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September 7, 1999
Project No. 077.41741.500

RECEIVED

SEP 20 1999

ADEC STORAGE
TANK PROGRAM
FAIRBANKS

Mr. Clint Adler
State of Alaska
Department of Environmental Conservation
601 University Avenue
Fairbanks, Alaska 99709-3643

Re: **Site Assessment Report**
Chevron Service Station 9-6489
1304 Airport Heights Drive
Anchorage, Alaska
ADEC # 19

Dear Mr. Adler:

SECOR International Incorporated (SECOR) has prepared this letter on behalf of Chevron Products Company (Chevron) to document the findings and results of a site assessment performed at the site referenced above (Figure 1). This assessment included the drilling and installation of four groundwater monitoring wells. The purpose of this site assessment was to evaluate the presence and extent of the petroleum hydrocarbons in soil and groundwater beneath the site. This work was performed as described in SECOR's *Work Plan for Site Assessment*, dated April 12, 1999. The scope of work outlined in the *Work Plan* was approved as stated in Alaska Department of Environmental Conservation (ADEC's) letter dated June 23, 1999 (Attachment A).

SITE BACKGROUND

The site is an operating service station at the southwest corner of Airport Heights Drive and DeBarr Avenue in Anchorage, Alaska (Figure 1). The topography of the site is relatively flat. Both commercial and residential land uses are located in the immediate vicinity of the site.

In September 1998, five USTs were replaced at the site (Figure 2). Analytical results from soil samples collected from the UST and product line excavations indicated the presence of petroleum hydrocarbons in soil beneath the site. During UST replacement activities, approximately 150 cubic yards of significantly impacted soil was removed from the site and disposed of at Alaska Soil Recycling in Anchorage, Alaska.

The maximum detected concentration of gasoline range organics (GRO) in in-situ soil was 1,740 milligrams per kilogram (mg/kg) beneath the northwestern-most UST (at a

depth of 18 feet). The only detected concentration of benzene in in-situ soil was 0.294 mg/kg beneath a dispenser on the south product island (at a depth of 2 feet).

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Three monitoring wells (MW-1 through MW-3) were abandoned on September 8, 1998 as part of station demolition/rebuild activities. Prior to the abandonment of the groundwater monitoring wells, quarterly monitoring had been ongoing at the site since August 1997. Water levels have been measured at approximately 27 to 28-1/2 feet below ground surface (bgs). Blaine Tech Services, Inc. (Blaine) performed the quarterly sampling at the site. GRO has been reported at a maximum concentration of 14,800 micrograms per liter ($\mu\text{g/L}$) from a sample collected from MW-1 on August 27, 1997. The highest concentration of benzene was reported at 242 $\mu\text{g/L}$ in a sample collected from MW-3 on April 16, 1998.

WELL INSTALLATION ACTIVITIES

On July 2, 1999, the drilling and installation of four groundwater monitoring wells (MW-4 through MW-7) was completed by Discovery Drilling Incorporated (Discovery) of Anchorage, Alaska. Groundwater monitoring wells MW-4 through MW-7 were drilled to a total depth of 38 feet bgs and were screened from 18 feet to 38 feet bgs. Boring logs showing well completion details are included as Attachment B.

Subsurface Conditions

The soils encountered during this assessment consisted primarily of sandy gravel to gravelly sand (Attachment B). A sandy silt layer was encountered from approximately 10 ½ to 11 ½ feet bgs in monitoring well MW-7. Groundwater was initially encountered in the borings at depths of 27 ½ to 28 ½ feet bgs. Groundwater stabilized in the monitoring wells at 26.74 feet bgs to 28.04 feet bgs.

Soil Sampling and Analysis

Soil samples were collected from each of the borings at 5-foot intervals. Samples collected from each boring at depths of 15 feet bgs and at the capillary fringe (between 27' and 28.5') were analyzed for GRO hydrocarbons by Alaska Method 101, BTEX compounds and MtBE by EPA Method 8020, halogenated volatile organic compounds (HVOCS) by EPA 8260B, and polynuclear aromatic hydrocarbon compounds (PAHs) by 8270C. Additionally, soil samples collected at 1', 3', 5', 10', 15', and 20' from well MW-6 were analyzed for geotechnical properties (total organic carbon, dry bulk density, porosity: air filled and water filled, and average soil moisture).

GRO was reported in soil samples at the capillary fringe in wells MW-4, MW-5, and MW-7 at a maximum concentration of 91.7mg/kg (MW-5@28'). Benzene was reported in soil samples at the capillary fringe in wells MW-4, MW-5, and MW-7 at a maximum concentration of 2.19mg/kg (MW-4@27'). Toluene, ethylbenzene, and xylene were reported in soil samples from each monitoring well at concentrations ranging from 0.03 to 4.0 mg/kg.

Monitoring well MW-7 had detections of n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene at concentrations of 0.04 mg/kg, 0.69 mg/kg, and 0.16 mg/kg, respectively. Monitoring well MW-5 had detections of naphthalene and pyrene at concentrations of 0.0009 mg/kg and 0.0006mg/kg, respectively. Soil analytical data is presented in Table 1 and geotechnical analysis is presented in Table 2. Field and laboratory procedures are presented as Attachment C. Certified analytical reports and chain-of-custody documentation are presented as Attachment D.

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Well Installation

Four groundwater monitoring wells were installed in the four borings. The groundwater monitoring wells were constructed of 2-inch-diameter schedule 40 PVC blank casing and 0.020-inch-slot well screen with flush threads. A #3-sand filter pack was installed in the annulus from the bottom of each borehole to at least 2 feet above the top of the well screen, followed by a well seal consisting hydrated bentonite to ground surface. Each well was secured by a locking expandable well cap and fitted with a traffic-rated well box set in concrete. Boring logs showing well construction details are included as Attachment B.

Stockpiled Soil

Approximately 5 cubic yards of soil, generated during the installation of the groundwater monitoring wells was stockpiled onsite. Two grab samples were collected from the stockpiled soil and analyzed for GRO, BTEX, and total lead. The soil was disposed of at Alaska Soil Recycling in Anchorage, Alaska. Stockpiled soil analytical data is presented in Table 3. Certified analytical reports and chain-of-custody documentation are presented as Attachment C.

Monitoring Well Development, Depth-to-Water, and Sampling

After installation, the groundwater monitoring wells were developed by rigorously surging over the length of the screen interval and by purging approximately ten casing volumes of water. Field and laboratory procedures are presented as Attachment C.

Depth-to-water measurements collected from wells MW-4 through MW-7 on July 3, 1999 ranged from 26.74 to 28.04 feet bgs. Based on these depth-to-water measurements and the surveyed well elevations, the groundwater gradient is to the west-northwest at 0.002 to 0.008 (Figure 3). Survey data is included as Attachment E.

Groundwater samples were collected from the four newly installed groundwater monitoring wells on July 3, 1999, and submitted for analysis of GRO by Alaska Method 101, BTEX compounds by EPA Method 8020, HVOCS by EPA 8260B, and PAHs by 8270C. GRO was reported in three of four wells at concentrations ranging from 1,180 ppb to 20,100 ppb. Benzene was reported in three of four wells at concentrations ranging from 5.3 ppb to 537 ppb. Toluene, ethylbenzene, and xylene were reported in groundwater samples from monitoring wells MW-4, MW-5, and MW-7 at concentrations

ranging from 3.6 to 2,820 ppb. No detectable concentrations of hydrocarbons were reported in the samples from well MW-6. Hydrocarbon concentrations in groundwater are shown on Figure 2.

Well MW-4 had detections of n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene at concentrations of 50.8 ppb, 417 ppb, 141 ppb and 55.6 ppb, respectively. Well MW-5 had detections of n-butylbenzene and sec-butylbenzene at concentrations of 3.26 ppb 1.36 ppb, respectively. Well MW-7 had detections of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene at concentrations of 774 ppb and 259 ppb, respectively. Groundwater analytical data is presented in Table 4. Field and laboratory procedures are presented as Attachment C. Certified analytical reports and chain-of-custody documentation are presented as Attachment D.

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SUMMARY OF FINDINGS

- GRO and benzene were reported in soil samples at the capillary fringe in wells MW-4, MW-5, and MW-7 at maximum concentrations of 91.7 mg/kg and 2.19mg/kg, respectively.
- GRO and benzene were reported in groundwater samples from monitoring wells MW-4, MW-5, and MW-7 (downgradient wells) at maximum concentrations of 20,100 ppb and 537 ppb, respectively.
- HVOCS (n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene) and PAHs (naphthalene and pyrene) were reported in soil and groundwater at the site.
- Depth to groundwater in the newly installed groundwater monitoring wells stabilized at approximately 27 feet bgs, and groundwater flow is to the west-northwest.

CONCLUSIONS

Based on the data collected during this assessment, soil and groundwater underlying the site has been impacted by petroleum hydrocarbons. ADEC Groundwater Cleanup Standards were exceeded in the initial samples from three of the four newly installed wells (MW-4, MW-5, and MW-7) installed in the areas of and downgradient to the former USTs and product islands. Hydrocarbon impact to the soil and groundwater is undefined.

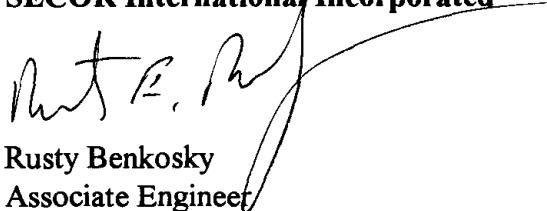
Chevron will monitor and sample the newly installed groundwater wells to confirm initial hydrocarbon concentrations detected during this assessment. Additional assessment will be evaluated based on this confirmation sampling.

If you have any questions or comments regarding this letter, please feel free to call us at (916) 364-1880.

Sincerely,

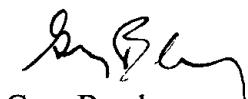
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SECOR International Incorporated



Rusty Benkosky

Associate Engineer



Greg Barclay

Senior Geologist

- Attachments:
- Table 1 - Soil Analytical Data - Soil Borings
 - Table 2 - Soil Geotechnical Data
 - Table 3 - Soil Analytical Data - Stockpiled Soil
 - Table 4 - Groundwater Elevation and Analytical Data
 - Figure 1 - Site Location Map
 - Figure 2 - Groundwater Chemical Concentration Map
 - Figure 3 - Groundwater Contour Map
 - Attachment A - ADEC Letter dated June 23, 1999
 - Attachment B - Boring Logs
 - Attachment C - Field and Laboratory Procedures
 - Attachment D - Certified Analytical Reports and Chain-of-Custody Documentation
 - Attachment E - Survey Data

cc: Mr. Bob Cochran, Chevron Products Company

Table 1
Soil Analytical Data
Groundwater Monitoring Wells

Chevron Service Station 9-6489
 1304 Airport Heights Drive
 Anchorage, Alaska

Sample Name	Sample Depth (feet bgs)	Date Sampled	GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	MtBE (mg/kg)	n-propyl-benzene (mg/kg)	1,2,4 trimethyl-benzene (mg/kg)	1,3,5 trimethyl-benzene (mg/kg)	Naphthalene (mg/kg)	Pyrene (mg/kg)
MW-4@15'	15	7/2/99	<1.84	<0.02	0.06	<0.02	<0.02	<0.18	<0.005	<0.005	<0.005	--	--
MW-4@27'	27	7/2/99	23.5	2.19	5.52	0.64	3.94	<0.45	<0.006	<0.006	<0.006	--	--
MW-5@15'	15	7/2/99	<1.64	<0.02	0.04	<0.02	<0.02	<0.16	<0.005	<0.005	<0.005	--	--
MW-5@28'	28	7/2/99	91.7	0.32	0.88	0.37	0.84	<0.19	<0.006	<0.006	<0.006	0.0009*	0.0006*
MW-6@15'	15	7/2/99	<1.59	<0.02	0.06	0.02	0.03	<0.16	<0.005	<0.005	<0.005	--	--
MW-6@28.5'	28.5	7/2/99	<2.08	<0.02	<0.02	<0.02	<0.02	<0.21	<0.005	<0.005	<0.005	--	--
MW-7@15'	15	7/2/99	2.43	0.03	0.28	0.04	0.90	<0.12	<0.005	<0.005	<0.005	--	--
MW-7@27'	27	7/2/99	17.1	0.36	3.81	0.68	4.00	<0.29	0.04	0.69	0.16	--	--

GRO = Gasoline Range Organics by Alaska Method 101
 mg/kg = milligrams per kilogram
 BTEX analytical data (<0.02/<0.005) = EPA 8020/8260
 All samples were analyzed for HVOC's by EPA 8260 B and PAH's by EPA 8270 C
 * = PAH's were analyzed by EPA 8270 Selective Ion Mode

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Table 2
Geotechnical Analysis Results

Chevron Service Station 9-6489
1304 Airport Heights Drive
Anchorage, Alaska

Sample Name	Sample Depth	Date Sampled	Soil Moisture Content %	Total Porosity Air-Filled %	Total Porosity Water-Filled %	Dry Bulk Density g/cc	Organic Carbon mg/kg
MW-6@1'	1	7/2/1999	4	14.7	8.3	2.11	3,130
MW-6@3'	3	7/2/1999	4	13.5	9.3	2.1	18,200
MW-6@5'	5	7/2/1999	3	17.5	6.2	2.09	1,340
MW-6@10'	10	7/2/1999	2	15.5	6.6	2.13	3,380
MW-6@15'	15	7/2/1999	2	17.4	6.8	2.09	1,070
MW-6@20'	20	7/2/1999	3	19.0	4.8	2.08	1,940

mg/kg = milligrams per kilogram
g/cc = grams per cubic centimeters
Soil Moisture Content by SM 2540B
Total Porosity, fluid saturation and sample densities by API RP-40
Organic Carbon by SM 5310 B

Table 3
Soil Analytical Data
Stockpiled Soil

Chevron Service Station 9-6489
1304 Airport Heights Drive
Anchorage, Alaska

Sample Name	Date Sampled	GRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total Lead (mg/kg)
S-1	7/2/1999	20.0	0.12	2.02	0.56	6.95	3.05
S-2	7/2/1999	10.4	<0.02	0.1	0.06	0.24	10.4

GRO = Gasoline Range Organics
RRO = Residual Range Organics
mg/kg = milligrams per kilograms
ND = Nondetectable above reporting limits

Table 4
Groundwater Elevation and Analytical Data

Chevron 9-6489
 1304 Airport Heights Drive
 Anchorage, Alaska

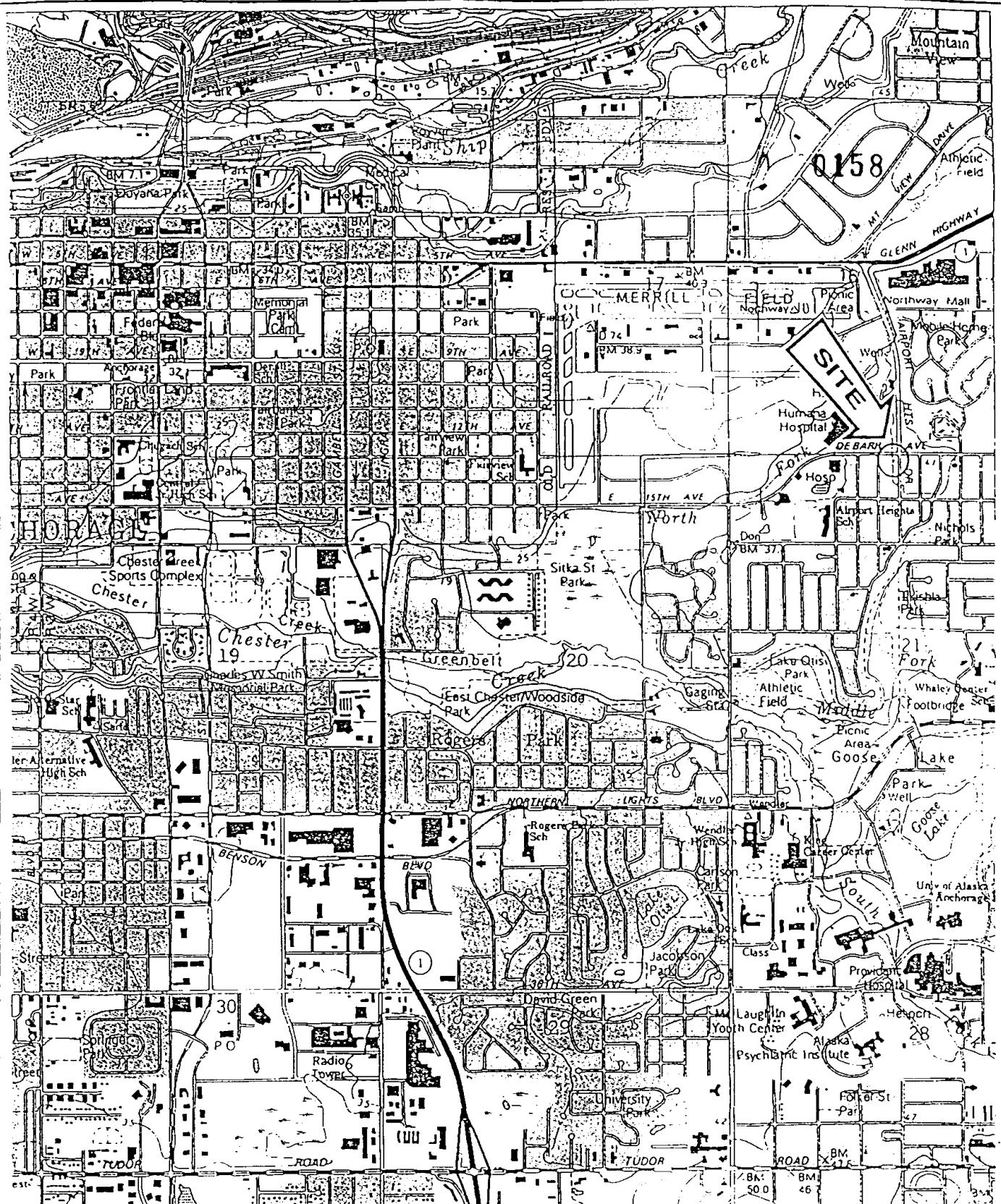
Sample Name	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	GRO (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	n-propyl-benzene (ppb)	1,2,4 trimethyl-benzene (ppb)	1,3,5 trimethyl-benzene (ppb)	Naphthalene (ppb)	n-butyl benzene (ppb)	sec-butyl benzene (ppb)
MW-4	7/3/1999	131.97	27.74	104.23	9,330	525	540	41	292	<40.0*	50.8	417	141	55.6	<20.0	<20.0
MW-5	7/3/1999	133.43	28.04	105.39	1,180	5.3	7.3	12.2	3.6	<2.00*	<1.00	<2.00	<1.00	<2.00	3.26	1.36
MW-6	7/3/1999	133.12	27.36	105.76	<50.0	<0.5	<0.5	<0.5	<0.5	<2.00*	<1.00	<2.00	<1.00	<2.00	<1.00	<1.00
MW-7	7/3/1999	132.95	27.42	105.53	20,100	537	2,820	507	2,420	<200*	<100	774	259	<200	<100	<100

GRO = Gasoline Range Organics

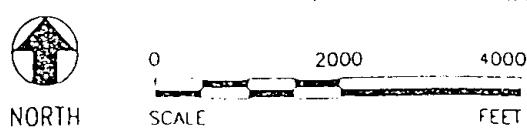
ppb = parts per billion

All samples were analyzed for HVOC's by EPA 8260 B and PAH's by EPA 8270 C

* = Analysis completed by EPA 8260



REFERENCE: U.S. GEOLOGICAL SURVEY, 7.5 MINUTE SERIES
ANCHORAGE (A-8) NW, ALASKA QUADRANGLE.
PHOTOREVISED 1994.



SECOR
INTERNATIONAL
INCORPORATED

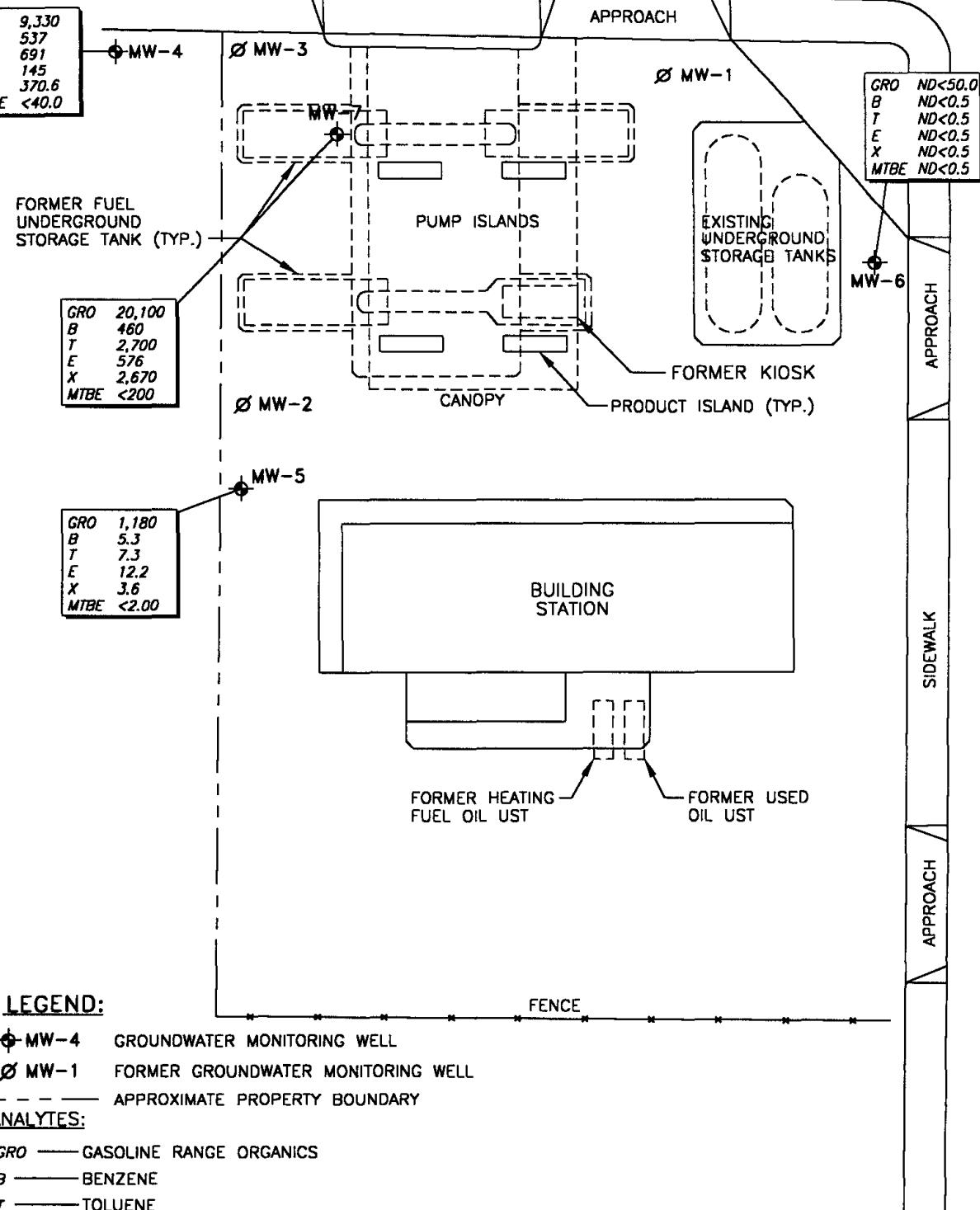
DRAWN	CCR
APPR	RH
DATE	24AUG98
JOB NO.	7G007-037-02

FIGURE 1
CHEVRON SERVICE STATION 9-6489
1304 AIRPORT HEIGHTS DRIVE
ANCHORAGE, ALASKA

SITE LOCATION MAP

DEBARR ROAD

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REFERENCE: THIS FIGURE IS BASED ON A "SITE PLAN" PROVIDED BY RRM ENGINEERING CONTRACTING FIRM, AND IS INTENDED FOR ILLUSTRATION ONLY.

FIGURE 2
CHEVRON SERVICE STATION 9-6489
1304 AIRPORT HEIGHTS DRIVE
ANCHORAGE, ALASKA

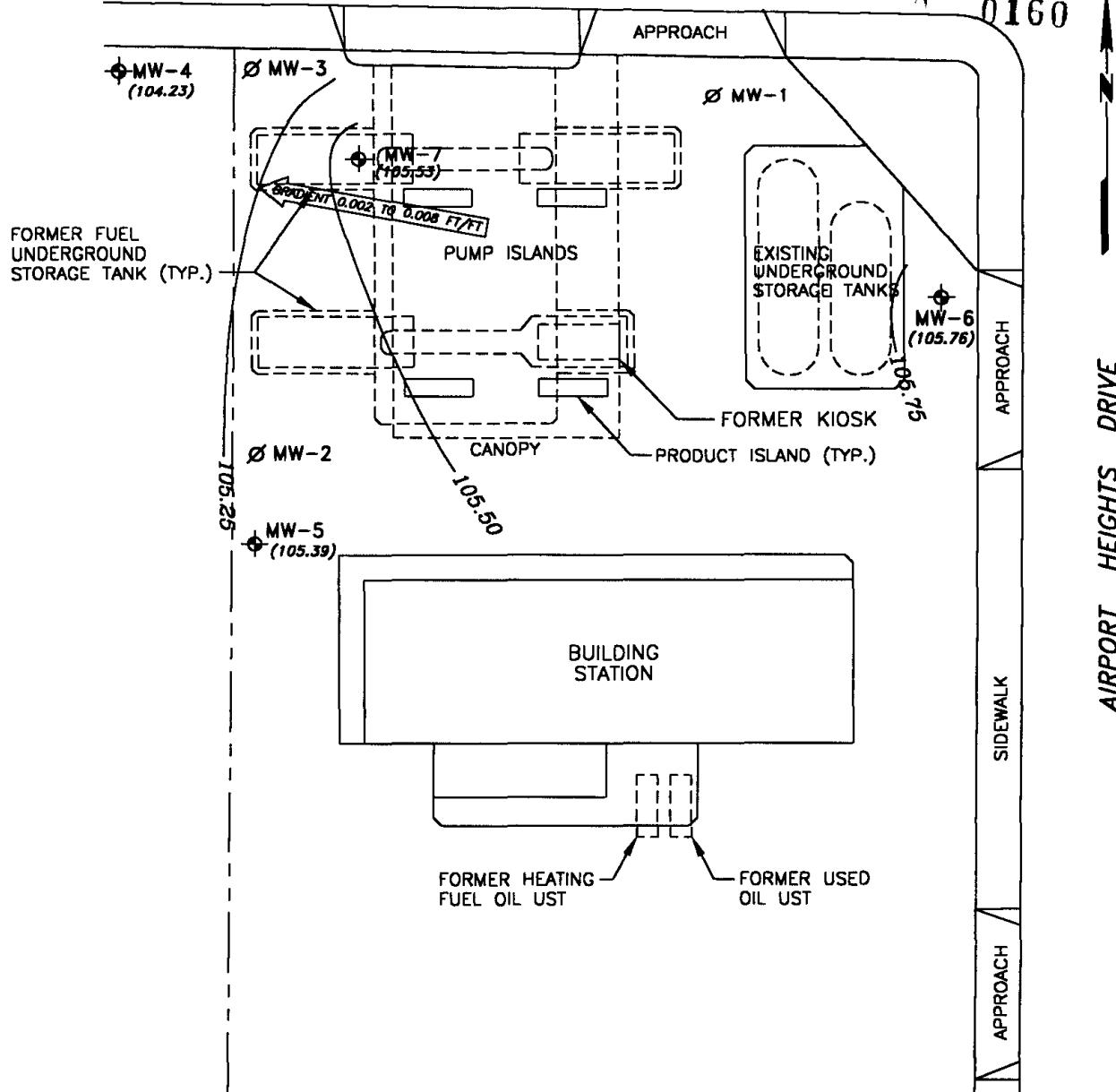
GROUNDWATER CONCENTRATION MAP
JULY 3, 1999

SECOR
International
Incorporated

DRAWN	TJZ
APPR	RH
DATE	19MAR99
JOB NO.	077.41741.500

DEBARR ROAD

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LEGEND:

- ◆ MW-4 GROUNDWATER MONITORING WELL
- ∅ MW-1 FORMER GROUNDWATER MONITORING WELL
- APPROXIMATE PROPERTY BOUNDARY
- ↖ GRADIENT 0.002 TO 0.008 FT/FT APPROXIMATE GROUNDWATER FLOW DIRECTION
- 123.40 ↖ GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL)
- (105.39) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

0 60 120
APPROXIMATE SCALE FEET

REFERENCE: THIS FIGURE IS BASED ON A "SITE PLAN" PROVIDED BY RRM ENGINEERING CONTRACTING FIRM, AND IS INTENDED FOR ILLUSTRATION ONLY.

