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DATE: August 16, 1999

ENVIRONMENTAL DEPARTMENT
NORTHWEST REGION **TOSCO MARKETING COMPANY**
GROUNDWATER MONITORING REPORT

Site No.: 5353 Address: 600 Westlake Avenue North, Seattle, WA
Tosco Project Manager: Timothy D. Johnson
Consultant /Contact Person: Environmental Resolutions, Inc./John Meyer
Primary Agency/Regulatory ID No.: Washington State Department of Ecology

WORK PERFORMED THIS QUARTER(S) [Second - 1999]:

- Monitored 10 groundwater monitoring wells and sampled 5 wells without purging

WORK PROPOSED FOR NEXT QUARTER [Fourth - 1999]:

- Monitor 11 wells and sample 6 wells without purging

SUMMARY:

Frequency of Sampling Events:	<u>Semiannually</u>	(Quarterly, etc.)
Approximate Depth to Groundwater:	<u>8 to 10 ft</u>	(Measured Feet)
Groundwater Gradient:	<u>Northerly and Easterly</u>	(Direction)
	<u>0.003 ft/ft</u>	(Magnitude)
Maximum TPH-G/Benzene Concentrations:	<u>28,500/4,340</u>	(ppb)
Measurable Free Product Detected:	<u>Yes - SMW-4 and MW-37</u>	(Yes - ID wells(s)/No)
Free Product Recovered This Quarter:	<u>None</u>	(gallons)
Cumulative Free Product Recovered to Date:	<u>46,632</u>	(gallons)
Bulk Soil Removed This Quarter:	<u>None</u>	(cubic yards)
Water Wells or Surface Waters w/in a 2000'	<u>Lake Union</u>	(Distance &
Radius and Respective Direction:	<u>400 feet north</u>	Direction)
Current Remedial Action:	<u>VES</u>	(SVE/AS/P&T etc.)
Permits for Discharge:	<u>PSAPCA No. 4397</u>	(NPDES, POTW, etc.)

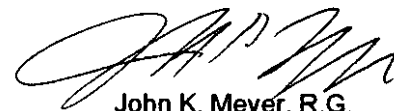
DISCUSSION:

- 2 of 5 wells sampled contained analyte concentrations exceeding MTCA Method A Cleanup Levels
- Trace amounts of LPH were observed in SMW-4 and MW-37; an absorbent sock was replaced in MW-37.

ATTACHMENTS:

Plate P-1 - Groundwater Sample Analyses Map, 6/30/99
Table 1 - Groundwater Analytical Results
Laboratory Reports and Chain of Custody Records
Field Data Records

