

REC'D AUG 22 2000

Date: August 21, 2000

ARCO QUARTERLY GROUNDWATER MONITORING REPORT - 2ND QUARTER 2000

Facility No:	0855
Address:	4603 Ocean Beach Highway Longview, Washington
ARCO Environmental Engineer:	Mr. Chuck Hutchens
Consulting Co./Contact Person:	SECOR International Incorporated/Cary Goodman
Consultant Project No.:	015.08698.702
Primary Agency:	Washington Department of Ecology (Ecology)
Ecology LUST File No:	5421 509017 513961

WORK PERFORMED 2ND QUARTER 2000:

1. Groundwater monitoring and sampling on May 23, 2000.
2. Soil cuttings disposal on June 19, 2000.

WORK PROPOSED FOR 3RD QUARTER 2000:

1. Quarterly groundwater sampling.

Current Phase of Project:	Groundwater monitoring
Is Free Product (FP) Present On-Site:	No
FP Recovered this Quarter (gallons):	Not applicable (NA)
Cumulative FP Recovered to Date (gallons):	NA
Current Remediation Techniques:	NA
Approximate Depth to Groundwater (feet below top of casing):	4.64 (MW-2) to 6.46 (MW-3)
Groundwater Gradient (direction):	East
Groundwater Gradient (magnitude):	0.07 ft/ft

DISCUSSION:

Groundwater monitoring field activities conducted on May 23, 2000 included measuring the water levels and collecting groundwater samples from MW-1 through MW-3. The water samples collected from MW-1 through MW-3 were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8021B and total petroleum hydrocarbons in the gasoline range (TPH-G) by NWTPH-Gx.

Benzene was detected at concentrations above the laboratory method reporting limit (MRL) in monitoring wells MW-2 and MW-3 at 26.2 micrograms per liter ($\mu\text{g/L}$) and 4,710 $\mu\text{g/L}$, respectively. TPH-G was also detected at concentrations above the laboratory MRL in MW-2 and MW-3 at 13,200 $\mu\text{g/L}$ and 65,200 $\mu\text{g/L}$, respectively.