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ATTACHMENT A

ADEC LETTER DATED JUNE 23, 1999

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE STORAGE TANK PROGRAM

TONY KNOWLES, GOVERNOR

610 University Avenue
Fairbanks, Alaska 99709-3643
PHONE: (907) 451-2143
FAX: 451-2155

http://www.state.ak.us/dec/dspar/stp_home.htm

File: L10.24

June 23, 1999

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Mr. Bob Cochran
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

RE: Work Plan for Site Assessment, Chevron Service Station #9-6489, 1304 Airport Heights Drive, Anchorage Alaska.

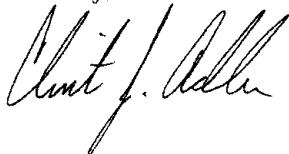
Dear Mr. Cochran,

The Alaska Department of Environmental Conservation (ADEC) has reviewed the *Work Plan for Site Assessment, Chevron Service Station 9-6489, 1304 Airport Heights Drive, Anchorage Alaska*, dated April 12, 1999. ADEC approves the scope of fieldwork outlined in this document: installation of four monitoring wells and concurrent soil and water sampling for GRO and BTEX. In addition, ADEC will request additional analyses for all potential compounds of concern (PCoC). Specifically:

- a. Soil samples should be analyzed for the seven carcinogenic PAH (cPAH) compounds in the most contaminated soil boring(s) as identified by field screening. Specific cPAH are identified in the attached list of PCoCs. To achieve the most useful results, ADEC suggests a GC/MS, analytical method run in selective ion monitoring (SIM) mode.
- b. Soil and groundwater samples should be analyzed for HVOC. The purpose of these analyses is to verify the presence or absence of these compounds. As such the analytical method should be chosen to minimize detection limits and maximize positive compound identification. ADEC suggests EPA method 8260.
- c. ADEC suggests that the most downgradient monitoring well be sampled for MTBE.

Please do not hesitate to contact me with any questions or concerns. I can be reached directly at (907) 451-2183 or via e-mail at cadler@envircon.state.ak.us.

Sincerely,



Clint Adler, P.E.
Environmental Engineer

cc: Roger Hoffmore, Secor International, Inc.
Rusty Benkosky, Secor International, Inc.

enclosure

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ATTACHMENT B

BORING LOGS

Unified Soil Classification System

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Major Divisions		Symbols	Typical Names
Coarse Grained Soils (MORE THAN HALF OF SOIL > NO. 200 SIEVE SIZE)	Gravels (MORE THAN HALF OF COARSE FRACTION > NO. 4 SIEVE SIZE)	GW	WELL GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GM	SANDY GRAVELS, GRAVEL-SAND-SILT MIXTURES
		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	Sands (MORE THAN HALF OF COARSE FRACTION < NO. 4 SIEVE SIZE)	SW	WELL GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SM	SILTY SANDS, SAND-SILT MIXTURES
		SC	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
Fine Grained Soils (MORE THAN HALF OF SOIL > NO. 200 SIEVE SIZE)	Silts and Clays LL = < 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR SILTY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, LEAN CLAYS
		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
	Silts and Clays LL = < 50	CH	INORGANIC SILTS OF HIGH PLASTICITY, FAT CLAYS
		OH	ORGANIC CLAYS OF HIGH PLASTICITY, ORGANIC SILTY CLAYS, ORGANIC SILTS
		Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

Grain Size Chart

Classification	Range of Grain Sizes	
	U.S. STANDARD SIEVE SIZE	GRAIN SIZE IN MILLIMETERS
BOULDERS	ABOVE 12"	ABOVE 305
COBBLES	12" TO 3"	305 TO 76.2
GRAVEL coarse fine	3" TO NO.4 3" TO 3/4" 3/4" TO NO.4	76.2 TO 7.76 76.2 TO 4.76 19.1 TO 4.76
SAND coarse medium fine	NO.4 TO NO.200 NO.4 TO NO.10 NO.10 TO NO.40 NO.40 TO NO.200	4.76 TO 0.074 4.76 TO 2.00 2.00 TO 0.420 0.420 TO 0.074
SILT & CLAY	BELOW NO.200	BELOW 0.074

Sample Designation

RECOVERY	
	DRIVE SAMPLE INTERVAL
	CONTINUOUS CORE SAMPLE INTERVAL
NR	NO RECOVERY
ND	NOT DETECTED
	FIRST WATER (bgs)
	STABILIZED WATER LEVEL (bgs)

Project: CHEVRON #9-6489								Log of Boring/Monitoring Well:	
Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.				Project No.: 077.41741.500				MW-4	
Subcontractor and Equipment: DISCOVERY DRILLING				Logged By: C.H. Drawn By: T.Z.					
Sampling Method: SPLIT SPOON				Monitoring Device: PID				Comments: 0165	
Start Date/Time: 7/2/99 // 805				Finish Date/Time: 7/2/99 // 1120					
First Water (bgs): ~27.5'				Stabilized Water Level (bgs): 26.74'					
Sample Number	Blows/Foot	PID (ppm)	Depth (Feet)	Recovery Hydropunch	USCS Symbol	Water Level	Surface Elevation: NA Top Casing Elevation: NA	Boring Abandonment/Well Construction Details	
							LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
							Asphalt		
			0						
			1						
			2						
			3				Skipped 5 foot sample - Didn't want to hammer into possible utility. Soil coming up the Auger appears to be GRAVELLY SAND with some silt.		
			4						
			5						
			6						
			7						
			8				SANDY GRAVEL (GM) fine to medium gravel, medium dense, moist, no product odor (70,30,0,0)		
			9						
			10						
3 11 28	0		11	X			SAND (SP) grayish brown, fine to medium sand, medium dense, moist, no product odor (0,100,0,0)		
			12						
			13				SANDY GRAVEL (GM) grayish brown, fine to medium gravel (1"), loose, moist, no hc odor (70,30,0,0)		
			14						
13 39 69	0.2		15	X					
			16	X					
			17						
			18						
			19						
			20	X			Some as above		
5 17 27	1.4		21	X					
			22				SAND (SP) grayish brown, fine to medium sand, medium dense, moist, no product odor (0,100,0,0)		
			23						
			24						
7 17 31 45	32.0		25				SANDY GRAVEL (GM) grayish brown, fine gravel, fine to coarse sand, medium dense, wet, strong hc odor (60,40,0,0)		
			26	X					
			27	X					
			28						
			29						
			30						

Project: CHEVRON #9-6489

Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.

Project No.: 077.41741.500

Log of Boring/Monitoring Well:

MW-4

0166

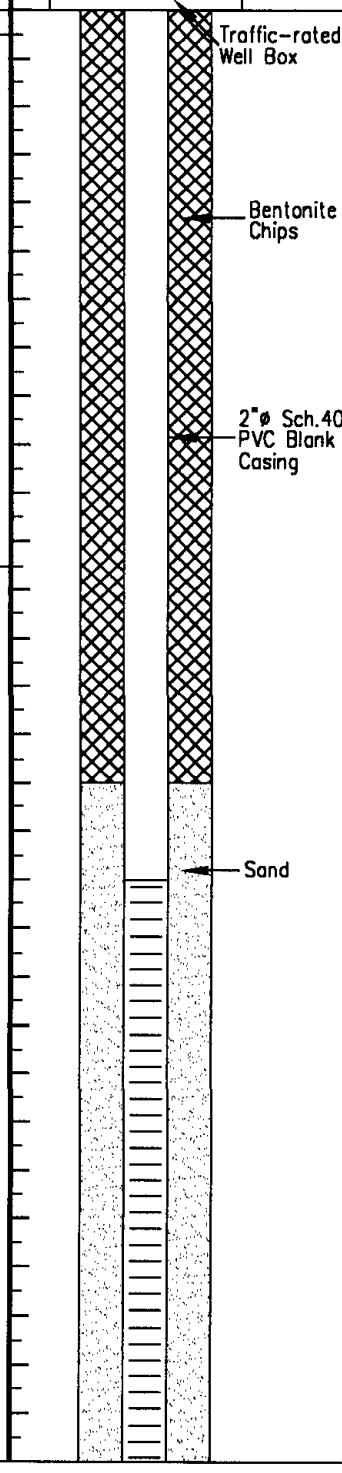
Sample Number	Blows/foot	PID (ppm)	Depth (feet)	Recovery	Hydropunch	USCS Symbol	Water Level	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)			Boring Abandonment/ Well Construction Details		
								30	31	32	33	34	35
3 10 21	0.4		30	X				SAND (SP) grayish brown, fine to coarse, medium dense, saturated, moderate to strong hc odor (0,100,0,0)					
1 8 18	0		31	X				Same as above, slight hc odor					
			32										
			33										
			34										
			35	X									
			36	X									
			37										
			38										
			39										
			40										
			41										
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			43										
			44										
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			48										
			49										
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			52										
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			60										
			61										
			62										
			63										

Reviewed By: _____

Date: _____

Revised By: _____

Date: _____

Project: CHEVRON #9-6489								Log of Boring/Monitoring Well:					
Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.				Project No.: 077.41741.500				MW-5					
Subcontractor and Equipment: DISCOVERY DRILLING				Logged By: C.H. Drawn By: T.Z.									
Sampling Method: SPLIT SPOON				Monitoring Device: PID				Comments: 0 0167					
Start Date/Time: 7/2/99 // 950				Finish Date/Time: 7/2/99 // 1200									
First Water (bgs): ~28'				Stabilized Water Level (bgs): 28.04'									
Sample Number	Blows/Foot	PID (ppm)	Depth (Feet)	Recovery	Hydropunch	USCS Symbol	Water Level	Surface Elevation: NA	Top Casing Elevation: NA				
LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)													
11 26 41 56	0	0.0	0					Asphalt					
			1										
			2										
			3										
			4										
			5										
			6	X									
			7	X									
			8										
			9										
8 24 46 63	0.0	0.0	10	X									
			11	X									
			12										
			13										
			14										
			15										
			16										
			17										
			18										
			19										
13 30 60 81	0.0	0.0	20										
			21	X									
			22	X									
			23										
			24										
			25										
			26	X									
			27	X									
			28										
			29	X									
8 27 42 67	0.0	0.0	30										
			31										
10 31 51 81	0.0	0.0	32										
			33										
10 27 38 51	0.0	0.0	34										
			35										
Boring Abandonment/ Well Construction Details													
													

Project: CHEVRON #9-6489

Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.

Project No.: 077.41741.500

Log of Boring/Monitoring Well:

MW-5

Sample Number	Blows/foot	PID (ppm)	Depth (feet)	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)			Boring Abandonment/ Well Construction Details
				Recovery	Hydropunch	USCS Symbol	
			30				
			31				
			32				
			33				
			34				
7			35				
14			36	XX			
26			37	XX			
39	0		38				
			39				
			40				
			41				
			42				
			43				
			44				
			45				
			46				
			47				
			48				
			49				
			50				
			51				
			52				
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			55				
			56				
			57				
			58				
			59				
			60				
			61				
			62				
			63				

Project: CHEVRON #9-6489

Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK. Project No.: 077.41741.500

Subcontractor and Equipment: DISCOVERY DRILLING **Logged By:** C.H. **Drawn By:** T.Z.

Sampling Method: SPLIT SPOON

Monitoring Device: PID

Log of Boring/Monitoring Well:

MW-6

Start Date/Time: 7/2/99 // 1200

Finish Date/Time: 7/2/99 //1400

Comments: 0169

First Water (bgs): ~28.5'

Stabilized Water Level (bgs): 27.36'

First Water (bgs): ~28.5' Stabilized Water Level (bgs): 27.36'

Stabilized Water Level (bgs): 27.36'

First Water (bgs): ~28.5' Stabilized Water Level (bgs): 27.36'

Stabilized Water Level (bgs): 27.36'

Sample Number	Blows/Foot	PID (ppm)	Depth (Feet)	Recovery	Hydropunch	USCS Symbol	Water Level	Surface Elevation: NA	Top Casing Elevation: NA	Boring Abandonment/ Well Construction Details
								LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
			0					Asphalt		
			1					Fill		Traffic-rated Well Box
7		0	3	X				GRAVELLY SAND (SP) grayish brown, fine to coarse sand, fine gravel, loose, moist, no hc odor (40,60,0,0)		
10		0	4					Same as above		Bentonite Chips
14		0.2	5	X						
29		0.2	6	X						
44		0.2	7							
3		0.2	10	X				GRAVELLY SAND (SP) grayish brown, fine to coarse sand, moist, no hc odor (40,60,0,0)		
10		0.2	11	X						
21		0.2	12							
10		0.0	15	X				Same as above		
23		0.0	16	X						
43		0.0	17							
9		1.4	20	X				Same as above		
27		1.4	21	X						
43		1.4	22							
20		0.0	25	X				Same as above		
30		0.0	26	X						
46		0.0	27	X						
66		0.0	28	X						
10		8.2	28	X				SAND (SP) grayish brown, fine to coarse sand, firm, wet, slight hc odor (5,95,0,0)		
23		8.2	29	X						
31		8.2	30	X						

Project: CHEVRON #9-6489

Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.

Project No.: 077.41741.500

Log of Boring/Monitoring Well:

MW-6

Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		0 0170 Boring Abandonment/ Well Construction Details
				Recovery	Hydropunch	
			30			
			31			
			32			
			33			
			34			
			35			
7	0		35	X		
17			36	X		
28			37			
			38			
			39			
			40			
			41			
			42			
			43			
			44			
			45			
			46			
			47			
			48			
			49			
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			61			
			62			
			63			

Reviewed By: _____

Date: _____

Revised By: _____

Date: _____

Project: CHEVRON #9-6489								Log of Boring/Monitoring Well: MW-7	
Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.				Project No.: 077.41741.500					
Subcontractor and Equipment: DISCOVERY DRILLING				Logged By: C.H. Drawn By: T.Z.					
Sampling Method: SPLIT SPOON				Monitoring Device: PID				Comments: 0171	
Start Date/Time: 7/2/99 // 1303				Finish Date/Time: 7/2/99 // 1430					
First Water (bgs): ~27.5'				Stabilized Water Level (bgs): 27.42'					
Sample Number	Blows/Foot	PID (ppm)	Depth (Feet)	Recovery	Hydropunch	USCS Symbol	Water Level	Surface Elevation: NA	Top Casing Elevation: NA
LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)									
								Asphalt	
			0						
			1						
			2						
			3						
			4						
			5						
		0.0	6						
			7						
			8						
			9						
			10						
			11						
			12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						
			21						
			22						
			23						
			24						
			25						
			26						
			27						
			28						
			29						
			30						

Project: CHEVRON #9-6489

Boring Location: 1304 AIRPORT HEIGHTS, ANCHORAGE, AK.

Project No.: 077.41741.500

Log of Boring/Monitoring Well:

MW-7

Sample Number	Blows/foot	PID (ppm)	Depth (feet)	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)			Water Level	Boring Abandonment/ Well Construction Details
				Recovery	Hydropunch	USCS Symbol		
			30					
			31					
			32					
			33					
			34					
15	0	35	35					
21			36	XX				
31			37	XX				
42			38					
			39					
			40					
			41					
			42					
			43					
			44					
			45					
			46					
			47					
			48					
			49					
			50					
			51					
			52					
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			58					
			59					
			60					
			61					
			62					
			63					

Reviewed By: _____

Date: _____

Revised By: _____

Date: _____

Page 2 of 2

ATTACHMENT C
FIELD AND LABORATORY PROCEDURES

ATTACHMENT C

FIELD AND LABORATORY PROCEDURES

Soil Borings

The soil borings for well installation were drilled using 8-inch hollow-stem auger drilling equipment to the above referenced depths. Borings were logged by a SECOR International Incorporated geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for logging were collected at 5-foot depth intervals using a split-spoon sampler. The sampler was driven a maximum of 18 inches using a 140-pound hammer with a 30-inch drop. All soil samples for chemical analysis were retained in an ADEC approved glass jab. Preservation was added when appropriate. All soil samples for geotechnical analysis were retained in brass liners, capped with Teflon squares and plastic end caps, and sealed in clean zip-lock bags. The samples were placed on ice for transport to the laboratory accompanied by chain-of-custody documentation. All down-hole drilling and sampling equipment was steam-cleaned following the completion of the soil boring. Down-hole sampling equipment was washed in a tri-sodium phosphate or alconox solution between samples.

Groundwater Monitoring Well Installation and Development

Four groundwater monitoring wells were installed using 2-inch diameter, flush-threaded, Schedule 40 PVC casing with 0.020-inch factory-slotted screen. The screen intervals for each well are referenced above. An RMC 2/12 sand pack, or equivalent, was placed in the annular space across the entire screened interval, and extends approximately 1 to 2 feet above the top of the screen interval. A bentonite t seal was placed atop the sand pack extends to the ground surface. The boring logs show well construction details. The groundwater monitoring wells were developed after completion. The development procedure for the wells consisted of pumping or bailing water from the wells until the water was visibly clear or until a maximum of ten casing volumes were removed.

Groundwater Sampling Procedures

The sampling procedure for each well consisted collecting the necessary volume of groundwater using a disposable bailer. The groundwater was then placed into appropriate EPA-approved

containers, labeled, logged onto chain-of-custody document, and transported on ice to a Washington State-certified laboratory.

Laboratory Procedures

The soil and groundwater samples were analyzed for the presence of gasoline range organics (GRO) by Alaska Method AK 101, and benzene, toluene, ethylbenzene, and xylenes by Alaska Method 8020, halogenated volatile organic compounds (HVOCs) by EPA Method 80260B, and Polynuclear Aromatic Compounds (PAHs) by EPA 8270 C. Soil sample MW-5@28 had PAH analysis by GC/MS with Selected Ion Monitoring.

ATTACHMENT D

**CERTIFIED ANALYTICAL REPORTS AND
CHAIN-OF-CUSTODY DOCUMENTATION**



0177

CORE LABORATORIES

ANALYTICAL REPORT

JOB NUMBER: 991278

Prepared For:

Secor International Inc.
9912 Business Park Dr. #100
Sacramento, CA 95827

Attention: Rusty Benkosky

Date: 07/20/1999

Paul Chust for
Signature

7/21/99

Date

Name: Charles Munoz
Title: Project Coordinator

1250 E. Gene Autry Way
Anaheim, CA 92805PHONE: (714) 937-1094
FAX...: (714) 937-1170C.A.E.L.A.P. 1174
L.A.C.S.D. 10146



0178

CORE LABORATORIES

SAMPLE INFORMATION

Date: 07/20/1999

Job Number.: 991278
Customer....: Secor International Inc.
Attn.....: Rusty Benkosky

Project Number.....: 99180343
Customer Project ID....: 9-6489
Project Description....: Chevron-Alaska

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
991278-1	MW-4a15'	Soil	07/02/1999	08:40	07/07/1999	10:30
991278-2	MW-4a27'	Soil	07/02/1999	09:03	07/07/1999	10:30
991278-3	MW-5a15'	Soil	07/02/1999	10:24	07/07/1999	10:30
991278-4	MW-5a28'	Soil	07/02/1999	11:12	07/07/1999	10:30
991278-5	MW-6a11'	Soil	07/02/1999	11:28	07/07/1999	10:30
991278-6	MW-6a3'	Soil	07/02/1999	11:38	07/07/1999	10:30
991278-7	MW-6a5'	Soil	07/02/1999	11:44	07/07/1999	10:30
991278-8	MW-6a10'	Soil	07/02/1999	11:56	07/07/1999	10:30
991278-9	MW-6a15'	Soil	07/02/1999	12:13	07/07/1999	10:30
991278-10	MW-6a20'	Soil	07/02/1999	12:24	07/07/1999	10:30
991278-11	MW-6a28.5'	Soil	07/02/1999	12:45	07/07/1999	10:30
991278-12	MW-7a15'	Soil	07/02/1999	13:30	07/07/1999	10:30
991278-13	MW-7a27'	Soil	07/02/1999	13:51	07/07/1999	10:30



0179

CORE LABORATORIES



CORE LABORATORIES

Job Number: 991278

LABORATORY TEST RESULTS

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4a151
Date Sampled.....: 07/02/1999
Time Sampled.....: 08:40
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-1
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Dibromochloromethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.026	0.026	mg/Kg	07/14/99	vz
	Dibromomethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,3-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,4-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.010	0.010	mg/Kg	07/14/99	vz
	1,1-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	cis-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	trans-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	cis-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	trans-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,3-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	2,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Ethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Hexachlorobutadiene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	2-Hexanone, Solid	<0.052	0.052	mg/Kg	07/14/99	vz
	Iodomethane, Solid	<0.010	0.010	mg/Kg	07/14/99	vz
	Isopropylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	p-Isopropyltoluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Methylene chloride, Solid	<0.015	0.015	mg/Kg	07/14/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.052	0.052	mg/Kg	07/14/99	vz
	Naphthalene, Solid	<0.010	0.010	mg/Kg	07/14/99	vz
	n-Propylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Styrene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Tetrachloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Toluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1,1-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1,2-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Trichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2,3-Trichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz
	Vinyl acetate, Solid	<0.052	0.052	mg/Kg	07/14/99	vz
	Vinyl chloride, Solid	<0.010	0.010	mg/Kg	07/14/99	vz
	m&p-Xylenes, Solid	<0.010	0.010	mg/Kg	07/14/99	vz
	o-Xylene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz



0181

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4Q151
Date Sampled.....: 07/02/1999
Time Sampled.....: 08:40
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-1
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	<0.02 <0.02 <0.18 0.06 <0.02	0.02 0.02 0.18 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd

0182
CORE LABORATORIES**LABORATORY TEST RESULTS**

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4a271
Date Sampled.....: 07/02/1999
Time Sampled.....: 09:03
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 3630C	Silica Gel Cleanup, Solid	Complete		mL	07/14/99	tmp
SM 2540 B	% Moisture, Solid	10	0	%	07/09/99	mls
EPA 3550	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Solid	Complete			07/14/99	tmp
EPA 8270C	Semivolatile Organics Acenaphthene, Solid Acenaphthylene, Solid Anthracene, Solid Benzo(a)anthracene, Solid Benzo(ghi)perylene, Solid Benzo(a)pyrene, Solid Chrysene, Solid Dibenz(a,h)anthracene, Solid Fluoranthene, Solid Fluorene, Solid Indeno(1,2,3-cd)pyrene, Solid Naphthalene, Solid Phenanthrene, Solid Pyrene, Solid Benzo [b,k] fluoranthene, Solid	<0.115 <0.114 <0.0971 <0.0452 <0.3568 <0.0666 <0.0412 <0.2211 <0.0864 <0.102 <0.1789 <0.1187 <0.0873 <0.0660 <0.0611	0.115 0.114 0.0971 0.0452 0.3568 0.0666 0.0412 0.2211 0.0864 0.102 0.1789 0.1187 0.0873 0.0660 0.0611	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99	gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	23.5	2.24	mg/Kg	07/13/99	evd
EPA 8260B	Volatile Organics (Client List) Acetone, Solid Benzene, Solid Bromobenzene, Solid Bromochloromethane, Solid Bromodichloromethane, Solid Bromoform, Solid Bromomethane, Solid Methyl-t-Butyl Ether (MTBE), Solid Methyl ethyl ketone (2-Butanone), Solid n-Butylbenzene, Solid sec-Butylbenzene, Solid tert-Butylbenzene, Solid Carbon disulfide, Solid Carbon tetrachloride (Freon 10), Solid Chlorobenzene, Solid Chloroethane, Solid 2-Chloroethylvinyl ether, Solid Chloroform, Solid Chloromethane, Solid 2-Chlorotoluene, Solid	<0.058 <0.006 <0.006 <0.006 <0.006 <0.006 <0.012 <0.012 <0.058 <0.006 <0.006 <0.006 <0.006 <0.006 <0.006 <0.006 <0.012 <0.012 <0.006 <0.012 <0.006 <0.006	0.058 0.006 0.006 0.006 0.006 0.006 0.012 0.012 0.058 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.012 0.012 0.006 0.012 0.006 0.006	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99 07/14/99	vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz



0183

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-40271
Date Sampled.....: 07/02/1999
Time Sampled.....: 09:03
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Dibromochloromethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.029	0.029	mg/Kg	07/14/99	vz
	Dibromomethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,3-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,4-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.012	0.012	mg/Kg	07/14/99	vz
	1,1-Dichloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2-Dichloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	cis-1,2-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	trans-1,2-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	cis-1,3-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	trans-1,3-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,3-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	2,2-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Ethylbenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Hexachlorobutadiene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	2-Hexanone, Solid	<0.058	0.058	mg/Kg	07/14/99	vz
	Iodomethane, Solid	<0.012	0.012	mg/Kg	07/14/99	vz
	Isopropylbenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	p-Isopropyltoluene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Methylene chloride, Solid	<0.017	0.017	mg/Kg	07/14/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.058	0.058	mg/Kg	07/14/99	vz
	Naphthalene, Solid	<0.012	0.012	mg/Kg	07/14/99	vz
	n-Propylbenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Styrene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Tetrachloroethene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Toluene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1,1-Trichloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1,2-Trichloroethane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Trichloroethene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2,3-Trichloropropane, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz
	Vinyl acetate, Solid	<0.058	0.058	mg/Kg	07/14/99	vz
	Vinyl chloride, Solid	<0.012	0.012	mg/Kg	07/14/99	vz
	m&p-Xylenes, Solid	<0.012	0.012	mg/Kg	07/14/99	vz
	o-Xylene, Solid	<0.006	0.006	mg/Kg	07/14/99	vz