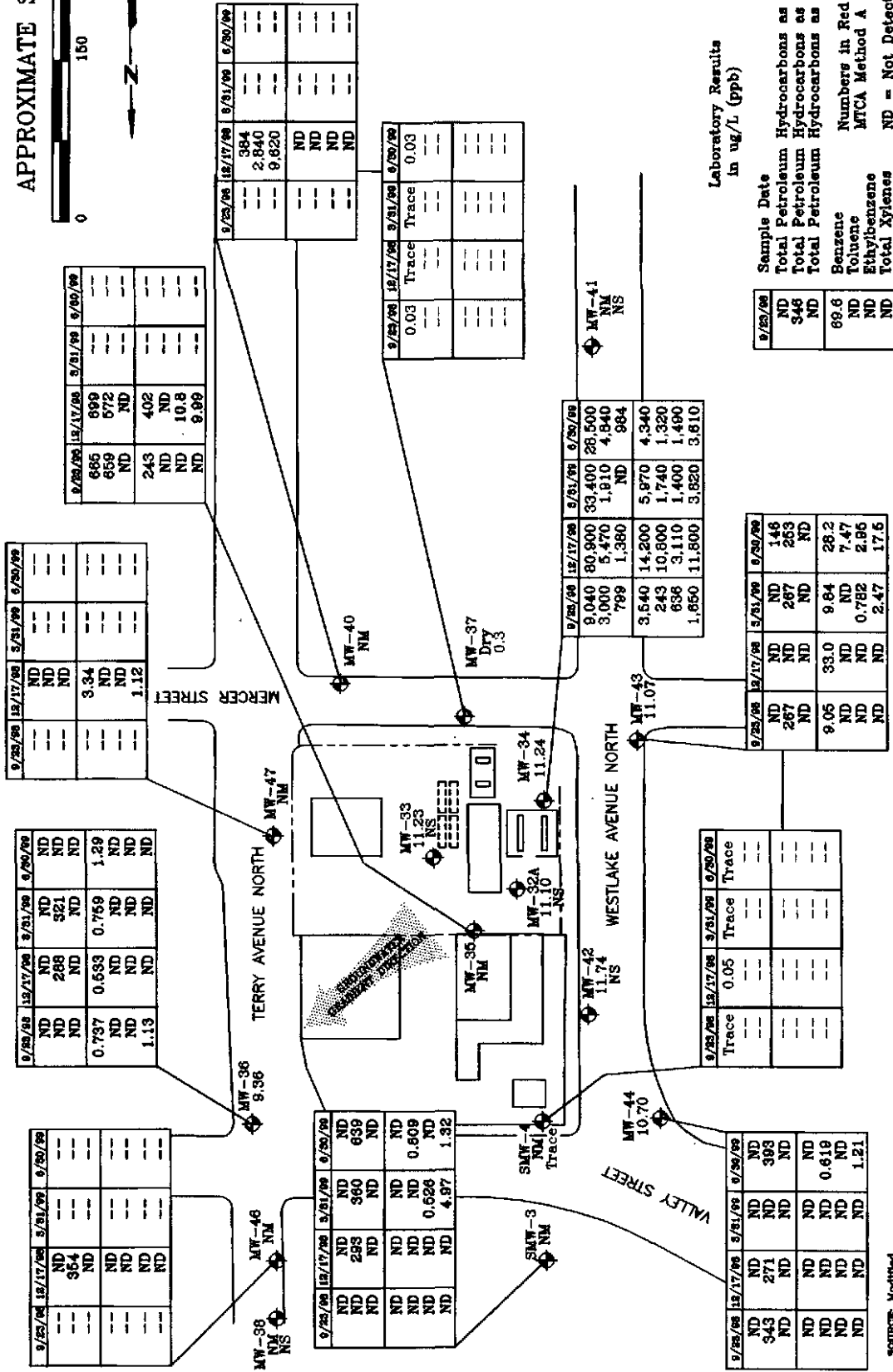
Prepared By:



John K. Meyer, R.G.
Environmental Resolutions, Inc.

cc: Ecology NW Region
GeoEngineers

APPROXIMATE SCALE



SOURCE: Modified from maps provided by Tesco Marketing Company

FN 6363

PROJECT NO.
31020

PLATE
P-1

DATE: 7/8/99

EXPLANATION

MW-37 Groundwater Monitoring Well
 9.70 Groundwater Elevation
 0.01 Free Product Thickness in Feet
 NM Not Measured
 NS Not Sampled

GROUNDWATER SAMPLE ANALYSES MAP - 6/30/99

TOSCO FACILITY 5353
600 Westlake Avenue North
Seattle, Washington

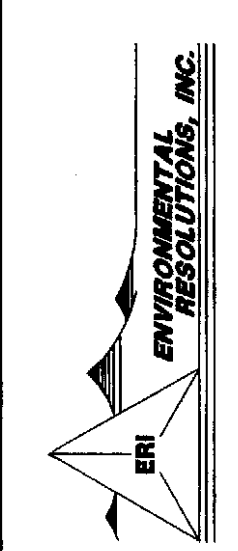


TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Tosco Facility 5353
600 Westlake Avenue North
Seattle, Washington
Page 1 of 5

