

RELEASE #369379

SECOR
International Incorporated

TEXACO 63-232-0395
TUKWILA
LIST #4454

November 12, 2001

RECEIVED
MAR 11 2002
DEPT OF ECOLOGY

Mr. Tony Palagyi
Equiva Services, LLC
10602 NE 38th Place
Kirkland, Washington 98033

Subject: Semi-Annual Groundwater Monitoring - Fourth Quarter 2001
Texaco Station SAP No. 120598
13138 Interurban Avenue South, Tukwila, Washington
SECOR PN: 001.01171.500

Dear Mr. Palagyi:

Five groundwater monitoring wells were monitored, and three wells were sampled by SECOR at the referenced site on October 9, 2001. No free product was detected in any of the monitoring wells.

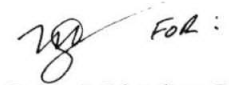
Attachments include: a vicinity map and a groundwater elevation contour/analytical results summary map (Attachment 1), summaries of groundwater monitoring (Table 1) and analytical data (Table 2 and 3) (Attachment 2), laboratory analytical report (Attachment 3), and field forms (Attachment 4).

SECOR's field procedures were performed in accordance with SECOR's Standard Operating Procedures for quality assurance and quality control, as outlined in SECOR's December 27, 2000 Unit Price Bid.

SECOR appreciates the opportunity to be of service to Equiva on this project. If you have any questions regarding the information provided in this report, please contact us at (425) 372-1600.

Sincerely,
SECOR International Incorporated

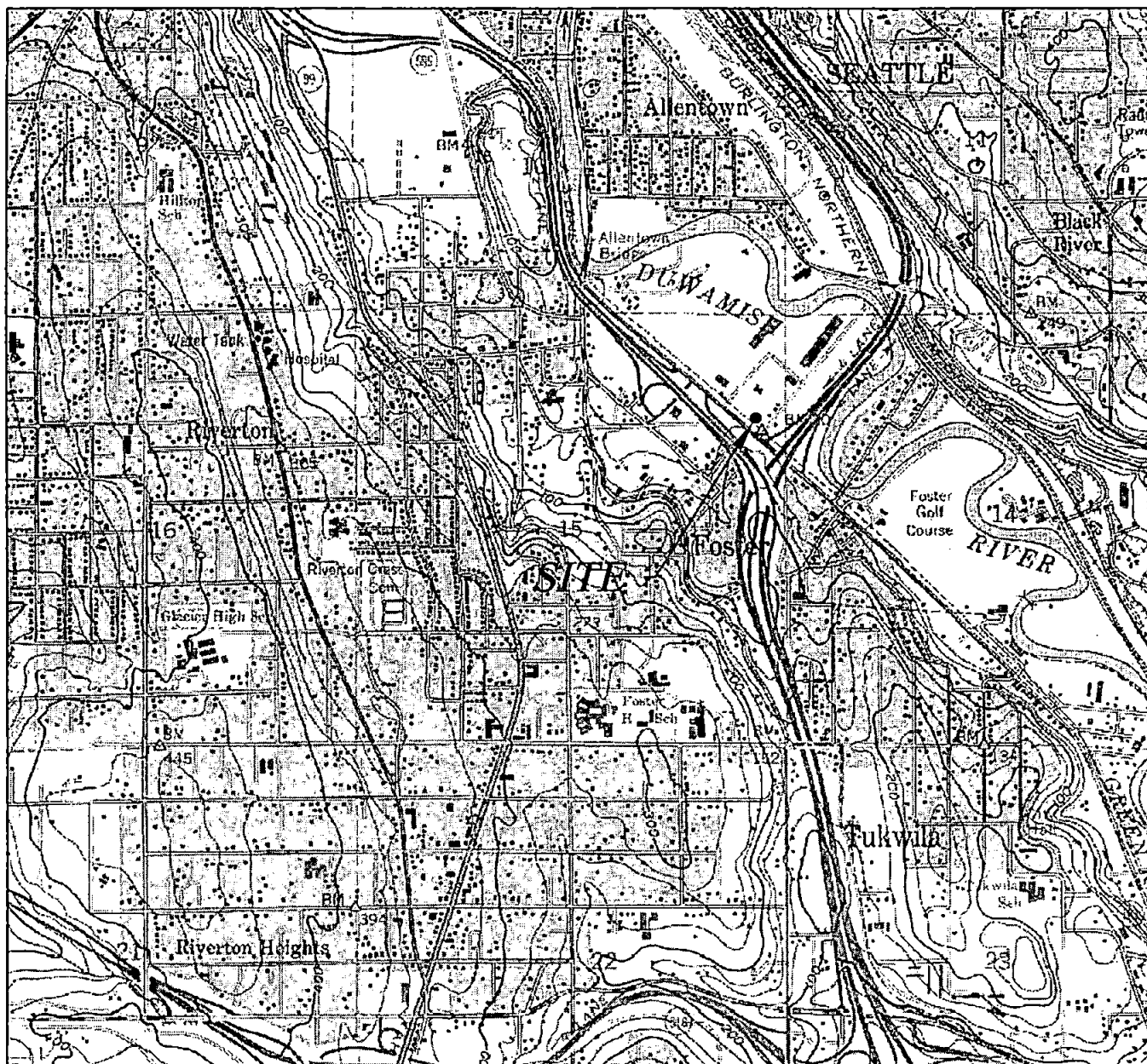

Marc Sauze
Associate Engineer

 For:
Brian J. Pletcher, R.G.
Senior Geologist

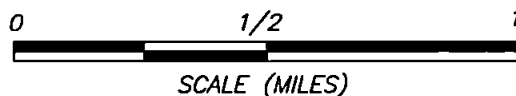
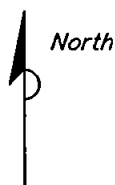
MS/BJP:KM
Attachments (4)