CORE LABORATORIES

0080184

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4a271
Date Sampled.....: 07/02/1999
Time Sampled.....: 09:03
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	2.19 0.64 <0.45 5.52 3.94	0.04 0.04 0.45 0.04 0.04	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd



0185

CORE LABORATORIES

0186
CORE LABORATORIES**LABORATORY TEST RESULTS**

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5015
Date Sampled.....: 07/02/1999
Time Sampled.....: 10:24
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-3
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
4-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Dibromochloromethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2-Dibromoethane (EDB), Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2-Dibromo-3-chloropropane, Solid	<0.026	0.026	mg/Kg	07/14/99	vz	
Dibromomethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,3-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,4-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Dichlorodifluoromethane (Freon 12), Solid	<0.010	0.010	mg/Kg	07/14/99	vz	
1,1-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
cis-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
trans-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
cis-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
trans-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,3-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
2,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Ethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Hexachlorobutadiene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
2-Hexanone, Solid	<0.052	0.052	mg/Kg	07/14/99	vz	
Iodomethane, Solid	<0.010	0.010	mg/Kg	07/14/99	vz	
Isopropylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
p-Isopropyltoluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Methylene chloride, Solid	<0.016	0.016	mg/Kg	07/14/99	vz	
4-Methyl-2-pentanone (MIBK), Solid	<0.052	0.052	mg/Kg	07/14/99	vz	
Naphthalene, Solid	<0.010	0.010	mg/Kg	07/14/99	vz	
n-Propylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Styrene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1,1,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1,2,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Tetrachloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Toluene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2,3-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2,4-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1,1-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1,2-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Trichloroethene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Trichlorofluoromethane (Freon 11), Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2,3-Trichloropropane, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,2,4-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
1,3,5-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	
Vinyl acetate, Solid	<0.052	0.052	mg/Kg	07/14/99	vz	
Vinyl chloride, Solid	<0.010	0.010	mg/Kg	07/14/99	vz	
m&p-Xylenes, Solid	<0.010	0.010	mg/Kg	07/14/99	vz	
o-Xylene, Solid	<0.005	0.005	mg/Kg	07/14/99	vz	



0187

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5a151
Date Sampled.....: 07/02/1999
Time Sampled.....: 10:24
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-3
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	<0.02 <0.02 <0.16 0.04 <0.02	0.02 0.02 0.16 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd

7-0188
CORE LABORATORIES**LABORATORY TEST RESULTS**

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5a28⁴
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:12
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-4
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 3630C	Silica Gel Cleanup, Solid	Complete		mL	07/14/99	tmp
SM 2540 B	% Moisture, Solid	10	0	%	07/09/99	mls
EPA 3550	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Solid	Complete			07/14/99	tmp
EPA 8270C	Semivolatile Organics Acenaphthene, Solid Acenaphthylene, Solid Anthracene, Solid Benzo(a)anthracene, Solid Benzo(ghi)perylene, Solid Benzo(a)pyrene, Solid Chrysene, Solid Dibenz(a,h)anthracene, Solid Fluoranthene, Solid Fluorene, Solid Indeno(1,2,3-cd)pyrene, Solid Naphthalene, Solid Phenanthrene, Solid Pyrene, Solid Benzo [b,k] fluoranthene, Solid	<0.115 <0.114 <0.0971 <0.0452 <0.3568 <0.0666 <0.0412 <0.2211 <0.0864 <0.102 <0.1789 <0.1187 <0.0873 <0.0660 <0.0611	0.115 0.114 0.0971 0.0452 0.3568 0.0666 0.0412 0.2211 0.0864 0.102 0.1789 0.1187 0.0873 0.0660 0.0611	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99	gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	91.7	1.91	mg/Kg	07/13/99	evd
EPA 8260B	Volatile Organics (Client List) Acetone, Solid Benzene, Solid Bromobenzene, Solid Bromoform, Solid Bromochloromethane, Solid Bromodichloromethane, Solid Bromoform, Solid Bromomethane, Solid Methyl-t-Butyl Ether (MTBE), Solid Methyl ethyl ketone (2-Butanone), Solid n-Butylbenzene, Solid sec-Butylbenzene, Solid tert-Butylbenzene, Solid Carbon disulfide, Solid Carbon tetrachloride (Freon 10), Solid Chlorobenzene, Solid Chloroethane, Solid 2-Chloroethylvinyl ether, Solid Chloroform, Solid Chloromethane, Solid 2-Chlorotoluene, Solid	<0.058 <0.006 <0.006 <0.006 <0.006 <0.006 <0.012 <0.012 <0.058 <0.006 <0.006 <0.006 <0.012 <0.006 <0.006 <0.012 <0.006 <0.012 <0.006 <0.012 <0.006	0.058 0.006 0.006 0.006 0.006 0.006 0.012 0.012 0.058 0.006 0.006 0.006 0.012 0.006 0.006 0.012 0.006 0.012 0.006 0.006	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99	vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz



9189

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5a281
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:12
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-4
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Dibromochloromethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.029	0.029	mg/Kg	07/15/99	vz
	Dibromomethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,3-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,4-Dichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.012	0.012	mg/Kg	07/15/99	vz
	1,1-Dichloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2-Dichloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	cis-1,2-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	trans-1,2-Dichloroethene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	cis-1,3-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	trans-1,3-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,3-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	2,2-Dichloropropane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1-Dichloropropene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Ethylbenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Hexachlorobutadiene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	2-Hexanone, Solid	<0.058	0.058	mg/Kg	07/15/99	vz
	Iodomethane, Solid	<0.012	0.012	mg/Kg	07/15/99	vz
	Isopropylbenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	p-Isopropyltoluene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Methylene chloride, Solid	<0.017	0.017	mg/Kg	07/15/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.058	0.058	mg/Kg	07/15/99	vz
	Naphthalene, Solid	<0.012	0.012	mg/Kg	07/15/99	vz
	n-Propylbenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Styrene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Tetrachloroethene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Toluene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1,1-Trichloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1,2-Trichloroethane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Trichloroethene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2,3-Trichloropropane, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz
	Vinyl acetate, Solid	<0.058	0.058	mg/Kg	07/15/99	vz
	Vinyl chloride, Solid	<0.012	0.012	mg/Kg	07/15/99	vz
	m&p-Xylenes, Solid	<0.012	0.012	mg/Kg	07/15/99	vz
	o-Xylene, Solid	<0.006	0.006	mg/Kg	07/15/99	vz

0190
CORE LABORATORIES**LABORATORY TEST RESULTS**

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5a281
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:12
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-4
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	0.32 0.37 <0.19 0.88 0.84	0.02 0.02 0.19 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6a11
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:28
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-5
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	4	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	3130	105.0	mg/Kg	07/14/99	gwd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-603
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:38
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-6
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	4	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	18200	105.0	mg/Kg	07/14/99	gwd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-605
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:44
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-7
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	3	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	1340	103.0	mg/Kg	07/14/99	gwd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6@10'
Date Sampled.....: 07/02/1999
Time Sampled.....: 11:56
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-8
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	2	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	3380	102.0	mg/Kg	07/14/99	gwd

0195



CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6a15
 Date Sampled.....: 07/02/1999
 Time Sampled.....: 12:13
 Sample Matrix.....: Soil

Laboratory Sample ID: 991278-9
 Date Received.....: 07/07/1999
 Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 3630C	Silica Gel Cleanup, Solid	Complete		mL	07/14/99	tmp
SM 2540 B	% Moisture, Solid	2	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	1070	102.0	mg/Kg	07/14/99	gwd
EPA 3550	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Solid	Complete			07/14/99	tmp
EPA 8270C	Semivolatile Organics Acenaphthene, Solid Acenaphthylene, Solid Anthracene, Solid Benzo(a)anthracene, Solid Benzo(ghi)perylene, Solid Benzo(a)pyrene, Solid Chrysene, Solid Dibenz(a,h)anthracene, Solid Fluoranthene, Solid Fluorene, Solid Indeno(1,2,3-cd)pyrene, Solid Naphthalene, Solid Phenanthrene, Solid Pyrene, Solid Benzo [b,k] fluoranthene, Solid	<0.102 <0.101 <0.0861 <0.0401 <0.3165 <0.0591 <0.0365 <0.1961 <0.0766 <0.0901 <0.1587 <0.1053 <0.0774 <0.0585 <0.0542	0.102 0.101 0.0861 0.0401 0.3165 0.0591 0.0365 0.1961 0.0766 0.0901 0.1587 0.1053 0.0774 0.0585 0.0542	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99	gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	<1.59	1.59	mg/Kg	07/13/99	evd
EPA 8260B	Volatile Organics (Client List) Acetone, Solid Benzene, Solid Bromobenzene, Solid Bromoform, Solid Bromochloromethane, Solid Bromodichloromethane, Solid Bromoform, Solid Bromomethane, Solid Methyl-t-Butyl Ether (MTBE), Solid Methyl ethyl ketone (2-Butanone), Solid n-Butylbenzene, Solid sec-Butylbenzene, Solid tert-Butylbenzene, Solid Carbon disulfide, Solid Carbon tetrachloride (Freon 10), Solid Chlorobenzene, Solid Chloroethane, Solid 2-Chloroethylvinyl ether, Solid Chloroform, Solid	<0.051 <0.005 <0.005 <0.005 <0.005 <0.005 <0.010 <0.010 <0.051 <0.005 <0.005 <0.005 <0.005 <0.005 <0.010 <0.005 <0.010 <0.010 <0.005	0.051 0.005 0.005 0.005 0.005 0.005 0.010 0.010 0.051 0.005 0.005 0.005 0.005 0.005 0.010 0.010 0.005 0.005 0.010 0.010	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99	vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6015
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:13
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-9
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	Chloromethane, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	2-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	4-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dibromochloromethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.026	0.026	mg/Kg	07/15/99	vz
	Dibromomethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,4-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	1,1-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Ethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Hexachlorobutadiene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2-Hexanone, Solid	<0.051	0.051	mg/Kg	07/15/99	vz
	Iodomethane, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	Isopropylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	p-Isopropyltoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Methylene chloride, Solid	<0.015	0.015	mg/Kg	07/15/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.051	0.051	mg/Kg	07/15/99	vz
	Naphthalene, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	n-Propylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Styrene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Tetrachloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Toluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Vinyl acetate, Solid	<0.051	0.051	mg/Kg	07/15/99	vz
	Vinyl chloride, Solid	<0.010	0.010	mg/Kg	07/15/99	vz



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6015
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:13
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-9
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	m&p-Xylenes, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	o-Xylene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Volatile Organics -Aromatics					
	Benzene, Solid	<0.02	0.02	mg/Kg	07/13/99	evd
	Ethylbenzene, Solid	0.02	0.02	mg/Kg	07/13/99	evd
	Methyl-t-Butyl Ether (MTBE), Solid	<0.16	0.16	mg/Kg	07/13/99	evd
	Toluene, Solid	0.06	0.02	mg/Kg	07/13/99	evd
	Xylenes (total), Solid	0.03	0.02	mg/Kg	07/13/99	evd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6a201
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:24
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-10
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	3	0	%	07/09/99	mls
SM 5310 B	Organic Carbon, Total (TOC), Solid	1940	103.0	mg/Kg	07/14/99	gwd



0000199

CORE LABORATORIES

Job Number: 991278

LABORATORY TEST RESULTS

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6a28.51
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:45
Sample Matrix....: Soil

Laboratory Sample ID: 991278-11
Date Received.....: 07/07/1999
Time Received.....: 10:30



0250

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6a28.51
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:45
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-11
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dibromochloromethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.026	0.026	mg/Kg	07/15/99	vz
	Dibromomethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,4-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	1,1-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Ethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Hexachlorobutadiene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2-Hexanone, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Iodomethane, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	Isopropylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	p-Isopropyltoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Methylene chloride, Solid	<0.016	0.016	mg/Kg	07/15/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Naphthalene, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	n-Propylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Styrene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Tetrachloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Toluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Vinyl acetate, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Vinyl chloride, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	m&p-Xylenes, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	o-Xylene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz



07/02/01

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6028.51
Date Sampled.....: 07/02/1999
Time Sampled.....: 12:45
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-11
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	<0.02 <0.02 <0.21 <0.02 <0.02	0.02 0.02 0.21 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd

n 0202
CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7@15
Date Sampled.....: 07/02/1999
Time Sampled.....: 13:30
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-12
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 3630C	Silica Gel Cleanup, Solid	Complete		mL	07/14/99	tmp
SM 2540 B	% Moisture, Solid	5	0	%	07/09/99	mls
EPA 3550	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Solid	Complete			07/14/99	tmp
EPA 8270C	Semivolatile Organics Acenaphthene, Solid Acenaphthylene, Solid Anthracene, Solid Benzo(a)anthracene, Solid Benzo(ghi)perylene, Solid Benzo(a)pyrene, Solid Chrysene, Solid Dibenzo(a,h)anthracene, Solid Fluoranthene, Solid Fluorene, Solid Indeno(1,2,3-cd)pyrene, Solid Naphthalene, Solid Phenanthrene, Solid Pyrene, Solid Benzo [b,k] fluoranthene, Solid	<0.105 <0.104 <0.0886 <0.0413 <0.3258 <0.0608 <0.0376 <0.2019 <0.0789 <0.0927 <0.1634 <0.1084 <0.0797 <0.0603 <0.0558	0.105 0.104 0.0886 0.0413 0.3258 0.0608 0.0376 0.2019 0.0789 0.0927 0.1634 0.1084 0.0797 0.0603 0.0558	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99	gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	2.43	1.23	mg/Kg	07/13/99	evd
EPA 8260B	Volatile Organics (Client List) Acetone, Solid Benzene, Solid Bromobenzene, Solid Bromoform, Solid Bromochloromethane, Solid Bromoform, Solid Bromomethane, Solid Methyl-t-Butyl Ether (MTBE), Solid Methyl ethyl ketone (2-Butanone), Solid n-Butylbenzene, Solid sec-Butylbenzene, Solid tert-Butylbenzene, Solid Carbon disulfide, Solid Carbon tetrachloride (Freon 10), Solid Chlorobenzene, Solid Chloroethane, Solid 2-Chloroethylvinyl ether, Solid Chloroform, Solid Chloromethane, Solid 2-Chlorotoluene, Solid	<0.052 <0.005 <0.005 <0.005 <0.005 <0.010 <0.010 <0.052 <0.005 <0.005 <0.005 <0.010 <0.005 <0.005 <0.005 <0.005 <0.010 <0.005 <0.010 <0.005 <0.010 <0.005	0.052 0.005 0.005 0.005 0.005 0.010 0.010 0.052 0.005 0.005 0.005 0.010 0.010 0.005 0.005 0.005 0.010 0.005 0.010 0.005 0.005	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99 07/15/99	vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz vz



0203

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-70151
Date Sampled.....: 07/02/1999
Time Sampled.....: 13:30
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-12
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dibromochloromethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.026	0.026	mg/Kg	07/15/99	vz
	Dibromomethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,4-Dichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	1,1-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,2-Dichloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	cis-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	trans-1,3-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2,2-Dichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1-Dichloropropene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Ethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Hexachlorobutadiene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	2-Hexanone, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Iodomethane, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	Isopropylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	p-Isopropyltoluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Methylene chloride, Solid	<0.016	0.016	mg/Kg	07/15/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Naphthalene, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	n-Propylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Styrene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Tetrachloroethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Toluene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,1-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichloroethane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichlorethene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Trichlorodifluoromethane (Freon 11), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,3-Trichloropropane, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,2,4-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	1,3,5-Trimethylbenzene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz
	Vinyl acetate, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Vinyl chloride, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	m&p-Xylenes, Solid	<0.010	0.010	mg/Kg	07/15/99	vz
	o-Xylene, Solid	<0.005	0.005	mg/Kg	07/15/99	vz



n 0204

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7a15
Date Sampled.....: 07/02/1999
Time Sampled.....: 13:30
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-12
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	0.03 0.04 <0.12 0.28 0.90	0.01 0.01 0.12 0.01 0.01	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd



0205

CORE LABORATORIES

LABORATORY TEST RESULTS						
Job Number: 991278		Date: 07/20/1999				
Customer Sample ID: MW-7027*				Laboratory Sample ID: 991278-13		
Date Sampled.....: 07/02/1999				Date Received.....: 07/07/1999		
Time Sampled.....: 13:51				Time Received.....: 10:30		
Sample Matrix.....: Soil						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 3630C	Silica Gel Cleanup, Solid	Complete		mL	07/14/99	tmp
SM 2540 B	% Moisture, Solid	3	0	%	07/09/99	mts
EPA 3550	Extraction (Ultrasonic) SVOCs Ultrasonic Extraction, Solid	Complete			07/14/99	tmp
EPA 8270C	Semivolatile Organics Acenaphthene, Solid Acenaphthylene, Solid Anthracene, Solid Benzo(a)anthracene, Solid Benzo(ghi)perylene, Solid Benzo(a)pyrene, Solid Chrysene, Solid Dibenz(a,h)anthracene, Solid Fluoranthene, Solid Fluorene, Solid Indeno(1,2,3-cd)pyrene, Solid Naphthalene, Solid Phenanthrene, Solid Pyrene, Solid Benzo [b,k] fluoranthene, Solid	<0.103 <0.102 <0.0869 <0.0405 <0.3196 <0.0596 <0.0369 <0.1981 <0.0774 <0.0909 <0.1603 <0.1063 <0.0782 <0.0591 <0.0547	0.103 0.102 0.0869 0.0405 0.3196 0.0596 0.0369 0.1981 0.0774 0.0909 0.1603 0.1063 0.0782 0.0591 0.0547	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99 07/16/99	gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb gfb
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	17.1	1.46	mg/Kg	07/13/99	evd
EPA 8260B	Volatile Organics (Client List)					
	Acetone, Solid	<0.26	0.26	mg/Kg	07/15/99	vz
	Benzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Bromobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Bromochloromethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Bromodichloromethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Bromoform, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Bromomethane, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Methyl-t-Butyl Ether (MTBE), Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Methyl ethyl ketone (2-Butanone), Solid	<0.26	0.26	mg/Kg	07/15/99	vz
	n-Butylbenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	sec-Butylbenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	tert-Butylbenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Carbon disulfide, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Carbon tetrachloride (Freon 10), Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Chlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Chloroethane, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	2-Chloroethylvinyl ether, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Chloroform, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Chloromethane, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	2-Chlorotoluene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz

n 0206
CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7a27¹
Date Sampled.....: 07/02/1999
Time Sampled.....: 13:51
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-13
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	4-Chlorotoluene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Dibromochloromethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2-Dibromoethane (EDB), Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2-Dibromo-3-chloropropane, Solid	<0.13	0.13	mg/Kg	07/15/99	vz
	Dibromomethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2-Dichlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,3-Dichlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,4-Dichlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Dichlorodifluoromethane (Freon 12), Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	1,1-Dichloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2-Dichloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1-Dichloroethene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	cis-1,2-Dichloroethene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	trans-1,2-Dichloroethene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2-Dichloropropane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	cis-1,3-Dichloropropene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	trans-1,3-Dichloropropene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,3-Dichloropropane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	2,2-Dichloropropane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1-Dichloropropene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Ethylbenzene, Solid	0.27	0.03	mg/Kg	07/15/99	vz
	Hexachlorobutadiene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	2-Hexanone, Solid	<0.26	0.26	mg/Kg	07/15/99	vz
	Iodomethane, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	Isopropylbenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	p-Isopropyltoluene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Methylene chloride, Solid	<0.077	0.077	mg/Kg	07/15/99	vz
	4-Methyl-2-pentanone (MIBK), Solid	<0.26	0.26	mg/Kg	07/15/99	vz
	Naphthalene, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	n-Propylbenzene, Solid	0.04	0.03	mg/Kg	07/15/99	vz
	Styrene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1,1,2-Tetrachloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1,2,2-Tetrachloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Tetrachloroethene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Toluene, Solid	0.64	0.03	mg/Kg	07/15/99	vz
	1,2,3-Trichlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2,4-Trichlorobenzene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1,1-Trichloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1,2-Trichloroethane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Trichloroethene, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	Trichlorofluoromethane (Freon 11), Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,1,2-Trichlorotrifluoroethane(Freon113), Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2,3-Trichloropropane, Solid	<0.03	0.03	mg/Kg	07/15/99	vz
	1,2,4-Trimethylbenzene, Solid	0.69	0.03	mg/Kg	07/15/99	vz
	1,3,5-Timethylbenzene, Solid	0.16	0.03	mg/Kg	07/15/99	vz
	Vinyl acetate, Solid	<0.26	0.26	mg/Kg	07/15/99	vz
	Vinyl chloride, Solid	<0.052	0.052	mg/Kg	07/15/99	vz
	m&p-Xylenes, Solid	1.49	0.052	mg/Kg	07/15/99	vz
	o-Xylene, Solid	0.80	0.03	mg/Kg	07/15/99	vz



000207

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991278

Date: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7a271
Date Sampled.....: 07/02/1999
Time Sampled.....: 13:51
Sample Matrix.....: Soil

Laboratory Sample ID: 991278-13
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Methyl-t-Butyl Ether (MTBE), Solid Toluene, Solid Xylenes (total), Solid	0.36 0.68 <0.29 3.81 4.00	0.03 0.03 0.29 0.03 0.03	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd evd



0208

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Test Method.....: SM 2540 B
Method Description.: Total Solids
Parameter.....: % Moisture

Batch.....: 7160
Units.....: %

Analyst...: mls
Test Code.: %MOIST

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB			0.00							07/09/1999	0000

Test Method.....: SM 5310 B
Method Description.: Total Organic Carbon
Parameter.....: Organic Carbon, Total (TOC)

Batch.....: 7293
Units.....: mg/L

Analyst...: gwd
Test Code.: TOC

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB			0.406							07/14/1999	0000
LCS	W80406		927	1018	1000PPM		93	90-110		07/14/1999	0000
LCS	W80406		1018		1000PPM		102	90-110		07/14/1999	0000

0000209



CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 8270C Batch.....: 7343 Analyst...: gfb
 Method Description.: Semivolatile Organics Units.....: ug/L

MB	Method Blank						07/14/1999	2320
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
2,4-Dichlorophenol	0							
2,4-Dimethylphenol	0							
2,4-Dinitrophenol	0							
Benzyl alcohol	0							
Butyl benzyl phthalate	0							
Bis(2-chloroethoxy)methane	0							
Bis(2-chloroethyl)ether	0							
Bis(2-chloroisopropyl)ether	0							
Bis(2-ethylhexyl)phthalate	2.44							
4-Bromophenyl phenyl ether	0							
4-Chloroaniline	0							
2-Choronaphthalene	0							
4-Chlorophenyl phenyl ether	0							
2-Methylphenol (o-cresol)	0							
(3+4) Methylphenol (m+p-cresol)	0							
Dibenzofuran	0							
1,2-Dichlorobenzene	0							
2-Nitrophenol	0							
1,3-Dichlorobenzene	0							
Pyridine	0							
1,4-Dichlorobenzene	0							
3,3-Dichlorobenzidine	0							
Diethyl phthalate	0							
Dimethyl phthalate	0							
4,6-Dinitro-2-methylphenol	0							
Di-n-butyl phthalate	0							
Di-n-octyl phthalate	0							
2,4-Dinitrotoluene	0							
2,6-Dinitrotoluene	0							
1,2-Diphenylhydrazine	0							
2,4,6-Trichlorophenol	0							
Hexachlorobenzene	0							
Hexachlorobutadiene	0							
Hexachlorocyclopentadiene	0							
Hexachloroethane	0							
2,4,5-Trichlorophenol	0							
Isophorone	0							
2-Methylnaphthalene	0							
Phenol	0							
2-Nitroaniline	0							
3-Nitroaniline	0							
4-Nitroaniline	0							
Nitrobenzene	0							
n-Nitrosodimethylamine	0							
n-Nitrosodi-n-propylamine	0							
n-Nitrosodiphenylamine	0							
Pentachlorophenol	0							
4-Nitrophenol	0							
1,2,4-Trichlorobenzene	0							
Benzoic acid	0							

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/14/1999	2320

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Aniline	0							
4-Chloro-3-methylphenol	0							
Benzidine	0							
2-Chlorophenol	0							
Acenaphthene	0							
Acenaphthylene	0							
Anthracene	0							
Benzo(a)anthracene	0							
Benzo(ghi)perylene	0							
Benzo(a)pyrene	0							
Chrysene	0							
Dibenzo(a,h)anthracene	0							
Fluoranthene	0							
Fluorene	0							
Indeno(1,2,3-cd)pyrene	0							
Naphthalene	0							
Phenanthrene	0							
Pyrene	0							
Benzo [b,k] fluoranthene	0							

SB	Spiked Blank	09062802					07/15/1999	0010
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
4-Nitrophenol	30.89		50.000000		61.8		0-132	
1,4-Dichlorobenzene	14.67		25.000000		58.7		20-124	
Phenol	36.37		50.000000		72.7		5-112	
2,4-Dinitrotoluene	17.66		25.000000		70.6		0-112	
n-Nitrosodi-n-propylamine	16.91		25.000000		67.6		0-230	
Pentachlorophenol	27.30		50.000000		54.6		14-176	
1,2,4-Trichlorobenzene	14.54		25.000000		58.2		44-142	
4-Chloro-3-methylphenol	39.19		50.000000		78.4		22-147	
2-Chlorophenol	33.32		50.000000		66.6		23-134	
Acenaphthene	20.26		25.000000		81.0		47-145	
Pyrene	19.89		25.000000		79.6		52-115	

Test Method.....: EPA 8270C	Batch.....: 7379	Analyst...: gfb
Method Description.: Semivolatile Organics	Units.....: ug/L	

MB	Method Blank					07/16/1999	2017	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Bis(2-chloroisopropyl)ether	0							
Bis(2-ethylhexyl)phthalate	3.46							
4-Bromophenyl phenyl ether	0							
4-Chloroaniline	0							
Benzidine	0							
Bis(2-chloroethoxy)methane	0							
Butyl benzyl phthalate	0							
Aniline	0							



CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/16/1999	2017

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzyl alcohol	0							
Bis(2-chloroethyl)ether	0							
4-Chlorophenyl phenyl ether	0							
(3+4) Methylphenol (m+p-cresol)	0							
2-Nitrophenol	0							
Dibenzofuran	0							
1,2-Dichlorobenzene	0							
1,3-Dichlorobenzene	0							
1,4-Dichlorobenzene	0							
3,3-Dichlorobenzidine	0							
Diethyl phthalate	0							
Dimethyl phthalate	0							
4,6-Dinitro-2-methylphenol	0							
Di-n-butyl phthalate	0							
Di-n-octyl phthalate	0							
2,4-Dinitrotoluene	0							
2,6-Dinitrotoluene	0							
4-Nitrophenol	0							
Pentachlorophenol	0							
Hexachlorobenzene	0							
Hexachlorobutadiene	0							
Hexachlorocyclopentadiene	0							
Hexachloroethane	0							
Phenol	0							
Isophorone	0							
2-Methylnaphthalene	0							
2,4,5-Trichlorophenol	0							
2-Nitroaniline	0							
3-Nitroaniline	0							
4-Nitroaniline	0							
Nitrobenzene	0							
n-Nitrosodimethylamine	0							
2-Chloronaphthalene	0							
n-Nitrosodi-n-propylamine	0							
Pyridine	0							
n-Nitrosodiphenylamine	0							
1,2-Diphenylhydrazine	0							
2,4,6-Trichlorophenol	0							
1,2,4-Trichlorobenzene	0							
Benzoic acid	0							
4-Chloro-3-methylphenol	0							
2-Chlorophenol	0							
2,4-Dichlorophenol	0							
2,4-Dimethylphenol	0							
2,4-Dinitrophenol	0							
2-Methylphenol (o-cresol)	0							
Acenaphthene	0							
Acenaphthylene	0							
Anthracene	0							
Benz(a)anthracene	0							
Benz(ghi)perylene	0							
Benz(a)pyrene	0							
Chrysene	0							
Dibenzo(a,h)anthracene	0							



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/16/1999	2017

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Fluoranthene	0							
Fluorene	0							
Indeno(1,2,3-cd)pyrene	0							
Naphthalene	0							
Phenanthrene	0							
Pyrene	0							
Benzo [b,k] fluoranthene	0							

SB	Spiked Blank	09062802			07/16/1999	2107			
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

4-Nitrophenol	34.51		50.000000		69.0		0-132	
1,4-Dichlorobenzene	19.38		25.000000		77.5		20-124	
Phenol	42.00		50.000000		84.0		5-112	
2,4-Dinitrotoluene	17.87		25.000000		71.5		0-112	
n-Nitrosodi-n-propylamine	22.17		25.000000		88.7		0-230	
Pentachlorophenol	37.40		50.000000		74.8		14-176	
1,2,4-Trichlorobenzene	19.30		25.000000		77.2		44-142	
4-Chloro-3-methylphenol	48.96		50.000000		97.9		22-147	
2-Chlorophenol	42.85		50.000000		85.7		23-134	
Acenaphthene	24.54		25.000000		98.2		47-145	
Pyrene	21.84		25.000000		87.4		52-115	

Test Method.....: AK101	Batch.....: 7237	Analyst...: evd
Method Description.: Gasoline Range Organics	Units.....: mg/L	

MB	Method Blank				07/12/1999	1135			
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

Gasoline Range Organics (C6-C10)	0								
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

LCS	Laboratory Control Sample	09060803			07/12/1999	1227			
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

Gasoline Range Organics (C6-C10)	811		1000.0		81.1		70-120		
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

LCD	Laboratory Control Sample Duplicate	09060803			07/12/1999	1254			
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

Gasoline Range Organics (C6-C10)	825	811	1000.0		82.5		70-120		
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	09071203	991263-12	50	07/13/1999	0519

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
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Gasoline Range Organics (C6-C10)	876		1000.0	11	86.5		60-140	
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MSD	Matrix Spike Duplicate	09071203	991263-12	50	07/13/1999	0545
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	837	876	1000.0	11	82.6		60-140	
				5	50			

Test Method.....: EPA 8260B

Method Description.: Volatile Organics (Client List)

Batch.....: 7320

Units.....: ug/L

Analyst...: vz

MS	Matrix Spike	09052801	991219-1		07/09/1999	2135
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.89		10.000000	0	88.9		73-140	
Chlorobenzene	9.55		10.000000	0	95.5		78-135	
1,1-Dichloroethene	5.56		10.000000	0	55.6		55-120	
Toluene	9.48		10.000000	0	94.8		72-143	
Trichloroethene	9.50		10.000000	0	95.0		61-180	

MSD	Matrix Spike Duplicate	09052801	991219-1		07/09/1999	2218
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.76	8.89	10.000000	0	87.6		73-140	
Chlorobenzene	9.68	9.55	10.000000	0	96.8		78-135	
1,1-Dichloroethene	5.45	5.56	10.000000	0	54.5		55-120	X
Toluene	9.28	9.48	10.000000	0	92.8		72-143	
Trichloroethene	9.25	9.50	10.000000	0	92.5		61-180	
				3	12			

MS	Matrix Spike	09052801	991227-10		07/10/1999	0212
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.01		10.000000	0	80.1		73-140	
Chlorobenzene	8.07		10.000000	0.34	77.3		78-135	X
1,1-Dichloroethene	7.34		10.000000	0	73.4		55-120	
Toluene	7.99		10.000000	0	79.9		72-143	
Trichloroethene	8.96		10.000000	0	89.6		61-180	



CORE LABORATORIES

0214

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	09052801	991227-10		07/10/1999	0255
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.15	8.01	10.000000	0	81.5	2	73-140	
Chlorobenzene	8.16	8.07	10.000000	0.34	78.2	1	78-135	
1,1-Dichloroethene	7.05	7.34	10.000000	0	70.5	4	55-120	
Toluene	7.90	7.99	10.000000	0	79.0	1	72-143	
Trichloroethene	9.00	8.96	10.000000	0	90.0	0	61-180	
								12

LCS	Laboratory Control Sample	09071204			07/14/1999	1707
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.92		10.000000		89.2		74-135	
Chlorobenzene	10.00		10.000000		100.0		76-124	
1,1-Dichloroethene	9.20		10.000000		92.0		42-134	
Toluene	10.18		10.000000		101.8		79-132	
Trichloroethene	11.09		10.000000		110.9		77-133	

MB	Method Blank				07/14/1999	1750
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acrolein	0							
Acrylonitrile	0							
Acetone	0							
Benzene	0							
Bromobenzene	0							
Bromochloromethane	0							
Bromodichloromethane	0							
Bromoform	0							
Bromomethane	0							
Methyl-t-Butyl Ether (MTBE)	0							
Methyl ethyl ketone (2-Butanone)	0							
n-Butylbenzene	0							
sec-Butylbenzene	0							
tert-Butylbenzene	0							
Carbon disulfide	0.56							
Carbon tetrachloride (Freon 10)	0							
Chlorobenzene	0							
Chloroethane	0							
2-Chloroethylvinyl ether	0							
Chloroform	0							
Chloromethane	0							
2-Chlorotoluene	0							
4-Chlorotoluene	0							
Dibromochloromethane	0							
1,2-Dibromoethane (EDB)	0							
1,2-Dibromo-3-chloropropane	0							
Dibromomethane	0							

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MB	Method Blank						07/14/1999	1750
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
1,2-Dichlorobenzene	0							
1,3-Dichlorobenzene	0							
1,4-Dichlorobenzene	0							
Dichlorodifluoromethane (Freon 12)	0							
1,1-Dichloroethane	0							
1,2-Dichloroethane	0							
1,1-Dichloroethene	0							
cis-1,2-Dichloroethene	0							
trans-1,2-Dichloroethene	0							
1,2-Dichloropropane	0							
cis-1,3-Dichloropropene	0							
trans-1,3-Dichloropropene	0							
1,3-Dichloropropane	0							
2,2-Dichloropropane	0							
1,1-Dichloropropene	0							
Ethylbenzene	0							
Hexachlorobutadiene	0							
2-Hexanone	0							
Iodomethane	0							
Isopropylbenzene	0							
p-Isopropyltoluene	0							
Methylene chloride	0							
4-Methyl-2-pentanone (MIBK)	0							
Naphthalene	0							
n-Propylbenzene	0							
Styrene	0							
1,1,1,2-Tetrachloroethane	0							
1,1,2,2-Tetrachloroethane	0							
Tetrachloroethene	0							
Toluene	0							
1,2,3-Trichlorobenzene	0							
1,2,4-Trichlorobenzene	0							
1,1,1-Trichloroethane	0							
1,1,2-Trichloroethane	0							
Trichloroethene	0							
Trichlorofluoromethane (Freon 11)	0							
1,1,2-Trichlorotrifluoroethane(Freon113)	0.34							
1,2,3-Trichloropropane	0							
1,2,4-Trimethylbenzene	0							
1,3,5-Trimethylbenzene	0							
Vinyl acetate	0							
Vinyl chloride	0							
m&p-Xylenes	0							
o-Xylene	0							
Tetrahydrofuran	0							



CORE LABORATORIES

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QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 8260B

Method Description.: Volatile Organics (Client List)

Batch.....: 7326

Units.....: ug/L

Analyst....: vz

MS	Matrix Spike	09052801	991227-10		07/10/1999	0212
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.01		10.000000	0	80.1		73-140	
Chlorobenzene	8.07		10.000000	0.34	77.3		78-135	X
1,1-Dichloroethene	7.34		10.000000	0	73.4		55-120	
Toluene	7.99		10.000000	0	79.9		72-143	
Trichloroethene	8.96		10.000000	0	89.6		61-180	

MSD	Matrix Spike Duplicate	09052801	991227-10		07/10/1999	0255
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	8.15	8.01	10.000000	0	81.5		73-140	
Chlorobenzene	8.16	8.07	10.000000	0.34	78.2	2	12	
1,1-Dichloroethene	7.05	7.34	10.000000	0	70.5	1	55-120	
Toluene	7.90	7.99	10.000000	0	79.0	4	72-143	
Trichloroethene	9.00	8.96	10.000000	0	90.0	1	61-180	
					0		10	
							12	

LCS	Laboratory Control Sample	09071204			07/15/1999	1314
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	9.28		10.000000		92.8		74-135	
Chlorobenzene	9.96		10.000000		99.6		76-124	
1,1-Dichloroethene	8.64		10.000000		86.4		42-134	
Toluene	10.01		10.000000		100.1		79-132	
Trichloroethene	10.93		10.000000		109.3		77-133	

MB	Method Blank				07/15/1999	1357
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acrolein	0							
Acrylonitrile	0							
Acetone	0							
Benzene	0							
Bromobenzene	0							
Bromochloromethane	0							
Bromodichloromethane	0							
Bromoform	0							
Bromomethane	0							
Methyl-t-Butyl Ether (MTBE)	0							
Methyl ethyl ketone (2-Butanone)	0							
n-Butylbenzene	0							



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc. PROJECT: Chevron-Alaska ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/15/1999	1357
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
sec-Butylbenzene	0					
tert-Butylbenzene	0					
Carbon disulfide	0.22					
Carbon tetrachloride (Freon 10)	0					
Chlorobenzene	0					
Chloroethane	0					
2-Chloroethylvinyl ether	0					
Chloroform	0					
Chloromethane	0					
2-Chlorotoluene	0					
4-Chlorotoluene	0					
Dibromochloromethane	0					
1,2-Dibromoethane (EDB)	0					
1,2-Dibromo-3-chloropropane	0					
Dibromomethane	0					
1,2-Dichlorobenzene	0					
1,3-Dichlorobenzene	0					
1,4-Dichlorobenzene	0					
Dichlorodifluoromethane (Freon 12)	0					
1,1-Dichloroethane	0					
1,2-Dichloroethane	0					
1,1-Dichloroethene	0					
cis-1,2-Dichloroethene	0					
trans-1,2-Dichloroethene	0					
1,2-Dichloropropane	0					
cis-1,3-Dichloropropene	0					
trans-1,3-Dichloropropene	0					
1,3-Dichloropropane	0					
2,2-Dichloropropane	0					
1,1-Dichloropropene	0					
Ethylbenzene	0					
Hexachlorobutadiene	0					
2-Hexanone	0					
Iodomethane	0					
Isopropylbenzene	0					
p-Isopropyltoluene	0					
Methylene chloride	0					
4-Methyl-2-pentanone (MIBK)	0					
Naphthalene	0					
n-Propylbenzene	0					
Styrene	0					
1,1,1,2-Tetrachloroethane	0					
1,1,2,2-Tetrachloroethane	0					
Tetrachloroethene	0					
Toluene	0					
1,2,3-Trichlorobenzene	0					
1,2,4-Trichlorobenzene	0					
1,1,1-Trichloroethane	0					
1,1,2-Trichloroethane	0					
Trichloroethene	0					
Trichlorofluoromethane (Freon 11)	0					
1,1,2-Trichlorotrifluoroethane(Freon113)	0					
1,2,3-Trichloropropane	0					
1,2,4-Trimethylbenzene	0					



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/15/1999	1357

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
1,3,5-Trimethylbenzene	0						
Vinyl acetate	0						
Vinyl chloride	0						
m&p-Xylenes	0						
o-Xylene	0						
Tetrahydrofuran	0						

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
MB	Method Blank					07/15/1999	1934

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Acrolein	0						
Acrylonitrile	0						
Acetone	0						
Benzene	0						
Bromobenzene	0						
Bromochloromethane	0						
Bromodichloromethane	0						
Bromoform	0						
Bromomethane	0						
Methyl-t-Butyl Ether (MTBE)	0						
Methyl ethyl ketone (2-Butanone)	0						
n-Butylbenzene	0						
sec-Butylbenzene	0						
tert-Butylbenzene	0						
Carbon disulfide	0.29						
Carbon tetrachloride (Freon 10)	0						
Chlorobenzene	0						
Chloorethane	0						
2-Chloroethylvinyl ether	0						
Chloroform	0						
Chloromethane	0						
2-Chlorotoluene	0						
4-Chlorotoluene	0						
Dibromochloromethane	0						
1,2-Dibromoethane (EDB)	0						
1,2-Dibromo-3-chloropropane	0						
Dibromomethane	0						
1,2-Dichlorobenzene	0						
1,3-Dichlorobenzene	0						
1,4-Dichlorobenzene	0						
Dichlorodifluoromethane (Freon 12)	0						
1,1-Dichloroethane	0						
1,2-Dichloroethane	0						
1,1-Dichloroethene	0						
cis-1,2-Dichloroethene	0						
trans-1,2-Dichloroethene	0						
1,2-Dichloropropane	0						
cis-1,3-Dichloropropene	0						
trans-1,3-Dichloropropene	0						
1,3-Dichloropropane	0						
2,2-Dichloropropane	0						
1,1-Dichloropropene	0						



0219

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/15/1999	1934

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Ethylbenzene	0							
Hexachlorobutadiene	0							
2-Hexanone	0							
Iodomethane	0							
Isopropylbenzene	0							
p-Isopropyltoluene	0							
Methylene chloride	0.63							
4-Methyl-2-pentanone (MIBK)	0							
Naphthalene	0							
n-Propylbenzene	0							
Styrene	0							
1,1,1,2-Tetrachloroethane	0							
1,1,2,2-Tetrachloroethane	0							
Tetrachloroethene	0							
Toluene	0							
1,2,3-Trichlorobenzene	0							
1,2,4-Trichlorobenzene	0							
1,1,1-Trichloroethane	0							
1,1,2-Trichloroethane	0							
Trichloroethene	0							
Trichlorofluoromethane (Freon 11)	0							
1,1,2-Trichlorotrifluoroethane(Freon113)	0							
1,2,3-Trichloropropane	0							
1,2,4-Trimethylbenzene	0							
1,3,5-Trimethylbenzene	0							
Vinyl acetate	0							
Vinyl chloride	0							
m&p-Xylenes	0							
o-Xylene	0							
Tetrahydrofuran	0							

MS	Matrix Spike	09071204	991266-2		07/15/1999	2108		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	10.78		10.000000	0	107.8		88-134	
Chlorobenzene	11.27		10.000000	0	112.7		92-122	
1,1-Dichloroethene	8.29		10.000000	0	82.9		39-141	
Toluene	11.43		10.000000	0	114.3		86-137	
Trichloroethene	11.39		10.000000	0	113.9		75-148	

MSD	Matrix Spike Duplicate	09071204	991266-2		07/15/1999	2151		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	10.44	10.78	10.000000	0	104.4		88-134	
Chlorobenzene	10.99	11.27	10.000000	0	109.9		92-122	
1,1-Dichloroethene	7.55	8.29	10.000000	0	75.5		39-141	
Toluene	11.09	11.43	10.000000	0	110.9		86-137	

0220
CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	09071204	991266-2		07/15/1999	2151

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Trichloroethene	10.93	11.39	10.000000	0	109.3	4	75-148	13

Test Method.....: EPA 8020A Batch.....: 7236 Analyst...: evd
 Method Description.: Volatile Organics -Aromatics Units.....: ug/L

MB	Method Blank	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene		0.00							
Ethylbenzene		0.00							
Methyl-t-Butyl Ether (MTBE)		0.00							
Toluene		0.00							
Xylenes (total)		0.00							

LCS	Laboratory Control Sample	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	56.48		50		113.0		39-150		
Ethylbenzene	54.25		50		108.5		32-160		
Methyl-t-Butyl Ether (MTBE)	292.60		250		117.0		50-150		
Toluene	56.18		50		112.4		46-148		
Xylenes (total)	170.52		150		113.7		75-125		

LCD	Laboratory Control Sample Duplicate	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	57.16	56.48	50		114.3		39-150		
Ethylbenzene	54.63	54.25	50		109.3		32-160		
Methyl-t-Butyl Ether (MTBE)	288.71	292.60	250		115.5		50-150		
Toluene	56.44	56.18	50		112.9		46-148		
Xylenes (total)	171.92	170.52	150		114.6		75-125		
					0.8		20		

MS	Matrix Spike	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	58.38		50		0.12	116.5		39-150	
Ethylbenzene	56.37		50		0.89	111.0		32-160	
Methyl-t-Butyl Ether (MTBE)	290.13		250		0.40	115.9		50-150	
Toluene	58.69		50		1.08	115.2		46-148	



0221

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MS	Matrix Spike	09071201	991263-12	50	07/13/1999	0612
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
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Xylenes (total)	176.75		150	0.72	117.4		75-125	
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MSD	Matrix Spike Duplicate	09071201	991263-12	50	07/13/1999	0638
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.41	58.38	50	0.12	110.6	5	39-150	
Ethylbenzene	52.99	56.37	50	0.89	104.2	6	32-160	
Methyl-t-Butyl Ether (MTBE)	265.59	290.13	250	0.40	106.1	9	50-150	
Toluene	55.85	58.69	50	1.08	109.5	5	46-148	
Xylenes (total)	166.19	176.75	150	0.72	110.3	6	75-125	
							20	

Test Method.....: EPA 8020A

Method Description.: Volatile Organics -Aromatics

Batch.....: 7255

Units.....: ug/L

Analyst...: evd

MB	Method Blank						07/13/1999	0757
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	0.00							
Ethylbenzene	0.00							
Methyl-t-Butyl Ether (MTBE)	0.00							
Toluene	0.00							
Xylenes (total)	0.00							

CV	Calibration Verification	09071201					07/13/1999	0916
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.96		50		112		85-115	
Ethylbenzene	53.56		50		107		85-115	
Methyl-t-Butyl Ether (MTBE)	246.54		250		99		70-130	
Toluene	54.64		50		109		85-115	
Xylenes (total)	167.23		150		111		85-115	

MS	Matrix Spike	09071201	991271-4				07/13/1999	1717
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	61.06		50	0.00	122.1		39-150	
Ethylbenzene	58.99		50	0.00	118.0		32-160	
Methyl-t-Butyl Ether (MTBE)	242.54		250	0.00	97.0		50-150	
Toluene	57.87		50	0.00	115.7		46-148	
Xylenes (total)	184.87		150	0.11	123.2		75-125	



0222
CORE LABORATORIES

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	09071201	991271-4		07/13/1999	1743
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Benzene		60.91	61.06	50	0.00	121.8 39-150
Ethylbenzene		58.30	58.99	50	0.00	116.6 32-160
Methyl-t-Butyl Ether (MTBE)		279.43	242.54	250	0.00	111.8 50-150
Toluene		58.12	57.87	50	0.00	116.2 46-148
Xylenes (total)		184.08	184.87	150	0.11	122.6 75-125
						0 20

LCS	Laboratory Control Sample	09071201			07/13/1999	1900
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Benzene		58.94		50		117.9 39-150
Ethylbenzene		57.25		50		114.5 32-160
Methyl-t-Butyl Ether (MTBE)		249.47		250		99.8 50-150
Toluene		58.62		50		117.2 46-148
Xylenes (total)		180.44		150		120.3 75-125

LCD	Laboratory Control Sample Duplicate	09071201			07/13/1999	1926
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Benzene		56.54	58.94	50		113.1 39-150
Ethylbenzene		55.54	57.25	50		111.1 32-160
Methyl-t-Butyl Ether (MTBE)		262.85	249.47	250		105.1 50-150
Toluene		56.54	58.62	50		113.1 46-148
Xylenes (total)		174.96	180.44	150		116.6 75-125
						3.1 20

CV	Calibration Verification	09071201			07/13/1999	1952
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F
Benzene		52.52		50		105 85-115
Ethylbenzene		50.51		50		101 85-115
Methyl-t-Butyl Ether (MTBE)		248.13		250		99 70-130
Toluene		51.84		50		104 85-115
Xylenes (total)		159.12		150		106 85-115



0223

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CV	Calibration Verification	09071201			07/13/1999	2044
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.07		50		110		85-115	
Ethylbenzene	52.89		50		106		85-115	
Methyl-t-Butyl Ether (MTBE)	266.12		250		106		70-130	
Toluene	54.40		50		109		85-115	
Xylenes (total)	166.78		150		111		85-115	

CV	Calibration Verification	09062503			07/13/1999	2322
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	54.27		50		109		85-115	
Ethylbenzene	52.75		50		106		85-115	
Methyl-t-Butyl Ether (MTBE)	262.21		250		105		70-130	
Toluene	53.90		50		108		85-115	
Xylenes (total)	165.12		150		110		85-115	



CORE LABORATORIES

0224

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Volatile Organics -Aromatics
Method Code.....: 8020BXBatch.....: 7236
Analyst.....: evd

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	39.42	50.0000	78.8	64-147		07/12/1999	1135
		LCS	1	44.42	50.0000	88.8	64-147		07/12/1999	1320
		LCD	1	43.35	50.0000	86.7	64-147		07/12/1999	1347
991263-5	Solid		26.8	347.40	50.0000	694.8	64-147	X	07/12/1999	1824
991263-6	Solid		13.2	44.63	50.0000	89.3	64-147		07/12/1999	1917
991263-7	Solid		13.7	39.04	50.0000	78.1	64-147		07/12/1999	1943
991263-9	Solid		16.7	39.21	50.0000	78.4	64-147		07/12/1999	2009
991263-12	Solid		16.9	42.30	50.0000	84.6	64-147		07/12/1999	2035
991263-11	Solid		20.6	41.09	50.0000	82.2	64-147		07/12/1999	2101
991263-4	Solid		19.1	39.92	50.0000	79.8	64-147		07/12/1999	2128
991277-1	Solid		14.5	46.53	50.0000	93.1	64-147		07/12/1999	2246
991277-2	Solid		18.6	41.06	50.0000	82.1	64-147		07/13/1999	0057
991278-1	Solid		17.9	39.91	50.0000	79.8	64-147		07/13/1999	0123
991278-3	Solid		15.6	41.23	50.0000	82.5	64-147		07/13/1999	0215
991278-4	Solid		16.6	65.84	50.0000	131.7	64-147		07/13/1999	0242
991278-9	Solid		15.6	40.59	50.0000	81.2	64-147		07/13/1999	0308
991278-11	Solid		19.8	42.10	50.0000	84.2	64-147		07/13/1999	0334
991278-12	Solid		11.7	42.45	50.0000	84.9	64-147		07/13/1999	0400
991269-1	Liquids		1	56.01	50.0000	112.0	64-147		07/13/1999	0453
991263-12	Solid	MS	50	44.20	50.0000	88.4	64-147		07/13/1999	0612
991263-12	Solid	MSD	50	43.84	50.0000	87.7	64-147		07/13/1999	0638

Method.....: Gasoline Range Organics
Method Code.....: AKGROBatch.....: 7237
Analyst.....: evd

Surrogate	Units
BFB (Surrogate)	mg/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991263-5	Solid		26.8	1326	50.0000	2652.0	60-140	X	07/12/1999	1824
991263-6	Solid		13.2	42.1	50.0000	84.2	60-140		07/12/1999	1917
991263-7	Solid		13.7	45.7	50.0000	91.4	60-140		07/12/1999	1943
991263-9	Solid		16.7	41.8	50.0000	83.6	60-140		07/12/1999	2009
991263-12	Solid		16.9	45.1	50.0000	90.2	60-140		07/12/1999	2035
991263-11	Solid		20.6	50.1	50.0000	100.2	60-140		07/12/1999	2101
991263-4	Solid		19.1	42.8	50.0000	85.6	60-140		07/12/1999	2128
991263-8	Solid		29.0	119	50.0000	238.0	60-140	X	07/12/1999	2154
991263-10	Solid		25.0	101	50.0000	202.0	60-140	X	07/12/1999	2220
991277-1	Solid		14.5	53.3	50.0000	106.6	60-140		07/12/1999	2246
991277-2	Solid		18.6	43.7	50.0000	87.4	60-140		07/13/1999	0057
991278-1	Solid		17.9	45.5	50.0000	91.0	60-140		07/13/1999	0123
991278-2	Solid		19.5	51.0	50.0000	102.0	60-140		07/13/1999	0149
991278-3	Solid		15.6	50.0	50.0000	100.0	60-140		07/13/1999	0215



0225

CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
BFB (Surrogate)	mg/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		16.6	96.3	50.0000	192.6	60-140	X	07/13/1999	0242
991278-9	Solid		15.6	43.6	50.0000	87.2	60-140		07/13/1999	0308
991278-11	Solid		19.8	44.9	50.0000	89.8	60-140		07/13/1999	0334
991278-12	Solid		11.7	51.2	50.0000	102.4	60-140		07/13/1999	0400
991278-13	Solid		14.2	53.4	50.0000	106.8	60-140		07/13/1999	0427
991269-1	Liquids		1	84.9	50.0000	169.8	60-140	X	07/13/1999	0453

Method.....: Volatile Organics -Aromatics
Method Code.....: 8020BXBatch.....: 7255
Analyst.....: evd