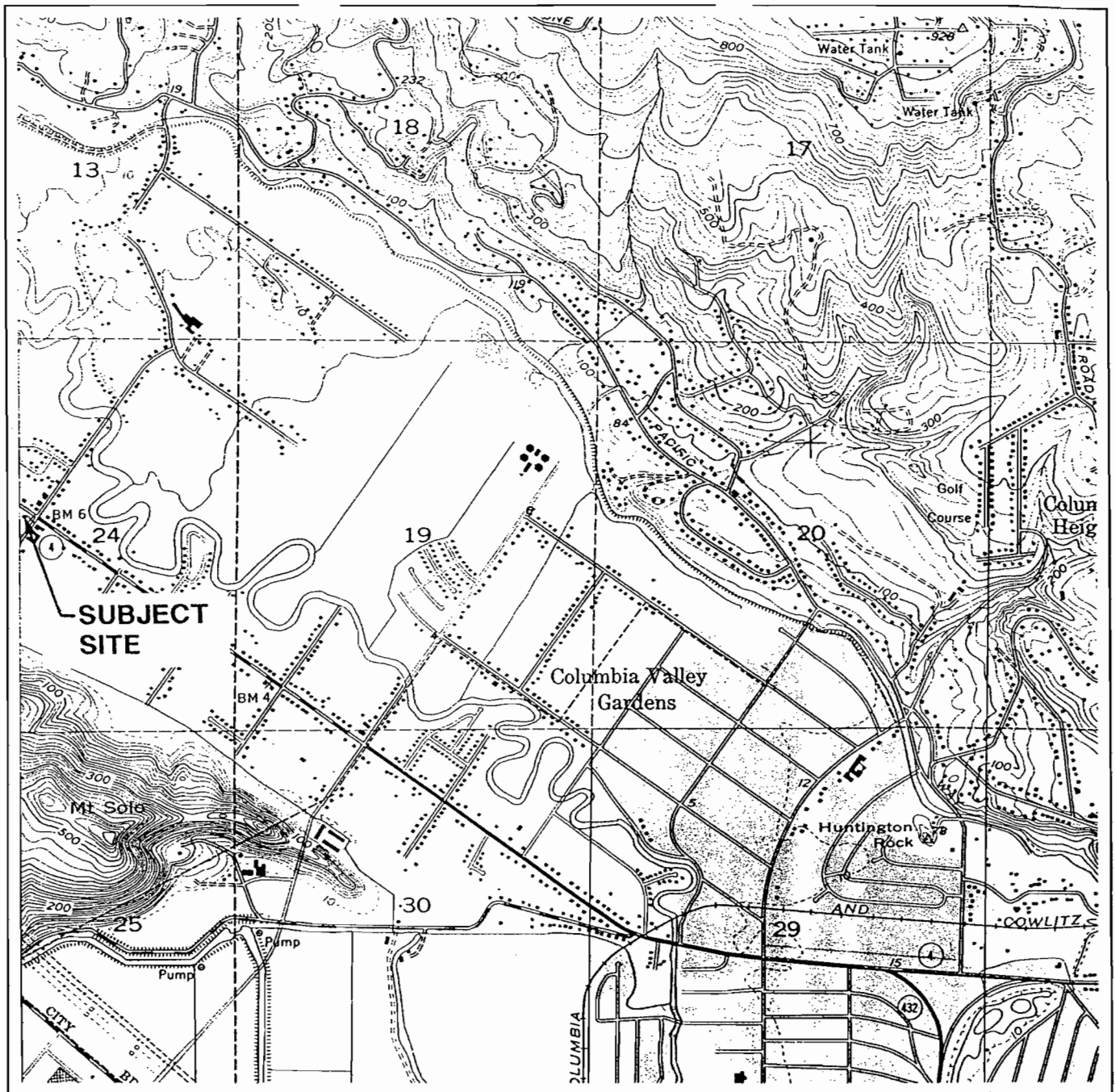
At ARCO's direction, SECOR transported 1.46 tons of drummed soil cuttings to TPS Technologies of Portland, Oregon, for treatment and disposal on June 19, 2000. The soil cuttings resulted from the March 2000 well installation by ARCO's previous consultant.

ATTACHMENTS:

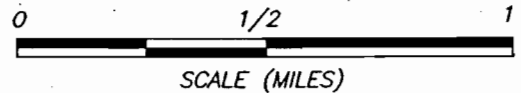
- Figure 1: Site Location Map
- Figure 2: Groundwater Contour and Historical Groundwater Analytical Results
- Table 1: Summary of Groundwater Monitoring Results
- Laboratory Report and Chain of Custody
- Groundwater Sampling Field Data Sheets
- Soil Disposal Receipts

cc: ✓ Mr. Craig Rankine, Washington Department of Ecology, Vancouver, Washington
Mr. David McDowell, Attorney for Wakefield Trust, Vancouver, Washington

FIGURES



QUADRANGLE LOCATION



SCALE (MILES)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; KELSO, WASHINGTON; 1970

