend\*\*

> MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	490	268		10/11/01
	4-Bromofluorobenzene	% Recovery	80			
AK 102						
	Diesel Range Organics	mg/dry kg	970	11.0	10/15/01	10/17/01
	C25 (Surr)	% Recovery	115			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	3.22	0.27		10/10/01
	Ethylbenzene	mg/dry kg	23.6	0.27		
	Toluene	mg/dry kg	49.8	2.68		10/11/01
	m,p-Xylene	mg/dry kg	154	5.35		
	o-Xylene	mg/dry kg	67.0	2.68		
	DBFM (Surr)	% Recovery	119			10/10/01
	Toluene-d8 (Surr)	% Recovery	107			
	4-Bromofluorobenzene	% Recovery	127			
SM 2540	G					
	Total Solids, Percent	%	90.6		10/10/01	10/11/01

<u>cezodyn nitchell</u> Reported By: Wendy M. Mitchell Anchorage Laboratory Manager



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY: UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

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Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Pothole B

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176008

Sample Matrix:

Soil

Comments:

Report Date: 11/13/01
Date Arrived: 10/10/01
Sample Date: 10/9/01
Sample Time: 8:50
Collected By: RC
\*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value
M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	776	295		10/11/01
	4-Bromofluorobenzene	% Recovery	74			10/11/01
AK 102						
	Diesel Range Organics	mg/dry kg	644	11.3	10/15/01	10/17/01
	C25 (Surr)	% Recovery	101			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	3.43	0.30		10/10/01
	Ethylbenzene	mg/dry kg	18.3	0.30		
	Toluene	mg/dry kg	54.2	2.95		10/11/01
	m,p-Xylene	mg/dry kg	132	5.91		
	o-Xylene	mg/dry kg	50.6	0.30		10/10/01
	DBFM (Surr)	% Recovery	114			
	Toluene-d8 (Surr)	% Recovery	106			
	4-Bromofluorobenzene	% Recovery	116			
SM 2540	G					
	Total Solids, Percent	%	88.4		10/10/01	10/11/01





5761 SILVERADO WAY, UNIT N POUCH 340043

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Secor International, Inc.

2301 Leghorn St.

Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Pothole C

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176009

Sample Matrix:

Soil

Comments:

Sample Date: 10/9/01 Sample Time: 9:10 Collected By: RC \*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL

Report Date: 11/13/01

Date Arrived: 10/10/01

D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	212	14.9		10/10/01
	4-Bromofluorobenzene	% Recovery	84			
AK 102						
	Diesel Range Organics	mg/dry kg	1710	12.0	10/15/01	10/17/01
	C25 (Surr)	% Recovery	105			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	1.22	0.30		10/10/01
	Ethylbenzene	mg/dry kg	0.95	0.30		
	Toluene	mg/dry kg	2.46	0.30		
	m,p-Xylene	mg/dry kg	5.13	0.59		
	o-Xylene	mg/dry kg	2.24	0.30		
	DBFM (Surr)	% Recovery	121			
	Toluene-d8 (Surr)	% Recovery	105			
	4-Bromofluorobenzene	% Recovery	132			
SM 2540	G					
	Total Solids, Percent	%	83.0		10/10/01	10/11/01

Reported By: Wendy M. Mitchell



5761 SILVERADO WAY: UNIT N POUCH 340043

ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

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2301 Leghorn St.

Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Pothole D

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176010

Sample Matrix:

Soil

Comments:

Report Date: 11/13/01 Date Arrived: 10/10/01 Sample Date: 10/9/01 Sample Time: 9:40 Collected By: RC \*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference H = Above MCL

D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	2680	1230		10/19/01
	4-Bromofluorobenzene	% Recovery	91			
AK 102						
	Diesel Range Organics	mg/dry kg	1660	10.6	10/15/01	10/17/01
	C25 (Surr)	% Recovery	112			
EPA 8260	0 (8020 List)					
	Benzene	mg/dry kg	22.1	0.25		10/10/01
	Ethylbenzene	mg/dry kg	49.1	0.25		
	Toluene	mg/dry kg	256	4.91		10/11/01
	m,p-Xylene	mg/dry kg	291	9.82		
	o-Xylene	mg/dry kg	110	4.91		
	DBFM (Surr)	% Recovery	117			10/10/01
	Toluene-d8 (Surr)	% Recovery	123			
	4-Bromofluorobenzene	% Recovery	134			
SM 2540	G					
	Total Solids, Percent	%	94.1		10/10/01	10/11/01

Reported By: Wendy M. Mitchell Anchorage Laboratory Manager



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc.

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Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Travel Blank

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176011

Sample Matrix:

Soil

Comments:

Report Date: 10/20/01 Date Arrived: 10/10/01

Sample Date: Sample Time: Collected By:

\*\*Legend\*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value

M = Matrix Interference H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	<mrl< td=""><td>1.20</td><td></td><td>10/10/01</td></mrl<>	1.20		10/10/01
	4-Bromofluorobenzene	% Recovery	88			
EPA 826	) (8020 List)					
	Benzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td>10/10/01</td></mrl<>	0.02		10/10/01
	Ethylbenzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	Toluene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	m,p-Xylene	mg/dry kg	<mrl< td=""><td>0.05</td><td></td><td></td></mrl<>	0.05		
	o-Xylene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	DBFM (Surr)	% Recovery	124			
	Toluene-d8 (Surr)	% Recovery	104			
	4-Bromofluorobenzene	% Recovery	110			

Reported By: Marina I. Mitchell Quality Control Chemist



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

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Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Field Blank

Client Project:

Chevron 9-2114 Excavation

Source:

NTL Lab#:

A176012

Sample Matrix:

Soil

Comments:

Report Date: 10/20/01 Date Arrived: 10/10/01

Sample Date: Sample Time: Collected By:

\*\*Legend\*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value
M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	<mrl< td=""><td>1.25</td><td></td><td>10/10/01</td></mrl<>	1.25		10/10/01
	4-Bromofluorobenzene	% Recovery	110			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td>10/10/01</td></mrl<>	0.02		10/10/01
	Ethylbenzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	Toluene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	m,p-Xylene	mg/dry kg	<mrl< td=""><td>0.05</td><td></td><td></td></mrl<>	0.05		
	o-Xylene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	DBFM (Surr)	% Recovery	112			
	Toluene-d8 (Surr)	% Recovery	107			
	4-Bromofluorobenzene	% Recovery	116			

Reported By: Marina I. Mitchell Quality Control Chemist



#### NORTHERN TESTING LABOR 3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 ABORATORIES, INC. KA 99701 SKA 99518 ASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 ASKA 99734 (907) 659-2145 • FAX 659-2146

#### ANALYTICAL SERVICES ORDER AND CHAIN OF **CUSTODY FORM**

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#### PLEASE PRINT CLEARLY & FIRMLY

Client name and address:	7	Phone		INTE	Account N	ament size			
SECOR INTERNATIONAL	(50)	1691-0121							
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MOUNTAIN VIEW, CA	94043								
Contact: RONALD CHINN		PWS No:		Cash	or check p	payable to lease call for		order)	
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3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY: UNIT N POUCH 340043

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Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

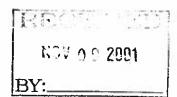
Client ID: Client Project:

Source:

S. Wall 1@ 6' Chevron 9-2114 Chevron Excavation

NTL Lab#: Sample Matrix: A176065 Soil

Comments:



Report Date: 11/5/01
Date Arrived: 10/15/01
Sample Date: 10/12/01
Sample Time: 16:15
Collected By: RDC
\*\*Legend\*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank

E = Estimated Value

M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	54.4	14.9		10/16/01
	4-Bromofluorobenzene	% Recovery	94			
AK 102						
	Diesel Range Organics	mg/dry kg	64.4	11.9	10/16/01	11/2/01
	C25 (Surr)	% Recovery	102			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	<mrl< td=""><td>0.15</td><td></td><td>10/17/01</td></mrl<>	0.15		10/17/01
	Ethylbenzene	mg/dry kg	<mrl< td=""><td>0.15</td><td></td><td></td></mrl<>	0.15		
	Toluene	mg/dry kg	0.21	0.15		
	m,p-Xylene	mg/dry kg	1.89	0.30		
	o-Xylene	mg/dry kg	1.14	0.15		
	DBFM (Suπ)	% Recovery	102			
	Toluene-d8 (Surτ)	% Recovery	110			
	4-Bromofluorobenzene	% Recovery	106			10/17/01
SM 2540	G					
	Total Solids, Percent	%	93.4		10/15/01	10/16/01

Broad Bro Wands M. Mitchell

Reported By: Wendy M. Mitchell Anchorage Laboratory Manager



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project:

Source:

S. Wall 2@6' Chevron 9-2114 Chevron Excavation

NTL Lab#:

A176066

Sample Matrix: Comments:

Soil

Report Date: 11/5/01 Date Arrived: 10/15/01 Sample Date: 10/12/01 Sample Time: 16:20 Collected By: RDC \*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated ValueM = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	772	344		10/16/01
	4-Bromofluorobenzene	% Recovery	100			
AK 102						
	Diesel Range Organics	mg/dry kg	279	12.7	10/16/01	11/2/01
	C25 (Surr)	% Recovery	72			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	2.33	0.27		10/17/01
	Ethylbenzene	mg/dry kg	12.3	0.27		
	Toluene	mg/dry kg	31.7	0.27		
	m,p-Xylene	mg/dry kg	123	1.10		10/24/01
	o-Xylene	mg/dry kg	43.7	0.27		10/17/01
	DBFM (Surr)	% Recovery	105	1		
	Toluene-d8 (Surr)	% Recovery	111			
	4-Bromofluorobenzene	% Recovery	107			
SM 2540	G					
	Total Solids, Percent	%	88.1		10/15/01	10/16/01

wendy motchell Reported By: Wendy M. Mitchell



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 349-1000 • FAX 349-1016 (907) 659-2145 - FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: E. Wall 1@6' Chevron 9-2114 Chevron Excavation

NTL Lab#: Sample Matrix: A176067

Soil

Comments:

Source:

Report Date: 11/5/01 Date Arrived: 10/15/01 Sample Date: 10/12/01 Sample Time: 16:25 Collected By: RDC \*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	555	123		10/16/01
	4-Bromofluorobenzene	% Recovery	73			10/16/01
AK 102						
	Diesel Range Organics	mg/dry kg	300	10.9	10/16/01	11/2/01
	C25 (Surr)	% Recovery	71			
EPA 8260	(8020 List)					
	Benzene	mg/dry kg	2.32	0.25		10/17/01
	Ethylbenzene	mg/dry kg	21.3	0.25		
	Toluene	mg/dry kg	53.3	0.25		
	m,p-Xylene	mg/dry kg	118	0.99		10/24/01
	o-Xylene	mg/dry kg	48.2	0.49		
	DBFM (Surr)	% Recovery	104			10/17/01
	Toluene-d8 (Surr)	% Recovery	113			
	4-Bromofluorobenzene	% Recovery	109			
SM 2540	G					
	Total Solids, Percent	%	90.2		10/15/01	10/16/01

cuendy mutchell Reported By: Wendy M. Mitchell



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: E. Wall 2@6' Chevron 9-2114 Chevron Excavation

Source: NTL Lab#:

A176068

Sample Matrix:

Soil

Comments:

Report Date: 11/5/01 Date Arrived: 10/15/01 Sample Date: 10/12/01 Sample Time: 16:30 Collected By: RDC \*\*Legend\*\*

> MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	4720	892		10/16/01
	4-Bromofluorobenzene	% Recovery	72			10/16/01
AK 102						
	Diesel Range Organics	mg/dry kg	871	10.4	10/16/01	11/2/01
	C25 (Surr)	% Recovery	100			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	24.4	0.89		10/17/01
	Ethylbenzene	mg/dry kg	86.2	0.89		
	Toluene	mg/dry kg	589	3.57		10/24/01
	m,p-Xylene	mg/dry kg	898	7.14		
	o-Xylene	mg/dry kg	349	3.57		
	DBFM (Surr)	% Recovery	108			10/17/01
	Toluene-d8 (Surr)	% Recovery	116			
	4-Bromofluorobenzene	% Recovery	108			
SM 2540	G					
	Total Solids, Percent	%	93.3		10/15/01	10/16/01

Reported By: Wendy M. Mitchell



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: E. Wall 3@6' Chevron 9-2114 Chevron Excavation

NTL Lab#:
Sample Matrix:

A176069 Soil

Comments:

Source:

Report Date: 11/5/01
Date Arrived: 10/15/01
Sample Date: 10/12/01
Sample Time: 16:35
Collected By: RDC
\*\*Legend\*\*

MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference H = Above MCL

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	160	103		10/16/01
	4-Bromofluorobenzene	% Recovery	95			
AK 102						
	Diesel Range Organics	mg/dry kg	54.9	12.1	10/16/01	11/2/01
	C25 (Surr)	% Recovery	87			
EPA 8260	) (8020 List)					
	Benzene	mg/dry kg	1.09	1.03		10/17/01
	Ethylbenzene	mg/dry kg	2.57	1.03		
	Toluene	mg/dry kg	11.9	1.03		
	m,p-Xylene	mg/dry kg	19.0	2.06		
	o-Xylene	mg/dry kg	7.36	1.03		
	DBFM (Surr)	% Recovery	75			
	Toluene-d8 (Surr)	% Recovery	105			
	4-Bromofluorobenzene	% Recovery	85			
SM 2540	G					
	Total Solids, Percent	%	80.5		10/15/01	10/16/01



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 349-1000 · FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Travel Blank Chevron 9-2114

Source:

NTL Lab#: Sample Matrix: A176070

Comments:

Soil

\*\*Legend\*\* MRL = Method Report Level

Report Date: 10/29/01

Date Arrived: 10/15/01

Sample Date: Sample Time:

Collected By:

MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCLD = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	<mrl< td=""><td>1.20</td><td></td><td>10/16/01</td></mrl<>	1.20		10/16/01
	4-Bromofluorobenzene	% Recovery	86			
EPA 8260	0 (8020 List)					
	Benzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td>10/17/01</td></mrl<>	0.02		10/17/01
	Ethylbenzene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	Toluene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	m,p-Xylene	mg/dry kg	<mrl< td=""><td>0.05</td><td></td><td></td></mrl<>	0.05		
	o-Xylene	mg/dry kg	<mrl< td=""><td>0.02</td><td></td><td></td></mrl<>	0.02		
	DBFM (Surr)	% Recovery	101			
	Toluene-d8 (Surr)	% Recovery	104			
	4-Bromofluorobenzene	% Recovery	91			



# NORTHERN TESTING LABORATORIES 3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99718 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 - F (907) 349-1000 - F (907) 659-2145 - F

(907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

### ANALYTICAL SERVICES ORDER AND CHAIN OF CUSTODY FORM

NO POIRS

#### PLEASE PRINT CLEARLY & FIRMLY

LEASE PRINT CLEARLY & FIRML					3	7		-
Client name and address:	Ph	none: (50)	131-0121	NTL A	ccount Nur	nber:		
ISA LEGHOON TREET	F#	X: (5%)	601-9337	PAY	MENT INI	ORMATI	ON:	n
MONTAIN VIEW, CA ACH		Mail:			rization#: _			
Contact: [NA-) CHINN	PV	WS No:		Cash	or check pa Card: (Plea			der)
Reporting Format:RegularData D	eliverable Se	end results	to ADEC:		Requ	ested	Analy	sis
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Relinquished by: Date/Time	e;	Receive	ed by:		Comments			
Client Signature:  By signing, I have read and accepted the this form or as otherwise stipulated in the					v 1984		Page _	ol

# SECOR International Incorporated

LETTER OF TRANSMITTAL

2301 Leghorn Street Mountain View, CA 94043-1431 Telephone (650) 691-0131 Fax (650) 691-9837

102.26.097

Subject:	Excavation Report	<b>Date:</b> 3/28/02
Send Via:	Fed. Ex.	For:
Attn:	John Carnahan	As Requested
Company:	ADEC	Review Your Information RECEIVED
Address: Project No.	610 University Ave. Fairbanks, AK 99709	Approval Signature Return MAR 2 9 2002 Other Contaminated Sites FAIRBANKS
, , , , , , , , , , , , , , , , , , , ,		Project Name Chevron 9-2114
		Quantity ort, Chevron 9-2114, 3350 College Rd.,
Fairbanks, AK.		
COMMENTS:		
Signature:	Ronald D. Chinn	Cc: Bob Cochran, ChevronTexaco Products Company Roger Hoffmore, SECOR International, Inc.
Title:	Portfolio Manager	Mark Nielson, Estate of Margaret Nielson

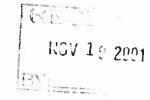


Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588



9 November 2001

Ron Chinn

Secor - Moutain View

2301 Leghorn St.

Mountain View, CA/USA 94043

RE: Chevron #9-2114 Excavation

Enclosed are the results of analyses for samples received by the laboratory on 10/25/01 09:40. If you have any questions concerning this report, lease feel free to contact me.

Sincerely,

larne Garthwate

Jeanne Garthwaite

Project Manager



Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541 383 9310 fax 541,382,7588

Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom A	B1J0704-01	Soil	10/20/01 16:15	10/25/01 09:40
Bottom B	B1J0704-02	Soil	10/20/01 16:20	10/25/01 09:40
Bottom C	B1J0704-03	Soil	10/20/01 16:55	10/25/01 09:40
Bottom D	B1J0704-04	Soil	10/20/01 16:25	10/25/01 09:40
Bottom E	B1J0704-05	Soil	10/20/01 16:30	10/25/01 09:40
Bottom F	B1J0704-06	Soil	10/20/01 16:50	10/25/01 09:40
Bottom G	B1J0704-07	Soil	10/20/01 16:35	10/25/01 09:40
Bottom H	B1J0704-08	Soil	10/20/01 16:40	10/25/01 09:40
Delineation 1@6'	B1J0704-09	Soil	10/23/01 16:05	10/25/01 09:40
Delineation 2@6'	B1J0704-10	Soil	10/23/01 16:20	10/25/01 09:40
Delineation 3@6'	B1J0704-11	Soil	10/23/01 16:30	10/25/01 09:40
Delineation 4@6'	B1J0704-12	Soil	10/23/01 16:50	10/25/01 09:40
FMR WASTE OIL LOC.	B1J0704-13	Soil	10/11/01 10:40	10/25/01 09:40
FMR HEATING OIL LOC.	B1J0704-14	Soil	10/11/01 11:00	10/25/01 09:40
W WALL 1@6'	B1J0704-15	Soil	10/20/01 09:45	10/25/01 09:40
W WALL 2@6'	B1J0704-16	Soil	10/20/01 09:50	10/25/01 09:40
W WALL 3@6'	B1J0704-17	Soil	10/20/01 09:40	10/25/01 09:40
E WALL 4@6'	B1J0704-18	Soil	10/20/01 14:35	10/25/01 09:40
E WALL 5@6'	B1J0704-19	Soil	10/20/01 14:30	10/25/01 09:40
E WALL 6@6'	B1J0704-20	Soil	10/20/01 14:40	10/25/01 09:40