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	40.73	50.0000	81.5	64-147		07/13/1999	0757
		CV	1	41.78	50.0000	83.6	64-147		07/13/1999	0916
991271-1	Liquids		1	37.95	50.0000	75.9	64-147		07/13/1999	1049
991271-4	Liquids		1	42.13	50.0000	84.3	64-147		07/13/1999	1208
991272-1	Liquids		10	40.97	50.0000	81.9	64-147		07/13/1999	1235
991272-2	Liquids		1	49.16	50.0000	98.3	64-147		07/13/1999	1301
991272-3	Liquids		1	44.31	50.0000	88.6	64-147		07/13/1999	1328
991272-4	Liquids		10	44.91	50.0000	89.8	64-147		07/13/1999	1354
991263-8	Solid		145	43.99	50.0000	88.0	64-147		07/13/1999	1421
991263-10	Solid		125	44.94	50.0000	89.9	64-147		07/13/1999	1447
991271-4	Liquids	MS	1	54.96	50.0000	109.9	64-147		07/13/1999	1717
991271-4	Liquids	MSD	1	48.93	50.0000	97.9	64-147		07/13/1999	1743
		LCS	1	43.08	50.0000	86.2	64-147		07/13/1999	1900
		LCD	1	43.80	50.0000	87.6	64-147		07/13/1999	1926
		CV	1	43.67	50.0000	87.3	64-147		07/13/1999	1952
		CV	1	42.80	50.0000	85.6	64-147		07/13/1999	2044
991278-2	Solid		39.0	40.36	50.0000	80.7	64-147		07/13/1999	2110
991278-13	Solid		28.4	42.00	50.0000	84.0	64-147		07/13/1999	2137
991271-2	Liquids		10	40.64	50.0000	81.3	64-147		07/13/1999	2203
991271-3	Liquids		5	42.09	50.0000	84.2	64-147		07/13/1999	2229
		CV	1	44.37	50.0000	88.7	64-147		07/13/1999	2322



0226

CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Volatile Organics (Client List)
Method Code.....: 8260CBatch.....: 7320
Analyst.....: vz

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991219-1	Solid		1	9.37	10.000	93.7	75-107		07/09/1999	1426
991227-10	Solid		1	10.41	10.000	104.1	75-107		07/09/1999	1447
991219-1	Solid	MS		9.67	10.000	96.7	75-107		07/09/1999	2135
991219-1	Solid	MSD		9.66	10.000	96.6	75-107		07/09/1999	2218
991227-10	Solid	MS		11.19	10.000	111.9	75-107	X	07/10/1999	0212
991227-10	Solid	MSD		10.82	10.000	108.2	75-107	X	07/10/1999	0255
		LCS	1	11.49	10.000	114.9	68-125		07/14/1999	1707
		MB	1	10.62	10.000	106.2	68-125		07/14/1999	1750
991263-9	Solid		1	10.32	10.000	103.2	75-107		07/14/1999	1833
991263-11	Solid		1	10.62	10.000	106.2	75-107		07/14/1999	1916
991263-12	Solid		1	10.57	10.000	105.7	75-107		07/14/1999	1959
991263-8	Solid		2500	11.75	10.000	117.5	75-107	X	07/14/1999	2042
991263-10	Solid		100	11.56	10.000	115.6	75-107	X	07/14/1999	2124
991278-1	Solid		1	10.82	10.000	108.2	75-107	X	07/14/1999	2207
991278-2	Solid		1	10.50	10.000	105.0	75-107		07/14/1999	2251
991278-3	Solid		1	10.48	10.000	104.8	75-107		07/14/1999	2334
991278-9	Solid		1	10.76	10.000	107.6	75-107	X	07/15/1999	0102
991278-11	Solid		1	10.42	10.000	104.2	75-107		07/15/1999	0145
991278-12	Solid		1	10.28	10.000	102.8	75-107		07/15/1999	0227

Surrogate	Units
Dibromofluoromethane	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991219-1	Solid		1	8.61	10.000	86.1	43-159		07/09/1999	1426
991227-10	Solid		1	12.43	10.000	124.3	43-159		07/09/1999	1447
991219-1	Solid	MS		8.63	10.000	86.3	43-159		07/09/1999	2135
991219-1	Solid	MSD		8.47	10.000	84.7	43-159		07/09/1999	2218
991227-10	Solid	MS		12.22	10.000	122.2	43-159		07/10/1999	0212
991227-10	Solid	MSD		11.45	10.000	114.5	43-159		07/10/1999	0255
		LCS	1	11.87	10.000	118.7	85-118	X	07/14/1999	1707
		MB	1	11.74	10.000	117.4	85-118		07/14/1999	1750
991263-9	Solid		1	12.08	10.000	120.8	43-159		07/14/1999	1833
991263-11	Solid		1	12.88	10.000	128.8	43-159		07/14/1999	1916
991263-12	Solid		1	13.10	10.000	131.0	43-159		07/14/1999	1959
991263-8	Solid		2500	12.08	10.000	120.8	43-159		07/14/1999	2042
991263-10	Solid		100	11.77	10.000	117.7	43-159		07/14/1999	2124
991278-1	Solid		1	12.33	10.000	123.3	43-159		07/14/1999	2207
991278-2	Solid		1	13.12	10.000	131.2	43-159		07/14/1999	2251
991278-3	Solid		1	13.21	10.000	132.1	43-159		07/14/1999	2334
991278-9	Solid		1	12.85	10.000	128.5	43-159		07/15/1999	0102
991278-11	Solid		1	12.57	10.000	125.7	43-159		07/15/1999	0145
991278-12	Solid		1	13.06	10.000	130.6	43-159		07/15/1999	0227

0227



CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
Toluene-d8	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991219-1	Solid		1	9.20	10.000	92.0	76-116		07/09/1999	1426
991227-10	Solid		1	11.27	10.000	112.7	76-116		07/09/1999	1447
991219-1	Solid	MS		9.41	10.000	94.1	76-116		07/09/1999	2135
991219-1	Solid	MSD		9.25	10.000	92.5	76-116		07/09/1999	2218
991227-10	Solid	MS		11.26	10.000	112.6	76-116		07/10/1999	0212
991227-10	Solid	MSD		10.66	10.000	106.6	76-116		07/10/1999	0255
		LCS	1	11.05	10.000	110.5	82-115		07/14/1999	1707
		MB	1	10.90	10.000	109.0	82-115		07/14/1999	1750
991263-9	Solid		1	11.11	10.000	111.1	76-116		07/14/1999	1833
991263-11	Solid		1	11.16	10.000	111.6	76-116		07/14/1999	1916
991263-12	Solid		1	11.53	10.000	115.3	76-116		07/14/1999	1959
991263-8	Solid		2500	11.21	10.000	112.1	76-116		07/14/1999	2042
991263-10	Solid		100	11.31	10.000	113.1	76-116		07/14/1999	2124
991278-1	Solid		1	10.63	10.000	106.3	76-116		07/14/1999	2207
991278-2	Solid		1	10.71	10.000	107.1	76-116		07/14/1999	2251
991278-3	Solid		1	11.18	10.000	111.8	76-116		07/14/1999	2334
991278-9	Solid		1	11.13	10.000	111.3	76-116		07/15/1999	0102
991278-11	Solid		1	11.01	10.000	110.1	76-116		07/15/1999	0145
991278-12	Solid		1	10.83	10.000	108.3	76-116		07/15/1999	0227

Method.....: Volatile Organics (TCLP)
Method Code.....: 8260TCBatch.....: 7326
Analyst.....: vz

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991227-10	Solid		1	10.41	10.000	104.1	75-107		07/09/1999	1447
991227-10	Solid	MS		11.19	10.000	111.9	75-107	X	07/10/1999	0212
991227-10	Solid	MSD		10.82	10.000	108.2	75-107	X	07/10/1999	0255
991266-2	Liquids		1	9.05	10.000	90.5	68-125		07/15/1999	1217
		LCS	1	11.82	10.000	118.2	68-125		07/15/1999	1314
		MB	1	10.19	10.000	101.9	68-125		07/15/1999	1357
991278-4	Solid		1	11.08	10.000	110.8	75-107	X	07/15/1999	1440
991315-3	Solid		1	10.59	10.000	105.9	75-107		07/15/1999	1600
991278-13	Solid		5	11.66	10.000	116.6	75-107	X	07/15/1999	1642
991324-4	Solid		1	10.38	10.000	103.8	75-107		07/15/1999	1725
991328-1	Solid		1	12.03	10.000	120.3	75-107	X	07/15/1999	1808
991230-9	Solid		1	11.71	10.000	117.1	75-107	X	07/15/1999	1850
		MB	1	10.54	10.000	105.4	68-125		07/15/1999	1934
991307-11	Liquids		1	10.44	10.000	104.4	68-125		07/15/1999	2017
991326-1	Liquids		1	10.64	10.000	106.4	68-125		07/15/1999	2100
991266-2	Liquids	MS		9.76	10.000	97.6	68-125		07/15/1999	2108
991326-9	Liquids		1	10.29	10.000	102.9	68-125		07/15/1999	2144
991266-2	Liquids	MSD		9.84	10.000	98.4	68-125		07/15/1999	2151

0228



CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
Dibromofluoromethane	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991227-10	Solid		1	12.43	10.000	124.3	43-159		07/09/1999	1447
991227-10	Solid	MS		12.22	10.000	122.2	43-159		07/10/1999	0212
991227-10	Solid	MSD		11.45	10.000	114.5	43-159		07/10/1999	0255
991266-2	Liquids		1	8.67	10.000	86.7	85-118		07/15/1999	1217
		LCS	1	11.46	10.000	114.6	85-118		07/15/1999	1314
		MB	1	11.48	10.000	114.8	85-118		07/15/1999	1357
991278-4	Solid		1	12.18	10.000	121.8	43-159		07/15/1999	1440
991315-3	Solid		1	13.09	10.000	130.9	43-159		07/15/1999	1600
991278-13	Solid		5	13.55	10.000	135.5	43-159		07/15/1999	1642
991324-4	Solid		1	13.23	10.000	132.3	43-159		07/15/1999	1725
991328-1	Solid		1	13.42	10.000	134.2	43-159		07/15/1999	1808
991230-9	Solid		1	13.77	10.000	137.7	43-159		07/15/1999	1850
		MB	1	12.86	10.000	128.6	85-118	X	07/15/1999	1934
991307-11	Liquids		1	12.47	10.000	124.7	85-118	X	07/15/1999	2017
991326-1	Liquids		1	12.69	10.000	126.9	85-118	X	07/15/1999	2100
991266-2	Liquids	MS		8.59	10.000	85.9	85-118		07/15/1999	2108
991326-9	Liquids		1	13.06	10.000	130.6	85-118	X	07/15/1999	2144
991266-2	Liquids	MSD		8.54	10.000	85.4	85-118		07/15/1999	2151

Surrogate	Units
Toluene-d8	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991227-10	Solid		1	11.27	10.000	112.7	76-116		07/09/1999	1447
991227-10	Solid	MS		11.26	10.000	112.6	76-116		07/10/1999	0212
991227-10	Solid	MSD		10.66	10.000	106.6	76-116		07/10/1999	0255
991266-2	Liquids		1	9.30	10.000	93.0	82-115		07/15/1999	1217
		LCS	1	11.18	10.000	111.8	82-115		07/15/1999	1314
		MB	1	11.16	10.000	111.6	82-115		07/15/1999	1357
991278-4	Solid		1	11.28	10.000	112.8	76-116		07/15/1999	1440
991315-3	Solid		1	11.72	10.000	117.2	76-116	X	07/15/1999	1600
991278-13	Solid		5	11.38	10.000	113.8	76-116		07/15/1999	1642
991324-4	Solid		1	11.35	10.000	113.5	76-116		07/15/1999	1725
991328-1	Solid		1	11.03	10.000	110.3	76-116		07/15/1999	1808
991230-9	Solid		1	11.98	10.000	119.8	76-116	X	07/15/1999	1850
		MB	1	11.19	10.000	111.9	82-115		07/15/1999	1934
991307-11	Liquids		1	11.36	10.000	113.6	82-115		07/15/1999	2017
991326-1	Liquids		1	11.51	10.000	115.1	82-115	X	07/15/1999	2100
991266-2	Liquids	MS		9.39	10.000	93.9	82-115		07/15/1999	2108
991326-9	Liquids		1	11.05	10.000	110.5	82-115		07/15/1999	2144
991266-2	Liquids	MSD		9.31	10.000	93.1	82-115		07/15/1999	2151



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CORE LABORATORIES

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Semivolatile Organics
Method Code....: 8270PABatch.....: 7343
Analyst.....: gfb

Surrogate	Units
2,4,6-Tribromophenol	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	141.80	200	71	10-123		07/14/1999	2320
		SB	1	178.12	200	89	10-123		07/15/1999	0010
991263-5	Solid		1	157.41	200	79	19-122		07/15/1999	1614
991263-4	Solid		1	146.85	200	73	19-122		07/15/1999	1705
991263-6	Solid		1	165.28	200	83	19-122		07/15/1999	1756
991263-8	Solid		1	163.17	200	82	19-122		07/15/1999	1937
991263-9	Solid		1	161.40	200	81	19-122		07/15/1999	2027
991263-11	Solid		1	167.26	200	84	19-122		07/15/1999	2207
991263-12	Solid		1	179.73	200	90	19-122		07/15/1999	2256
991278-1	Solid		1	171.08	200	86	19-122		07/15/1999	2346
991278-2	Solid		1	183.01	200	92	19-122		07/16/1999	0036
991278-3	Solid		1	168.19	200	84	19-122		07/16/1999	0126

Surrogate	Units
2-Fluorobiphenyl	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	51.58	100	52	43-116		07/14/1999	2320
		SB	1	85.02	100	85	43-116		07/15/1999	0010
991263-5	Solid		1	119.1	100	119	30-115	X	07/15/1999	1614
991263-4	Solid		1	122.6	100	123	30-115	X	07/15/1999	1705
991263-6	Solid		1	98.68	100	99	30-115		07/15/1999	1756
991263-8	Solid		1	92.49	100	92	30-115		07/15/1999	1937
991263-9	Solid		1	92.34	100	92	30-115		07/15/1999	2027
991263-11	Solid		1	118.4	100	118	30-115	X	07/15/1999	2207
991263-12	Solid		1	133.8	100	134	30-115	X	07/15/1999	2256
991278-1	Solid		1	125.2	100	125	30-115	X	07/15/1999	2346
991278-2	Solid		1	119.1	100	119	30-115	X	07/16/1999	0036
991278-3	Solid		1	124.5	100	124	30-115	X	07/16/1999	0126

Surrogate	Units
2-Fluorophenol	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	95.75	200	48	21-110		07/14/1999	2320
		SB	1	107.26	200	54	21-110		07/15/1999	0010
991263-5	Solid		1	113.66	200	57	25-121		07/15/1999	1614
991263-4	Solid		1	100.20	200	50	25-121		07/15/1999	1705
991263-6	Solid		1	112.93	200	56	25-121		07/15/1999	1756
991263-8	Solid		1	92.10	200	46	25-121		07/15/1999	1937



0230

CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
2-Fluorophenol	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991263-9	Solid		1	112.73	200	56	25-121		07/15/1999	2027
991263-11	Solid		1	118.37	200	59	25-121		07/15/1999	2207
991263-12	Solid		1	129.74	200	65	25-121		07/15/1999	2256
991278-1	Solid		1	121.13	200	61	25-121		07/15/1999	2346
991278-2	Solid		1	118.46	200	59	25-121		07/16/1999	0036
991278-3	Solid		1	124.62	200	62	25-121		07/16/1999	0126

Surrogate	Units
Nitrobenzene-d5	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	41.49	100	41	35-114		07/14/1999	2320
		SB	1	52.56	100	53	35-114		07/15/1999	0010
991263-5	Solid		1	60.82	100	61	23-120		07/15/1999	1614
991263-4	Solid		1	60.38	100	60	23-120		07/15/1999	1705
991263-6	Solid		1	58.41	100	58	23-120		07/15/1999	1756
991263-8	Solid		1	54.01	100	54	23-120		07/15/1999	1937
991263-9	Solid		1	57.63	100	58	23-120		07/15/1999	2027
991263-11	Solid		1	58.79	100	59	23-120		07/15/1999	2207
991263-12	Solid		1	68.51	100	69	23-120		07/15/1999	2256
991278-1	Solid		1	61.65	100	62	23-120		07/15/1999	2346
991278-2	Solid		1	63.53	100	64	23-120		07/16/1999	0036
991278-3	Solid		1	62.52	100	63	23-120		07/16/1999	0126

Surrogate	Units
Phenol-d6	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	123.50	200	62	10-110		07/14/1999	2320
		SB	1	155.01	200	78	10-110		07/15/1999	0010
991263-5	Solid		1	169.38	200	85	24-113		07/15/1999	1614
991263-4	Solid		1	124.54	200	62	24-113		07/15/1999	1705
991263-6	Solid		1	160.40	200	80	24-113		07/15/1999	1756
991263-8	Solid		1	119.95	200	60	24-113		07/15/1999	1937
991263-9	Solid		1	155.69	200	78	24-113		07/15/1999	2027
991263-11	Solid		1	160.03	200	80	24-113		07/15/1999	2207
991263-12	Solid		1	191.25	200	96	24-113		07/15/1999	2256
991278-1	Solid		1	185.63	200	93	24-113		07/15/1999	2346
991278-2	Solid		1	169.75	200	85	24-113		07/16/1999	0036
991278-3	Solid		1	175.86	200	88	24-113		07/16/1999	0126



0 0231

CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
Terphenyl-d14	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	40.42	100	40	33-141		07/14/1999	2320
		SB	1	53.56	100	54	33-141		07/15/1999	0010
991263-5	Solid		1	55.46	100	55	18-137		07/15/1999	1614
991263-4	Solid		1	51.80	100	52	18-137		07/15/1999	1705
991263-6	Solid		1	53.69	100	54	18-137		07/15/1999	1756
991263-8	Solid		1	52.81	100	53	18-137		07/15/1999	1937
991263-9	Solid		1	48.49	100	48	18-137		07/15/1999	2027
991263-11	Solid		1	55.39	100	55	18-137		07/15/1999	2207
991263-12	Solid		1	59.85	100	60	18-137		07/15/1999	2256
991278-1	Solid		1	56.03	100	56	18-137		07/15/1999	2346
991278-2	Solid		1	59.51	100	60	18-137		07/16/1999	0036
991278-3	Solid		1	58.98	100	59	18-137		07/16/1999	0126

Method.....: Semivolatile Organics

Batch.....: 7379

Method Code.....: 8270PA

Analyst.....: gfb

Surrogate	Units
2,4,6-Tribromophenol	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	137.85	200	69	19-122		07/16/1999	1515
991278-9	Solid		1	122.91	200	61	19-122		07/16/1999	1606
991278-11	Solid		1	160.69	200	80	19-122		07/16/1999	1656
991278-12	Solid		1	152.64	200	76	19-122		07/16/1999	1747
991278-13	Solid		1	155.79	200	78	19-122		07/16/1999	1837
991296-1	Solid		1	173.76	200	87	19-122		07/16/1999	1927
		MB	1	166.80	200	83	10-123		07/16/1999	2017
		SB	1	174.24	200	87	10-123		07/16/1999	2107
991263-7	Solid		5	12.94	200	32	19-122		07/16/1999	2157
991263-10	Solid		10	0.0	200	0	19-122	X	07/16/1999	2246

Surrogate	Units
2-Fluorobiphenyl	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	109.83	100	110	30-115		07/16/1999	1515
991278-9	Solid		1	77.43	100	77	30-115		07/16/1999	1606
991278-11	Solid		1	117.34	100	117	30-115	X	07/16/1999	1656
991278-12	Solid		1	116.25	100	116	30-115	X	07/16/1999	1747
991278-13	Solid		1	102.48	100	102	30-115		07/16/1999	1837
991296-1	Solid		1	123.8	100	124	30-115	X	07/16/1999	1927
		MB	1	122.3	100	122	43-116	X	07/16/1999	2017
		SB	1	120.2	100	120	43-116	X	07/16/1999	2107



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CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
2-Fluorobiphenyl	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991263-7	Solid		5	18.75	100	94	30-115		07/16/1999	2157
991263-10	Solid		10	5.62	100	56	30-115		07/16/1999	2246

Surrogate	Units
2-Fluorophenol	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	114.79	200	57	25-121		07/16/1999	1515
991278-9	Solid		1	101.75	200	51	25-121		07/16/1999	1606
991278-11	Solid		1	123.39	200	62	25-121		07/16/1999	1656
991278-12	Solid		1	117.27	200	59	25-121		07/16/1999	1747
991278-13	Solid		1	102.79	200	51	25-121		07/16/1999	1837
991296-1	Solid		1	105.31	200	53	25-121		07/16/1999	1927
		MB	1	120.24	200	60	21-110		07/16/1999	2017
		SB	1	126.85	200	63	21-110		07/16/1999	2107
991263-7	Solid		5	19.81	200	50	25-121		07/16/1999	2157
991263-10	Solid		10	12.78	200	64	25-121		07/16/1999	2246

Surrogate	Units
Nitrobenzene-d5	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	58.07	100	58	23-120		07/16/1999	1515
991278-9	Solid		1	53.84	100	54	23-120		07/16/1999	1606
991278-11	Solid		1	63.83	100	64	23-120		07/16/1999	1656
991278-12	Solid		1	64.03	100	64	23-120		07/16/1999	1747
991278-13	Solid		1	56.77	100	57	23-120		07/16/1999	1837
991296-1	Solid		1	59.47	100	59	23-120		07/16/1999	1927
		MB	1	61.09	100	61	35-114		07/16/1999	2017
		SB	1	61.90	100	62	35-114		07/16/1999	2107
991263-7	Solid		5	13.86	100	69	23-120		07/16/1999	2157
991263-10	Solid		10	12.99	100	130	23-120	X	07/16/1999	2246

Surrogate	Units
Phenol-d6	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	166.99	200	83	24-113		07/16/1999	1515
991278-9	Solid		1	144.24	200	72	24-113		07/16/1999	1606
991278-11	Solid		1	182.90	200	91	24-113		07/16/1999	1656



030233

CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991278

Report Date.: 07/20/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
Phenol-d6	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-12	Solid		1	163.75	200	82	24-113		07/16/1999	1747
991278-13	Solid		1	152.28	200	76	24-113		07/16/1999	1837
991296-1	Solid		1	174.85	200	87	24-113		07/16/1999	1927
		MB	1	178.99	200	89	10-110		07/16/1999	2017
		SB	1	179.75	200	90	10-110		07/16/1999	2107
991263-7	Solid		5	3.94	200	10	24-113	X	07/16/1999	2157
991263-10	Solid		10	3.27	200	16	24-113	X	07/16/1999	2246

Surrogate	Units
Terphenyl-d14	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		1	50.51	100	51	18-137		07/16/1999	1515
991278-9	Solid		1	49.74	100	50	18-137		07/16/1999	1606
991278-11	Solid		1	53.61	100	54	18-137		07/16/1999	1656
991278-12	Solid		1	52.48	100	52	18-137		07/16/1999	1747
991278-13	Solid		1	51.01	100	51	18-137		07/16/1999	1837
991296-1	Solid		1	54.14	100	54	18-137		07/16/1999	1927
		MB	1	51.75	100	52	33-141		07/16/1999	2017
		SB	1	50.74	100	51	33-141		07/16/1999	2107
991263-7	Solid		5	16.46	100	82	18-137		07/16/1999	2157
991263-10	Solid		10	9.47	100	95	18-137		07/16/1999	2246



n 0234
CORE LABORATORIES

ANALYTICAL SUMMARY REPORT

Job Number: 991278

Report Date: 07/20/19

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

BATCH	7237	ANALYTICAL METHOD	AK101	DESCRIPTION	Gasoline Range Organics				ANALYST	evd
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/13/99	0123	18.4
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/13/99	0149	22.4
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/13/99	0215	16.4
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/13/99	0242	19.1
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/13/99	0308	15.9
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/13/99	0334	20.8
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/13/99	0400	12.3
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/13/99	0427	14.6

BATCH	7275	ANALYTICAL METHOD	EPA 3550	DESCRIPTION	Extraction (Ultrasonic) SVOCs				ANALYST	tmp
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/14/99	0000	1
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/14/99	0000	1
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/14/99	0000	1
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/14/99	0000	1
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/14/99	0000	1
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/14/99	0000	1
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/14/99	0000	1
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/14/99	0000	1

BATCH	7278	ANALYTICAL METHOD	EPA 3630C	DESCRIPTION	Cleanup (Silica Gel)				ANALYST	tmp
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/14/99	0000	1
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/14/99	0000	1
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/14/99	0000	1
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/14/99	0000	1
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/14/99	0000	1
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/14/99	0000	1
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/14/99	0000	1
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/14/99	0000	1

BATCH	7256	ANALYTICAL METHOD	EPA 8020A	DESCRIPTION	Volatile Organics -Aromatics				ANALYST	evd
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/13/99	0123	18.4
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/13/99	0215	16.4
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/13/99	0242	19.1
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/13/99	0308	15.9
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/13/99	0334	20.8
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/13/99	0400	12.3

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CORE LABORATORIES

ANALYTICAL SUMMARY REPORT

Job Number: 991278

Report Date: 07/20/19

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

BATCH	7255	ANALYTICAL METHOD	EPA 8020A	DESCRIPTION	Volatile Organics -Aromatics			ANALYST	evd	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/13/99	2110	44.8
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/13/99	2137	29.3

BATCH	7320	ANALYTICAL METHOD	EPA 8260B	DESCRIPTION	Volatile Organics (Client List)			ANALYST	vz	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/14/99	2207	1.03
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/14/99	2251	1.15
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/14/99	2334	1.05
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/15/99	0102	1.02
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/15/99	0145	1.05
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/15/99	0227	1.05

BATCH	7326	ANALYTICAL METHOD	EPA 8260B	DESCRIPTION	Volatile Organics (Client List)			ANALYST	vz	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/15/99	1440	1.15
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/15/99	1642	5.15

BATCH	7343	ANALYTICAL METHOD	EPA 8270C	DESCRIPTION	Semivolatile Organics			ANALYST	gfb	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/15/99	2346	1.03
991278-2	MW-4a27'			Soil	Solid	07/02/99	0903	07/16/99	0036	1.15
991278-3	MW-5a15'			Soil	Solid	07/02/99	1024	07/16/99	0126	1.05

BATCH	7379	ANALYTICAL METHOD	EPA 8270C	DESCRIPTION	Semivolatile Organics			ANALYST	gfb	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-4	MW-5a28'			Soil	Solid	07/02/99	1112	07/16/99	1515	1.15
991278-9	MW-6a15'			Soil	Solid	07/02/99	1213	07/16/99	1606	1.02
991278-11	MW-6a28.5'			Soil	Solid	07/02/99	1245	07/16/99	1656	1.05
991278-12	MW-7a15'			Soil	Solid	07/02/99	1330	07/16/99	1747	1.05
991278-13	MW-7a27'			Soil	Solid	07/02/99	1351	07/16/99	1837	1.03

BATCH	7160	ANALYTICAL METHOD	SM 2540 B	DESCRIPTION	Total Solids			ANALYST	mls	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-1	MW-4a15'			Soil	Solid	07/02/99	0840	07/09/99	0000	1

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CORE LABORATORIES

ANALYTICAL SUMMARY REPORT

Job Number: 991278

Report Date: 07/20/19

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

991278-2	MW-6a27'	Soil	Solid	07/02/99	0903	07/09/99	0000	1
991278-3	MW-5a15'	Soil	Solid	07/02/99	1024	07/09/99	0000	1
991278-4	MW-5a28'	Soil	Solid	07/02/99	1112	07/09/99	0000	1
991278-5	MW-6a11'	Soil	Solid	07/02/99	1128	07/09/99	0000	1
991278-6	MW-6a3'	Soil	Solid	07/02/99	1138	07/09/99	0000	1
991278-7	MW-6a5'	Soil	Solid	07/02/99	1144	07/09/99	0000	1
991278-8	MW-6a10'	Soil	Solid	07/02/99	1156	07/09/99	0000	1
991278-9	MW-6a15'	Soil	Solid	07/02/99	1213	07/09/99	0000	1
991278-10	MW-6a20'	Soil	Solid	07/02/99	1224	07/09/99	0000	1
991278-11	MW-6a28.5'	Soil	Solid	07/02/99	1245	07/09/99	0000	1
991278-12	MW-7a15'	Soil	Solid	07/02/99	1330	07/09/99	0000	1
991278-13	MW-7a27'	Soil	Solid	07/02/99	1351	07/09/99	0000	1

BATCH	7293	ANALYTICAL METHOD	SM 5310-B	DESCRIPTION	Total Organic Carbon			ANALYST	gwd	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991278-5	MW-6a11'	Soil	Solid	07/02/99	1128	07/14/99	0000	1.05		
991278-6	MW-6a3'	Soil	Solid	07/02/99	1138	07/14/99	0000	1.05		
991278-7	MW-6a5'	Soil	Solid	07/02/99	1144	07/14/99	0000	1.03		
991278-8	MW-6a10'	Soil	Solid	07/02/99	1156	07/14/99	0000	1.02		
991278-9	MW-6a15'	Soil	Solid	07/02/99	1213	07/14/99	0000	1.02		
991278-10	MW-6a20'	Soil	Solid	07/02/99	1224	07/14/99	0000	1.03		



CL File : 57111-99142

SECOR International, Inc.
Chevron Facility 9-6489, Anchorage, AK
SECOR No. 7G007-037-03
Anaheim File 991278

Sample		Porosity (Total) %	Void Space % PV	Water Saturation % PV	Bulk Density		Matrix Density g/cc	Description
ID	Time				Dry g/cc	Natural g/cc		
MW-6@ 1'	1128	23.0	63.9	36.1	2.11	2.19	2.74	Gray vf-vcgr gravelly sand
MW-6@ 3'	1138	22.8	59.0	41.0	2.10	2.20	2.72	Gray vf-vcgr gravelly sand
MW-6@ 5'	1144	23.7	73.7	26.3	2.09	2.15	2.74	Gray vf-vcgr sand w/gravel
MW-6@10'	1156	22.1	70.0	30.0	2.13	2.20	2.74	Gray vf-vcgr gravelly sand
MW-6@15'	1213	24.2	72.0	28.0	2.09	2.15	2.75	Gray vf-vcgr sand w/gravel
MW-6@20'	1224	23.8	79.9	20.1	2.08	2.13	2.74	Gray vf-vcgr sand w/gravel

Total porosity, fluid saturation and sample densities determined as per API RP-40.