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
SMW-3	03/08/95	10.25	0.00	--	<50	400	2,500	<0.5	<0.5	<0.5	<1.0
	06/06/95	10.23	0.00	--	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	09/07/95	10.89	0.00	--	<50	300	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	10.38	0.00	--	<50	300	<750	<0.5	<0.5	<0.5	<1.0
	04/01/96	10.07	0.00	--	34,000	4,000	2,300	6,400	42	2,100	3,000
	06/25/96	10.19	0.00	--	<50.0	320	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	11.12	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	10.19	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97 ^{NP}	10.14	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/08/97 ^{NP}	10.85	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/97 ^{NP}	9.67	0.00	--	<50.0	521	<750	<0.500	<0.500	<0.500	<1.00
	3/16/98 ^{NP}	9.28	0.00	--	50.1	<250	<750	<0.500	<0.500	<0.500	<1.00
	6/26/98 ^{NP}	8.87	0.00	--	<50.0	500	<750	<0.500	<0.500	<0.500	<1.00
	9/23/98 ^{NP}	9.88	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/17/98 ^{NP}	9.22	0.00	--	<50.0	293	<750	<0.500	<0.500	<0.500	<1.00
	3/31/99 ^{NP}	9.01	0.00	--	<50.0	360	<750	<0.500	<0.500	0.526	4.97
	6/30/99 ^{NP}	9.55	0.00	--	<50.0	639	<750	<0.500	0.809	<0.500	1.32
SMW-4	03/08/95	8.14	0.00	--	39,000	4,100	5,100	13,000	<250	2,400	8,200
	06/06/95	8.90	0.00	--	41,000	5,500	<750	9,400	44	2,700	4,900
	09/07/95	8.99	0.00	--	--	--	--	--	--	--	--
	12/08/95	7.56	0.00	--	40,000	1,500	920	6,100	57	2,600	3,600
	04/01/96	8.13	0.00	--	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	8.20	0.00	--	28,100	2,680	630	3,900	81.4	1,710	1,710
	09/27/96	8.82	0.00	--	28,600	2,460	<750	6,090	<0.500	2,060	1,730
	03/28/97	8.20	0.00	--	--	--	--	--	--	--	--
	06/30/97	8.06	0.00	--	--	--	--	--	--	--	--
	09/08/97	9.00	0.00	--	--	--	--	--	--	--	--
	12/19/97	9.41	0.04	--	--	--	--	--	--	--	--
	3/16/98	9.09	0.00	--	--	--	--	--	--	--	--
	6/26/98	8.76	Trace	--	--	--	--	--	--	--	--
	9/23/98	9.96	0.06	--	--	--	--	--	--	--	--
	12/17/98	10.22	Trace	--	--	--	--	--	--	--	--
	3/31/99	8.70	Trace	--	--	--	--	--	--	--	--
	6/30/99	8.20	Trace	--	--	--	--	--	--	--	--
MW-32A 20.70	03/08/95	11.29	0.00	9.69	21,000	2,300	2,300	5,800	1,700	990	2,900
	06/06/95	--	--	--	--	--	--	--	--	--	--
	09/07/95	11.27	--	9.43	20,000	2,500	1,600	4,200	470	730	2,000
	12/08/95	10.61	--	10.06	11,000	1,200	<750	1,800	86	420	910
	04/01/96	10.90	--	9.80	7,900	1,400	1,000	2,200	58	300	490
	06/25/96	10.98	--	9.72	7,500	1,250	<750	1,200	80.4	217	435
	09/27/96	11.37	--	9.61	7,050	1,040	<750	1,570	37.4	264	416
	03/28/97	11.26	--	9.72	--	--	--	--	--	--	--
	06/30/97	10.89	--	--	--	--	--	--	--	--	--
	09/08/97	11.67	0.00	9.31	--	--	--	--	--	--	--
	12/19/97	11.42	0.00	9.28	--	--	--	--	--	--	--
	3/16/98	11.30	0.00	9.40	--	--	--	--	--	--	--
	6/26/98	11.29	0.00	9.41	--	--	--	--	--	--	--
	9/23/98	11.97	0.00	8.73	--	--	--	--	--	--	--
	12/17/98	11.09	0.00	9.61	--	--	--	--	--	--	--
	3/31/99	10.47	0.00	10.23	--	--	--	--	--	--	--
	6/30/99	9.60	0.00	11.10	--	--	--	--	--	--	--
MW-33 20.75	03/08/95	11.18	0.00	9.73	4,900	1,400	2,000	680	<25	320	420
	06/06/95	--	--	--	--	--	--	--	--	--	--
	09/07/95	11.20	0.00	9.55	9,700	1,400	820	550	140	290	620
	12/08/95	--	--	--	13,800	1,900	1,800	800	240	280	780
	04/01/96	11.00	0.00	9.75	6,200	960	<750	630	33	130	270
	06/25/96	11.05	0.00	9.70	2,700	1,030	<750	230	24.6	46.5	61.1
	09/27/96	11.13	0.00	9.76	5,150	1,190	<750	1,190	237	86.3	272
	03/28/97	11.19	0.00	9.70	--	--	--	--	--	--	--
	06/30/97	10.66	0.00	10.23	--	--	--	--	--	--	--
	09/08/97	10.48	0.00	10.41	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98	11.18	0.00	9.57	--	--	--	--	--	--	--
	9/23/98	11.90	0.00	8.85	--	--	--	--	--	--	--
	12/17/98	11.03	0.00	9.72	--	--	--	--	--	--	--
	3/31/99	10.38	0.00	10.37	--	--	--	--	--	--	--
	6/30/99	9.52	0.00	11.23	--	--	--	--	--	--	--
MTCA Method A Cleanup Level					1,000*	5	40	30	20		

Continued on Page 2.