cc: John Bails, Washington State Department of Ecology ✓

ATTACHMENT 1
FIGURES



WASHINGTON



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; DES MOINES, WASHINGTON; 1978

SECOR

International Incorporated

12034 134th COURT NE, SUITE 102
REDMOND, WASHINGTON 98052
(425) 372-1600

SITE LOCATION MAP

TEXACO STATION SAP NO. 120598
13138 INTERURBAN AVENUE SOUTH
TUKWILA, WASHINGTON

FIGURE:

1

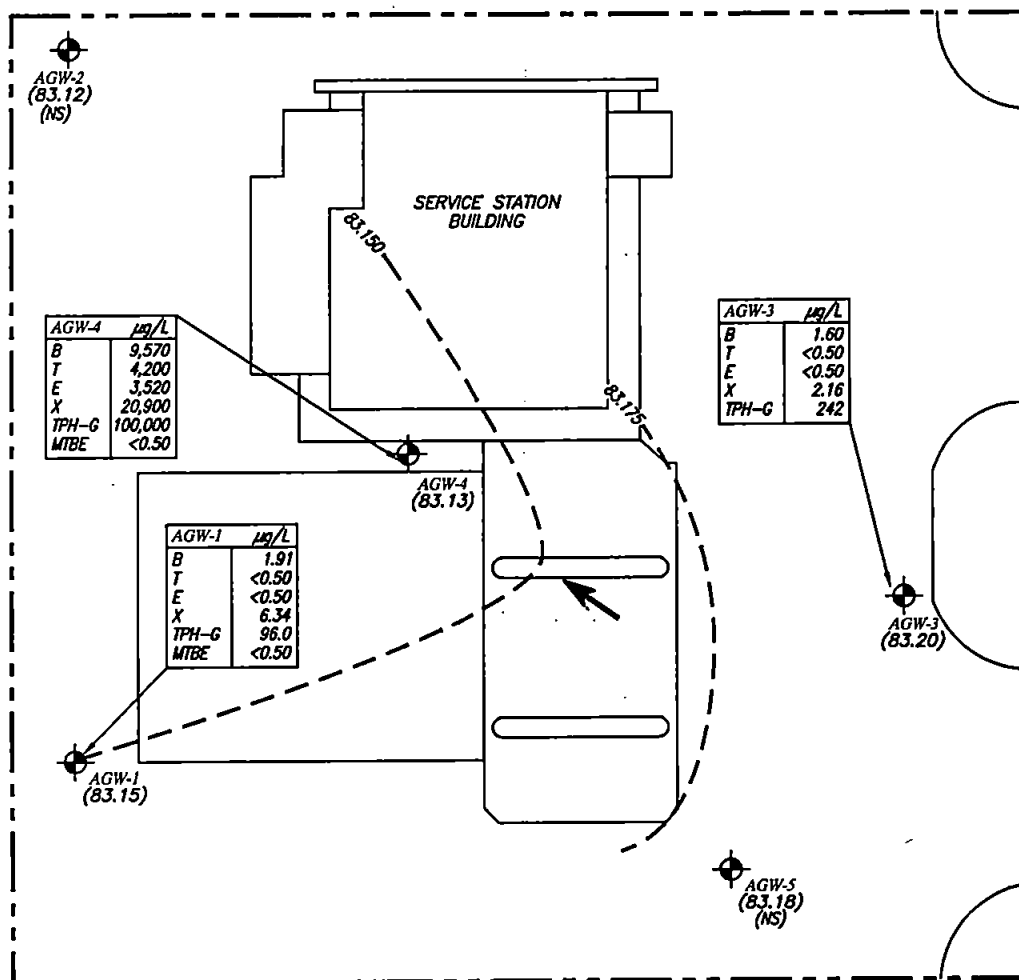
JOB#: 001.01171.500

APPR:

DWN: SES

DATE: 8/15/00

DWG: 120598M



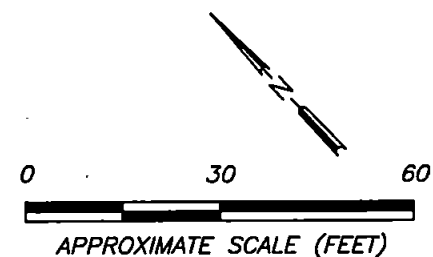
- LEGEND:**
- SUBJECT PROPERTY LINE BOUNDARY
- AGW-S GROUNDWATER MONITORING WELL LOCATION
- (83.20) RELATIVE GROUNDWATER ELEVATION (FEET)
- INFERRED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR (FEET)