SECOR
International Incorporated
015

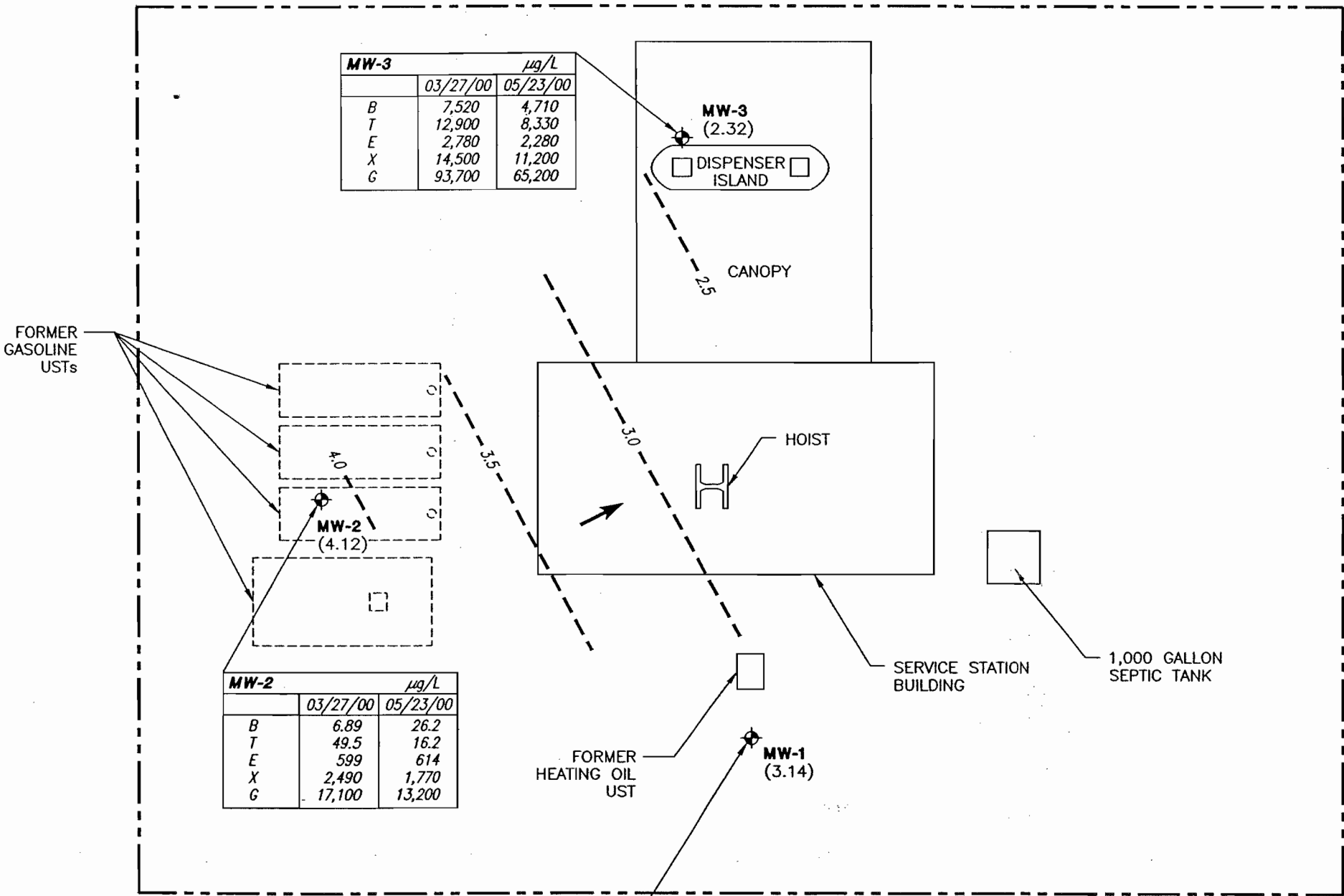
SITE LOCATION MAP
FORMER ARCO SERVICE STATION 0855
4603 OCEAN BEACH HIGHWAY
LONGVIEW, WASHINGTON

FIGURE:

1

JOB#: 015.08698.702 APPR: C W G DWN: KPM DATE: 07/28/00

OCEAN BEACH HWY.



LEGEND

- SUBJECT PROPERTY LINE BOUNDARY
- MW-5 GROUNDWATER MONITORING WELL LOCATION
- ← INFERRED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR (FEET)
- (219.11) RELATIVE GROUNDWATER ELEVATION (FEET)
- (NM) NOT MEASURED

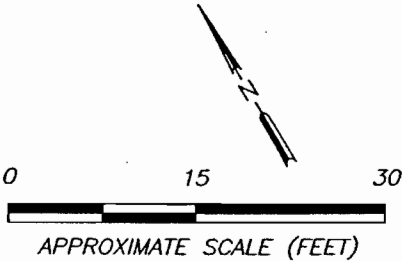
ANALYTE

B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
G	GASOLINE

(ND) NOT DETECTED AT OR ABOVE THE LABORATORY METHOD REPORTING LIMIT

NOTES

CONTOUR INTERVAL = 0.5 FT
GROUNDWATER ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL



NOTE: MONITORING WELL LOCATIONS AND CORNERS OF BUILDING SURVEYED APRIL 2000 BY GIBBS & OLSEN, INC. OF LONGVIEW, WASHINGTON.