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Tosco Facility 5353
600 Westlake Avenue North
Seattle, Washington
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Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW-34 21.42	03/08/95	11.82	0.00	10.08	9,200	1,100	480	2,400	1,500	250	1,300
	06/06/95	11.73	0.00	9.97	9,100	2,300	<750	4,200	1,000	330	1,200
	09/07/95	11.57	0.00	9.85	18,000	1,800	930	4,800	2,300	560	2,000
	12/08/95	10.92	0.00	10.50	68,000	2,900	1,600	12,000	9,200	1,200	5,500
	04/01/96	11.21	0.00	10.21	10,000	1,900	<750	5,500	580	620	1,200
	06/25/96	11.19	0.00	10.23	13,700	1,180	<750	4,190	1,110	393	1,740
	09/27/96	11.58	0.00	10.12	16,300	1,030	<750	5,010	2,620	541	1,310
	03/28/97	11.47	0.00	10.23	--	--	--	--	--	--	--
	06/30/97 ^{NP}	11.19	0.00	10.51	2,970	311	<750	1,930	15.7	271	531
	09/08/97 ^{NP}	11.74	0.00	9.96	8,390	455	<750	3,920	645	567	1,270
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98 ^{NP}	11.42	0.00	10.00	76,900	3,090	<750	13,400	11,100	2,310	9,080
	9/23/98 ^{NP}	12.23	0.00	9.19	9,040	3,000	799	3,540	243	636	1,650
	12/17/98 ^{NP}	11.35	0.00	10.07	60,900	5,470	1,380	14,200	10,800	3,110	11,800
	3/31/99 ^{NP}	10.85	0.00	10.57	33,400	1,910	<750	5,970	1,740	1,400	3,820
	6/30/99 ^{NP}	10.18	0.00	11.24	28,500	4,840	984	4,340	1,320	1,490	3,810
MW-35 20.10	03/08/95	10.67	0.00	9.60	2,500	1,200	1,300	406	<25	120	63
	06/06/95	10.67	0.00	9.60	810	1,000	930	82	1.4	27	36
	09/07/95	10.87	0.00	9.43	--	--	--	--	--	--	--
	12/08/95	0.00	--	--	--	--	--	--	--	--	--
	04/01/96	--	--	--	--	--	--	--	--	--	--
	06/25/96	11.11	0.00	8.99	1,620	850	<750	68.2	1.11	26.7	17.6
	09/27/96	10.64	0.00	9.63	949	524	<750	58.8	0.990	10.4	6.18
	03/28/97 ^{NP}	11.28	0.00	8.99	1,370	339	<750	181	2.36	31.9	10.7
	03/28/97	11.28	0.00	8.99	1,800	<250	<750	250	2.62	49.1	8.04
	06/30/97 ^{NP}	10.19	0.00	10.08	1,900	<250	<750	349	<2.50	85.0	7.31
	09/08/97 ^{NP}	10.86	0.00	9.41	4,200	<250	<750	1,480	16.2	231	69.2
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98 ^{NP}	10.64	0.00	9.46	905	361	<750	410	4.24	<2.50	<5.00
	6/26/98 ^{NP}	10.65	0.00	9.45	1,300	692	<750	600	<10.0	45.1	<20.0
	9/23/98 ^{NP}	11.38	0.00	8.72	685	638	<750	243	<2.50	<2.50	<5.00
12/17/98 ^{NP}	10.49	0.00	9.61	699	572	<750	462	<2.50	10.8	9.99	
3/31/99	Obstructed by vehicle										