ANALYTE	
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
TPH-G	GASOLINE
MTBE	METHYL TERT-BUTYL ETHER

(NS) NOT SAMPLED

NOTES

CONTOUR INTERVAL = 0.025 FT



SECOR
International Incorporated

GROUNDWATER ELEVATIONS CONTOURS AND
ANALYTICAL RESULTS (10/9/01)
TEXACO STATION SAP NO. 120598
13138 INTERURBAN AVENUE SOUTH
TUKWILA, WASHINGTON

FIGURE:

2

JOB#: 001.01171.500

APPR:

DWN: SES

DATE: 12/12/01

DWG: 120598_401

ATTACHMENT 2
TABLES

Table 1. Cumulative Summary of Groundwater Elevations
Texaco Station SAP No. 120598
13138 Interurban Avenue South, Tukwila, Washington

Well Number/ TOC Elevation	Date of Measurement	DTW (feet)	DTEP (feet)	FPT (feet)	SWL (feet)	Change in SWL (feet)
AGW-1 96.38	4/23/97	9.63	0.00	0.00	86.75	-
	7/14/97	12.20	0.00	0.00	84.18	-2.57
	10/22/97	12.31	0.00	0.00	84.07	-0.11
	1/22/98	10.30	0.00	0.00	86.08	2.01
	4/9/98	12.04	0.00	0.00	84.34	-1.74
	7/14/98	12.51	0.00	0.00	83.87	-0.47
	5/11/99	13.17	0.00	0.00	83.21	-0.66
	11/3/99	14.49	0.00	0.00	81.89	-1.32
	5/13/00	11.90	0.00	0.00	84.48	2.59
	10/21/00	12.55	0.00	0.00	83.83	-0.65
	4/12/01	11.81	0.00	0.00	84.57	0.74
	10/9/01	13.23	0.00	0.00	83.15	-1.42
AGW-2 95.47	4/23/97	9.76	0.00	0.00	85.71	-
	7/14/97	11.30	0.00	0.00	84.17	-1.54
	10/22/97	11.36	0.00	0.00	84.11	-0.06
	1/22/98	9.40	0.00	0.00	86.07	1.96
	4/9/98	11.18	0.00	0.00	84.29	-1.78
	7/14/98	11.67	0.00	0.00	83.80	-0.49
	5/11/99	12.25	0.00	0.00	83.22	-0.58
	11/3/99	13.53	0.00	0.00	81.94	-1.28
	5/13/00	11.03	0.00	0.00	84.44	2.50
	10/21/00	11.64	0.00	0.00	83.83	-0.61
	4/12/01	10.92	0.00	0.00	84.55	0.72
	10/9/01	12.35	0.00	0.00	83.12	-1.43
AGW-3 96.39	4/23/97	9.50	0.00	0.00	86.89	-
	7/14/97	12.28	0.00	0.00	84.11	-2.78
	10/22/97	12.35	0.00	0.00	84.04	-0.07
	1/22/98	10.25	0.00	0.00	86.14	2.10
	4/9/98	12.02	0.00	0.00	84.37	-1.77
	7/14/98	12.49	0.00	0.00	83.90	-0.47
	5/11/99	13.18	0.00	0.00	83.21	-0.69
	11/3/99	14.60	0.00	0.00	81.79	-1.42
	5/13/00	9.01	0.00	0.00	87.38	5.59
	10/21/00	12.51	0.00	0.00	83.88	-3.50
	4/12/01	11.72	0.00	0.00	84.67	0.79
	10/9/01	13.19	0.00	0.00	83.20	-1.47

**Table 1. Cumulative Summary of Groundwater Elevations
Texaco Station SAP No. 120598
13138 Interurban Avenue South, Tukwila, Washington**

Well Number/ TOC Elevation	Date of Measurement	DTW (feet)	DTFP (feet)	FPT (feet)	SWL (feet)	Change in SWL (feet)
AGW-4 97.61	4/23/97	10.95	0.00	0.00	86.66	—
	7/14/97	13.70	0.00	0.00	83.91	-2.75
	10/22/97	13.43	0.00	0.00	84.18	0.27
	1/22/98	11.53	0.00	0.00	86.08	1.90
	4/9/98	13.58	0.00	0.00	84.03	-2.05
	7/14/98	14.02	0.00	0.00	83.59	-0.44
	5/11/99	14.46	0.00	0.00	83.15	-0.44
	11/3/99	15.88	0.00	0.00	81.73	-1.42
	5/13/00	13.14	0.00	0.00	84.47	2.74
	10/21/00	13.81	0.00	0.00	83.80	-0.67
	4/12/01	13.00	0.00	0.00	84.61	0.81
	10/9/01	14.48	0.00	0.00	83.13	-1.48
AGW-5 97.35	4/23/97	10.52	0.00	0.00	86.83	—
	7/14/97	13.25	0.00	0.00	84.10	-2.73
	10/22/97	13.35	0.00	0.00	84.00	-0.10
	1/22/98	11.20	0.00	0.00	86.15	2.15
	4/9/98	13.00	0.00	0.00	84.35	-1.80
	7/14/98	13.48	0.00	0.00	83.87	-0.48
	5/11/99	14.19	0.00	0.00	83.16	-0.71
	11/3/99	15.56	0.00	0.00	81.79	-1.37
	5/13/00	12.87	0.00	0.00	84.48	2.69
	10/21/00	13.45	0.00	0.00	83.90	-0.58
	4/12/01	12.71	0.00	0.00	84.64	0.74
	10/9/01	14.17	0.00	0.00	83.18	-1.46

TOC = Top of casing.