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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509-924.9200 fax 509.924.9290 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906 9200 fax 503.906 9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541 383 9310 fax 541.382 7588

Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St.
Mountain View CA/USA, 94043

Project Number: [none]
Project Manager: Ron Chinn

Reported: 11/09/01 09:31

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

		Reporting		47		· <u></u>			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom A (B1J0704-01) Soil Samp	led: 10/20/01 16	:15 Receiv	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	3430	143	mg/kg dry	50	1K05012	11/05/01	11/06/01	AK 101	
Benzene	7.24	0.571	n n	н	**		**	**	
Toluene	103	1.43	*	"	"	"	#		
Ethylbenzene	37.2	1.43		#		n	#		
Xylenes (total)	323	2.86		*	*	#	R	*	
Surrogate: 4-BFB (FID)	%	60-120			"	*	"	**	S-01
Surrogate: a,a,a-TFT (FID)	%	50-150			"	#	,,	**	S-0.
Surrogate: 4-BFB (PID)	%	54-123			"	*	ir	"	S-01
Surrogate: a,a,a-TFT (PID)	%	50-150			*	,,	*	*	S-0
Bottom B (B1J0704-02) Soil Samp	led: 10/20/01 16	:20 Receiv	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	225	54.8	mg/kg dry	20	1K05012	11/05/01	11/06/01	AK 101	
Benzene	0.936	0.219	n	н	n	**	n	н	
Toluene	9.86	0.548	**	**		*	**	#	
Ethylbenzene	2,21	0.548	**	n	*	*	**	**	
Xylenes (total)	23.3	1.10	Ħ		*		Ħ	**	
Surrogate: 4-BFB (FID)	%	60-120			"	"	"	"	S-0.
Surrogate: a,a,a-TFT (FID)	116%	50-150			*	*	"	Ħ	
Surrogate: 4-BFB (PID)	154 %	54-123			"	*	**	n	S-0
Surrogate: a,a,a-TFT (PID)	104 %	50-150			**	*	Ħ	*	
Bottom C (B1J0704-03) Soil Samp	oled: 10/20/01 10	5:55 Receiv	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	4.81	2.84	mg/kg dry	1	1K05012	11/05/01	11/06/01	AK 101	
Benzene	0.0632	0.0114	n	u	**	"	Ħ	11	
Toluene	0.287	0.0284	м	#	*	**	Ħ	*	
Ethylbenzene	0.0705	0.0284	**	**	*	**	n	n	
Xylenes (total)	0.497	0.0569	**	•	=	**	77	et	
Surrogate: 4-BFB (FID)	104 %	60-120			"	"	*	**	
Surrogate: a,a,a-TFT (FID)	83.5 %	50-150			*	*	*	"	
Surrogate: 4-BFB (PID)	104 %	54-123			m	"	n	"	
Surrogate: a,a,a-TFT (PID)	74.1 %	50-150			**	"	*	"	

North Creek Analytical - Bothell

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Jeanne Garthwate

North Creek Analytical, Inc. Environmental Laboratory Network

Page 2 of 20



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541.383.9310 fax 541.382.7588

Secor - Moutain View

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

		Reporting				<del></del>			$\overline{}$
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom D (B1J0704-04) Soil Sam	pled: 10/20/01 16	:25 Receive	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	837	77.4	mg/kg dry	20	1K05012	11/05/01	11/06/01	AK 101	
Benzene	0.485	0.310	n	*	#	н	Ħ	n	
Toluene	17.9	0.774	"	*	*	**	Ħ	**	
Ethylbenzene	5.95	0.774	**	**		H	•	**	
Xylenes (total)	69.1	1.55	**	Ħ	н	H	н	et	
Surrogate: 4-BFB (FID)	%	60-120			*	н	"	*	S-01
Surrogate: a,a,a-TFT (FID)	158 %	50-150			*	#	**	n	S-06
Surrogate: 4-BFB (PID)	%	54-123			*	H	*	#	S-01
Surrogate: a,a,a-TFT (PID)	133 %	50-150			H	*	n	"	
Bottom E (B1J0704-05) Soil Sam	pled: 10/20/01 16	:30 Receive	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	471	61.3	mg/kg dry	20	1K05012	11/05/01	11/07/01	AK 101	
Benzene	0.896	0.245	#	Ħ	#	*	н	H	
Toluene	16.6	0.613	n		н	n	"	н	
Ethylbenzene	4.80	0.613	#	**	Ħ	*	**	**	
Xylenes (total)	53.4	1.23	TOTALLE ADDRESS	n Les consentations			# p=	н	
Surrogate: 4-BFB (FID)	%	60-120			"	"	"	,,	S-01
Surrogate: a,a,a-TFT (FID)	122 %	50-150			*	*	#	"	
Surrogate: 4-BFB (PID)	182 %	54-123			*	•	"	н	S-06
_Surrogate: a,a,a-TFT (PID)	101 %	50-150			"	*	*	#	
Bottom F (B1J0704-06) Soil Sam	npled: 10/20/01 16	:50 Receiv	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	78.5	28.8	mg/kg dry	10	1K05012	11/05/01	11/07/01	AK 101	
Benzene	0.981	0.115	Ħ	n	n	11	11	*	
Toluene	9.82	0.288	n	11	n	**	H	н	
Ethylbenzene	2.01	0.288	**	н	n	*	и	#	
Xylenes (total)	18.9	0.577	*	**	•	*	**	н	
Surrogate: 4-BFB (FID)	126 %	60-120			"	"	"	"	S-06
Surrogate: a,a,a-TFT (FID)	70.8 %	50-150			n	n	*	"	
Surrogate: 4-BFB (PID)	116%	54-123			"	#	"	n	
Surrogate: a,a,a-TFT (PID)	65.6 %	50-150			*	•	*	"	

North Creek Analytical - Bothell

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20332 Empire Avenue, Suite F-1, Bend, OR 97701 5711 541.383.9310 fax 541.382.7588

Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

		Reporting		191				<del></del>	$\overline{}$
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom G (B1J0704-07) Soil Sampl	led: 10/20/01 16	:35 Receiv	ed: 10/25/01	09:40			<del> </del>		
Gasoline Range Hydrocarbons	1100	71.2	mg/kg dry	20	1K05012	11/05/01	11/06/01	AK 101	
Benzene	2.39	0.285	"	**	**	*	H	n	
Toluene	48.8	0.712	н	n	Ħ	#	н	*	
Ethylbenzene	14.0	0.712	и	**	n	**	n	,	
Xylenes (total)	144	1.42		H	н	•	**	н	
Surrogate: 4-BFB (FID)	%	60-120			"	"	"	"	S-01
Surrogate: a,a,a-TFT (FID)	194 %	50-150			"	"	*	"	S-06
Surrogate: 4-BFB (PID)	%	54-123			*	#	н	"	S-01
Surrogate: a,a,a-TFT (PID)	161 %	50-150			*	"	m	a	S-06
Bottom H (B1J0704-08) Soil Sampl	led: 10/20/01 10	5:40 Receiv	ed: 10/25/01	09:40					
Gasoline Range Hydrocarbons	1330	155	mg/kg dry	50	1K05012	11/05/01	11/06/01	AK 101	
Benzene	4.53	0.620	н	u		**	#		
Toluene	74.0	1.55	#	н	Ħ		**	#	
Ethylbenzene	22.6	1.55	н	**	**	*	н	**	
Xylenes (total)	162	3.10	**	m	HT .	#	# 069399-333 ID-	H	
Surrogate: 4-BFB (FID)	%	60-120			"	*	"	н	S-0
Surrogate: a,a,a-TFT (F1D)	%	50-150			"	*	#	"	S-0
Surrogate: 4-BFB (PID)	%	54-123			"	#	er	**	S-0.
Surrogate: a,a,a-TFT (PID)	190 %	50-150			*	*	**	n	S-06
Delineation 1@6' (B1J0704-09) Soil	Sampled: 10/	23/01 16:05	Received: 1	10/25/01 0	9:40				
Gasoline Range Hydrocarbons	6.42	3.76	mg/kg dry	1	1K05012	11/05/01	11/06/01	AK 101	G-01
Benzene	0.0216	0.0150	*	**	41			#	
Toluene	0.0953	0.0376	n	#	н	н	н	n	
Ethylbenzene	ND	0.0376	н	n	Ħ	*	Ħ	н	
Xylenes (total)	0.227	0.0752	**	н	н	*	**	#	
Surrogate: 4-BFB (FID)	114%	60-120			"	,,	"	"	20/10/11/51
Surrogate: a,a,a-TFT (FID)	102 %	50-150			"	"	"	#	
Surrogate: 4-BFB (PID)	108 %	54-123				*	"	n	
Surrogate: a,a,a-TFT (PID)	86.9 %	50-150			"	#	*	"	