6/30/99	Obstructed by vehicle										
MW-36 17.80	03/08/95	9.07	0.00	8.97	<50	560	1,200	2.6	<0.5	<0.5	<1.0
	06/06/95	7.92	0.00	10.12	<50	<250	<750	1.0	<0.5	<0.5	<1.0
	09/07/95	8.11	0.00	9.69	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	9.00	0.00	8.80	<50	510	1,200	1.1	<0.5	<0.5	<1.0
	04/01/96	9.00	0.00	8.80	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	8.97	0.00	--	<50.0	<250	<750	0.580	0.500	<0.500	<1.00
	09/27/96	7.53	0.00	10.51	<50.0	<250	<750	1.18	<0.500	<0.500	<1.00
	03/28/97	9.21	0.00	8.83	<50.0	<250	<750	0.810	<0.500	<0.500	<1.00
	06/30/97 ^{NP}	8.88	0.00	11.16	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/08/97 ^{NP}	9.21	0.00	8.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/97 ^{NP}	10.09	0.00	7.71	<50.0	<250	<750	0.608	<0.500	<0.500	<1.00
	3/16/98 ^{NP}	9.29	0.00	8.51	56.6	287	<750	<0.500	<0.500	<0.500	<1.00
	6/26/98 ^{NP}	8.47	0.00	9.33	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	9/23/98 ^{NP}	9.89	0.00	7.91	<50.0	<250	<750	0.737	<0.500	<0.500	1.13
12/17/98 ^{NP}	10.00	0.00	7.80	<50.0	288	<750	0.533	<0.500	<0.500	<1.00	
3/31/99 ^{NP}	8.96	0.00	8.84	<50.0	321	<750	0.759	<0.500	<0.500	<1.00	
6/30/99 ^{NP}	8.44	0.00	9.36	<50.0	<250	<750	1.29	<0.500	<0.500	<1.00	
MW-37 21.01	03/08/95	11.94	0.00	9.24	34	3,200	1,400	3,100	2,400	1,200	6,700
	06/06/95	11.76	0.01	9.43	45	4,600	2,600	3,700	2,400	1,300	7,900
	06/06/95	11.76	0.01	9.43	90	--	--	5,100	6,000	2,400	14,000
	09/07/95	11.17	0.00	9.84	--	--	--	--	--	--	--
	12/08/95	10.22	0.00	10.79	--	--	--	--	--	--	--
	04/01/96	10.79	0.02	10.22	--	--	--	--	--	--	--
	06/25/96	10.82	0.20	10.19	--	--	--	--	--	--	--
	09/27/96	11.47	0.05	9.75	--	--	--	--	--	--	--
	03/28/97 ^{NP}	11.14	0.25	10.40	80,100	7,970	789	1,530	2,180	1,650	7,440
	03/28/97	11.14	0.25	10.40	297,000	45,100	<8,250	6,970	13,200	4,930	22,900
	06/30/97	10.80	0.02	10.23	--	--	--	--	--	--	--
	09/08/97	11.41	0.23	9.77	--	--	--	--	--	--	--
	12/19/97	11.28	0.02	9.75	--	--	--	--	--	--	--
	3/16/98	11.11	0.01	9.91	--	--	--	--	--	--	--
	6/26/98	11.32	0.01	9.70	--	--	--	--	--	--	--
	9/23/98	12.01	0.03	9.03	--	--	--	--	--	--	--
	12/17/98	11.00	Trace	10.01	--	--	--	--	--	--	--
	3/31/99	--	Trace	--	--	--	--	--	--	--	--
	6/30/99	Dry	0.3	--	--	--	--	--	--	--	--
	MTCA Method A Cleanup Level					1,000 ^a	5	40	30	20	