DTW = Depth to water.

DTFP = Depth to free product

FPT = Free product thickness.

SWL = Static water level.

— = Not monitored.

Table 2. Cumulative Summary of Groundwater Sample Analytical Results
Texaco Station SAP No. 120598
13138 Interurban Avenue South, Tukwila, Washington

Well Number	Sample Date	BTEX (µg/L)				TPH-G (µg/L)	MTBE (µg/L)
		Benzene	Toluene	Ethyl- benzene	Total Xylenes		
AGW-1	4/23/97	728	113	0.65	47.5	439	-
	7/14/97	425	53	ND	44.6	960	-
	10/22/97	320	31.1	ND	13.9	ND	-
	1/22/98	752	53.5	ND	28.1	ND	-
	4/9/98	371	58.1	ND	ND	ND	-
	7/14/98	309	16.8	ND	9.51	ND	-
	5/11/99	429	8.75	<5.0	22.9	<500	<50
	11/3/99	207	1.78	<0.5	7.86	75.1	-
	5/13/00	262	0.96	0.87	8.15	<250	-
	10/21/00	130	<2.50	<2.50	8.12	362	-
	4/12/01	55.3	<0.500	<0.500	2.08	120	<1.00
	10/9/01	1.91	<0.500	<0.500	6.34	96.0	<0.500
AGW-2	4/23/97	ND	ND	ND	ND	ND	-
	7/14/97	ND	ND	ND	ND	ND	-
	10/22/97	ND	ND	ND	ND	ND	-
	1/22/98	ND	ND	ND	ND	ND	-
	4/9/98	ND	ND	ND	ND	ND	-
	7/14/98	ND	ND	ND	ND	ND	-
	5/11/99	-	-	-	-	-	-
	11/3/99	-	-	-	-	-	-
	5/13/00	-	-	-	-	-	-
	10/21/00	-	-	-	-	-	-
	4/12/01	-	-	-	-	-	-
	10/9/01	-	-	-	-	-	-
AGW-3	4/23/97	12.8	0.591	ND	6.76	ND	-
	7/14/97	38.9	1.6	0.504	18	363	-
	10/22/97	6.35	1.14	ND	11.4	83.9	-
	1/22/98	16.5	1.06	ND	5.68	65.9	-
	4/9/98	12.2	ND	ND	12.4	ND	-
	7/14/98	ND	1.24	ND	11.2	79.5	-
	5/11/99	5.65	0.93	<0.5	10.4	<50	<25
	11/3/99	<3.38	1.51	<0.5	3.79	72.1	-
	5/13/00	14.6	1.69	0.70	9.3	92.1	-
	10/21/00	<2.53	<0.660	<0.500	2.46	189	-
	4/12/01	0.978	0.752	<0.500	3.58	83.9	<1.00
	10/9/01	1.60	<0.500	<0.500	2.16	242	-

Table 2. Cumulative Summary of Groundwater Sample Analytical Results
Texaco Station SAP No. 120598
13138 Interurban Avenue South, Tukwila, Washington

Well Number	Sample Date	BTEX (µg/L)				TPH-G (µg/L)	MTBE (µg/L)
		Benzene	Toluene	Ethylbenzene	Total Xylenes		
AGW-4	4/23/97	—	—	—	—	—	—
	7/14/97	—	—	—	—	—	—
	10/22/97	—	—	—	—	—	—
	1/22/98	—	—	—	—	—	—
	4/9/98	—	—	—	—	—	—
	7/14/98	—	—	—	—	—	—
	5/11/99	9,830	10,500	3,440	22,200	129,000	<2,500
	11/3/99	8,280	5,600	2,320	13,800	86,300	—
	5/13/00	9,000	4,550	2,560	15,100	74,300	—
	10/21/00	8,930	3,830	2,320	13,200	68,700	—
	4/12/01	4,090	634	1,070	5,650	28,100	<1.00
	10/9/01	9,570	4,200	3,520	20,900	100,000	<0.500
AGW-5	4/23/97	ND	ND	ND	ND	ND	—
	7/14/97	ND	ND	ND	ND	ND	—
	10/22/97	ND	ND	ND	ND	ND	—
	1/22/98	ND	ND	ND	ND	ND	—
	4/9/98	ND	ND	ND	ND	ND	—
	7/14/98	ND	ND	ND	ND	ND	—
	5/11/99	—	—	—	—	—	—
	11/3/99	—	—	—	—	—	—
	5/13/00	—	—	—	—	—	—
	10/21/00	—	—	—	—	—	—
	4/12/01	—	—	—	—	—	—
	10/9/01	—	—	—	—	—	—
Current Quarter Quality Assurance/Quality Control Samples							
AGW-4 (Duplicate)		6,460	1,320	2,390	12,100	61,100	—
Trip Blank		—	—	—	—	—	—

µg/L = Micrograms per liter; approximate parts per billion.