SOURCE: MAP BASED ON ATLANTIC RICHFIELD "GENERAL ARRANGEMENT" DRAWING, NOVEMBER 30, 1966, 1/8"-1'.

SECOR
International Incorporated
015

GROUNDWATER CONTOUR MAP (05/23/00) AND
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER ARCO SERVICE STATION 0855
4603 OCEAN BEACH HIGHWAY
LONGVIEW, WASHINGTON

FIGURE:
2

JOB#: 015.08698.702 APPR: CWG DWN: KPM DATE: 07/28/00

TABLE

Table 1. Summary of Groundwater Monitoring Results
Former ARCO Station No. 0855
4603 Ocean Beach Highway, Longview, Washington

Well Number	Sample Date	TOC Elevation (feet)	DTW (feet)	Groundwater Elevation (feet)	BTEX (µg/L)				TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)
					Benzene	Toluene	Ethylbenzene	Total Xylenes			
MW-1	03/27/00	8.34	4.36	3.98	ND	ND	ND	ND	ND	ND	ND
	05/23/00		5.20	3.14	ND	ND	ND	ND	ND	—	—
MW-2	03/27/00	8.76	3.61	5.15	6.89	49.5	599	2,490	17,100	ND	ND
	05/23/00		4.64	4.12	26.2	16.2	614	1,770	13,200	—	—
MW-3	03/27/00	8.78	5.61	3.17	7,520	12,900	2,780	14,500	93,700	ND	ND
	05/23/00		6.46	2.32	4,710	8,330	2,280	11,200	65,200	—	—
Laboratory MRLs					0.50	0.50	0.50	1.0	80	250	500

TOC = Top of casing elevation, NAVD, 1988.

DTW = Depth to water

ND or < = Less than laboratory method reporting limit (MRL).

— = Not measured, not sampled, or not available.

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

Total petroleum hydrocarbons-gasoline range (TPH-G) analysis by Method NWTPH-Gx.

TPH-diesel range (TPH-D) and TPH-oil range (TPH-O) analysis by Method NWTPH-Dx.

Note: Results in micrograms per liter (µg/L), or approximately parts per billion (ppb).

**LABORATORY REPORT AND
CHAIN OF CUSTODY**



Seattle 18939 1st Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420. 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Scor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

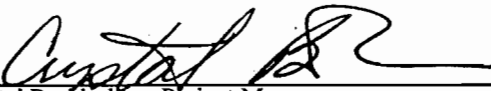
Reported:
06/05/00 12:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-855	P005513-01	Water	05/23/00 12:05	05/24/00 12:30
MW-2-855	P005513-02	Water	05/23/00 12:10	05/24/00 12:30
MW-3-855	P005513-03	Water	05/23/00 12:20	05/24/00 12:30
DUP-855	P005513-04	Water	05/23/00 12:00	05/24/00 12:30
TB	P005513-05	Water	05/23/00 12:00	05/24/00 12:30

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 1 of 6



Seattle 18939 1st Avenue NE, Suite 101, Bothell, WA 98011-9508
425.426.4260 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Accor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

Reported:
06/05/00 12:09

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
MW-1-855 (P005513-01RE1) Water					Sampled: 05/23/00 Received: 05/24/00				
Benzene	ND	0.500	ug/l	1	NW-G, 8021B	06/03/00	06/03/00	0060092	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	80.0	"	"	"	"	"	"	
Surr: 4-BFB (FID)	97.4 %	50-150							
Surr: 4-BFB (PID)	110 %	75-120							