Continued on Page 3.

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Tosco Facility 5353
600 Westlake Avenue North
Seattle, Washington
Page 3 of 5

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW-38 18.52	03/08/95	--	--	--	--	--	--	--	--	--	--
	06/06/95	--	--	--	--	--	--	--	--	--	--
	09/07/95	--	--	--	--	--	--	--	--	--	--
	12/08/95	--	--	--	--	--	--	--	--	--	--
	04/01/96	--	--	--	--	--	--	--	--	--	--
	06/25/96	--	--	--	--	--	--	--	--	--	--
	09/27/96	--	--	--	--	--	--	--	--	--	--
	03/28/97	9.23	0.00	7.60	<50	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98	--	--	--	--	--	--	--	--	--	--
	9/23/98	--	--	--	--	--	--	--	--	--	--
12/17/98	--	--	--	--	--	--	--	--	--	--	
3/31/99	--	--	--	--	--	--	--	--	--	--	
6/30/99	--	--	--	--	--	--	--	--	--	--	
MW-40 20.89	03/08/95	10.98	0.00	10.14	960	2,600	2,600	11	<0.5	11	<1.0
	06/06/95	11.18	0.00	9.94	1,500	2,300	1,600	6.8	4.3	4.1	21
	09/07/95	11.08	0.00	9.81	650	13,000	66,000	11	0.91	0.57	<1.0
	12/08/95	10.30	0.00	10.59	500	1,400	4,800	2.7	3	<0.5	<1.0
	04/01/96	10.56	0.00	10.33	520	3,200	13,000	1.2	<0.5	0.55	<1.0
	06/25/96	10.69	0.00	10.20	500	2,700	8,460	<0.500	9.82	<0.500	<1.00
	09/27/96	10.95	0.00	10.17	602	3,550	9,860	0.604	41.1	0.525	<1.0
	03/28/97	10.92	0.00	10.20	--	--	--	--	--	--	--
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97 ^{NP}	11.11	0.00	9.78	328	3,260	12,600	<0.500	0.504	0.663	2.44
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98	--	--	--	--	--	--	--	--	--	--
	9/23/98	--	--	--	--	--	--	--	--	--	--
12/17/98 ^{NP}	10.88	0.00	10.03	384	2,640	9,620	<0.500	<0.500	<0.500	<1.00	
3/31/99	--	--	--	--	--	--	--	--	--	--	
6/30/99	--	--	--	--	--	--	--	--	--	--	
MW-41 27.00	03/08/95	14.72	--	12.48	<50	<250	<750	1.6	<0.5	<0.5	<1.0
	06/06/95	15.02	--	12.18	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	09/07/95	15.00	--	12.00	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	16.30	--	10.70	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	04/01/96	15.02	--	11.98	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	15.07	--	11.93	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	15.42	0.00	11.78	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	15.27	0.00	11.93	--	--	--	--	--	--	--
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98	--	--	--	--	--	--	--	--	--	--
	9/23/98	--	--	--	--	--	--	--	--	--	--
12/17/98	--	--	--	--	--	--	--	--	--	--	
3/31/99	--	--	--	--	--	--	--	--	--	--	
6/30/99	--	--	--	--	--	--	--	--	--	--	
MW-42 20.34	03/08/95	9.45	0.00	10.91	130	670	1,200	730	<25	<25	<50
	06/06/95	9.37	0.00	10.89	120	920	1,500	500	<0.56	<0.5	<1.0
	09/07/95	9.50	0.00	10.84	3,000	780	1,200	210	4.1	42	230
	12/08/95	8.95	0.00	11.39	200	1,900	1,900	380	<2.0	<2.0	<4.0
	04/01/96	9.03	0.00	11.31	180	650	<750	280	0.52	<0.5	<1.0
	06/25/96	9.07	0.00	11.27	150	720	<750	150	<0.500	<0.500	<1.00
	09/27/96	9.12	0.00	11.24	<250	534	<750	228	<2.50	<2.50	<5.00
	03/28/97	9.09	0.00	11.27	--	--	--	--	--	--	--
	06/30/97	8.92	0.00	11.44	--	--	--	--	--	--	--
	09/08/97	9.57	0.00	10.79	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	9.53	0.00	10.81	--	--	--	--	--	--	--
	6/26/98	9.51	0.00	10.83	--	--	--	--	--	--	--
	9/23/98	9.96	0.00	10.38	--	--	--	--	--	--	--
12/17/98	9.10	0.00	11.24	--	--	--	--	--	--	--	
3/31/99	9.00	0.00	11.34	--	--	--	--	--	--	--	
6/30/99	8.60	0.00	11.74	--	--	--	--	--	--	--	
MTCA Method A Cleanup Level					1,000 ^a	5	40	30	20		

Continued on Page 4.

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
Tosco Facility 5353
600 Westlake Avenue North
Seattle, Washington
Page 4 of 5