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Delineation 2@6' (B1J0704-10) Soil	Sampled: 10/2	23/01 16:20	Received: 1	0/25/01 09	:40				
Gasoline Range Hydrocarbons	3150	205	mg/kg dry	50	1K05012	11/05/01	11/06/01	AK 101	
Benzene	1.89	0.820	n	**	Ħ	**	*	11	1-06
Toluene	19.2	2.05	Ħ	Ħ	**	n	H	u	
Ethylbenzene	15.3	2.05	"	#		*	•	*	
Xylenes (total)	259	4.10	н	н	н	*	*	*	
Surrogate: 4-BFB (FID)	%	60-120			"	"	"	*	S-0.
Surrogate: a,a,a-TFT (FID)	%	50-150			"	"	*	"	S-0
Surrogate: 4-BFB (PID)	%	54-123			*	#	n	*	S-0
Surrogate: a,a,a-TFT (PID)	%	50-150			"	"	*	"	S-0
Delineation 3@6' (B1J0704-11) Soil	Sampled: 10/2	23/01 16:30	Received: 1	0/25/01 09	:40				
Gasoline Range Hydrocarbons	5.69	5.00	mg/kg dry	1	1K05012	11/05/01	11/06/01	AK 101	
Benzene	0.133	0.0200	11	**	н	**	н	Ħ	
Toluene	0.337	0.0500	Ħ		•	#	*	**	
Ethylbenzene	ND	0.0500	#1	H	#	*	n		
Xylenes (total)	0.199	0.100	**	**	н	н	**	H	
Surrogate: 4-BFB (FID)	96.7 %	60-120			"	n	"	"	
Surrogate: a,a,a-TFT (FID)	98.3 %	50-150			"	*	"	n	
Surrogate: 4-BFB (PID)	105 %	54-123			"	7	H	n	
Surrogate: a,a,a-TFT (PID)	91.5 %	50-150			m	*	"	n	
Delineation 4@6' (B1J0704-12) Soil	Sampled: 10/	23/01 16:50	Received:	10/25/01 0	9:40				
Gasoline Range Hydrocarbons	ND	4.14	mg/kg dry	ı	1K05012	11/05/01	11/06/01	AK 101	
Benzene	0.0336	0.0166	11	n		*	Ħ	•	
Toluene	ND	0.0414	н	ш	n	*	#		
Ethylbenzene	0.0549	0.0414	Ħ	**	#		**	*	
Xylenes (total)	0.296	0.0828		**				**	
Surrogate: 4-BFB (FID)	101 %	60-120			"	"	"	"	
Surrogate: a,a,a-TFT (FID)	109 %	50-150			**	"	*	N	
Surrogate: 4-BFB (PID)	100 %	54-123			"	"	#	"	
Surrogate: a,a,a-TFT (PID)	94.7 %	50-150			*	н	•	n	

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FMR WASTE OIL LOC. (B1J0704-13) S	Soil Samp	oled: 10/11/0	1 10:40 Re	ceived: 10/	25/01 09:4	10		<del></del>	
Gasoline Range Hydrocarbons	ND	3.92	mg/kg dry	1	1K05012	11/05/01	11/06/01	AK 101	<del></del>
Benzene	0.0331	0.0157	11	n	н	n	н	U	
_Toluene	0.109	0.0392	#	Ħ	*	"		tt	
Ethylbenzene	ND	0.0392	17	*	**		*	*	
Xylenes (total)	ND	0.0783	н	97		Ħ		*	
Surrogate: 4-BFB (FID)	103 %	60-120			*	#	n	"	
Surrogate: a,a,a-TFT (FID)	105 %	50-150			"	"	p	"	
Surrogate: 4-BFB (PID)	106%	54-123			n	*	*	н	
Surrogate: a,a,a-TFT (PID)	94.0 %	50-150			"	*	*	Ħ	
FMR HEATING OIL LOC. (B1J0704-14	i) Soil Sa	mpled: 10/13	L/01 11:00	Received:	10/25/01 0	9:40			
Gasoline Range Hydrocarbons	ND	3.82	mg/kg dry	1	1K05012	11/05/01	11/07/01	AK 101	
Benzene	0.0179	0.0153	#	и	н	**		н	
Toluene	ND	0.0382	11	н	Ħ		**	#	
Ethylbenzene	NĎ	0.0382	n	**	**	**	π-	*	
Xylenes (total)	ND	0.0763	H	M M STOCK PARTY STATE	H EMPCOS CARSOUS O		**	н	
Surrogate: 4-BFB (FID)	101 %	60-120			"	"	*	н	
Surrogate: a,a,a-TFT (FID)	110%	50-150			*	**	*	n	
Surrogate: 4-BFB (PID)	100 %	54-123			*	#	"	*	
Surrogate: a,a,a-TFT (PID)	94.2 %	50-150			*	*	*	*	
W WALL 1@6' (B1J0704-15) Soil San	pled: 10/2	0/01 09:45	Received: 10	/25/01 09:	40				
Gasoline Range Hydrocarbons	1650	184	mg/kg dry	50	1K05012	11/05/01	11/07/01	AK 101	
Benzene	36.4	0.737	"	**		ff	н		
Toluene	24.6	1.84	#	·	Ħ	*	н	н	
Ethylbenzene	14.3	1.84	Ħ	**	**	**	n	n	
Xylenes (total)	68.9	3.69	ri	**	н	**	#	н	
Surrogate: 4-BFB (FID)	%	60-120			н	*	N	"	S-0.
Surrogate: a,a,a-TFT (FID)	141 %	50-150			#	*	,,	"	
Surrogate: 4-BFB (PID)	%	54-123			n	#	n	"	S-0
Surrogate: a,a,a-TFT (PID)	120 %	50-150			*	*	•	*	

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lame Garthate

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

		Reporting						<del></del> -	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W WALL 2@6' (B1J0704-16) Soil	Sampled: 10/20	/01 09:50	Received: 10	/25/01 09:	40			-	
Gasoline Range Hydrocarbons	3270	185	mg/kg dry	50	1K05012	11/05/01	11/07/01	AK 101	
Benzene	5.87	0.741	#	Ħ	н	Ħ	**	n	
Toluene	64.3	1.85	**	#	#	**	п	**	
Ethylbenzene	37.3	1.85	"	**	**	H	Ħ	н	
Xylenes (total)	492	3.71	H	н	*		Ħ	Ħ	
Surrogate: 4-BFB (FID)	%	60-120			"	"	*	"	S-01
Surrogate: a,a,a-TFT (FID)	%	50-150			"	"	*	er	S-01
Surrogate: 4-BFB (PID)	%	54-123			*	*	*	*	S-01
Surrogate: a,a,a-TFT (PID)	198 %	50-150			#	"	*	#	S-06
W WALL 3@6' (B1J0704-17) Soil	Sampled: 10/20	/01 09:40	Received: 10	/25/01 09:	40				
Gasoline Range Hydrocarbons	1600	223	mg/kg dry	50	1K05012	11/05/01	11/07/01	AK 101	
Benzene	8.85	0.893	#	*	н	#	<b>H</b>	н	
Toluene	64.3	2.23	Ħ	**	**	*	Ħ	н	
Ethylbenzene	18.9	2.23			**	н	#	#	
Xylenes (total)	229	4.46			H	Ħ	Ħ	**	
Surrogate: 4-BFB (FID)	%	60-120			*	"	"	"	S-01
Surrogate: a,a,a-TFT (FID)	184 %	50-150				"	"		S-06
Surrogate: 4-BFB (PID)	%	54-123			"	*	*	<i>n</i>	S-01
Surrogate: a,a,a-TFT (PID)	157 %	50-150			"	*	**	#	S-06
E WALL 4@6' (B1J0704-18) Soil	Sampled: 10/20	/01 14:35	Received: 10/	25/01 09:4	10				
Gasoline Range Hydrocarbons	6070	198	mg/kg dry	50	1K05012	11/05/01	11/07/01	AK 101	
Benzene	8.90	0.794		#	#	"	н	н	
Toluene	174	1.98			n	н	H	**	
Ethylbenzene	124	1.98	"	**	n	**	ts	**	
Xylenes (total)	762	15.9	, #	200	**	#	11/07/01	**	
Surrogate: 4-BFB (FID)	%	60-120			"	*	11/07/01	"	S-0
Surrogate: a,a,a-TFT (FID)	%	50-150			**	n	*	"	S-0
Surrogate: 4-BFB (PID)	%	54-123			*	"	*	u	S-0
Surrogate: a,a,a-TFT (PID)	%	50-150			,	*	*	#	S-0

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported:

11/09/01 09:31

# Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 North Creek Analytical - Bothell