MW-2-855 (P005513-02RE1) Water					Sampled: 05/23/00 Received: 05/24/00				
Benzene	26.2	5.00	ug/l	10	NW-G, 8021B	06/03/00	06/03/00	0060092	
Toluene	16.2	5.00	"	"	"	"	"	"	
Ethylbenzene	614	5.00	"	"	"	"	"	"	
Xylenes (total)	1770	10.0	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	13200	800	"	"	"	"	"	"	
Surr: 4-BFB (FID)	95.4 %	50-150							
Surr: 4-BFB (PID)	108 %	75-120							

MW-3-855 (P005513-03RE1) Water					Sampled: 05/23/00 Received: 05/24/00				
Benzene	4710	50.0	ug/l	100	NW-G, 8021B	06/03/00	06/03/00	0060092	
Toluene	8330	50.0	"	"	"	"	"	"	
Ethylbenzene	2280	50.0	"	"	"	"	"	"	
Xylenes (total)	11200	100	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	65200	8000	"	"	"	"	"	"	
Surr: 4-BFB (FID)	93.8 %	50-150							
Surr: 4-BFB (PID)	106 %	75-120							

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 2 of 6



Seattle 18939 1st Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.9210 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Accor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

Reported:
06/05/00 12:09

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
DUP-855 (P005513-04RE1) Water						Sampled: 05/23/00 Received: 05/24/00			
Benzene	4620	50.0	ug/l	100	NW-G, 8021B	06/03/00	06/03/00	0060092	
Toluene	8270	50.0	"	"	"	"	"	"	
Ethylbenzene	2260	50.0	"	"	"	"	"	"	
Xylenes (total)	11200	100	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	65500	8000	"	"	"	"	"	"	
Surr: 4-BFB (FID)	96.0 %	50-150							
Surr: 4-BFB (PID)	109 %	75-120							
TB (P005513-05RE1) Water						Sampled: 05/23/00 Received: 05/24/00			
Benzene	ND	0.500	ug/l	1	NW-G, 8021B	06/03/00	06/03/00	0060092	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	80.0	"	"	"	"	"	"	
Surr: 4-BFB (FID)	95.8 %	50-150							
Surr: 4-BFB (PID)	109 %	75-120							

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 3 of 6



Seattle 18939 1st Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.5000 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Cor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

Reported:
06/05/00 12:09

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

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

Batch 0060057 - EPA 5030

Blank (0060057-BLK1)

Prepared & Analyzed: 06/02/00

Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	57.4		"	50.0		115	75-120			

LCS (0060057-BS2)

Prepared & Analyzed: 06/02/00

Benzene	18.3	0.500	ug/l	20.0		91.5	70-130			
Toluene	19.3	0.500	"	20.0		96.5	70-130			
Ethylbenzene	19.0	0.500	"	20.0		95.0	70-130			
Xylenes (total)	56.7	1.00	"	60.0		94.5	70-130			
Surr: 4-BFB (PID)	54.7		"	50.0		109	75-120			

Duplicate (0060057-DUP1)

Source: P005513-01

Prepared & Analyzed: 06/02/00

Gasoline Range Hydrocarbons	ND	80.0	ug/l		ND				50	
Surr: 4-BFB (FID)	48.9		"	50.0		97.8	50-150			

Duplicate (0060057-DUP2)

Source: P005545-02

Prepared: 06/02/00 Analyzed: 06/03/00

Gasoline Range Hydrocarbons	ND	80.0	ug/l		ND				50	
Surr: 4-BFB (FID)	50.5		"	50.0		101	50-150			

Matrix Spike (0060057-MS1)

Source: P005513-02

Prepared & Analyzed: 06/02/00

Benzene	887	25.0	ug/l	1000	ND	86.4	70-130			
Toluene	883	25.0	"	1000	ND	86.3	70-130			
Ethylbenzene	1310	25.0	"	1000	509	80.1	70-130			
Xylenes (total)	3980	50.0	"	3000	1630	78.3	70-130			
Surr: 4-BFB (PID)	47.3		"	50.0		94.6	75-120			

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 4 of 6



Seattle 18939 1 Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.3400 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Cor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

Reported:
06/05/00 12:09

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

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

Batch 0060057 - EPA 5030

Matrix Spike Dup (0060057-MSD1)