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW-43 21.04	03/08/95	11.35	0.00	9.94	<50	850	2,400	25	<0.5	<0.5	<1.0
	06/06/95	11.45	0.00	9.84	<50	890	1,500	8.2	<0.5	<0.5	<1.0
	09/07/95	11.14	0.00	9.90	<50	<250	850	10	<0.5	<0.5	<1.0
	12/08/95	10.85	0.00	10.19	<50	960	3,100	37	<0.5	<0.5	<1.0
	04/01/96	10.98	0.00	10.06	<50	300	<750	4.5	<0.5	<0.5	<1.0
	06/25/96	11.06	0.00	9.98	<50.0	370	<750	2.57	<0.500	<0.500	<1.00
	09/27/96	11.33	0.00	9.96	<50.0	339	<750	4.40	<0.5	<0.500	<1.00
	03/28/97	11.13	0.00	9.98	<50.0	<250	<750	5.89	0.884	<0.500	2.47
	06/30/97 ^{HP}	7.08	0.00	14.21	<50.0	<250	<750	59.2	<0.500	<0.500	<1.00
	09/08/97 ^{HP}	11.46	0.00	9.83	83	<250	<750	35.5	<0.500	2.10	3.08
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98 ^{HP}	11.09	0.00	9.95	76.3	408	<750	26.5	<0.500	<0.500	<1.00
	6/26/98 ^{HP}	11.26	0.00	9.78	<50.0	346	<750	69.6	<0.500	<0.500	<1.00
	9/23/98 ^{HP}	11.75	0.00	9.29	<50.0	267	<750	9.05	<0.500	<0.500	<1.00
	12/17/98 ^{HP}	11.07	0.00	9.97	<50.0	<250	<750	33.0	<0.500	<0.500	<1.00
	3/31/99 ^{HP}	10.97	0.00	10.07	<50.0	267	<750	9.84	<0.500	0.782	2.47
	6/30/99 ^{HP}	9.97	0.00	11.07	146	253	<750	28.2	7.47	2.95	17.5
MW-44 18.73	03/08/95	9.44	0.00	10.46	<50	280	940	<0.5	<0.5	<0.5	<1.0
	06/06/95	8.28	0.00	10.82	<50	<250	820	<0.5	<0.5	<0.5	1.6
	09/07/95	7.94	0.00	10.79	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	8.09	0.00	10.64	<50	520	2,500	<0.5	<0.5	<0.5	<1.0
	04/01/96	7.98	0.00	10.75	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	7.90	0.00	10.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	8.28	0.00	10.59	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	8.07	0.00	10.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97 ^{HP}	7.84	0.00	11.06	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/08/97 ^{HP}	8.65	0.00	10.25	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/97 ^{HP}	8.51	0.00	10.22	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	3/16/98 ^{HP}	8.43	0.00	10.30	80.0	310	<750	<0.500	<0.500	<0.500	<1.00
	6/26/98 ^{HP}	8.37	0.00	10.38	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	9/23/98 ^{HP}	9.30	0.00	9.43	<50.0	343	<750	<0.500	<0.500	<0.500	<1.00
	12/17/98 ^{HP}	8.10	0.00	10.83	<50.0	271	<750	<0.500	<0.500	<0.500	<1.00
	3/31/99 ^{HP}	8.18	0.00	10.55	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	6/30/99 ^{HP}	8.03	0.00	10.70	<50.0	393	<750	<0.500	0.619	<0.500	1.21
MW-46 18.91	03/08/95	8.00	0.00	8.91	<50	720	3,600	<0.5	<0.5	<0.5	<1.0
	06/06/95	7.30	0.00	10.01	<50	<250	1,400	<0.5	<0.5	<0.5	<1.0
	09/07/95	7.80	0.00	8.93	<50	710	5,600	<0.5	<0.5	<0.5	<1.0
	12/08/95	8.32	0.00	8.59	<50	1,400	14,000	<0.5	<0.5	<0.5	<1.0
	04/01/96	7.04	0.00	9.87	<50	<400	2,800	<0.5	<0.5	<0.5	<1.0
	06/25/96	7.85	0.00	9.06	<50.0	440	2,050	<0.500	<0.500	<0.500	<1.00
	09/27/96	7.57	0.00	9.74	<50.0	267	<750	0.518	<0.500	<0.500	<1.00
	03/28/97	7.25	0.00	10.06	<50.0	<250	<750	<0.500	1.25	<0.500	2.06
	06/30/97	7.12	0.00	10.19	--	--	--	--	--	--	--
	09/08/97	8.82	0.00	8.49	--	--	--	--	--	--	--
	12/19/97 ^{HP}	9.40	0.00	7.51	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98	--	--	--	--	--	--	--	--	--	--
	9/23/98	--	--	--	--	--	--	--	--	--	--
	12/17/98 ^{HP}	9.20	0.00	7.71	<50.0	354	<750	<0.500	<0.500	<0.500	<1.00
	3/31/99	--	--	--	--	--	--	--	--	--	--
	6/30/99	--	--	--	--	--	--	--	--	--	--
MW-47 19.83	03/08/95	10.88	0.00	9.18	<50	330	1,600	5.3	<0.5	<0.5	<1.0
	06/06/95	10.91	0.00	9.13	70	380	760	15	0.59	<0.5	2.3
	09/07/95	10.76	0.00	9.07	<50	260	<750	1.7	<0.5	<0.5	<1.0
	12/08/95	10.40	0.00	9.43	740	580	2,000	<0.5	<0.5	<0.5	<1.0
	04/01/96	10.87	0.00	9.16	<50	<250	<750	4.4	<0.5	<0.5	<1.0
	06/25/96	10.71	0.00	9.12	110	400	<750	14.4	<0.500	<0.500	<1.00
	09/27/96	10.85	0.00	9.19	<50.0	<250	<750	4.34	<0.500	<0.500	<1.00
	03/28/97 ^{HP}	10.92	0.00	9.12	64.5	<250	<750	7.61	<0.500	<0.500	1.57
	03/28/97	10.92	0.00	9.12	177	<250	<750	62.6	<0.500	<0.500	<1.00
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	3/16/98	--	--	--	--	--	--	--	--	--	--
	6/26/98 ^{HP}	10.78	0.00	9.05	<50.0	356	<750	27.3	<0.500	<0.500	<1.00
	9/23/98	--	--	--	--	--	--	--	--	--	--
	12/17/98 ^{HP}	10.61	0.00	9.22	<50.0	<250	<750	3.34	<0.500	<0.500	1.12
	3/31/99	9.65	0.00	10.18	--	--	--	--	--	--	--
6/30/99	--	--	--	--	--	--	--	--	--	--	
MTCA Method A Cleanup Level						1,000 ^a	5	40	30	20	