— = Not sampled or not analyzed.

TPH-G = Analytical Method changed to NW-TPH-Gx in 2000.

Benzene, toluene, ethylbenzene, and total xylene (BTEX) analysis by EPA 8021B.

ND = Not detected at a concentration above laboratory method reporting limit as previously reported by others.

The exact laboratory method reporting limits were not available to SECOR.

Table 3. Summary of Volatile Organic Compounds Analytical Results
Texaco Station SAP No. 120598
13138 Interurban Avenue, Tukwila, WA

Well Number	Sample Date	Ethanol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Diisopropyl Ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Amyl Methyl Ether (µg/L)	tert-Butyl Alcohol (µg/L)
AGW-1	10/09/01	--	--	--	<1.00	<1.00	<0.500	2.21	<50.0
AGW-4	10/09/01	--	--	--	<1.00	<1.00	<0.500	<1.00	<50.0

µg/L = Micrograms per liter; approximate parts per billion.

-- = Not sampled or not analyzed.

ATTACHMENT 3
LABORATORY ANALYTICAL REPORT



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AGW-1	B1J0348-01	Water	10/09/01 16:50	10/10/01 16:45
AGW-3	B1J0348-02	Water	10/09/01 16:40	10/10/01 16:45
AGW-4	B1J0348-03	Water	10/09/01 17:00	10/10/01 16:45
DUP-13138	B1J0348-04	Water	10/09/01 17:10	10/10/01 16:45
TRIPBLANK	B1J0348-05	Water	10/09/01 12:00	10/10/01 16:45

North Creek Analytical - Bothell

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

Jeff Gerdes, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 1 of 6



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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AGW-1 (B1J0348-01) Water Sampled: 10/09/01 16:50 Received: 10/10/01 16:45

Gasoline Range Hydrocarbons	96.0	50.0	ug/l	1	1J18049	10/18/01	10/19/01	NWTPH-Gx/8021B	
Benzene	1.91	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	6.34	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	91.7 %	62-139			"	"	"	"	
Surrogate: 4-BFB (PID)	78.5 %	62-125			"	"	"	"	

AGW-3 (B1J0348-02) Water Sampled: 10/09/01 16:40 Received: 10/10/01 16:45

Gasoline Range Hydrocarbons	242	50.0	ug/l	1	1J18049	10/18/01	10/19/01	NWTPH-Gx/8021B	
Benzene	1.60	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	2.16	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	94.0 %	62-139			"	"	"	"	
Surrogate: 4-BFB (PID)	78.8 %	62-125			"	"	"	"	

AGW-4 (B1J0348-03) Water Sampled: 10/09/01 17:00 Received: 10/10/01 16:45

Gasoline Range Hydrocarbons	100000	12500	ug/l	250	1J18049	10/18/01	10/19/01	NWTPH-Gx/8021B	
Benzene	9570	125	"	"	"	"	"	"	
Toluene	4200	125	"	"	"	"	"	"	
Ethylbenzene	3520	125	"	"	"	"	"	"	
Xylenes (total)	20900	250	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	94.2 %	62-139			"	"	"	"	
Surrogate: 4-BFB (PID)	82.1 %	62-125			"	"	"	"	

North Creek Analytical - Bothell

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Jeff Gerdes, Project Manager

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Page 2 of 6



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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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DUP-13138 (B1J0348-04) Water Sampled: 10/09/01 17:10 Received: 10/10/01 16:45

Gasoline Range Hydrocarbons	79700	2500	ug/l	50	1J18049	10/18/01	10/19/01	NWTPH-Gx/8021B	
Benzene	10400	125	"	250	"	"	10/19/01	"	
Toluene	2820	25.0	"	50	"	"	10/19/01	"	
Ethylbenzene	2720	25.0	"	"	"	"	"	"	
Xylenes (total)	15800	250	"	250	"	"	"	"	
Surrogate: 4-BFB (FID)	141 %	62-139			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	110 %	62-125			"	"	"	"	

TRIPBLANK (B1J0348-05) Water Sampled: 10/09/01 12:00 Received: 10/10/01 16:45

Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	1J18049	10/18/01	10/19/01	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	91.5 %	62-139			"	"	"	"	
Surrogate: 4-BFB (PID)	81.9 %	62-125			"	"	"	"	

North Creek Analytical - Bothell

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Jeff Gerdes, Project Manager

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Page 3 of 6



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503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1J18049: Prepared 10/18/01 Using EPA 5030B (P/T)

Blank (1J18049-BLK1)

Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	43.6		"	48.0		90.8	62-139			
Surrogate: 4-BFB (PID)	38.1		"	48.0		79.4	62-125			

LCS (1J18049-BS1)