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CORE LABORATORIES

rpjsckl

Job Sample Receipt Checklist Report
07/07/1999

V2

Job Number.....: 991278 Location.: 57218 Customer Job ID.....:
Project Number.: 99180343 Project Description.: Chevron-Alaska
Customer.....: Secor International Inc. Contact.: Rusty Benkosky

Job Check List Date.: 07/07/1999
Project Manager.....: cem

Questions ?	(Y/N) Comments
Chain-of-Custody Present?.....	Y
...If "yes", completed properly?.....	Y
Custody seal on shipping container?.....	N
...If "yes", custody seal intact?.....	N
Custody seals on sample containers?.....	N
...If "yes", custody seal intact?.....	N
Samples chilled?.....	Y 4
Temperature of cooler acceptable? (4 deg C +/- 2). Y	
Temperature measured from temperature blank?.....	N
Samples received intact (good condition)?.....	Y
Volatile samples acceptable? (no headspace).....	n/a
Correct containers used?.....	Y
Adequate sample volume provided?.....	Y
Samples preserved correctly?.....	Y
Samples received within holding-time?.....	Y
Agreement between COC and sample labels?.....	Y
Open cooler radioactive screen at or below bkgrd?.	
Additional.....	
Comments.....	
Sample Custodian Signature/Date.....	Y



Notes/History

CORE LAB

Paul Christi Core Laboratories, Inc.

1250 E. Gene Autry Way

Anaheim, CA 92805

0239

CORE LABORATORIES

Date Range: 7/7/99

Number of Contacts: 1

99 127 ✓

Secor International Rusty Benkosky 916-364-1880

Note 7/7/99 5:34 PM T- Received samples from Alaska for 8270 SIM analyses. I told Rusty that we do not run 8270 SIM and will have to send samples to a subcontract lab at a price of \$400/sample. He checked with Chevron and approved 8270 analyses for PAH's. He wants us to send highest GRO sample to WCAS for 8270-SIM analysis. We need to run GRO ASAP so we do not run into holding time problem. Report 8270 results at our MDL.

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-6489	Chevron Contact (Name)	Bob Cochran
	Facility Address	1304 Airport Heights, Antioch, CA	(Phone)	
	Consultant Project Number	76007-037-03	Laboratory Name	CORE LAB
	Consultant Name	SECOL INTERNATIONAL	Laboratory Release Number	9178077 LINE 52
	Address	9912 Business Park Drive, Sacramento, CA	Samples Collected by (Name)	CLINT HARMS
	Project Contact (Name)	RUSTY BANISTER	Collection Date	7-2-99
(Phone)	(916)364-1890	Signature	<i>Clint Harms</i>	
(Fax Number)	(916)364-1885			

Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed								Remarks			
								BTEX + TPH + Oils + Grease + Chlorinated HC (8020 + 8020 + 5520)	TPH Diesel (8015)	Oil and Grease (5520)	Chlorinated HC (8010)	Non-Chlorinated HC (8020)	Total Lead (M)	Metals Cd,Cr,Pb,Zn,Ni (ICP or AAS)	PARTS BY GC/HGS (51m Mole)	PARTS BY GC/HGS (51m Mole)	ANALYSIS Moisture	PENETRITY: AIR FRIED + WATER FILLED	Day Bulk Density
MW-4E 15'	3	S	D	G	840	ONE EACH IN PLASTIC	YES	X					X		X				
MW-4E 27'	3	I		C	903				X						X	X			
MW-5E 15'	3			C	1024			X							X	X			
MW-5E 20'	3			C	1112				X						X	X			
MW-6E 1'	1			C	1128												X	X	X
MW-6E 3'	1			C	1138											X	X	X	X
MW-6E 5'	1			C	1144											X	X	Y	X
MW-6E 10'	1			C	1156											X	X	Y	X
MW-6E 15'	4			C	1213	I AN UNKNOWN		X							X	X	X	X	X
MW-6E 20'	1			C	1224											X	X	X	X
MW-6E 28.5'	3			C	1245	ONE EACH IN PLASTIC		X							X	X			
MW-7E 15'	3			C	1330				X						X	X			
MW-7E 27'	3			C	1351				X						X	X			

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>Clint Harms</i>	SECOL	7-3-99 800	<i>JL</i>	CORE LAB	7-3-99	24 Hrs. <input checked="" type="radio"/>
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs. <input type="radio"/>
			<i>Clint Harms</i>	CORE LAB	7-3-99 1030	5 Days <input type="radio"/>
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Date/Time		10 Days <input type="radio"/>
						As Contracted <input type="radio"/>

0720

Sample: 991278-4

Polynuclear Aromatic Hydrocarbons by EPA 8270/SIM

0000241

Date Received: 07/19/99
 Date Extracted: 07/21/99
 Date Analyzed: 07/22/99
 Instrument ID: HP-1 5973

Matrix: Soil
 Sample Amount: 50g:0.5 mL
 Run Number: 42977HC3
 Units: ug/kg (ppb)

CAS #		Concentration	Detection Limit
33-32-9	Acenaphthene	ND	0.5
208-96-8	Acenaphthylene	ND	1
120-12-7	Anthracene	ND	1
56-55-3	Benzo(a)anthracene	ND	1
205-99-2	Benzo(b & k)fluoranthene	ND	1
191-24-2	Benzo(g,h,i)perylene	ND	1
50-32-8	Benzo(a)pyrene	ND	1
218-01-9	Chrysene	ND	1
53-70-3	Dibenzo(a,h)anthracene	ND	1
204-44-0	Fluoranthene	ND	1
86-73-7	Fluorene	ND	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1
91-20-3	Naphthalene	0.9	0.5
85-01-8	Phenanthrene	ND	1
129-00-0	Pyrene	0.6	0.5

Surrogate	Percent Recovery	QC Limits
2-Fluorobiphenyl	55	35-114
Terphenyl-d14	75	30 121

Sample: Method Blank

Polymer Aromatic Hydrocarbons by EPA 8270/SIM

n 0242

Date Received: 07/19/99
Date Extracted: 07/21/99
Date Analyzed: 07/22/99
Instrument ID: HP-1 5973

Matrix: Soil
Sample Amount: 50g:0.5 mL
Run Number: 42977H01
Units: ug/kg (ppb)

CAS #		Concentration	Detection Limit
83-32-9	Acenaphthene	ND	0.5
208-96-8	Acenaphthylene	ND	1
120-12-7	Anthracene	ND	1
56-55-3	Benzo(a)anthracene	ND	1
205-99-2	Benzo(b & k)fluoranthenes	ND	1
191-24-2	Benzo(g,h,i)perylene	ND	1
50-32-8	Benzo(a)pyrene	ND	1
218-01-9	Chrysene	ND	1
53-70-3	Dibenzo(a,h)anthracene	ND	1
204-44-0	Fluoranthene	ND	1
86-73-7	Fluorene	ND	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1
91-20-3	Naphthalene	ND	0.5
85-01-8	Phenanthrene	ND	1
129-00-0	Pyrene	ND	0.5

Surrogate	Percent Recovery	QC Limits
2-Fluorobiphenyl	61	35-114
Terphenyl-d14	79	30-121

Matrix Spike (MS and MSD)
% Recovery and RPD Summary

0 0243

Date Analyzed: 07/22/99
QC Batch C72199SP

Matrix: Soil
Units: ug/kg (ppb)

Polymer Aromatic Hydrocarbons

Compound	Conc Spiked	Conc Sample	% Rec MS	% Rec MSD	% Rec MSD	RPD
Acenaphthene	100	ND	67.6	68	62.0	62
Acenaphthylene	100	ND	73.1	73	67.3	67
Anthracene	100	ND	70.8	71	64.6	65
Benzo(a)anthracene	100	ND	76.4	76	70.9	71
Benzo(b & k) fluoranthene	200	ND	180	90	170	85
Benzo(g,h,i) perylene	100	ND	93.4	93	85.4	85
Benzo(a)pyrene	100	ND	89.6	90	82.3	82
Chrysene	100	ND	74.6	75	70.3	70
Dibenzo(a,h) anthracene	100	ND	93.8	94	86.6	87
Fluoranthene	100	ND	78.6	79	72.5	73
Fluorene	100	ND	71.8	72	65.6	66
Indeno(1,2,3-cd)pyrene	100	ND	91.7	92	84.4	84
Naphthalene	100	0.9	53.8	53	56.8	56
Phenanthrene	100	ND	74.4	74	68.3	68
Pyrene	100	0.6	74.8	74	70.1	70

Quality Control Limits

	Recovery	RPD
Acenaphthene	53-125	25
Acenaphthylene	28-125	25
Anthracene	23-125	25
Benzo(a)anthracene	44-125	25
Benzo(b&k) fluoranthenes	42-125	25
Benzo(g,h,i) perylene	25-149	25
Benzo(a)pyrene	36-125	25
Chrysene	43-125	25
Dibenzo(a,h) anthracene	25-125	25
Fluoranthene	42-125	25
Fluorene	51-125	25
Indeno(1,2,3-cd)pyrene	35-125	25
Naphthalene	48-125	25
Phenanthrene	47-125	25
Pyrene	33-125	25

Chain-of-Custody--Record

Chevron U.S.A. Inc. P.O. BOX 5004 on Ramon, CA 94583 AX (415)842-9591	Chevron Facility Number	9-6489	Chevron Contact (Name)	Bob Cochran
	Facility Address	1304 Airport Heights, Livermore, CA	(Phone)	
	Consultant Project Number	76007-037-03	Laboratory Name	CORE LAB
	Consultant Name	SECOR INSTALLATION C	Laboratory Release Number	9178077 LINE 52
	Address	9912 BUSINESS PARK DR., LIVERMORE, CA	Samples Collected by (Name)	CLINT FARMS
	Project Contact (Name)	RUSTI BURKOSKI	Collection Date	7-2-99
(Phone)	(916) 364-1880 (Fax Number)	Signature	<i>Clint Farms</i>	

Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Coarse C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed								Remarks		
								ETDX + (S020 + B020) + C0101	TPH Diesel (E015)	Oil and Grease (S520)	Chlorinated HC (E010)	Non-Chlorinated HC (E020)	Total Lead (A)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or A)	Hg/Cs + MeBe B19260	Pd/Hg BT GCras (5in max)	AC: Soil Moisture	Porosity: Air Fried + Water Filled
W-1815'	3	S	D	840	ONE EACH IN MEDIUM	YES	X							X	X			
W-1827'	3			903			X							X	X			
W-1825'	3			1024			X							X	X			
W-1820'	3			1112			X							X	X			
W-601'	1			1128												X	X	X
W-603'	1			1138												X	X	X
W-605'	1			1144												X	X	X
W-6010'	1			1156												X	X	X
W-6015'	4			1213	1 ON MEDIUM		X							X	X	X	X	X
W-6020'	1			1224												X	X	X
W-6020.5'	3			1245	ONE EACH IN MEDIUM		X							X	X			
W-6015'	3			1330			X							X	X			
W-7027'	3			1351			X							X	X			

Inquadrated By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>Rebekah</i>	SECOR	7-3-99 800	<i>JL</i>	CORE LAB	7-3-99	24 Hrs.
Inquadrated By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
			<i>Rebekah</i>	CORE	07/07/99 1030	5 Days
Inquadrated By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
						As Contracted

991278



0000245

CORE LABORATORIES

SAMPLE INFORMATION

Date: 07/16/1999

Job Number.: 991277
Customer...: Secor International Inc.
Attn.....: Rusty Benkosky

Project Number.....: 99180343
Customer Project ID....: 9-6489
Project Description....: Chevron-Alaska

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
991277-1	S-1	Soil	07/02/1999	15:00	07/07/1999	10:30
991277-2	S-2	Soil	07/02/1999	15:10	07/07/1999	10:30



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991277

Date: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: S-1
Date Sampled.....: 07/02/1999
Time Sampled.....: 15:00
Sample Matrix.....: Soil

Laboratory Sample ID: 991277-1
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	4	0	%	07/09/99	mls
EPA 3050B	Acid Digestion: Solids, Solid	Complete			07/12/99	gwd
EPA 6010B	Metals Analysis (ICAP) Lead, Solid	3.05	2.50	mg/Kg	07/13/99	eaw
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	20.0	1.51	mg/Kg	07/12/99	evd
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Toluene, Solid Xylenes (total), Solid	0.12 0.56 2.02 6.95	0.02 0.02 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg	07/12/99 07/12/99 07/12/99 07/12/99	evd evd evd evd



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991277

Date: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: S-2
Date Sampled.....: 07/02/1999
Time Sampled.....: 15:10
Sample Matrix.....: Soil

Laboratory Sample ID: 991277-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SM 2540 B	% Moisture, Solid	6	0	%	07/09/99	mls
EPA 3050B	Acid Digestion: Solids, Solid	Complete			07/12/99	gwd
EPA 6010B	Metals Analysis (ICAP) Lead, Solid	10.4	2.50	mg/Kg	07/13/99	eaw
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Solid	2.09	1.99	mg/Kg	07/13/99	evd
EPA 8020A	Volatile Organics -Aromatics Benzene, Solid Ethylbenzene, Solid Toluene, Solid Xylenes (total), Solid	<0.02 0.06 0.1 0.24	0.02 0.02 0.02 0.02	mg/Kg mg/Kg mg/Kg mg/Kg	07/13/99 07/13/99 07/13/99 07/13/99	evd evd evd evd



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Test Method.....: SM 2540 B
Method Description.: Total Solids
Parameter: % Moisture

Batch.....: 7160
Units.....: %

Analyst...: mls
Test Code.: %MOIST

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB				0.00						07/09/1999	0000



070249

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 6010B

Batch.....: 7207

Analyst...: eaw

Method Description.: Metals Analysis (ICAP)

Units.....: mg/L

MB	Method Blank					07/12/1999	1151
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	0.00854							
Arsenic	0.00463							
Barium	-0.00022							
Cadmium	-0.00257							
Chromium	0.00392							
Copper	-0.00015							
Lead	-0.00780							
Nickel	-0.01733							
Silver	-0.00053							
Zinc	0.00027							

SB	Spiked Blank	M9010701				07/12/1999	1200
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	4.66465		5.0		93.3		75-125	
Arsenic	4.76496		5.0		95.3		75-125	
Barium	4.68198		5.0		93.6		75-125	
Cadmium	4.72225		5.0		94.4		75-125	
Chromium	4.81059		5.0		96.2		75-125	
Copper	4.44385		5.0		88.9		75-125	
Lead	4.61665		5.0		92.3		75-125	
Nickel	4.65118		5.0		93.0		75-125	
Silver	4.67345		5.0		93.5		75-125	
Zinc	4.86210		5.0		97.2		75-125	

MB	Method Blank					07/12/1999	1354
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	0.00031							
Arsenic	0.00723							
Barium	0.00000							
Cadmium	0.00024							
Chromium	0.00788							
Copper	-0.00004							
Lead	-0.00181							
Nickel	-0.01021							
Silver	-0.00138							
Zinc	0.00092							

0250
CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MB	Method Blank				07/12/1999	1403
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	-0.01108	0.00031						
Arsenic	-0.00267	0.00723						
Barium	0.00011	0.00000						
Cadmium	0.00016	0.00024						
Chromium	0.01094	0.00788						
Copper	0.00040	-0.00004						
Lead	-0.00379	-0.00181						
Nickel	-0.01377	-0.01021						
Silver	0.00110	-0.00138						
Zinc	0.00181	0.00092						

SB	Spiked Blank	M9010701			07/12/1999	1411
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	9.20066		10.000000		92.0		75-125	
Arsenic	9.36212		10.000000		93.6		75-125	
Barium	10.02933		10.000000		100.3		75-125	
Cadmium	9.39567		10.000000		94.0		75-125	
Chromium	10.05109		10.000000		100.5		75-125	
Copper	8.88535		10.000000		88.9		75-125	
Lead	10.13778		10.000000		101.4		75-125	
Nickel	9.64375		10.000000		96.4		75-125	
Silver	9.73596		10.000000		97.4		75-125	
Zinc	9.61259		10.000000		96.1		75-125	

SBD	Spiked Blank Duplicate	M9010701			07/12/1999	1420
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	9.08857	9.20066	10.000000		90.9		75-125	
Arsenic	9.26834	9.36212	10.000000		92.7		75-125	
Barium	10.04204	10.02933	10.000000		100.4		75-125	
Cadmium	9.47393	9.39567	10.000000		94.7		75-125	
Chromium	10.05558	10.05109	10.000000		100.6		75-125	
Copper	8.85452	8.88535	10.000000		88.5		75-125	
Lead	10.05324	10.13778	10.000000		100.5		75-125	
Nickel	9.65843	9.64375	10.000000		96.6		75-125	
Silver	9.74202	9.73596	10.000000		97.4		75-125	
Zinc	9.57958	9.61259	10.000000		95.8		75-125	



0251

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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PS	Post Digestion Spike	M9010701	991222-1		07/12/1999	1840
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	5.19621		5.0	-0.02921	105		75-125	
Arsenic	5.09125		5.0	-0.02753	102		75-125	
Barium	5.39511		5.0	0.05152	107		75-125	
Cadmium	5.30034		5.0	-0.00169	106		75-125	
Chromium	5.41046		5.0	-0.01596	109		75-125	
Copper	4.98605		5.0	-0.00213	100		75-125	
Lead	5.28121		5.0	-0.04301	106		75-125	
Nickel	5.30300		5.0	-0.02642	107		75-125	
Silver	5.66226		5.0	-0.00674	113		75-125	
Titanium (Ti)	5.26318		5.0	-0.00010	105		75-125	
Zinc	5.20497		5.0	0.00535	104		75-125	

MS	Matrix Spike	M9010701	991222-1		07/12/1999	1848
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	10.49463		10.000000	-0.02921	105		75-125	
Arsenic	10.17946		10.000000	-0.02753	102		75-125	
Barium	11.12952		10.000000	0.05152	111		75-125	
Cadmium	10.72566		10.000000	-0.00169	107		75-125	
Chromium	10.99549		10.000000	-0.01596	110		75-125	
Copper	10.23930		10.000000	-0.00213	102		75-125	
Lead	10.90024		10.000000	-0.04301	109		75-125	
Nickel	10.87813		10.000000	-0.02642	109		75-125	
Silver	1.26023		10.000000	-0.00674	13		75-125	Y
Titanium (Ti)	10.81277		10.000000	-0.00010	108		75-125	
Zinc	10.20182		10.000000	0.00535	102		75-125	

MSD	Matrix Spike Duplicate	M9010701	991222-1		07/12/1999	1856
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Antimony	10.90362	10.49463	10.000000	-0.02921	109	3.8	75-125	
Arsenic	10.51868	10.17946	10.000000	-0.02753	105	3.3	75-125	
Barium	11.45695	11.12952	10.000000	0.05152	114	2.9	75-125	
Cadmium	11.20744	10.72566	10.000000	-0.00169	112	4.4	75-125	
Chromium	11.42709	10.99549	10.000000	-0.01596	114	3.8	75-125	
Copper	10.53120	10.23930	10.000000	-0.00213	105	2.8	75-125	
Lead	11.37281	10.90024	10.000000	-0.04301	114	4.2	75-125	
Nickel	11.13358	10.87813	10.000000	-0.02642	112	2.3	75-125	
Silver	0.92674	1.26023	10.000000	-0.00674	9	30.5	75-125	
Titanium (Ti)	11.30348	10.81277	10.000000	-0.00010	113	4.4	75-125	



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	M9010701	991222-1		07/12/1999	1856
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Zinc	10.66841	10.20182	10.000000	0.00535	107	4.5	75-125	20

Test Method.....: AK101	Batch.....: 7237	Analyst...: evd
Method Description.: Gasoline Range Organics	Units.....: mg/L	

MB	Method Blank				07/12/1999	1135
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	0							

LCS	Laboratory Control Sample	09060803			07/12/1999	1227
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	811		1000.0		81.1		70-120	

LCD	Laboratory Control Sample Duplicate	09060803			07/12/1999	1254
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	825	811	1000.0		82.5	1.7	70-120	20

MS	Matrix Spike	09071203	991263-12	50	07/13/1999	0519
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	876		1000.0	11	86.5		60-140	

MSD	Matrix Spike Duplicate	09071203	991263-12	50	07/13/1999	0545
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Gasoline Range Organics (C6-C10)	837	876	1000.0	11	82.6	5	60-140	50



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 8020A
Method Description.: Volatile Organics -AromaticsBatch.....: 7236
Units.....: ug/L

Analyst...: evd

MB	Method Blank					07/12/1999	1135
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	0.00							
Ethylbenzene	0.00							
Methyl-t-Butyl Ether (MTBE)	0.00							
Toluene	0.00							
Xylenes (total)	0.00							

LCS	Laboratory Control Sample	09071201				07/12/1999	1320
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	56.48		50		113.0		39-150	
Ethylbenzene	54.25		50		108.5		32-160	
Methyl-t-Butyl Ether (MTBE)	292.60		250		117.0		50-150	
Toluene	56.18		50		112.4		46-148	
Xylenes (total)	170.52		150		113.7		75-125	

LCD	Laboratory Control Sample Duplicate	09071201				07/12/1999	1347
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	57.16	56.48	50		114.3		39-150	
Ethylbenzene	54.63	54.25	50		109.3		32-160	
Methyl-t-Butyl Ether (MTBE)	288.71	292.60	250		115.5		50-150	
Toluene	56.44	56.18	50		112.9		46-148	
Xylenes (total)	171.92	170.52	150		114.6		75-125	

MS	Matrix Spike	09071201	991263-12	50		07/13/1999	0612
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	58.38		50	0.12	116.5		39-150	
Ethylbenzene	56.37		50	0.89	111.0		32-160	
Methyl-t-Butyl Ether (MTBE)	290.13		250	0.40	115.9		50-150	
Toluene	58.69		50	1.08	115.2		46-148	
Xylenes (total)	176.75		150	0.72	117.4		75-125	



0254
CORE LABORATORIES

Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	09071201	991263-12	50	07/13/1999	0638
-----	------------------------	----------	-----------	----	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.41	58.38	50	0.12	110.6	5	39-150	20
Ethylbenzene	52.99	56.37	50	0.89	104.2	6	32-160	20
Methyl-t-Butyl Ether (MTBE)	265.59	290.13	250	0.40	106.1	9	50-150	25
Toluene	55.85	58.69	50	1.08	109.5	5	46-148	20
Xylenes (total)	166.19	176.75	150	0.72	110.3	6	75-125	20



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CORE LABORATORIES

SURROGATE RECOVERIES REPORT

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Volatile Organics -Aromatics
Method Code.....: 8020BXBatch.....: 7236
Analyst.....: evd