		Reporting	5.9			-			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E WALL 5@6' (B1J0704-19) Soil	Sampled: 10/20	/01 14:30 R	keceived: 10/	25/01 09:4	0				
Gasoline Range Hydrocarbons	29.2	6.05	mg/kg dry	1	1K05012	11/05/01	11/07/01	AK 101	
Benzene	0.576	0.0242	u			44	n	19	
Toluene	2.88	0.0605		*		#	Ħ		
Ethylbenzene	0.204	0.0605		*	*	#	**	n	
Xylenes (total)	1.45	0.121	tt	**	н	**	**	N	
Surrogate: 4-BFB (FID)	103 %	60-120			н	#	"	n	
Surrogate: a,a,a-TFT (FID)	106 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	99.6 %	54-123			W	#	n	н	
Surrogate: a,a,a-TFT (PID)	88.8 %	50-150			#	*	"	"	
E WALL 6@6' (B1J0704-20) Soil	Sampled: 10/20	/01 14:40 R	Received: 10/	25/01 09:4	0				
Gasoline Range Hydrocarbons	8.78	4.02	mg/kg dry	1	1K05012	11/05/01	11/07/01	AK 101	<del></del>
Benzene	0.176	0.0161	"	n	н	#	#	H	
Toluene	0.495	0.0402	"	Ħ	n	н	n	н	
Ethylbenzene	0.125	0.0402	#	**	н		**	#	
Xylenes (total)	0.704	0.0804	Ħ	**	*			**	
Surrogate: 4-BFB (FID)	106 %	60-120		2000	**	"	"	,	
Surrogate: a,a,a-TFT (FID)	84.9 %	50-150			*	**	"	a	
Surrogate: 4-BFB (PID)	106 %	54-123			"	#	•	*	
Surrogate: a,a,a-TFT (PID)	73.5 %	50-150			*	**	"	n	

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Secor - Moutain View 2301 Leghorn St. Mountain View CA/USA, 94043 Project: Chevron #9-2114 Excavation

Project Number: [none] Project Manager: Ron Chinn Reported:

11/09/01 09:31

# Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

	F	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom A (B1J0704-01) Soil	Sampled: 10/20/01 16:15	Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	32.5	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	335
Surrogate: 2-FBP	62.7 % 5	0-150			"	н	"	tı	
<b>Bottom B (B1J0704-02) Soil</b>	Sampled: 10/20/01 16:20	Receive	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	18.9	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	63.2 % 5	0-150			"	н	"	ħ	
Bottom C (B1J0704-03) Soil	Sampled: 10/20/01 16:55	Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	7.44	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	64.2 % 5	0-150			"	*	*	n	
Bottom D (B1J0704-04) Soil	Sampled: 10/20/01 16:25	Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	155	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	75.2 % 5	0-150			"	"	n	n	
Bottom E (B1J0704-05) Soil	Sampled: 10/20/01 16:30	Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	29.2	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	4580
Surrogate: 2-FBP	75.8 % 5	0-150			#	"	"	tt	
Bottom F (B1J0704-06) Soil	Sampled: 10/20/01 16:50	Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	44.6	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	71.8% 5	0-150			rr rr	"	"	н	
Bottom G (B1J0704-07) Soil	Sampled: 10/20/01 16:3	5 Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	79.9	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	76.9 % 5	0-150			"	н	"	rr .	

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Secor - Moutain View

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none] Project Manager: Ron Chinn Reported:

11/09/01 09:31

# Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom H (B1J0704-08) Soil Samp	led: 10/20/01 16	:40 Receiv	ed: 10/25/01	09:40					
Diesel Range Hydrocarbons	116	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	<del></del>
Surrogate: 2-FBP	74.5 %	50-150			#	n	"	"	
<b>Delineation 1@6' (B1J0704-09) Soil</b>	Sampled: 10/2	23/01 16:05	Received: 1	0/25/01 09	:40				
Diesel Range Hydrocarbons	62.0	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	71.3 %	50-150			"	"	"	,,	
Delineation 2@6' (B1J0704-10) Soil	Sampled: 10/2	23/01 16:20	Received: 1	0/25/01 09	:40				
Diesel Range Hydrocarbons	479	4.00	mg/kg dry	I	1K03006	11/03/01	11/04/01	AK 102	sss
Surrogate: 2-FBP	83.9 %	50-150			#	#	*	н	
Delineation 3@6' (B1J0704-11) Soil	Sampled: 10/2	23/01 16:30	Received: 1	0/25/01 09	:40				
Diesel Range Hydrocarbons	ND	4.00	mg/kg dry	ŀ	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	69.2 %	50-150			"	*	n	n	
Delineation 4@6' (B1J0704-12) Soil	Sampled: 10/2	23/01 16:50	Received: 1	0/25/01 09	2:40				
Diesel Range Hydrocarbons	5.60	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	60.5 %	50-150			*	"	#	#	
W WALL 1@6' (B1J0704-15) Soil	Sampled: 10/20	0/01 09:45	Received: 10	/25/01 09:	40				
Diesel Range Hydrocarbons	37900	1610	mg/kg dry	201	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	%	50-150			"	"	*	"	S-01
W WALL 2@6' (B1J0704-16) Soil	Sampled: 10/2	0/01 09:50	Received: 10	/25/01 09:	40				
Diesel Range Hydrocarbons	549	20.0	mg/kg dry	5	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	%	50-150			"	"	н	H	S-02

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Secor - Moutain View

2301 Leghorn St.

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

Project Number: [none] Project Manager: Ron Chinn

Reported:

11/09/01 09:31

# Diesel Hydrocarbons (C10-C25) by AK102 North Creek Analytical - Bothell

		Reporting						-	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
W WALL 3@6' (B1J0704-17) Soil	Sampled: 10/20	0/01 09:40	Received: 10	/25/01 09:	40		<del>-</del>	<u>-</u>	
Diesel Range Hydrocarbons	436	44.0	mg/kg dry	11	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	10.8 %	50-150			n	*	"	"	S-00
E WALL 4@6' (B1J0704-18) Soil	Sampled: 10/20	/01 14:35 I	Received: 10/2	25/01 09:4	0				
Diesel Range Hydrocarbons	1060	44.0	mg/kg dry	11	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	21.7%	50-150			W	н		"	S-06
E WALL 5@6' (B1J0704-19) Soil	Sampled: 10/20	/01 14:30 1	Received: 10/2	25/01 09:4	10				
Diesel Range Hydrocarbons	10.3	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	
Surrogate: 2-FBP	66.3 %	50-150		- 10	#	н	"	#	
E WALL 6@6' (B1J0704-20) Soil	Sampled: 10/20	/01 14:40	Received: 10/	25/01 09:4	10				
Diesel Range Hydrocarbons	22.9	4.00	mg/kg dry	1	1K03006	11/03/01	11/04/01	AK 102	D-09
Surrogate: 2-FBP	57.5 %	50-150			n	#	rr	"	

North Creek Analytical - Bothell

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Jeanne Garthwaite, Project Manager

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

# Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103

#### North Creek Analytical - Bothell

	· -	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FMR WASTE OIL LOC. (B1J0704-	-13) Soil Samp	led: 10/11/0	1 10:40 Re	ceived: 10/	25/01 09:4	0			
Diesel Range Hydrocarbons	5.07	4.00	mg/kg dry	1	1K01030	11/01/01	11/02/01	AK102/103	Q-29
Residual Range Organics	ND	25.0	**	11	**		**	ħ	Q-29
Surrogate: 2-FBP	66.7 %	50-150			"	**	"	**	Q-29
Surrogate: Octacosane	88.1 %	50-150			н	**	"	"	Q-29
FMR HEATING OIL LOC. (B1J07	04-14) Soil Sa	mpled: 10/11	l/ <b>01 11:00</b>	Received:	10/25/01 0	9:40			
Diesel Range Hydrocarbons	4.03	4.00	mg/kg dry	ı	1K01030	11/01/01	11/02/01	AK102/103	Q-29
Residual Range Organics	ND	25.0	n	"	**	Ħ	H	**	Q-29
Surrogate: 2-FBP	70.5 %	50-150			*	n	n	"	Q-29
Surrogate: Octacosane	95.5 %	50-150			n	"	Ħ	u	Q-25

North Creek Analytical - Bothell

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none]

Reported:

Mountain View CA/USA, 94043

Project Manager: Ron Chinn

11/09/01 09:31

# Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

	Re	porting	(57.1	Post - 600					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom A (B1J0704-01) Soil	Sampled: 10/20/01 16:15	Receive	d: 10/25/0	1 09:40					
Dry Weight	79.7	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom B (B1J0704-02) Soil	Sampled: 10/20/01 16:20	Receive	<b>d: 10/25/0</b> 1	1 09:40					
Dry Weight	84.5	1.00	%	ī	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom C (B1J0704-03) Soil	Sampled: 10/20/01 16:55	Receive	d: 10/25/0	1 09:40					
Dry Weight	80.3	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom D (B1J0704-04) Soil	Sampled: 10/20/01 16:25	Receive	d: 10/25/0	1 09:40					
Dry Weight	96.4	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom E (B1J0704-05) Soil	Sampled: 10/20/01 16:30	Receive	d: 10/25/0	1 09:40					
Dry Weight	83.8	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom F (B1J0704-06) Soil	Sampled: 10/20/01 16:50	Receive	d: 10/25/0	1 09:40					
Dry Weight	72.2	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom G (B1J0704-07) Soil	Sampled: 10/20/01 16:35	Receive	ed: 10/25/0	1 09:40					
Dry Weight	95.4	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Bottom H (B1J0704-08) Soil	Sampled: 10/20/01 16:40	Receive	d: 10/25/0	1 09:40					
Dry Weight	88.5	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Delineation 1@6' (B1J0704-0	9) Soil Sampled: 10/23/0	1 16:05	Received:	10/25/01 09	:40				
Dry Weight	81.8	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	

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Secor - Moutain View

Project: Chevron #9-2114 Excavation

2301 Leghorn St. Mountain View CA/USA, 94043

Project Number: [none] Project Manager: Ron Chinn

Reported:

11/09/01 09:31

# Physical Parameters by APHA/ASTM/EPA Methods North Creek Analytical - Bothell

		Reporting	1000						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Delineation 2@6' (B1J0704-10) Soil	Sampled: 10/23/	01 16:20	Received:	10/25/01 09	:40				
Dry Weight	93.4	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Delineation 3@6' (B1J0704-11) Soil	Sampled: 10/23/	01 16:30	Received:	10/25/01 09	:40				
Dry Weight	95.3	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
Delineation 4@6' (B1J0704-12) Soil	Sampled: 10/23/	01 16:50	Received:	10/25/01 09	:40				
Dry Weight	96.0	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
FMR WASTE OIL LOC. (B1J0704-	13) Soil Sampled	1: 10/11/0	1 10:40 Re	ceived: 10/	25/01 09:4	10			
Dry Weight	94.6	1.00	%	1	1K01025	11/01/01	11/02/01	BSOPSPL003R07	
FMR HEATING OIL LOC. (B1J070	4-14) Soil Samp	led: 10/1	1/01 11:00	Received:	10/25/01 0	9:40			
Dry Weight	95.9	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	
W WALL 1@6' (B1J0704-15) Soil	Sampled: 10/20/0	1 09:45	Received: 16	0/25/01 09:	40				
Dry Weight	78.6	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	
W WALL 2@6' (B1J0704-16) Soil	Sampled: 10/20/0	1 09:50	Received: 10	0/25/01 09:	40				
Dry Weight	92.4	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	
W WALL 3@6' (B1J0704-17) Soil	Sampled: 10/20/0	1 09:40	Received: 10	0/25/01 09:	40				
Dry Weight	86.8	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	
E WALL 4@6' (B1J0704-18) Soil	Sampled: 10/20/01	14:35 F	Received: 10	/25/01 09:4	10				
Dry Weight	93.5	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	

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Secor - Moutain View

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

# Physical Parameters by APHA/ASTM/EPA Methods

### North Creek Analytical - Bothell

		Reporting	8.96						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
E WALL 5@6' (B1J0704-19) Soil	Sampled: 10/20/01	14:30 Re	ceived: 10	/25/01 09:4	0				
Dry Weight	95.4	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	
E WALL 6@6' (B1J0704-20) Soil	Sampled: 10/20/01	14:40 Re	ceived: 10	/25/01 09:4	0				
Dry Weight	81.1	1.00	%	1	1K01026	11/01/01	11/02/01	BSOPSPL003R07	

North Creek Analytical - Bothell

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Secor - Moutain View

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

### Gasoline Hydrocarbons (n-Hexane to <n-Decane) and BTEX by AK101 - Quality Control North Creek Analytical - Bothell

	A - 1		Reporting		Spike	Source		%REC		RPD	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1K05012:	Prepared 11/05/01	Using E	PA 5030B	(МеОН)				•	_		
Biank (1K05012-BI	LK1)	Sec.								· · · ·	
Gasoline Range Hydro	carbons	ND	5.00	mg/kg							
Benzene		ND	0.0200	**							
Toluene		ND	0.0500	**							
Ethylbenzene		ND	0.0500	Ħ							
Xylenes (total)		ND	0.100	**							
Surrogate: 4-BFB (FIL	D)	3.88		#	4.00	-	97.0	60-120	****		
Surrogate: a,a,a-TFT (	(FID)	2.90		#	2.40		121	50-150			
Surrogate: 4-BFB (PIL	D)	3.86		"	4.00		96.5	54-123			
Surrogate: a,a,a-TFT (	(PID)	2.46		Ħ	2.40		102	50-150			
LCS (1K05012-BS)	1)										
Gasoline Range Hydro	carbons	24.1	5.00	mg/kg	27.5		87.6	60-120			
Benzene		0.315	0.0200	н	0.330		95.5	80-120			
Toluene		1.76	0.0500	#	1.96		89.8	80-120			
Ethylbenzene		0.468	0.0500	**	0.460		102	80-120			
Xylenes (total)		2.23	0.100	p	2.28		97.8	80-120			
Surrogate: 4-BFB (FII	D)	4.23		H	4.00		106	60-120			
Surrogate: a,a,a-TFT	(FID)	2.91		#	2.40		121	50-150			
Surrogate: 4-BFB (PII	D) (	3.84		n	4.00		96.0	54-123			
Surrogate: a,a,a-TFT	(PID)	2.33		*	2.40		97.1	50-150			
LCS Dup (1K0501	2-BSD1)										
Gasoline Range Hydro	ocarbons	25.4	5.00	mg/kg	27.5		92.4	60-120	5.25	20	
Benzene		0.328	0.0200	н	0.330		99.4	80-120	4.04	40	
Toluene		1.82	0.0500	н	1.96		92.9	80-120	3.35	40	
Ethylbenzene		0.486	0.0500	77	0.460		106	80-120	3.77	40	
Xylenes (total)		2.31	0.100	H	2.28		101	80-120	3.52	40	
Surrogate: 4-BFB (FI	D)	4.27		н	4.00		107	60-120			
Surrogate: a,a,a-TFT	(FID)	2.91		Ħ	2.40		121	50-150			
Surrogate: 4-BFB (PI	D)	3.86		н	4.00		96.5	54-123			
Surrogate: a,a,a-TFT	(PID)	2.32			2.40		96.7	50-150			

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Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none]

Reported:

Mountain View CA/USA, 94043

Project Manager: Ron Chinn

11/09/01 09:31

# Diesel Hydrocarbons (C10-C25) by AK102 - Quality Control

### North Creek Analytical - Bothell

		Reporting		Spike Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1K03006: Prepared 11/03/01	Using EI	PA 3550B	oo 88			200			31.00	
Blank (1K03006-BLK1)										
Diesel Range Hydrocarbons	ND	4.00	mg/kg							
Surrogate: 2-FBP	8.22		"	12.8		64.2	50-150			
LCS (1K03006-BS1)										
Diesel Range Hydrocarbons	77.7	4.00	mg/kg	80.0		97.1	75-125			
Surrogate: 2-FBP	10.1		"	12.8		78.9	50-150			
LCS Dup (1K03006-BSD1)										
Diesel Range Hydrocarbons	81.1	4.00	mg/kg	80-0		101	75-125	4.28	20	
Surrogate: 2-FBP	10.2		"	12.8		79.7	50-150			

North Creek Analytical - Bothell

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Secor - Moutain View

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

2301 Leghorn St.

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

Diesel Hydrocarbons (C10-C25) and Heavy Oil (C25-C36) by AK102 and AK103 - Quality Control North Creek Analytical - Bothell

A 1		Reporting		Spike Source		%REC		RPD			
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1K01030:	Prepared 11/01/01	Using El	PA 3550B	·							
Blank (1K01030-BL)	K1)							···			
Diesel Range Hydrocarb	ons	ND	4.00	mg/kg							-
Residual Range Organic	s	ND	25.0								
Surrogate: 2-FBP		9.11		"	12.8	-	71.2	50-150			
Surrogate: Octacosane		11.7		"	12.8		91.4	50-150			
LCS (1K01030-BS1)											
Diesel Range Hydrocarb	ons	73.0	4.00	mg/kg	80.0		91.2	75-125	400		
Surrogate: 2-FBP		10.6		n	12.8		82.8	50-150			
LCS (1K01030-BS2)											
Residual Range Organic	s	74.8	25.0	mg/kg	80.0		93.5	60-120	-		- 755
Surrogate: Octacosane	(VI.V.)	12.7		"	12.8		99.2	50-150			
LCS Dup (1K01030-	BSD1)										
Diesel Range Hydrocarb	ons	72.6	4.00	mg/kg	80.0		90.8	75-125	0,549	20	
Surrogate: 2-FBP		10.4		"	12.8		81.2	50-150	-		
LCS Dup (1K01030-	BSD2)										
Residual Range Organic	s	77.0	25.0	mg/kg	80.0		96.2	60-120	2.90	20	
Surrogate: Octacosane	-20	12.7		н	12.8		99.2	50-150			

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Jeanne Garthwaite, Project Manager

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2301 Leghorn St.

Mountain View CA/USA, 94043

Project: Chevron #9-2114 Excavation

Project Number: [none]

Project Manager: Ron Chinn

Reported:

11/09/01 09:31

# Physical Parameters by APHA/ASTM/EPA Methods - Quality Control North Creek Analytical - Bothell

Analyte		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K01025:	Prepared 11/01/01	Using Dr	y Weight	·		<del></del>		<u>.</u>		<del></del>	
Blank (1K01025-BI	LK1)				-						
Dry Weight		100	1.00	%							
Batch 1K01026:	Prepared 11/01/01	Using Dr	y Weight								
Blank (1K01026-Bl	LK1)										·
Dry Weight		100	1.00	%						27	200

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Secor - Moutain View 2301 Leghorn St. Mountain View CA/USA, 94043 Project: Chevron #9-2114 Excavation

Project Number: [none] Project Manager: Ron Chinn

Reported: 11/09/01 09:31

#### **Notes and Definitions**

D-09	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
G-01	Results reported for the gas range are primarily due to overlap from diesel range hydrocarbons.
I-06	The analyte concentration may be artificially elevated due to coeluting compounds or components.
Q-29	This sample was prepared outside of the method established holding time.
S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interferences.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Jeanne Garthwate Jeanne Garthwaite, Project Manager

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B130704

20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 Work Order #:

NCA WC DATE: 19/25/01 <u>5</u> 3 63 64 05 OTHER STD- AS CONTRACTED 10, <1 ₽ ટ્ઠ 80 8 9 4 \*Turnaround Requests less than standard may lacef. Rush Charges. TUME: 4:40 TURNAROUND REQUEST in Business Days\* <u>^</u> TIME DATE: Petroleum Hydrocarbon Analyses 5 4 3 2 COMMENTS TEMP: J Organic & Inorganic Analyse 100 CONT. # OF 5 MATRIX (W, S, O) FIRM: FIRM: 10 あか、 6001 BOLLINGER CANYON RD. BLDG, L SAN RAMON, CA INVOICE TO: BOB COCHERN REQUESTED ANALYSES RECEIVED BY RECEIVED BY: PRINT NAME: PRINT NAME: TIME: 8'45 A P.O. NUMBER: DATE: 10/24/91 DATE TIME PROJECT NAME: CHEVED 4-2114 EXMMETICAL ROWING D. CHIMM. SECRE INTIL REPORT TO: SECOR INTERNATIONAL - ROALD CHIMM 4:553 4:25p 4.30.4 4:40, 4:052 4:15p 4:00 4:30p 4:50% 4:20, ADDRESS: 2301 LELHAND ST. MOURTAIN VIEW, CM 34043 Scor WERNATIONAL 4:50° DATE/TIME SAMPLING 10/23/01 10/02/01 10/02/01 10/02/01 10/07/41 10/22/01 10/82/01 0/03/9 12. DELINEATION 406 10/23/01 11. DELINEATION 306" 10. DELINEATION 286" DELINEATION 106" SAMPLED BY: ADC CLIENT: //HZVRov / CLIENT SAMPLE **IDENTIFICATION** ADDITIONAL REMARKS: 2. Bottom B 3. Borrow C RELINQUISHED BY: S. Borron E 6. EXTON F RELINQUISHED BY: BOPTION A 4. BOTTON D BOTTOM H BOTTOM G PRINT NAME: PRINT NAME:

Ь

COC REV 3/99



East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 1720 Prock N. Sui Both 980

FAX 924-9290 FAX 906-9210 FAX 120-91

FAX 382-7588 (509) 924-9200 (541) 383-9310 (503) 906-9200

CHAIN OF CUSTODY REPORT

NCA WO Please Specify

OTHER

The A Conference of the C DATE: 19/25/81 -16 17 カン -15 Ω 1 જ -[9 TURNAROUND REQUEST in Business Days\* Petroleum Hydrocarbon Analyses TIME DATE TIME 150104 150104 Organic & Inorganic Analyses COMMENTS TEMP: CONT. # OF FIRM: (W, S, O) <u>=</u> MATRIX Work Order #: 6001 BOLLINGSE CANYON RU BLDG L SAN RAMON, CA INVOICE TO: NOS COSHEM REQUESTED ANALYSES RECEIVED BY: RECEIVED BY: PRINT NAME: P.O. NUMBER: TIME DATE DATE TIME DS0 FAX: ((50)(91-9837 FIRM: SECOR INTIL X318+09B DKO+KKD KONALD D. CHIMN CLIENT: CHEVRON / STOOK INTIGNATIONAL REPORT TO: SECOR INTL. - ROWAND CHIMM 10/20/01 2:32 p MONTAIN VIEW, OR 94043 10/22/01 9:40 A PROJECT NAME: CHEURON 9-2114 EXCAUATION ~Ch:01 10/11/a TAR TAKING OIL 124- 11/11/01 11:00 A 10/20/01 2:30 P 10/20/01 9:45A 9:50 ₽ 10/20/01 2:40p DATE/TIME SAMPLING 10/52/01 ADDRESS: 2301 LEGHORN ST PHONE: (650) 691-0131 1. FAR 135/FF 01, 186. WALL SEC 100C SAMPLED BY: RDC WAL 300' WALL 466" W WALL I CC' W WALL 266 IDENTIFICATION CLIENT SAMPLE ADDITIONAL REMARKS: PROJECT NUMBER: RELINQUISHED BY RELINQUISHED BY: PRINT NAME: PRINT NAME: 2 Ξ.

OF

COC REV 3/99



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Tank Contents Chevron 9-2114

Source:

NTL Lab#: A17
Sample Matrix: Oil

A176264

Comments:



Report Date: 11/16/01 Date Arrived: 10/25/01 Sample Date: 10/24/01 Sample Time: 10:50 Collected By: RDC \*\*Legend\*\*

> MRL = Method Report Level MCL = Max. Contaminant Level B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Units Result		Date Prepared	Date Analyzed
AK 101	Gasoline Range Organics 4-Bromofluorobenzene	ug/L % Recovery	66900000 D	5000000		11/8/01
AK 102	Diesel Range Organics C25 (Surr)	mg/kg % Recovery	830000 117	2500	10/30/01	11/5/01
AK 103	Residual Range Organics C36 (Surr)	mg/kg % Recovery	<mrl 113</mrl 	25000	10/30/01	11/5/01



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Tank E Wall @ 6' Chevron 9-4115

Source:

NTL Lab#: Sample Matrix:

A176265 Soil

Comments:

Report Date: 11/16/01
Date Arrived: 10/25/01
Sample Date: 10/24/01
Sample Time: 11:50
Collected By: RDC
\*\*Legend\*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank

E = Estimated Value M = Matrix Interference

H = Above MCL D = Lost to Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	673	122		11/8/01
AK 102						
	Diesel Range Organics	mg/dry kg	13300	47.0	11/7/01	11/8/01
	C25 (Surr)	% Recovery	97			
EPA 8021						
	Benzene	mg/dry kg	5.79	0.489		11/7/01
	Ethylbenzene	mg/dry kg	14.2	0.489		
	Toluene	mg/dry kg	2.30	0.979		
	m,p-Xylene	mg/dry kg	36.4	2.45		
	o-Xylene	mg/dry kg	31.8	1.22		
	4-Bromofluorobenzene	% Recovery	167M			
SM 2540	G					
	Total Solids, Percent	%	85.1		11/7/01	11/8/01



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Tank S Wall @ 6' Chevron 9-4115

Source:

NTL Lab#: A176266 Sample Matrix: Soil

Comments:

appropriate BTEX dilution analyzed 2 days out of hold time

Report Date: 11/16/01 Date Arrived: 10/25/01 Sample Date: 10/24/01 Sample Time: 11:45 Collected By: RDC

\*\* Legend \*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value
M = Matrix Interference
H = Above MCL
D = Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	530	134		11/9/01
	4-Bromofluorobenzene	% Recovery	134			
AK 102						
	Diesel Range Organics	mg/dry kg	9630	45.5	11/7/01	11/9/01
	C25 (Surr)	% Recovery	104			
EPA 802	1					
	Benzene	mg/dry kg	20.3	2.69		11/9/01
	Ethylbenzene	mg/dry kg	6.39	2.69		
	Toluene	mg/dry kg	51.5	2.69		
	m,p-Xylene	mg/dry kg	31.0	5.37		
	o-Xylene	mg/dry kg	18.1	2.69		
	4-Bromofluorobenzene	% Recovery	158M			
SM 2540	) G					
	Total Solids, Percent	%	87.9		11/7/01	11/8/01

evendy montchell



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Tank N Wall @ 6' Chevron 9-4115

Source:

NTL Lab#: A176267 Sample Matrix: Soil

Comments:

appropriate BTEX dilution analyzed 2 days out of hold time

Report Date: 11/16/01
Date Arrived: 10/25/01
Sample Date: 10/24/01
Sample Time: 12:00
Collected By: RDC

\*\* Legend \*\*

MRL = Method Report Level

MCL = Max. Contaminant Level

B = Present In Method Blank

E = Estimated Value

M = Matrix Interference

H = Above MCL
D = Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	548	98.5		11/8/01
	4-Bromofluorobenzene	% Recovery	260M			
AK 102						
	Diesel Range Organics	mg/dry kg	8150	42.1	11/7/01	11/9/01
	C25 (Surr)	% Recovery	100			
EPA 8021	l					
	Benzene	mg/dry kg	2.05	0.985		11/9/01
	Ethylbenzene	mg/dry kg	7.13	0.985		
	Toluene	mg/dry kg	1.40	0.985		
	m,p-Xylene	mg/dry kg	33.8	1.97		
	o-Xylene	mg/dry kg	19.6	0.985		
	4-Bromofluorobenzene	% Recovery	228M			
SM 2540	G					
	Total Solids, Percent	%	94.6		11/7/01	11/8/01

evendy mutchell



5761 SILVERADO WAY; UNIT N POUCH 340043

FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734

(907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Report Date: 11/16/01

Date Arrived: 10/25/01

Sample Date: 10/24/01

\*\* Legend \*\*

Max. Contaminant Level

MRL = Method Report Level

Sample Time: 12:10

Collected By: RDC

MCL =

В

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Tank W Wall @ 6'

Client Project:

Source:

NTL Lab#: Sample Matrix:

A176268 Soil

Comments:

Chevron 9-4115

= Present In Method Blank E Estimated Value = Matrix Interference М Н Above MCL = Lost To Dilution D