Gasoline Range Hydrocarbons	533	50.0	ug/l	500		107	80-120			
Benzene	6.57	0.500	"	6.01		109	80-120			
Toluene	35.2	0.500	"	36.1		97.5	80-120			
Ethylbenzene	9.60	0.500	"	8.37		115	80-120			
Xylenes (total)	44.0	1.00	"	42.0		105	80-120			
Surrogate: 4-BFB (FID)	59.5		"	48.0		124	62-139			
Surrogate: 4-BFB (PID)	43.4		"	48.0		90.4	62-125			

LCS Dup (1J18049-BSD1)

Gasoline Range Hydrocarbons	546	50.0	ug/l	500		109	80-120	2.41	25	
Benzene	6.74	0.500	"	6.01		112	80-120	2.55	40	
Toluene	36.1	0.500	"	36.1		100	80-120	2.52	40	
Ethylbenzene	9.86	0.500	"	8.37		118	80-120	2.67	40	
Xylenes (total)	45.2	1.00	"	42.0		108	80-120	2.69	40	
Surrogate: 4-BFB (FID)	60.6		"	48.0		126	62-139			
Surrogate: 4-BFB (PID)	44.3		"	48.0		92.3	62-125			

Matrix Spike (1J18049-MS1)

Source: B1J0323-01

Gasoline Range Hydrocarbons	504	50.0	ug/l	500	ND	95.9	70-130			
Benzene	6.77	0.500	"	6.01	ND	113	80-120			
Toluene	36.2	0.500	"	36.1	ND	99.3	75-117			
Ethylbenzene	9.69	0.500	"	8.37	ND	116	80-120			
Xylenes (total)	44.9	1.00	"	42.0	ND	105	80-120			
Surrogate: 4-BFB (FID)	57.2		"	48.0		119	62-139			
Surrogate: 4-BFB (PID)	43.8		"	48.0		91.2	62-125			

North Creek Analytical - Bothell

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

Jeff Gerdes, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1J18049: Prepared 10/18/01 Using EPA 5030B (P/T)

Matrix Spike Dup (1J18049-MSD1)

Source: B1J0323-01

Gasoline Range Hydrocarbons	504	50.0	ug/l	500	ND	95.9	70-130	0.00	25	
Benzene	6.67	0.500	"	6.01	ND	111	80-120	1.49	40	
Toluene	35.8	0.500	"	36.1	ND	98.2	75-117	1.11	40	
Ethylbenzene	9.54	0.500	"	8.37	ND	114	80-120	1.56	40	
Xylenes (total)	43.8	1.00	"	42.0	ND	103	80-120	2.48	40	
Surrogate: 4-BFB (FID)	58.4		"	48.0		122	62-139			
Surrogate: 4-BFB (PID)	43.5		"	48.0		90.6	62-125			

North Creek Analytical - Bothell

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Jeff Gerdes, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/23/01 10:07

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

North Creek Analytical - Bothell

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

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North Creek Analytical, Inc.
Environmental Laboratory Network

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TEXACO CHAIN OF CUSTODY REPORT **BIT0348**

TEXACO INFORMATION	
Facility Number:	
Project Manager:	TONY PALAGY
Texaco Job #:	120598
Site Address:	13138 INTERURBAN AVENUE
City, State, Zip:	FOK WILA, WA.

CONSULTANT INFORMATION	
Name:	SECOR Project# 001.01171.500
Address:	12034 134th Court NE, SUITE 102 REDMOND, WA. 98073-0230
Phone:	(425) 372-1600 Fax: (425) 372-1650
Project Manager:	MARC SAUZE
Sample Collection by:	Glen Scott

Laboratory Turnaround Time

- ☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days

☐ 3 Day Air Samples
(Please Select One)

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS
1. AGW-1	10-9-01/16:50	W	2
2. AGW-3	16:40	↓	2
3. AGW-4	17:00	↓	2
4. Dip-13138	17:10	↓	2
5. Trip blank	↓	↓	1
6.			
7.			
8.			
9.			
10.			

☐ AK ☐ OR ☐ WA ☒ NW Series															
TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel Ext. w/SG Cleanup	Halogen Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's EPA 8270	Lead: 8270 SIM or 8310	Total or Dissolved TCLP or RCRA Metals (8)		
		✓													
		✓													
		✓													
		✓													
		✓													

NCA SAMPLE NUMBER
- 01
- 02
- 03
- 04
- 05

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1. Glen Scott	SECOR	10-10-01/8:00	Bull	NCA	10-10-01 12:00
2. Bull	NCA	10-10-01 16:45	Glen Scott	NCA	10-10-01 16:45
3.					