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	39.42	50.0000	78.8	64-147		07/12/1999	1135
		LCS	1	44.42	50.0000	88.8	64-147		07/12/1999	1320
		LCD	1	43.35	50.0000	86.7	64-147		07/12/1999	1347
991218-5	Solid		26.8	347.40	50.0000	694.8	64-147	X	07/12/1999	1824
991263-6	Solid		13.2	44.63	50.0000	89.3	64-147		07/12/1999	1917
991263-7	Solid		13.7	39.04	50.0000	78.1	64-147		07/12/1999	1943
991263-9	Solid		16.7	39.21	50.0000	78.4	64-147		07/12/1999	2009
991263-12	Solid		16.9	42.30	50.0000	84.6	64-147		07/12/1999	2035
991263-11	Solid		20.6	41.09	50.0000	82.2	64-147		07/12/1999	2101
991263-4	Solid		19.1	39.92	50.0000	79.8	64-147		07/12/1999	2128
991277-1	Solid		14.5	46.53	50.0000	93.1	64-147		07/12/1999	2246
991277-2	Solid		18.6	41.06	50.0000	82.1	64-147		07/13/1999	0057
991278-1	Solid		17.9	39.91	50.0000	79.8	64-147		07/13/1999	0123
991278-3	Solid		15.6	41.23	50.0000	82.5	64-147		07/13/1999	0215
991278-4	Solid		16.6	65.84	50.0000	131.7	64-147		07/13/1999	0242
991278-9	Solid		15.6	40.59	50.0000	81.2	64-147		07/13/1999	0308
991278-11	Solid		19.8	42.10	50.0000	84.2	64-147		07/13/1999	0334
991278-12	Solid		11.7	42.45	50.0000	84.9	64-147		07/13/1999	0400
991269-1	Liquids		1	56.01	50.0000	112.0	64-147		07/13/1999	0453
991263-12	Solid	MS	50	44.20	50.0000	88.4	64-147		07/13/1999	0612
991263-12	Solid	MSD	50	43.84	50.0000	87.7	64-147		07/13/1999	0638

Method.....: Gasoline Range Organics
Method Code.....: AKGROBatch.....: 7237
Analyst.....: evd

Surrogate	Units
BFB (Surrogate)	mg/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991218-5	Solid		26.8	1326	50.0000	2652.0	60-140	X	07/12/1999	1824
991263-6	Solid		13.2	42.1	50.0000	84.2	60-140		07/12/1999	1917
991263-7	Solid		13.7	45.7	50.0000	91.4	60-140		07/12/1999	1943
991263-9	Solid		16.7	41.8	50.0000	83.6	60-140		07/12/1999	2009
991263-12	Solid		16.9	45.1	50.0000	90.2	60-140		07/12/1999	2035
991263-11	Solid		20.6	50.1	50.0000	100.2	60-140		07/12/1999	2101
991263-4	Solid		19.1	42.8	50.0000	85.6	60-140		07/12/1999	2128
991263-8	Solid		29.0	119	50.0000	238.0	60-140	X	07/12/1999	2154
991263-10	Solid		25.0	101	50.0000	202.0	60-140	X	07/12/1999	2220
991277-1	Solid		14.5	53.3	50.0000	106.6	60-140		07/12/1999	2246
991277-2	Solid		18.6	43.7	50.0000	87.4	60-140		07/13/1999	0057
991278-1	Solid		17.9	45.5	50.0000	91.0	60-140		07/13/1999	0123
991278-2	Solid		19.5	51.0	50.0000	102.0	60-140		07/13/1999	0149
991278-3	Solid		15.6	50.0	50.0000	100.0	60-140		07/13/1999	0215



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CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991277

Report Date.: 07/16/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
BFB (Surrogate)	mg/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991278-4	Solid		16.6	96.3	50.0000	192.6	60-140	X	07/13/1999	0242
991278-9	Solid		15.6	43.6	50.0000	87.2	60-140		07/13/1999	0308
991278-11	Solid		19.8	44.9	50.0000	89.8	60-140		07/13/1999	0334
991278-12	Solid		11.7	51.2	50.0000	102.4	60-140		07/13/1999	0400
991278-13	Solid		14.2	53.4	50.0000	106.8	60-140		07/13/1999	0427
991269-1	Liquids		1	84.9	50.0000	169.8	60-140	X	07/13/1999	0453



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CORE LABORATORIES

ANALYTICAL SUMMARY REPORT

Job Number: 991277

Report Date: 07/16/19

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

BATCH	7237	ANALYTICAL METHOD	AK101	DESCRIPTION	Gasoline Range Organics			ANALYST	evd	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991277-1	S-1			Soil	Solid	07/02/99	1500	07/12/99	2246	15.1
991277-2	S-2			Soil	Solid	07/02/99	1510	07/13/99	0057	19.9

BATCH	7213	ANALYTICAL METHOD	EPA 3050B	DESCRIPTION	Acid Digestion: Solids			ANALYST	gwd	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991277-1	S-1			Soil	Solid	07/02/99	1500	07/12/99	0000	1
991277-2	S-2			Soil	Solid	07/02/99	1510	07/12/99	0000	1

BATCH	7207	ANALYTICAL METHOD	EPA 6010B	DESCRIPTION	Metals Analysis (ICAP)			ANALYST	eaw	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991277-1	S-1			Soil	Solid	07/02/99	1500	07/13/99	0128	1
991277-2	S-2			Soil	Solid	07/02/99	1510	07/13/99	0137	1

BATCH	7236	ANALYTICAL METHOD	EPA 8020A	DESCRIPTION	Volatile Organics -Aromatics			ANALYST	evd	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991277-1	S-1			Soil	Solid	07/02/99	1500	07/12/99	2246	15.1
991277-2	S-2			Soil	Solid	07/02/99	1510	07/13/99	0057	19.9

BATCH	7160	ANALYTICAL METHOD	SM 2540 B	DESCRIPTION	Total Solids			ANALYST	mls	
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991277-1	S-1			Soil	Solid	07/02/99	1500	07/09/99	0000	1
991277-2	S-2			Soil	Solid	07/02/99	1510	07/09/99	0000	1

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CORE LABORATORIES

rpjsckl Job Sample Receipt Checklist Report V2

07/07/1999

Job Number.....: 991277 Location.: 57218 Customer Job ID.....:
Project Number.: 99180343 Project Description.: Chevron-Alaska
Customer.....: Secor International Inc. Contact.: Rusty Benkosky

Job Check List Date.: 07/07/1999
Project Manager.....: cem

Questions ? (Y/N) Comments

Chain-of-Custody Present?..... Y

...If "yes", completed properly?..... Y

Custody seal on shipping container?..... N

...If "yes", custody seal intact?..... N

Custody seals on sample containers?..... N

...If "yes", custody seal intact?..... N

Samples chilled?..... Y 4

Temperature of cooler acceptable? (4 deg C +/- 2). Y

Temperature measured from temperature blank?..... N

Samples received intact (good condition)?..... Y

Volatile samples acceptable? (no headspace)..... N N/A

Correct containers used?..... Y

Adequate sample volume provided?..... Y

Samples preserved correctly?..... Y

Samples received within holding-time?..... Y

Agreement between COC and sample labels?..... Y

Open cooler radioactive screen at or below bkgnd?.

Additional.....

Comments.....

Sample Custodian Signature/Date..... Y



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CORE LABORATORIES

QUALITY ASSURANCE FOOTER

METHOD REFERENCES

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, September 1986, and Updates I, II, IIIA, IIIB, and III
- (2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1995
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136) and amendments
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on limits specified in the referenced method or on actual laboratory performance. The date and time of analysis indicated on the report may not reflect the actual time of analysis for QC samples. Data reported in the QC report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis unless otherwise indicated. Unless otherwise indicated, volatiles by gas chromatography (GC) are reported from a single column. Volatiles analyses by GC on low level soils are conducted at room temperature. TCLP extractions are performed at sample amounts, approved by the State of California.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

NA	= Not analyzed	N.I.	= Not Ignitable
N/A	= Not applicable	S.I.	= Sustains Ignition
ug/L	= Micrograms per liter	I(NS)	= Ignites, but does not Sustain Ignition
mg/L	= Milligrams per liter	RPD	= Relative Percent Difference
ND	= Not detected at a value greater than the reporting limit		
NC	= Not calculable due to values lower than the detection limit		
(a)	= Surrogate recoveries were outside QC limits due to matrix effects.		
(b)	= Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate.		
(c)	= Matrix spike recoveries were outside QC limits due to matrix effects.		
(d)	= Relative Percent Difference (RPD) for duplicate analysis outside QC limits due to actual differences in the sample matrix.		
(e)	= The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable.		
(f)	= Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern.		
(g)	= Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern.		
(h)	= High dilution due to matrix effects		

QC SAMPLE IDENTIFICATIONS

MB	= Method Blank	SB	= Storage Blank
R8	= Reagent Blank	MS	= Matrix Spike
ICS	= Initial Calibration Blank	MSD	= Matrix Spike Duplicate
CCB	= Continuing Calibration Blank	MD	= Matrix Duplicate
CS	= Calibration Standard	BS	= Blank Spike
ICV	= Initial Calibration Verification	SS	= Surrogate Spike
CCV	= Continuing Calibration Verification	LCS	= Laboratory Control Standard
		RS	= Reference Standard

SUBCONTRACTED LABORATORY LOCATIONS

Core Laboratories:	Aurora, Colorado	*AU
	Casper, Wyoming	*CA
	Carson, California	*CP
	Corpus Christi, Texas	*CC
	Edison, New Jersey	*ED
	Houston, Texas (Env)	*HE
	Houston, Texas (Pet)	*HP
	Indianapolis, Indiana	*IN
	Lake Charles, Louisiana	*LC
	Valparaiso, Indiana	*VP
	Bakersfield, California	*BK

1250 Gene Autry Way Autry Way

Anaheim, CA 92805

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CORE LABORATORIES

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ANALYTICAL REPORT

JOB NUMBER: 991272

Prepared For:

Secor International Inc.
9912 Business Park Dr. #100
Sacramento, CA 95827

Attention: Rusty Benkosky

Date: 07/19/1999

Paul Christ for
Signature

7/20/99
Date

Name: Charles Munoz
Title: Project Coordinator

1250 E. Gene Autry Way
Anaheim, CA 92805

PHONE: (714) 937-1094
FAX...: (714) 937-1170



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CORE LABORATORIES

SAMPLE INFORMATION

Date: 07/19/1999

Job Number.: 991272
 Customer...: Secor International Inc.
 Attn.....: Rusty Benkosky

Project Number.....: 99180343
 Customer Project ID....: 9-6489
 Project Description....: Chevron-Alaska

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
991272-1	MW-4	Water	07/03/1999	00:00	07/07/1999	10:30
991272-2	MW-5	Water	07/03/1999	00:00	07/07/1999	10:30
991272-3	MW-6	Water	07/03/1999	00:00	07/07/1999	10:30
991272-4	MW-7	Water	07/03/1999	00:00	07/07/1999	10:30



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CORE LABORATORIES

ANALYTICAL REPORT

JOB NUMBER: 991272

Prepared For:

Secor International Inc.
9912 Business Park Dr. #100
Sacramento, CA 95827

Attention: Rusty Benkosky

Date: 07/19/1999

Paul Christ for
Signature

7/20/99
Date

Name: Charles Munoz

1250 E. Gene Autry Way
Anaheim, CA 92805

Title: Project Coordinator

PHONE: (714) 937-1094
FAX...: (714) 937-1170

C.A.E.L.A.P. 1174
L.A.C.S.D. 10146



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n CORE LABORATORIES

S A M P L E I N F O R M A T I O N

Date: 07/19/1999

Job Number.: 991272
Customer...: Secor International Inc.
Attn.....: Rusty Benkosky

Project Number.....: 99180343
Customer Project ID....: 9-6489
Project Description....: Chevron-Alaska

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
991272-1	MW-4	Water	07/03/1999	00:00	07/07/1999	10:30
991272-2	MW-5	Water	07/03/1999	00:00	07/07/1999	10:30
991272-3	MW-6	Water	07/03/1999	00:00	07/07/1999	10:30
991272-4	MW-7	Water	07/03/1999	00:00	07/07/1999	10:30



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-1
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Liquids	9330	500.0	ug/L	07/13/99	evd
EPA 8260B	Volatile Organics (Client List)					
	Acetone, Liquids	<300.0	300.0	ug/L	07/15/99	gfb
	Benzene, Liquids	537	20.0	ug/L	07/15/99	gfb
	Bromobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Bromoform, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Bromochloromethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Bromodichloromethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Bromoform, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Bromomethane, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	Methyl-t-Butyl Ether (MTBE), Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	Methyl ethyl ketone (2-Butanone), Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	n-Butylbenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	sec-Butylbenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	tert-Butylbenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Carbon disulfide, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	Carbon tetrachloride (Freon 10), Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Chlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Chloroethane, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	2-Chloroethylvinyl ether, Liquids	<100	100	ug/L	07/15/99	gfb
	Chloroform, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Chloromethane, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	2-Chlorotoluene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	4-Chlorotoluene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Dibromochloromethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2-Dibromoethane (EDB), Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2-Dibromo-3-chloropropane, Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	Dibromomethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2-Dichlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,3-Dichlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,4-Dichlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Dichlorodifluoromethane (Freon 12), Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	1,1-Dichloroethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2-Dichloroethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,1-Dichloroethene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	cis-1,2-Dichloroethene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	trans-1,2-Dichloroethene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2-Dichloropropane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	cis-1,3-Dichloropropene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	trans-1,3-Dichloropropene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,3-Dichloropropane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	2,2-Dichloropropane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,1-Dichloropropene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Ethylbenzene, Liquids	145	20.0	ug/L	07/15/99	gfb
	Hexachlorobutadiene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	2-Hexanone, Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	Iodomethane, Liquids	<100	100	ug/L	07/15/99	gfb
	Isopropylbenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb



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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-4
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-1
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	p-Isopropyltoluene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Methylene chloride, Liquids	<100	100	ug/L	07/15/99	gfb
	4-Methyl-2-pentanone (MIBK), Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	Naphthalene, Liquids	55.6	40.0	ug/L	07/15/99	gfb
	n-Propylbenzene, Liquids	50.8	20.0	ug/L	07/15/99	gfb
	Styrene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,1,1,2-Tetrachloroethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1,2,2-Tetrachloroethane, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	Tetrachloroethene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Toluene, Liquids	691	20.0	ug/L	07/15/99	gfb
	1,2,3-Trichlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2,4-Trichlorobenzene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,1,1-Trichloroethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,1,2-Trichloroethane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Trichloroethene, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	Trichlorofluoromethane (Freon 11), Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	1,1,2-Trichlorotrifluoroethane(Freon113), Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2,3-Trichloropropane, Liquids	<20.0	20.0	ug/L	07/15/99	gfb
	1,2,4-Trimethylbenzene, Liquids	417	40.0	ug/L	07/15/99	gfb
	1,3,5-Trimethylbenzene, Liquids	141	20.0	ug/L	07/15/99	gfb
	Vinyl acetate, Liquids	<200.0	200.0	ug/L	07/15/99	gfb
	Vinyl chloride, Liquids	<40.0	40.0	ug/L	07/15/99	gfb
	m&p-Xylenes, Liquids	305	40.0	ug/L	07/15/99	gfb
	o-Xylene, Liquids	65.6	20.0	ug/L	07/15/99	gfb
EPA 8020A	Volatile Organics -Aromatics					
	Benzene, Liquids	525	5	ug/L	07/13/99	evd
	Ethylbenzene, Liquids	41	5	ug/L	07/13/99	evd
	Toluene, Liquids	540	5	ug/L	07/13/99	evd
	Xylenes (total), Liquids	292	5	ug/L	07/13/99	evd



010267

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Liquids	1180	50.00	ug/L	07/13/99	evd
EPA 8260B	Volatile Organics (Client List)					
	Acetone, Liquids	<15.00	15.00	ug/L	07/15/99	gfb
	Benzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromoform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromochloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromodichloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromoform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromomethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Methyl-t-Butyl Ether (MTBE), Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Methyl ethyl ketone (2-Butanone), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	n-Butylbenzene, Liquids		3.26	1.00	07/15/99	gfb
	sec-Butylbenzene, Liquids		1.36	1.00	07/15/99	gfb
	tert-Butylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Carbon disulfide, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Carbon tetrachloride (Freon 10), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chloroethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	2-Chloroethylvinyl ether, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	Chloroform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chloromethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	2-Chlorotoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	4-Chlorotoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Dibromochloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dibromoethane (EDB), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dibromo-3-chloropropane, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Dibromomethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,3-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,4-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Dichlorodifluoromethane (Freon 12), Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	1,1-Dichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	cis-1,2-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	trans-1,2-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	cis-1,3-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	trans-1,3-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,3-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	2,2-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Ethylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Hexachlorobutadiene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	2-Hexanone, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Iodomethane, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	Isopropylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb



CPL 0268

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-5
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-2
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	p-Isopropyltoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Methylene chloride, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	4-Methyl-2-pentanone (MIBK), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Naphthalene, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	n-Propylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Styrene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,1,2-Tetrachloroethane, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	1,1,2,2-Tetrachloroethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Tetrachloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Toluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,3-Trichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,4-Trichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,1-Trichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,2-Trichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Trichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Trichlorofluoromethane (Freon 11), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	1,1,2-Trichlorotrifluoroethane(Freon113), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,3-Trichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,4-Trimethylbenzene, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	1,3,5-Trimethylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Vinyl acetate, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Vinyl chloride, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	m&p-Xylenes, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	o-Xylene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
EPA 8020A	Volatile Organics -Aromatics					
	Benzene, Liquids	5.3	0.5	ug/L	07/13/99	evd
	Ethylbenzene, Liquids	12.2	0.5	ug/L	07/13/99	evd
	Toluene, Liquids	7.3	0.5	ug/L	07/13/99	evd
	Xylenes (total), Liquids	3.4	0.5	ug/L	07/13/99	evd



070269

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-3
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
AK101	Gasoline Range Organics	<50.00	50.00	ug/L	07/13/99	evd
	Gasoline Range Organics (C6-C10), Liquids					
EPA 8260B	Volatile Organics (Client List)					
	Acetone, Liquids	<15.00	15.00	ug/L	07/15/99	gfb
	Benzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromoform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromochloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromodichloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromoform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Bromomethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Methyl-t-Butyl Ether (MTBE), Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Methyl ethyl ketone (2-Butanone), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	n-Butylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	sec-Butylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	tert-Butylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Carbon disulfide, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Carbon tetrachloride (Freon 10), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chloroethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	2-Chloroethylvinyl ether, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	Chloroform, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Chloromethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	2-Chlorotoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	4-Chlorotoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Dibromochloromethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dibromoethane (EDB), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dibromo-3-chloropropane, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Dibromomethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,3-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,4-Dichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Dichlorodifluoromethane (Freon 12), Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	1,1-Dichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	cis-1,2-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	trans-1,2-Dichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	cis-1,3-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	trans-1,3-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,3-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	2,2-Dichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1-Dichloropropene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Ethylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Hexachlorobutadiene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	2-Hexanone, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Iodomethane, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	Isopropylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb

n 0270
CORE LABORATORIES**LABORATORY TEST RESULTS**

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-6
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-3
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	p-Isopropyltoluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Methylene chloride, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	4-Methyl-2-pentanone (MIBK), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Naphthalene, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	n-Propylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Styrene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,1,2-Tetrachloroethane, Liquids	<5.00	5.00	ug/L	07/15/99	gfb
	1,1,2,2-Tetrachloroethane, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	Tetrachloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Toluene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,3-Trichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,4-Trichlorobenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,1-Trichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,1,2-Trichloroethane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Trichloroethene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Trichlorofluoromethane (Freon 11), Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	1,1,2-Trichlorotrifluoroethane(Freon113), Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,3-Trichloropropane, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	1,2,4-Trimethylbenzene, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	1,3,5-Trimethylbenzene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
	Vinyl acetate, Liquids	<10.00	10.00	ug/L	07/15/99	gfb
	Vinyl chloride, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	m&p-Xylenes, Liquids	<2.00	2.00	ug/L	07/15/99	gfb
	o-Xylene, Liquids	<1.00	1.00	ug/L	07/15/99	gfb
EPA 8020A	Volatile Organics -Aromatics					
	Benzene, Liquids	<0.5	0.5	ug/L	07/13/99	evd
	Ethylbenzene, Liquids	<0.5	0.5	ug/L	07/13/99	evd
	Toluene, Liquids	<0.5	0.5	ug/L	07/13/99	evd
	Xylenes (total), Liquids	<0.5	0.5	ug/L	07/13/99	evd



00271

CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-4
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
AK101	Gasoline Range Organics Gasoline Range Organics (C6-C10), Liquids	20100	500.0	ug/L	07/13/99	evd
EPA 8260B	Volatile Organics (Client List)					
	Acetone, Liquids	<1500	1500	ug/L	07/15/99	gfb
	Benzene, Liquids	460	100	ug/L	07/15/99	gfb
	Bromobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	Bromochloromethane, Liquids	<100	100	ug/L	07/15/99	gfb
	Bromodichloromethane, Liquids	<100	100	ug/L	07/15/99	gfb
	Bromoform, Liquids	<100	100	ug/L	07/15/99	gfb
	Bromomethane, Liquids	<200	200	ug/L	07/15/99	gfb
	Methyl-t-Butyl Ether (MTBE), Liquids	<200	200	ug/L	07/15/99	gfb
	Methyl ethyl ketone (2-Butanone), Liquids	<1000	1000	ug/L	07/15/99	gfb
	n-Butylbenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	sec-Butylbenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	tert-Butylbenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	Carbon disulfide, Liquids	<200	200	ug/L	07/15/99	gfb
	Carbon tetrachloride (Freon 10), Liquids	<100	100	ug/L	07/15/99	gfb
	Chlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	Chloroethane, Liquids	<200	200	ug/L	07/15/99	gfb
	2-Chloroethylvinyl ether, Liquids	<500	500	ug/L	07/15/99	gfb
	Chloroform, Liquids	<100	100	ug/L	07/15/99	gfb
	Chloromethane, Liquids	<200	200	ug/L	07/15/99	gfb
	2-Chlorotoluene, Liquids	<100	100	ug/L	07/15/99	gfb
	4-Chlorotoluene, Liquids	<100	100	ug/L	07/15/99	gfb
	Dibromochloromethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2-Dibromoethane (EDB), Liquids	<100	100	ug/L	07/15/99	gfb
	1,2-Dibromo-3-chloropropane, Liquids	<1000	1000	ug/L	07/15/99	gfb
	Dibromomethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2-Dichlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,3-Dichlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,4-Dichlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	Dichlorodifluoromethane (Freon 12), Liquids	<200	200	ug/L	07/15/99	gfb
	1,1-Dichloroethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2-Dichloroethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1-Dichloroethene, Liquids	<100	100	ug/L	07/15/99	gfb
	cis-1,2-Dichloroethene, Liquids	<100	100	ug/L	07/15/99	gfb
	trans-1,2-Dichloroethene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2-Dichloropropane, Liquids	<100	100	ug/L	07/15/99	gfb
	cis-1,3-Dichloropropene, Liquids	<100	100	ug/L	07/15/99	gfb
	trans-1,3-Dichloropropene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,3-Dichloropropane, Liquids	<100	100	ug/L	07/15/99	gfb
	2,2-Dichloropropane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1-Dichloropropene, Liquids	<100	100	ug/L	07/15/99	gfb
	Ethylbenzene, Liquids	576	100	ug/L	07/15/99	gfb
	Hexachlorobutadiene, Liquids	<100	100	ug/L	07/15/99	gfb
	2-Hexanone, Liquids	<1000	1000	ug/L	07/15/99	gfb
	Iodomethane, Liquids	<500	500	ug/L	07/15/99	gfb
	Isopropylbenzene, Liquids	<100	100	ug/L	07/15/99	gfb

0272
CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 991272

Date: 07/23/1999

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

Customer Sample ID: MW-7
Date Sampled.....: 07/03/1999
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 991272-4
Date Received.....: 07/07/1999
Time Received.....: 10:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
EPA 8020A	p-Isopropyltoluene, Liquids	<100	100	ug/L	07/15/99	gfb
	Methylene chloride, Liquids	<500	500	ug/L	07/15/99	gfb
	4-Methyl-2-pentanone (MIBK), Liquids	<1000	1000	ug/L	07/15/99	gfb
	Naphthalene, Liquids	<200	200	ug/L	07/15/99	gfb
	n-Propylbenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	Styrene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1,1,2-Tetrachloroethane, Liquids	<500	500	ug/L	07/15/99	gfb
	1,1,2,2-Tetrachloroethane, Liquids	<200	200	ug/L	07/15/99	gfb
	Tetrachloroethene, Liquids	<100	100	ug/L	07/15/99	gfb
	Toluene, Liquids	2700	100	ug/L	07/15/99	gfb
	1,2,3-Trichlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2,4-Trichlorobenzene, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1,1-Trichloroethane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,1,2-Trichloroethane, Liquids	<100	100	ug/L	07/15/99	gfb
	Trichloroethene, Liquids	<100	100	ug/L	07/15/99	gfb
	Trichlorofluoromethane (Freon 11), Liquids	<1000	1000	ug/L	07/15/99	gfb
	1,1,2-Trichlorotrifluoroethane(Freon113), Liquids	<100	100	ug/L	07/15/99	gfb
	1,2,3-Trichloropropane, Liquids	<100	100	ug/L	07/15/99	gfb
	1,2,4-Trimethylbenzene, Liquids	774	200	ug/L	07/15/99	gfb
	1,3,5-Trimethylbenzene, Liquids	259	100	ug/L	07/15/99	gfb
	Vinyl acetate, Liquids	<1000	1000	ug/L	07/15/99	gfb
	Vinyl chloride, Liquids	<200	200	ug/L	07/15/99	gfb
	m&p-Xylenes, Liquids	1990	200	ug/L	07/15/99	gfb
	o-Xylene, Liquids	680	100	ug/L	07/15/99	gfb
	Volatile Organics -Aromatics					
	Benzene, Liquids	527	5	ug/L	07/13/99	evd
	Ethylbenzene, Liquids	507	5	ug/L	07/13/99	evd
	Toluene, Liquids	2820	5	ug/L	07/13/99	evd
	Xylenes (total), Liquids	2420	5	ug/L	07/13/99	evd



000273

CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: AK101
Method Description.: Gasoline Range Organics

Batch.....: 7257
Units.....: mg/L

Analyst...: evd

MB	Method Blank					07/13/1999 0757
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Organics (C6-C10)	0						

LCS	Laboratory Control Sample	09071203				07/13/1999 0823
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Organics (C6-C10)	847		1000.0		84.7	70-120	

LCD	Laboratory Control Sample Duplicate	09071203				07/13/1999 0850
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Organics (C6-C10)	886	847	1000.0		88.6	70-120	
				4.5	20		

MS	Matrix Spike	09071203	991271-4			07/13/1999 1514
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Organics (C6-C10)	857		1000.0	3	85.4	60-140	

MSD	Matrix Spike Duplicate	09071203	991271-4			07/13/1999 1604
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Gasoline Range Organics (C6-C10)	937	857	1000.0	3	93.4	60-140	
				9	50		

Test Method.....: EPA 8260B
Method Description.: Volatile Organics (Client List)