Source: P005513-02

Prepared & Analyzed: 06/02/00

Benzene	990	25.0	ug/l	1000	ND	96.7	70-130	11.0	15
Toluene	1020	25.0	"	1000	ND	100	70-130	14.4	15
Ethylbenzene	1500	25.0	"	1000	509	99.1	70-130	13.5	15
Xylenes (total)	4570	50.0	"	3000	1630	98.0	70-130	13.8	15
Surr: 4-BFB (PID)	54.8		"	50.0		110	75-120		

Batch 0060092 - EPA 5030

Blank (0060092-BLK1)

Prepared & Analyzed: 06/03/00

Benzene	ND	0.500	ug/l						
Toluene	ND	0.500	"						
Ethylbenzene	ND	0.500	"						
Xylenes (total)	ND	1.00	"						
Gasoline Range Hydrocarbons	ND	80.0	"						
4-BFB (FID)	48.5		"	50.0		97.0	50-150		
Surr: 4-BFB (PID)	55.5		"	50.0		111	75-120		

LCS (0060092-BS1)

Prepared & Analyzed: 06/03/00

Gasoline Range Hydrocarbons	1120	80.0	ug/l	1250		89.6	70-130		
Surr: 4-BFB (FID)	58.0		"	50.0		116	50-150		

LCS (0060092-BS2)

Prepared & Analyzed: 06/03/00

Benzene	22.1	0.500	ug/l	20.0		111	70-130		
Toluene	19.6	0.500	"	20.0		98.0	70-130		
Ethylbenzene	20.8	0.500	"	20.0		104	70-130		
Xylenes (total)	62.2	1.00	"	60.0		104	70-130		
Surr: 4-BFB (PID)	53.3		"	50.0		107	75-120		

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 5 of 6



Seattle 18939 1st Avenue NE, Suite 101, Bothell, WA 98011-9508
425.420.3100 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 20354 Empire Avenue, Suite E-9, Bend, OR 97708-1883
541.383.9310 fax 541.382.7588

Cor
P.O. Box 1508
Tualatin, OR 97062

Project: ARCO #0855, Longview, WA
Project Number: 015.08698
Project Manager: Cary Goodman

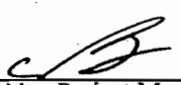
Reported:
06/05/00 12:09

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
wet Sample results reported on a wet weight basis
RPD Relative Percent Difference

North Creek Analytical - Portland

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.


Crystal Burkholder, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

Page 6 of 6

[illegible]

GROUNDWATER SAMPLING FIELD DATA SHEETS

SECOR

GROUNDWATER LEVEL DATA

SAMPLING EVENT: 2nd Quarter 2000

SITE: ARCO Facility 0855

PROJECT #: 015.08698

CLIENT: ARCO Products Co.

RECORDED BY: ↗

MEASURING DEVICE: Solingen DLW indicator

SITE LOCATION: 4603 Ocean Beach Highway, Longview, Washington

[illegible]

SECOR GROUND WATER SAMPLING FIELD DATA SHEET

SECOR PN: 05.0F698 DATE: 05/23/00 WELL NO. MW1
 FACILITY NAME: Arco 0855 TEMPERATURE: 70 °F or °C
 FIELD PERSONNEL: TV WEATHER: clear

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 5.20 FT.
 B. Thickness of Free Product, if present: 0 Inches _____ FT.
 C. Total Depth of well (TD) from top of casing/piezometer: _____ FT.
 D. Height of Water Column in casing ($h = TD - SWL$): _____ FT.
 E. Calculated Purge Volume (3 Well Volumes): _____ gal

PURGING METHOD: NP DURATION: _____

OBSERVATIONS:

	Time	Turbidity	Color	Sheen	pH	Temp.	Conduct.	SWL
1st Volume:								
2nd Volume:								
3rd Volume:								
4th Volume:								
Addl. Volumes:								

TOTAL VOLUME OF WATER PURGED FROM WELL: _____

PURGE WATER STORED/DISPOSED OF WHERE/HOW: _____

SAMPLES COLLECTED: Depth to Water at time of sample collection: _____

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW1-855</u>	<u>1205</u>	<u>3 x 40 mL Vials</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:

2-inch hole.....0.16 gal/lin ft.
 4-inch hole.....0.65 gal/lin ft.
 6.5-inch hole.....1.70 gal/lin ft.
 8-inch hole.....2.60 gal/lin ft.
 10-inch hole.....4.10 gal/lin ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = -- ()
 Collect sample when Depth to Water measures
 Less than or equal to: _____

Signature: _____

SECOR
GROUND WATER SAMPLING FIELD DATA SHEET

SECOR PN: 05-08698 DATE: 05/23/00 WELL NO. MW2
FACILITY NAME: Arco 0855 TEMPERATURE: 70 °F or °C
FIELD PERSONNEL: TV WEATHER: clear

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 4.64 FT.
B. Thickness of Free Product, if present: 0 Inches _____ FT.
C. Total Depth of well (TD) from top of casing/piezometer: _____ FT.
D. Height of Water Column in casing ($h = TD - SWL$): _____ FT.
E. Calculated Purge Volume (3 Well Volumes): _____ gal

PURGING METHOD: NP DURATION: _____

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>Color</u>	<u>Sheen</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>SWL</u>
1st Volume:	_____	_____	_____	_____	_____	_____	_____	_____
2nd Volume:	_____	_____	_____	_____	_____	_____	_____	_____
3rd Volume:	_____	_____	_____	_____	_____	_____	_____	_____
4th Volume:	_____	_____	_____	_____	_____	_____	_____	_____
Addl. Volumes:	_____	_____	_____	_____	_____	_____	_____	_____

TOTAL VOLUME OF WATER PURGED FROM WELL: _____

PURGE WATER STORED/DISPOSED OF WHERE/HOW: _____

SAMPLES COLLECTED: Depth to Water at time of sample collection: _____

<u>Sample Number(s)</u>	<u>Time</u>	<u>Size/Number of Container(s)</u>	<u>Preservative</u>
<u>MW2-855</u>	<u>1210</u>	<u>3x40-mL VOA's</u>	<u>HCL</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

COMMENTS:

Casing Capacities:

2-inch hole.....0.16 gal/lin ft.
4-inch hole.....0.65 gal/lin ft.
6.5-inch hole.....1.70 gal/lin ft.
8-inch hole.....2.60 gal/lin ft.
10-inch hole.....4.10 gal/lin ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
Original Water Column: _____ x 0.80 = _____
Collect sample when Depth to Water measures
Less than or equal to: _____

Signature: _____

SECOR GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: D/S. 08698 DATE: 05/23/00 WELL NO. MW3
 FACILITY NAME: Arco OFSS TEMPERATURE: 70 °F or °C
 FIELD PERSONNEL: TV WEATHER: clear

FIELD MEASUREMENTS:

A. Static Water Level (SWL) below top of casing/piezometer: 6.46 FT.
 B. Thickness of Free Product, if present: 0 Inches _____ FT.
 C. Total Depth of well (TD) from top of casing/piezometer: _____ FT.
 D. Height of Water Column in casing (h = TD - SWL): _____ FT.
 E. Calculated Purge Volume (3 Well Volumes): _____ gal

PURGING METHOD: NP DURATION: _____

OBSERVATIONS:

	Time	Turbidity	Color	Sheen	pH	Temp.	Conduct.	SWL
1st Volume:								
2nd Volume:								
3rd Volume:								
4th Volume:								
Addl. Volumes:								

NP

TOTAL VOLUME OF WATER PURGED FROM WELL: _____

PURGE WATER STORED/DISPOSED OF WHERE/HOW: _____

SAMPLES COLLECTED: Depth to Water at time of sample collection: _____

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW3-855</u>	<u>1220</u>	<u>3 x 40mL VOA's</u>	<u>HCL</u>
<u>Dup-855</u>	<u>"</u>	<u>"</u>	<u>"</u>

COMMENTS:

Casing Capacities:

2-inch hole.....0.16 gal/lin ft.
 4-inch hole.....0.65 gal/lin ft.
 6.5-inch hole.....1.70 gal/lin ft.
 8-inch hole.....2.60 gal/lin ft.
 10-inch hole.....4.10 gal/lin ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = ()
 Collect sample when Depth to Water measures
 Less than or equal to: _____

Signature: _____

SOIL DISPOSAL RECEIPTS



TPST SOIL RECYCLERS OF OREGON
9333 N. Harborage Street Portland, OR 97203

OR 018018

WEIGHMASTER CERTIFICATE - LICENSE #68636

THIS IS TO CERTIFY that the following described soil commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, as prescribed by the Division of Measurement Standards of the Oregon Department of Agriculture.

Manifest # A09 -05004 -001 06/19/00

Generator Site Information

ARCO 0855
4603 OCEAN BEACH HWY.

Facility Information

TPST SOIL RECYCLERS OF OREGON
9333 N HARBOEGATE STREET

LONGVIEW, WA 98632

USA

PORTLAND, OR 97203

USA

				LBS	TONS
0	IN --->	02:50:09pm	Gross Wt:	11,540	05.77
0	OUT -->	03:05:03pm	Tare Wt:	8,620	04.31
NET WT:				2,920	01.46

TRANSPORTER/DRIVER, SECOR/JOHN GLASS

Weighmaster

Manifest

TPS Technologies Soil Recycling

Non-Hazardous Soils

Manifest

Date of Shipment:		Responsible for Payment: Generator		Transporter Truck #: SECOR		Facility #: A09		Given by TPS: 05004		Load #: 001							
Generator's Name and Billing Address: ARCO PRODUCTS COMPANY P.O. BOX 5077 BUENA PARK, CA 90622-5077 USA						Generator's Phone #: (425) 868-1133		Generator's US EPA ID No. 7151									
						Person to Contact: MIKE WHELAN											
						FAX #: (425) 869-0210		Customer Account Number with TPS: 1002375									
Consultant's Name and Billing Address: SECOR 7730 SW MOHAWK STREET TUALATIN, OR 97062 USA						Consultant's Phone #:											
						Person to Contact: LARRY GOODMAN											
						FAX #: (503) 881-7070		Customer Account Number with TPS: 1000515									
Generation Site (Transport from): (name & address) ARCO 0855 4603 OCEAN BEACH HWY. LONGVIEW, WA 98632 USA						Site Phone #:		BTEX Levels									
						Person to Contact:		TPH Levels									
						FAX #:		AVG. Levels									
Designated Facility (Transport to): (name & address) TPS SOIL RECYCLERS OF OREGON 9333 N HARBOR GATE STREET PORTLAND, OR 97203 USA						Facility Phone #: 503-735-9525		Facility Permit Numbers									
						Person to Contact: GLENN MULLAN											
						FAX #: 503-240-1717											
Transporter Name and Mailing Address:						Transporter's Phone #:		Transporter's US EPA ID No.:									
						Person to Contact:		Transporter's DOT No.:									
						FAX #:		Customer Account Number with TPS:									
Description of Soil		Moisture Content		Contaminated by:		Approx. Qty:		Description of Delivery		Gross Weight		Tare Weight		Net Weight			
Sand ☐ Organic ☐ Clay ☐ Other ☐		0-10% ☐ 10-20% ☐ 20%-over ☐		Gas ☐ Diesel ☐ Other ☐						11540		8670		2920			
Sand ☐ Organic ☐ Clay ☐ Other ☐		0-10% ☐ 10-20% ☐ 20%-over ☐		Gas ☐ Diesel ☐ Other ☐								146					
List any exception to items listed above:																	
Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.																	
Print or Type Name: Generator ☐ Consultant ☐						Signature and date:						Month		Day		Year	
Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.																	
Print or Type Name: John Glass						Signature and date: John Glass						Month 06		Day 19		Year 00	
Discrepancies:																	
Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:																	
Print or Type Name: GLENN MULLAN / JULIE PERRI						Signature and date: Glenn Mullan						Month 6		Day 19		Year 00	

Please print or type.

TRANSPORTER'S COPY