Additional Comments:

W/O 4.1



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/19/01 14:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AGW-1	BIJ0350-01	Water	10/09/01 16:50	10/10/01 16:45
AGW-4	BIJ0350-02	Water	10/09/01 17:00	10/10/01 16:45

North Creek Analytical - Bothell

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Jeff Gerdes, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/19/01 14:40

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

AGW-1 (B1J0350-01) Water Sampled: 10/09/01 16:50 Received: 10/10/01 16:45

Diisopropyl ether	ND	1.00	ug/l	1	1J15030	10/15/01	10/15/01	EPA 8260B	
Ethyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
tert-Amyl Methyl Ether	2.21	1.00	"	"	"	"	"	"	
tert-Butyl Alcohol	ND	50.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	101 %	73-137			"	"	"	"	
Surrogate: Toluene-d8	102 %	75-124			"	"	"	"	

AGW-4 (B1J0350-02) Water Sampled: 10/09/01 17:00 Received: 10/10/01 16:45

Diisopropyl ether	ND	1.00	ug/l	1	1J15030	10/15/01	10/15/01	EPA 8260B	
Ethyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.500	"	"	"	"	"	"	
tert-Amyl Methyl Ether	ND	1.00	"	"	"	"	"	"	
tert-Butyl Alcohol	ND	50.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	91.5 %	73-137			"	"	"	"	
Surrogate: Toluene-d8	104 %	75-124			"	"	"	"	

North Creek Analytical - Bothell

Jeff Gerdes

Jeff Gerdes, Project Manager

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North Creek Analytical, Inc.
Environmental Laboratory Network

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

Secor-Redmond
 PO Box 230, 12034 - 134th Ct NE Ste 102
 Redmond WA/USA, 98073

Project: Equilon SAP #120598
 Project Number: 001.01171.500
 Project Manager: Marc Sauze

Reported:
 10/19/01 14:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J15030: Prepared 10/15/01 Using EPA 5030B										
Blank (1J15030-BLK1)	ND	1.00	ug/l							
Diisopropyl ether	ND	1.00	"							
Ethyl tert-butyl ether	ND	0.500	"							
Methyl tert-butyl ether	ND	1.00	"							
tert-Amyl Methyl Ether	ND	50.0	"							
tert-Butyl Alcohol	23.0		"	20.0		115	73-137			
Surrogate: 1,2-DCA-d4	20.9		"	20.0		104	75-124			
Surrogate: Toluene-d8										
LCS (1J15030-BS1)	9.09	1.00	ug/l	10.0		90.9	75-125			
Diisopropyl ether	9.86	0.500	"	10.0		98.6	75-125			
Methyl tert-butyl ether	435	50.0	"	500		87.0	75-125			
tert-Butyl Alcohol	22.4		"	20.0		112	73-137			
Surrogate: 1,2-DCA-d4	20.6		"	20.0		103	75-124			
Surrogate: Toluene-d8										
LCS Dup (1J15030-BSD1)	9.06	1.00	ug/l	10.0		90.6	75-125	0.331	25	
Diisopropyl ether	10.0	0.500	"	10.0		100	75-125	1.41	25	
Methyl tert-butyl ether	461	50.0	"	500		92.2	75-125	5.80	25	
tert-Butyl Alcohol	23.1		"	20.0		116	73-137			
Surrogate: 1,2-DCA-d4	20.7		"	20.0		104	75-124			
Surrogate: Toluene-d8										
Matrix Spike (1J15030-MS1)	10.8	1.00	ug/l	10.0	ND	108	60-140			
Diisopropyl ether	10.9	0.500	"	10.0	ND	109	60-140			
Methyl tert-butyl ether	517	50.0	"	500	ND	103	60-140			
tert-Butyl Alcohol	22.5		"	20.0		112	73-137			
Surrogate: 1,2-DCA-d4	19.2		"	20.0		96.0	75-124			
Surrogate: Toluene-d8										

Source: B1J0351-02

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North Creek Analytical - Bothell

Jeff Sanders

North Creek Analytical, Inc.
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Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/19/01 14:40

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1J15030: Prepared 10/15/01 Using EPA 5030B

Matrix Spike Dup (1J15030-MSD1)

Source: B1J0351-02

Diisopropyl ether	10.4	1.00	ug/l	10.0	ND	104	60-140	3.77	40	
Methyl tert-butyl ether	10.7	0.500	"	10.0	ND	107	60-140	1.85	40	
tert-Butyl Alcohol	499	50.0	"	500	ND	99.8	60-140	3.54	40	
Surrogate: 1,2-DCA-d4	22.3		"	20.0		112	73-137			
Surrogate: Toluene-d8	20.3		"	20.0		102	75-124			

North Creek Analytical - Bothell

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541.383.9310 fax 541.382.7588

Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond WA/USA, 98073

Project: Equilon SAP #120598
Project Number: 001.01171.500
Project Manager: Marc Sauze

Reported:
10/19/01 14:40

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

North Creek Analytical - Bothell

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

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Environmental Laboratory Network

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(425) 481-9200 FAX 485-2992
(509) 924-9200 FAX 924-9290
(503) 906-9200 FAX 906-2202



TEXACO CHAIN OF CUSTODY REPORT B1J0350

TEXACO INFORMATION	
Facility Number:	
Project Manager:	Tony Palagyi
Texaco Job #:	120598
Site Address:	13130 INTERURBAN AVENUE
City, State, Zip:	SEATTLE, WA.