Batch.....: 7332
Units.....: ug/L

Analyst...: gfb

LCS	Laboratory Control Sample	09071204				07/15/1999 1039
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene	10.72		10.000000		107.2	74-135	
Chlorobenzene	10.61		10.000000		106.1	76-124	
1,1-Dichloroethene	9.93		10.000000		99.3	42-134	
Toluene	11.03		10.000000		110.3	79-132	
Trichloroethene	11.00		10.000000		110.0	77-133	



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/15/1999	1128

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acrolein	0							
Acrylonitrile	0							
Acetone	0							
Benzene	0							
Bromobenzene	0							
Bromoform	0							
Bromomethane	0							
Methyl-t-Butyl Ether (MTBE)	0							
Methyl ethyl ketone (2-Butanone)	0							
n-Butylbenzene	0							
sec-Butylbenzene	0							
tert-Butylbenzene	0							
Carbon disulfide	0							
Carbon tetrachloride (Freon 10)	0							
Chlorobenzene	0							
Chloroethane	0							
2-Chloroethylvinyl ether	0							
Chloroform	0							
Chloromethane	0							
2-Chlorotoluene	0							
4-Chlorotoluene	0							
Dibromochloromethane	0							
1,2-Dibromoethane (EDB)	0							
1,2-Dibromo-3-chloropropane	0							
Dibromomethane	0							
1,2-Dichlorobenzene	0							
1,3-Dichlorobenzene	0							
1,4-Dichlorobenzene	0							
Dichlorodifluoromethane (Freon 12)	0							
1,1-Dichloroethane	0							
1,2-Dichloroethane	0							
1,1-Dichloroethene	0							
cis-1,2-Dichloroethene	0							
trans-1,2-Dichloroethene	0							
1,2-Dichloropropane	0							
cis-1,3-Dichloropropene	0							
trans-1,3-Dichloropropene	0							
1,3-Dichloropropane	0							
2,2-Dichloropropane	0							
1,1-Dichloropropene	0							
Ethylbenzene	0							
Hexachlorobutadiene	0							
2-Hexanone	0							
Iodomethane	0							
Isopropylbenzene	0							
p-Isopropyltoluene	0							
Methylene chloride	0							
4-Methyl-2-pentanone (MIBK)	0							
Naphthalene	0							
n-Propylbenzene	0							
Styrene	0							
1,1,1,2-Tetrachloroethane	0							



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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				07/15/1999	1128

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
1,1,2,2-Tetrachloroethane	0							
Tetrachloroethene	0							
Toluene	0							
1,2,3-Trichlorobenzene	0							
1,2,4-Trichlorobenzene	0							
1,1,1-Trichloroethane	0							
1,1,2-Trichloroethane	0							
Trichloroethene	0							
Trichlorofluoromethane (Freon 11)	0							
1,1,2-Trichlorotrifluoroethane(Freon113)	0							
1,2,3-Trichloropropane	0							
1,2,4-Trimethylbenzene	0							
1,3,5-Trimethylbenzene	0							
Vinyl acetate	0							
Vinyl chloride	0							
m&p-Xylenes	0							
o-Xylene	0							
Tetrahydrofuran	0							

MS	Matrix Spike	09071204	991266-2			07/15/1999	2108
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	10.78		10.000000	0	107.8		88-134	
Chlorobenzene	11.27		10.000000	0	112.7		92-122	
1,1-Dichloroethene	8.29		10.000000	0	82.9		39-141	
Toluene	11.43		10.000000	0	114.3		86-137	
Trichloroethene	11.39		10.000000	0	113.9		75-148	

MSD	Matrix Spike Duplicate	09071204	991266-2			07/15/1999	2151
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	10.44	10.78	10.000000	0	104.4		88-134	
Chlorobenzene	10.99	11.27	10.000000	0	109.9		92-122	
1,1-Dichloroethene	7.55	8.29	10.000000	0	75.5		39-141	
Toluene	11.09	11.43	10.000000	0	110.9		86-137	
Trichloroethene	10.93	11.39	10.000000	0	109.3		75-148	

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 8020A
Method Description.: Volatile Organics -AromaticsBatch.....: 7255
Units.....: ug/L

Analyst...: evd

MB	Method Blank					07/13/1999	0757
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	0.00							
Ethylbenzene	0.00							
Methyl-t-Butyl Ether (MTBE)	0.00							
Toluene	0.00							
Xylenes (total)	0.00							

CV	Calibration Verification	09071201				07/13/1999	0916
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.96		50		112		85-115	
Ethylbenzene	53.56		50		107		85-115	
Methyl-t-Butyl Ether (MTBE)	246.54		250		99		70-130	
Toluene	54.64		50		109		85-115	
Xylenes (total)	167.23		150		111		85-115	

MS	Matrix Spike	09071201	991271-4			07/13/1999	1717
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	61.06		50	0.00	122.1		39-150	
Ethylbenzene	58.99		50	0.00	118.0		32-160	
Methyl-t-Butyl Ether (MTBE)	242.54		250	0.00	97.0		50-150	
Toluene	57.87		50	0.00	115.7		46-148	
Xylenes (total)	184.87		150	0.11	123.2		75-125	

MSD	Matrix Spike Duplicate	09071201	991271-4			07/13/1999	1743
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	60.91	61.06	50	0.00	121.8		39-150	
Ethylbenzene	58.30	58.99	50	0.00	116.6		32-160	
Methyl-t-Butyl Ether (MTBE)	279.43	242.54	250	0.00	111.8		50-150	
Toluene	58.12	57.87	50	0.00	116.2		46-148	
Xylenes (total)	184.08	184.87	150	0.11	122.6		75-125	

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCS	Laboratory Control Sample	09071201			07/13/1999	1900
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	58.94		50		117.9		39-150	
Ethylbenzene	57.25		50		114.5		32-160	
Methyl-t-Butyl Ether (MTBE)	249.47		250		99.8		50-150	
Toluene	58.62		50		117.2		46-148	
Xylenes (total)	180.44		150		120.3		75-125	

LCD	Laboratory Control Sample Duplicate	09071201			07/13/1999	1926
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	56.54	58.94	50		113.1		39-150	
Ethylbenzene	55.54	57.25	50		111.1		32-160	
Methyl-t-Butyl Ether (MTBE)	262.85	249.47	250		105.1		50-150	
Toluene	56.54	58.62	50		113.1		46-148	
Xylenes (total)	174.96	180.44	150		116.6		75-125	
					3.1		20	

CV	Calibration Verification	09071201			07/13/1999	1952
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	52.52		50		105		85-115	
Ethylbenzene	50.51		50		101		85-115	
Methyl-t-Butyl Ether (MTBE)	248.13		250		99		70-130	
Toluene	51.84		50		104		85-115	
Xylenes (total)	159.12		150		106		85-115	

CV	Calibration Verification	09071201			07/13/1999	2044
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	55.07		50		110		85-115	
Ethylbenzene	52.89		50		106		85-115	
Methyl-t-Butyl Ether (MTBE)	266.12		250		106		70-130	
Toluene	54.40		50		109		85-115	
Xylenes (total)	166.78		150		111		85-115	

CV	Calibration Verification	09062503			07/13/1999	2322
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene	54.27		50		109		85-115	
Ethylbenzene	52.75		50		106		85-115	
Methyl-t-Butyl Ether (MTBE)	262.21		250		105		70-130	
Toluene	53.90		50		108		85-115	
Xylenes (total)	165.12		150		110		85-115	



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CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Volatile Organics -Aromatics
Method Code.....: 8020BXBatch.....: 7255
Analyst.....: evd

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		MB	1	40.73	50.0000	81.5	64-147		07/13/1999	0757
		CV	1	41.78	50.0000	83.6	64-147		07/13/1999	0916
991271-1	Liquids		1	37.95	50.0000	75.9	64-147		07/13/1999	1049
991271-4	Liquids		1	42.13	50.0000	84.3	64-147		07/13/1999	1208
991272-1	Liquids		10	40.97	50.0000	81.9	64-147		07/13/1999	1235
991272-2	Liquids		1	49.16	50.0000	98.3	64-147		07/13/1999	1301
991272-3	Liquids		1	44.31	50.0000	88.6	64-147		07/13/1999	1328
991272-4	Liquids		10	44.91	50.0000	89.8	64-147		07/13/1999	1354
991263-8	Solid		145	43.99	50.0000	88.0	64-147		07/13/1999	1421
991263-10	Solid		125	44.94	50.0000	89.9	64-147		07/13/1999	1447
991271-4	Liquids	MS	1	54.96	50.0000	109.9	64-147		07/13/1999	1717
991271-4	Liquids	MSD	1	48.93	50.0000	97.9	64-147		07/13/1999	1743
		LCS	1	43.08	50.0000	86.2	64-147		07/13/1999	1900
		LCD	1	43.80	50.0000	87.6	64-147		07/13/1999	1926
		CV	1	43.67	50.0000	87.3	64-147		07/13/1999	1952
		CV	1	42.80	50.0000	85.6	64-147		07/13/1999	2044
991278-2	Solid		39.0	40.36	50.0000	80.7	64-147		07/13/1999	2110
991278-13	Solid		28.4	42.00	50.0000	84.0	64-147		07/13/1999	2137
991271-2	Liquids		10	40.64	50.0000	81.3	64-147		07/13/1999	2203
991271-3	Liquids		5	42.09	50.0000	84.2	64-147		07/13/1999	2229
		CV	1	44.37	50.0000	88.7	64-147		07/13/1999	2322

Method.....: Gasoline Range Organics
Method Code.....: AKGROBatch.....: 7257
Analyst.....: evd

Surrogate	Units
BFB (Surrogate)	mg/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991271-1	Liquids		1	50.5	50.0000	101.0	60-140		07/13/1999	1049
991271-2	Liquids		1	101	50.0000	202.0	60-140	X	07/13/1999	1116
991271-3	Liquids		1	107	50.0000	214.0	60-140	X	07/13/1999	1142
991271-4	Liquids		1	59.3	50.0000	118.6	60-140		07/13/1999	1208
991272-1	Liquids		10	65.5	50.0000	131.0	60-140		07/13/1999	1235
991272-2	Liquids		1	88.0	50.0000	176.0	60-140	X	07/13/1999	1301
991272-3	Liquids		1	64.0	50.0000	128.0	60-140		07/13/1999	1328
991272-4	Liquids		10	66.8	50.0000	133.6	60-140		07/13/1999	1354
991263-8	Solid		145	95.1	50.0000	190.2	60-140	X	07/13/1999	1421
991263-10	Solid		125	79.9	50.0000	159.8	60-140	X	07/13/1999	1447
991278-2	Solid		39.0	56.5	50.0000	113.0	60-140		07/13/1999	2110
991278-13	Solid		28.4	61.1	50.0000	122.2	60-140		07/13/1999	2137
991271-2	Liquids		10	58.2	50.0000	116.4	60-140		07/13/1999	2203
991271-3	Liquids		5	59.7	50.0000	119.4	60-140		07/13/1999	2229



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CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Method.....: Volatile Organics (Client List)
Method Code.....: 8260CBatch.....: 7332
Analyst.....: gfb

Surrogate	Units
4-Bromofluorobenzene	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		LCS	1	9.71	10.000	97.1	68-125		07/15/1999	1039
		MB	1	9.21	10.000	92.1	68-125		07/15/1999	1128
991266-2	Liquids		1	9.05	10.000	90.5	68-125		07/15/1999	1217
991271-1	Liquids		1	9.09	10.000	90.9	68-125		07/15/1999	1300
991271-4	Liquids		1	9.65	10.000	96.5	68-125		07/15/1999	1425
991271-3	Liquids		12.5	9.60	10.000	96.0	68-125		07/15/1999	1526
991272-1	Liquids		20	9.80	10.000	98.0	68-125		07/15/1999	1608
991272-2	Liquids		1	9.81	10.000	98.1	68-125		07/15/1999	1651
991272-3	Liquids		1	9.24	10.000	92.4	68-125		07/15/1999	1734
991272-4	Liquids		100	9.77	10.000	97.7	68-125		07/15/1999	1816
991271-2	Liquids		50	10.05	10.000	100.5	68-125		07/15/1999	1942
991352-1	Liquids		1	9.77	10.000	97.7	68-125		07/15/1999	2025
991266-2	Liquids	MS		9.76	10.000	97.6	68-125		07/15/1999	2108
991266-2	Liquids	MSD		9.84	10.000	98.4	68-125		07/15/1999	2151

Surrogate	Units
Dibromofluoromethane	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		LCS	1	9.48	10.000	94.8	85-118		07/15/1999	1039
		MB	1	9.03	10.000	90.3	85-118		07/15/1999	1128
991266-2	Liquids		1	8.67	10.000	86.7	85-118		07/15/1999	1217
991271-1	Liquids		1	8.22	10.000	82.2	85-118	X	07/15/1999	1300
991271-4	Liquids		1	7.70	10.000	77.0	85-118	X	07/15/1999	1425
991271-3	Liquids		12.5	7.95	10.000	79.5	85-118	X	07/15/1999	1526
991272-1	Liquids		20	7.97	10.000	79.7	85-118	X	07/15/1999	1608
991272-2	Liquids		1	7.81	10.000	78.1	85-118	X	07/15/1999	1651
991272-3	Liquids		1	7.84	10.000	78.4	85-118	X	07/15/1999	1734
991272-4	Liquids		100	8.40	10.000	84.0	85-118	X	07/15/1999	1816
991271-2	Liquids		50	8.46	10.000	84.6	85-118	X	07/15/1999	1942
991352-1	Liquids		1	8.90	10.000	89.0	85-118		07/15/1999	2025
991266-2	Liquids	MS		8.59	10.000	85.9	85-118		07/15/1999	2108
991266-2	Liquids	MSD		8.54	10.000	85.4	85-118		07/15/1999	2151

Surrogate	Units
Toluene-d8	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
		LCS	1	9.44	10.000	94.4	82-115		07/15/1999	1039
		MB	1	9.23	10.000	92.3	82-115		07/15/1999	1128



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CORE LABORATORIES

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 991272

Report Date.: 07/19/1999

CUSTOMER: Secor International Inc.

PROJECT: Chevron-Alaska

ATTN: Rusty Benkosky

Surrogate	Units
Toluene-d8	ug/L

Lab ID	Matrix	QC Type	Dilution	Result	True Value	Percent Recovery	Limits	Flag	Date	Time
991266-2	Liquids		1	9.30	10.000	93.0	82-115		07/15/1999	1217
991271-1	Liquids		1	9.10	10.000	91.0	82-115		07/15/1999	1300
991271-4	Liquids		1	9.08	10.000	90.8	82-115		07/15/1999	1425
991271-3	Liquids		12.5	9.29	10.000	92.9	82-115		07/15/1999	1526
991272-1	Liquids		20	9.31	10.000	93.1	82-115		07/15/1999	1608
991272-2	Liquids		1	9.86	10.000	98.6	82-115		07/15/1999	1651
991272-3	Liquids		1	9.09	10.000	90.9	82-115		07/15/1999	1734
991272-4	Liquids		100	9.35	10.000	93.5	82-115		07/15/1999	1816
991271-2	Liquids		50	9.38	10.000	93.8	82-115		07/15/1999	1942
991352-1	Liquids		1	9.38	10.000	93.8	82-115		07/15/1999	2025
991266-2	Liquids	MS		9.39	10.000	93.9	82-115		07/15/1999	2108
991266-2	Liquids	MSD		9.31	10.000	93.1	82-115		07/15/1999	2151



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CORE LABORATORIES

ANALYTICAL SUMMARY REPORT

Job Number: 991272

Report Date: 07/19/19

CUSTOMER: Secor International Inc.

PROJECT: 9-6489

ATTN: Rusty Benkosky

BATCH	7257	ANALYTICAL METHOD	AK101	DESCRIPTION	Gasoline Range Organics				ANALYST	evd
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991272-1	MW-4			Water	Liquids	07/03/99	0000	07/13/99	1235	10
991272-2	MW-5			Water	Liquids	07/03/99	0000	07/13/99	1301	1
991272-3	MW-6			Water	Liquids	07/03/99	0000	07/13/99	1328	1
991272-4	MW-7			Water	Liquids	07/03/99	0000	07/13/99	1354	10

BATCH	7255	ANALYTICAL METHOD	EPA 8020A	DESCRIPTION	Volatile Organics -Aromatics				ANALYST	evd
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991272-1	MW-4			Water	Liquids	07/03/99	0000	07/13/99	1235	10
991272-2	MW-5			Water	Liquids	07/03/99	0000	07/13/99	1301	1
991272-3	MW-6			Water	Liquids	07/03/99	0000	07/13/99	1328	1
991272-4	MW-7			Water	Liquids	07/03/99	0000	07/13/99	1354	10

BATCH	7332	ANALYTICAL METHOD	EPA 8260B	DESCRIPTION	Volatile Organics (Client List)				ANALYST	gfb
Lab Sample ID	Client Sample Identification			Sample Matrix	Test Matrix	Sample Date	Time	Analysis Date	Time	Dil/Corr. Factor
991272-1	MW-4			Water	Liquids	07/03/99	0000	07/15/99	1608	20
991272-2	MW-5			Water	Liquids	07/03/99	0000	07/15/99	1651	1
991272-3	MW-6			Water	Liquids	07/03/99	0000	07/15/99	1734	1
991272-4	MW-7			Water	Liquids	07/03/99	0000	07/15/99	1816	100



0282

CORE LABORATORIES**QUALITY ASSURANCE FOOTER****METHOD REFERENCES**

- (1) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, September 1986, and Updates I, II, IIA, IIB, and III
- (2) Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1995
- (3) EPA 600/4-79-020, Methods of Chemical Analysis for Waters and Wastes, March 1983
- (4) Federal Register, Friday, October 26, 1984 (40 CFR Part 136) and amendments
- (5) American Society for Testing and Materials, Volumes 5.01, 5.02, 5.03, 1992
- (6) EPA 600/4-89-001, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh Water Organisms
- (7) EPA 600/4-90-027, Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, Fourth Edition

COMMENTS

All methods of chemical analysis have a statistical uncertainty associated with the results. Unless otherwise indicated, the data in this report are within the limits of uncertainty as specified in the referenced method. Quality control acceptance criteria are based either on limits specified in the referenced method or on actual laboratory performance. The date and time of analysis indicated on the report may not reflect the actual time of analysis for QC samples. Data reported in the QC report may be lower than sample data due to dilution of samples into the calibration range of the analysis. Sample concentrations for solid samples are calculated on an as received (wet) basis unless otherwise indicated. Unless otherwise indicated, volatiles by gas chromatography (GC) are reported from a single column. Volatiles analyses by GC on low level soils are conducted at room temperature. TCLP extractions are performed at sample amounts, approved by the State of California.

FLAGS, FOOTNOTES, AND ABBREVIATIONS (as needed)

- | | | | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------|
| NA | = Not analyzed | N.I. | = Not Ignitable |
| N/A | = Not applicable | S.I. | = Sustains Ignition |
| ug/L | = Micrograms per liter | I(NS) | = Ignites, but does not Sustain Ignition |
| mg/L | = Milligrams per liter | RPD | = Relative Percent Difference |
| ND | = Not detected at a value greater than the reporting limit | | |
| NC | = Not calculable due to values lower than the detection limit | | |
| (a) | = Surrogate recoveries were outside QC limits due to matrix effects. | | |
| (b) | = Surrogate recoveries were not calculated due to dilution of the sample below the detectable range for the surrogate. | | |
| (c) | = Matrix spike recoveries were outside QC limits due to matrix effects. | | |
| (d) | = Relative Percent Difference (RPD) for duplicate analysis outside QC limits due to actual differences in the sample matrix. | | |
| (e) | = The limit listed for flammability indicates the upper limit for the test. Samples are not tested at temperatures above 140 Fahrenheit since only samples which will sustain ignition at temperatures below 140 are considered flammable. | | |
| (f) | = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a diesel standard, however, the hydrocarbon pattern did not match a diesel pattern. | | |
| (g) | = Results for this hydrocarbon range did not match a typical hydrocarbon pattern. Results were quantified using a gasoline standard, however, the hydrocarbon pattern did not match a gasoline pattern. | | |
| (h) | = High dilution due to matrix effects | | |

QC SAMPLE IDENTIFICATIONS

- MB = Method Blank
- RB = Reagent Blank
- ICB = Initial Calibration Blank
- CCB = Continuing Calibration Blank
- CS = Calibration Standard
- ICV = Initial Calibration Verification
- CCV = Continuing Calibration Verification

SB = Storage Blank

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MD = Matrix Duplicate

BS = Blank Spike

SS = Surrogate Spike

LCS = Laboratory Control

Standard

RS = Reference Standard

SUBCONTRACTED LABORATORY LOCATIONS

- Core Laboratories: Aurora, Colorado
- Casper, Wyoming
- Carson, California
- Corpus Christi, Texas
- Edison, New Jersey
- Houston, Texas (Env)
- Houston, Texas (Pet)
- Indianapolis, Indiana
- Lake Charles, Louisiana
- Valparaiso, Indiana
- Bakersfield, California

*AU

*CA

*CP

*CC

*ED

*HE

*HP

*IN

*LC

*VP

*BK

1250 Gene Autry Way Autry Way

Anaheim, CA 92805

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CORE LABORATORIES

rpjsckl	Job Sample Receipt Checklist Report 07/08/1999	V2
Job Number.....: 991272 Location.: 57218 Customer Job ID.....: Project Number.: 99180343 Project Description.: Chevron-Alaska Customer.....: Secor International Inc. Contact.: Rusty Benkosky		Job Check List Date.: 07/07/1999 Project Manager.....: cem
Questions ?		(Y/N) Comments
Chain-of-Custody Present?..... Y		
...If "yes", completed properly?..... Y		
Custody seal on shipping container?..... N		
...If "yes", custody seal intact?..... N		
Custody seals on sample containers?..... N		
...If "yes", custody seal intact?..... N		
Samples chilled?..... Y 4		
Temperature of cooler acceptable? (4 deg C +/- 2). Y		
Temperature measured from temperature blank?..... N		
Samples received intact (good condition)?..... Y		
Volatile samples acceptable? (no headspace)..... Y		
Correct containers used?..... Y		
Adequate sample volume provided?..... Y		
Samples preserved correctly?..... Y		
Samples received within holding-time?..... Y		
Agreement between COC and sample labels?..... Y		
Open cooler radioactive screen at or below bkgrd?.		
Additional.....		
Comments.....		
Sample Custodian Signature/Date..... Y		

Chain-of-Custody-Records

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number <u>9-6489</u>	Chevron Contact (Name) <u>Bob Cocomoto</u> (Phone) _____
	Facility Address <u>1304 Airport Heights, Anchorage, AK</u>	Laboratory Name <u>CORE LAB</u>
	Consultant Project Number <u>76-001-037-03</u>	Laboratory Release Number <u>9778077 LINE 52</u>
	Consultant Name <u>SECON International</u>	Samples Collected by (Name) <u>Clinton Hayes</u>
	Address <u>9912 BUSINESS PARK DR 900 SOUTHERN</u>	Collection Date <u>7-3-89</u>
	Project Contact (Name) <u>Rosie Blakosek</u> (Phone) <u>(916)364-1880</u> (Fax Number) <u>(916)364-1889</u>	Signature <u>Clark Hayes</u>

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>Clark Hoss</i>	ECON	7-7-99/1700	<i>Bruce</i>	CORE	7/07/99 1030	<input checked="" type="checkbox"/> 24 Hrs. <input type="checkbox"/> 48 Hrs. <input type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time	

Chain-of-Custody-Records

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-6489	Chevron Contact (Name)	Bob Cecchetto
	Facility Address	1804 Airport Heights, Anchorage, AK	(Phone)	
	Consultant Project Number	76-007-057-03	Laboratory Name	CORE LAB
	Consultant Name	SECON International	Laboratory Release Number	9178077 LINE 52
	Address	9912 BUSINESS PARK DR 400 Suisun City	Samples Collected by (Name)	Clinton Adams
	Project Contact (Name)	Larry Benkose	Collection Date	7-3-89
(Phone)	(416)364-1880	Signature	Clinton Adams	
	(Fax Number)			

1272

Remarks

Relinquished By (Signature) <i>John Hoss</i>	Organization <i>ECON</i>	Date/Time <i>7-3-99/1700</i>	Received By (Signature) <i>Brennan</i>	Organization <i>CORE</i>	Date/Time <i>07/07/99 1030</i>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days <u>10 Days</u> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)			Date/Time

0286

ATTACHMENT E

SURVEY DATA

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SECOR INTERNATIONAL INCORPORATED

Prepared By: R&M Consultants, Inc.
6-Aug-99

CHEVRON SERVICE STATION MONITOR WELL DATA**STATION ID: 9-6489****LOCATION: 1304 AIRPORT HEIGHTS DRIVE, ANCHORAGE AK**

POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
1001	10118.3	5008.6	N/A	CONTROL POINT
1002	10000.0	5000.0	N/A	SE BLDG COR
1101	10027.4	5000.0	N/A	NE BLDG COR
1102	10027.4	4914.9	N/A	NW BLDG COR
1103	9987.4	4873.0	N/A	FENCELINE
1104	10095.4	4872.3	N/A	END FENCE
1105	10030.9	1897.0	133.43	MW5
1106	10110.8	4883.0	131.97	MW4
1107	10098.3	4914.1	132.95	MW7
1108	10076.4	5018.2	133.12	MW6

STATION ID: 9-5799**LOCATION: 2500 SEWARD HIGHWAY, ANCHORAGE AK**

POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
2001	10201.6	5024.2	N/A	CONTROL POINT
2002	10000.0	5000.0	N/A	SE BLDG COR
2101	10042.7	5000.0	N/A	NE BLDG COR
2102	10042.7	4929.1	N/A	NW BLDG COR
2103	10227.6	4944.0	109.98	MW13

STATION ID: 9-1356**LOCATION: 1456 NORTHERN LIGHTS BLVD., ANCHORAGE AK**

POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
3001	9989.8	5019.6	N/A	CONTROL POINT
3002	9788.2	4995.4	N/A	SE BLDG COR
3101	9830.9	4995.4	N/A	NE BLDG COR
3102	9830.9	4924.5	N/A	NW BLDG COR
3103	10015.8	4939.4	95.30	MW1
3104	9977.36	4891.86	94.61	MW2
3105	9964.88	4923.04	93.57	MW3
3106	9943.03	5027.08	94.66	MW4

NOTES:

1. ELEVATIONS ARE BASED ON THE MUNICIPALITY OF ANCHORAGE, 1972 VERTICAL ADJUSTMENT WHICH APPROXIMATES MEAN SEA LEVEL. ELEVATIONS ARE AT THE TOP OF 2 1/2" PVC PIPE INSIDE BOLT-DOWN CASING.

2. PROJECT COORDINATES ARE BASED ON ASSUMED VALUES AT EACH SITE.