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	677	70.1		11/7/01
	4-Bromofluorobenzene	% Recovery	73			
AK 102						
	Diesel Range Organics	mg/dry kg	12300	53.5	11/7/01	11/9/01
	C25 (Surr)	% Recovery	93			
EPA 8021						
	Benzene	mg/dry kg	4.49	1.40		11/7/01
	Ethylbenzene	mg/dry kg	8.13	1.40		
	Toluene	mg/dry kg	<mrl< td=""><td>2.80</td><td></td><td></td></mrl<>	2.80		
	m,p-Xylene	mg/dry kg	56.9	2.80		
	o-Xylene	mg/dry kg	26.1	1.40		
	4-Bromofluorobenzene	% Recovery	162M			
SM 2540	G					
	Total Solids, Percent	%	74.5		11/7/01	11/8/01



3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 456-3116 • FAX 456-3125 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc.
2301 Leghorn Street

Mountain View, CA 94043

Attn: Ronald Chinn

Client ID:

Tank Bottom @ 10' Chevron 9-4115

Client Project:

Source: NTL Lab#: A176269

Soil

Sample Matrix: Comments:

appropriate BTEX dilution analyzed 2 days out of hold time

Report Date: 11/16/01 Date Arrived: 10/25/01 Sample Date: 10/24/01

Sample Time: Collected By: RDC

\*\* Legend \*\*

MRL = Method Report Level
MCL = Max. Contaminant Level
B = Present In Method Blank
E = Estimated Value
M = Matrix Interference
H = Above MCL

Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	176	137		11/8/01
	4-Bromofluorobenzene	% Recovery	119			
AK 102	.2					
	Diesel Range Organics	mg/dry kg	429	10.6	11/7/01	11/8/01
	C25 (Surr)	% Recovery	106			
EPA 802	1					
	Benzene	mg/dry kg	1.15	0.549		11/9/01
	Ethylbenzene	mg/dry kg	0.912	0.549		
	Toluene	mg/dry kg	4.65	0.549		
	m,p-Xylene	mg/dry kg	4.56	1.10		
	o-Xylene	mg/dry kg	1.99	0.549		
	4-Bromofluorobenzene	% Recovery	152M			
SM 2540	G					
	Total Solids, Percent	%	94.1		11/7/01	11/8/01

cuendym mutchell



5761 SILVERADO WAY; UNIT N POUCH 340043

ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

Secor International, Inc. 2301 Leghorn Street Mountain View, CA 94043

Attn: Ronald Chinn

Client ID: Client Project: Travel Blank Chevron 9-4115

Source:

NTL Lab#: Sample Matrix: A176270 Soil

Comments:

Report Date: 11/16/01 Date Arrived: 10/25/01

Sample Date: Sample Time:

D

Sample ...
Collected By:
\*\* Legend \*\* MRL = Method Report Level MCL = Max. Contaminant Level Present In Method Blank В E Estimated Value М Matrix Interference Н Above MCL

Lost To Dilution

Method	Parameter	Units	Result	MRL	Date Prepared	Date Analyzed
AK 101						
	Gasoline Range Organics	mg/dry kg	<mrl< td=""><td>1.18</td><td></td><td>11/7/01</td></mrl<>	1.18		11/7/01
	4-Bromofluorobenzene	% Recovery	86			
EPA 8021						
	Benzene	mg/dry kg	<mrl< td=""><td>0.024</td><td></td><td>11/7/01</td></mrl<>	0.024		11/7/01
	Ethylbenzene	mg/dry kg	<mrl< td=""><td>0.024</td><td></td><td></td></mrl<>	0.024		
	Toluene	mg/dry kg	<mrl< td=""><td>0.047</td><td></td><td></td></mrl<>	0.047		
	m,p-Xylene	mg/dry kg	<mrl< td=""><td>0.047</td><td></td><td></td></mrl<>	0.047		
	o-Xylene	mg/dry kg	<mrl< td=""><td>0.024</td><td></td><td></td></mrl<>	0.024		
	4-Bromofluorobenzene	% Recovery	129			

cuendy matchell



# NORTHERN TESTING LABORATORIES, INC. 3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 349-1000 · FAX 349-1016 (907) 659-2145 · FAX 659-2146

### ANALYTICAL SERVICES ORDER AND CHAIN OF **CUSTODY FORM**

Nº 29203

#### PLEASE PRINT CLEARLY & FIRMLY

Client name and address:		P	họne:		MTI	Account Number:
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2301 (EGHURN ST MUNITAIN VIEW CA 94343 Contact: PINAC) (HINN		F/	AX:			MENT INFORMATION: or Contract #:
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Comments:  A WARNING A C	OUTH	1 NS POOL	7	<del></del>	Number of Containers	
Client Sample ID:		Sample Date/Time:	Matrix:	NTL ID#:	Ž	
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Client Signature: 4	W	W			i e	
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# NORTHERN TESTING LABORATORIES, INC. 3330 INDUSTRIAL AVENUE 5761 SILVERADO WAY; UNIT N POUCH 340043 FAIRBANKS, ALASKA 99701 ANCHORAGE, ALASKA 99518 PRUDHOE BAY, ALASKA 99734 (907) 349-1000 • FAX 349-1016 (907) 659-2145 • FAX 659-2146

### ANALYTICAL SERVICES ORDER AND CHAIN OF **CUSTODY FORM**

Nº 29202

#### PLEASE PRINT CLEARLY & FIRMLY

					110 2000			
Client name and address:		Phone: (50) 6	1-0131	NTL	Account Number:			
SECOR INTERNATIONAL 2DI (FAIDEN STEE	ET	FAX:			MENT INFORMATION:			
MONTAN VIEW,		EMail:			P.O. or Contract #:			
	74393		e f x. cam	Invoid	ce #:			
Contact: RNA CHINN	=	PWS No:		Cash or check payable to NTL: Credit Card: (Please call for phone order)				
Reporting Format:RegularData Deliverable		Send results	to ADEC:		Requested Analysis			
Sampled by:	Project information:	in I am	6243B	Containers				
Comments:	TEVEN 1-4	115 - 100	- 왕교기 1 년	ntai				
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Client Sample ID:	Sample Date/Time	. Matrix:	NTL ID#:	Ž	88			
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Relinquished by:	Date/Time:	Receiv	ed by:		- Comments:			
Client Signature: By signing, I have read and acc	M M	1 conditions o	utlined on the har	rk of				
this form or as otherwise stipul	ated in the above re	ferenced cont	ract or purchase	order.	Page of			

# ATTACHMENT D CALCULATION OF MASS REMOVAL ESTIMATE

#### **Calculation of Mass Removal Estimate** Remedial Excavation and UST Removal

# Excavation of UST Complex and Pump Islands Mass of Soil Excavated<sub>1</sub> = 1,184.29 tons Average Concentration of Side Samples = 1,717.22 mg/kg GRO 3,777.05 mg/kg DRO 8.27 mg/kg Benzene

Excavation of UST Discovery

Mass of Soil Excavated<sub>2</sub> = 47.29tons

Average Concentration of Tank Samples =

520.8 mg/kg GRO 8,762 mg/kg DRO 6.76 mg/kg Benzene

#### Mass Removed<sub>1</sub>

GRO: Mass Removed<sub>1</sub> = Mass of Soil Excavated<sub>1</sub> \* Average Concentration<sub>GRO</sub>

= (1,184.29 tons \* 2,000 lbs./tons \* 1 kg/2.2 lbs.) \* 1,717.22 mg/kg GRO

= 1,848.80 kg= 4,067.37 lbs

DRO: Mass Removed<sub>1</sub> = Mass of Soil Excavated<sub>1</sub> \* Average Concentration<sub>DRO</sub>

= (1,184.29 tons \* 2,000 lbs./tons \* 1 kg/2.2 lbs.) \* 3,777.05 mg/kg DRO

= 4,066.47 kg= 8,946.23 lbs

Mass Removed<sub>1</sub> = Mass of Soil Excavated<sub>1</sub> \* Average Concentration<sub>Benzene</sub> Benzene:

= (1,184.29 tons \* 2000 lbs./tons \* 1 kg/2.2 lbs.) \* 8.27 mg/kg Benzene

= 8.91 kg 19.59 lbs =

#### Mass Removed<sub>2</sub>

GRO: Mass Removed<sub>2</sub> = Mass of Soil Excavated<sub>2</sub> \* Average Concentration<sub>GRO</sub>

= (47.29 tons \* 2,000 lbs./tons \* 1 kg/2.2 lbs.) \* 520.8 mg/kg GRO

22.39 kg = 49.26 lbs =

DRO: Mass Removed<sub>2</sub>= Mass of Soil Excavated<sub>2</sub> \* Average Concentration<sub>DRO</sub>

= (47.29 tons \* 2,000 lbs./tons \* 1 kg/2.2 lbs.) \* 8,762 mg/kg DRO

376.68 kg 828.69 lbs

Mass Removed<sub>2</sub> = Mass of Soil Excavated<sub>2</sub> \* Average Concentration<sub>Benzene</sub> Benzene:

= (47.29 tons \* 2000 lbs./tons \* 1 kg/2.2 lbs.) \* 6.76 mg/kg Benzene

0.29 kg0.64 lbs =

#### Calculation of Mass Removal Estimate Remedial Excavation and UST Removal

Total Mass Removed = Mass Removed<sub>1</sub> + Mass Removed<sub>2</sub>

GRO:

Total Mass Removed = 4,067.37 lbs + 49.26 lbs

= 4,116.63 lbs

DRO:

Total Mass Removed =8,946.23 lbs + 828.69 lbs

= 9,774.93 lbs

Benzene:

Total Mass Removed = 19.59 lbs + 0.64 lbs

= 20.23 lbs