CONSULTEE INFORMATION	
Name: SECOR	Project# 001,0171.500
Address: 12034 134th Court NE, SUITE 102 Redmond, WA. 98073-0230	
Phone: (425) 372-1600	Fax: (425) 372-1650
Project Manager: MARC SAUZE	
Sample Collection by: Glen Scott	

Laboratory Turnaround Time

☐ 1 Business Day

☐ 3 Business Days

☐ 5 Business Days

☒ 10 Business Days

☐ 3 Day Air Samples

(Please Select One)

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON- TAINERS
1. AGW-1	10-9-01/16:50	W	2
2. AGW-4	↓ 17:00	↓	2
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

[illegible][illegible]

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	<i>[Signature]</i>	SECOR	10-10-01	<i>[Signature]</i>	SECOR	10-10-01 12:00
2.	<i>[Signature]</i>	NCA	10-10-01 16:45	<i>[Signature]</i>	<i>[Signature]</i>	10-10-01 16:45
3.						W/O 4.1

Additional Comments:
RUN 8260 for MTBE +
OXYGENATES (TBA, DIPE, ETBE, TAME).
Set the detection limits for
14 µg/L (ppb) or lower

ATTACHMENT 4
FIELD FORMS

TEXACO CHAIN OF CUSTODY REPORT

TEXACO INFORMATION	
Facility Number:	
Project Manager:	Tony Palagyi
Texaco Job #:	120598
Site Address: 13130 INTERURBAN AVENUE City, State, Zip: SEATTLE, WA	

CONSULTANT INFORMATION	
Name:	SECOR
Project#	001.01171.500
Address: 12034 134th Court NE, SUITE 102 Redmond, WA. 98073-0230	
Phone:	(425) 372-1600
Fax:	(425) 372-1650
Project Manager:	MARC SAUZE
Sample Collection by:	Ken Scott

Laboratory Turnaround Time

- ☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days

☐ 3 Day Air Samples
(Please Select One)

SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	MATRIX (W.S.O)	# OF CONTAINERS
1. AGW-1	10-9-01/16:50	W	2
2. AGW-4	↓ 17:00	↓	2
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

☐ AK ☐ OR ☐ WA ☒ NW Series															
TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's EPA 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	8260	
														✓	
														✓	

NCA SAMPLE NUMBER

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1. Ken Scott	SECOR	10-10-01/8:00			
2.					
3.					

Additional Comments:

RUN 8260 for MTBE + OXEGENATES (TBA, DIPE, ETBE, TAME). Set the detection limits for 1ug/L (ppb) or lower



TEXACO CHAIN OF CUSTODY REPORT

TEXACO INFORMATION	
Facility Number:	
Project Manager:	TONY PALAGY
Texaco Job #:	120598
Site Address:	13138 INTERURBAN AVENUE
City, State, Zip:	FOUR WILA, WA.

CONSULTANT INFORMATION	
Name:	SECOR
Project#	001-01171500
Address:	12034 134th Court NE, SUITE 102 REDMOND, WA. 98073-0230
Phone:	(425) 372-1600
Fax:	(425) 372-1650
Project Manager:	MARC SAUZE
Sample Collection by:	Glen Scott

Laboratory Turnaround Time

- ☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days

☐ 3 Day Air Samples
(Please Select One)

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CON-TAINERS
1. AGW-1	10-7-01/16:50	W	2
2. AGW-3	16:40		2
3. AGW-4	17:00		2
4. Dip-13138	17:10		2
5. Trip blank			1
6.			
7.			
8.			
9.			
10.			

☐ AK ☐ OR ☐ WA ☒ NW Series															
TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GCMS Volatiles EPA 8260	GCMS Semi Vols. EPA 8270	PAH's EPA 8270 SIM or 8310	Lead: Total or Dissolved TCLP or RCRA Metals (8)			
			✓												
			✓												
			✓												
			✓												
			✓												

NCA SAMPLE NUMBER

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time	Additional Comments:
1. Glen Scott	SECOR	10-10-01/8:00				
2.						
3.						

TEXACO Groundwater Monitoring and Sampling Record

TEXACO Facility ID# _____

DATE: 10-9-01

Site Address: 13138 Interurban Avenue

City, State: Tukwila, WA

Field Personnel: K5

Well Number	AGW-1	AGW-2	AGW-3	AGW-4	AGW-5	
TIME	16:23	16:10	16:19	16:27	16:24	
TD (ft)						
- DTW (ft)						
= WC (ft)						
20% x WC =						
+DTW = 80% DTW						
Well Diam. (in)	4"	4"	4"	4"	4"	
x Multiplier: 2" = 0.5 4" = 2.0 6" = 4.4 = Purge Volume						
Actual Purge Volume						
Purge Method (B or P)						
DTW when sampled > 80%? (Y/N)						
If No, DTW after 2 hours:						
Sample ID	AGW-1	—	AGW-3	AGW-4	—	
Sample time	16:50		16:40	17:00		
DUPLICATE				17:10 DUPLICATE		
Sheen (Y/N) <i>obs</i>	N/y	—	N/y	N/y	—	
Free Product (Y/N)						
DTW	13.23	12.35	13.19	14.48	14.17	
- DTFP						
= FPT						

TD = Total Depth of well.
DTW = Depth to Water below top of casing.
WC = Water Column.

B = Bailer.
P = Pump.

DTFP = Depth to Free Product.
FPT = Free Product Thickness.