Continued on Page 5.

TABLE 1
GROUNDWATER ANALYTICAL RESULTS
 Tosco Facility 5353
 600 Westlake Avenue North
 Seattle, Washington
 Page 5 of 5

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
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EXPLANATION:

Concentrations in ug/L (ppb).

Wellhead elevations taken from prior consultant's reports.

DTW = Depth to water in feet below top of casing except where noted in prior reports.

LPH = Liquid-phase petroleum hydrocarbon thickness in feet.

GW Elev. = Groundwater elevation relative to DTW data; corrected for LPH where applicable using a specific gravity of 0.85.

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Ecology Method WTPH-G.

TPH-D and TPH-O = Total petroleum hydrocarbons as diesel and as oil (respectively) by Ecology Method WTPH-D (Extended).

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes.

BTEX = Aromatic compounds by EPA Method 8020.

NP = Well not purged prior to sampling.

< = Less than the stated laboratory reporting limit.

- = Not analyzed or no data.

Shaded values equal or exceed MTC A Cleanup Levels.

* Total Petroleum Hydrocarbons

Data collected before 12/1997 are taken from prior consultants.



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ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
SMW-3	B906747-01	Water	6/30/99
MW-34	B906747-02	Water	6/30/99
MW-36	B906747-03	Water	6/30/99
MW-43	B906747-04	Water	6/30/99
MW-44	B906747-05	Water	6/30/99

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.*

Steve Davis, Project Manager

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**Gasoline Hydrocarbons (Toluene to Dodecane) and BTEX by WTPH-G and EPA 8021B
 North Creek Analytical - Bothell**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
				B906747-01				
SMW-3							Water	
Gasoline Range Hydrocarbons	0790056	7/2/99	7/3/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	0.609	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		1.00	1.32	"	
Surrogate: 4-BFB (FID)	"	"	"	50.0-150		93.8	%	
Surrogate: 4-BFB (PID)	"	"	"	50.0-150		97.7	"	
				B906747-02				
MW-34							Water	
Gasoline Range Hydrocarbons	0790056	7/2/99	7/3/99		2500	28500	ug/l	
Benzene	"	"	"		25.0	4340	"	
Toluene	"	"	"		25.0	1320	"	
Ethylbenzene	"	"	"		25.0	1490	"	
Xylenes (total)	"	"	"		50.0	3610	"	
Surrogate: 4-BFB (FID)	"	"	"	50.0-150		111	%	
Surrogate: 4-BFB (PID)	"	"	"	50.0-150		101	"	
				B906747-03				
MW-36							Water	
Gasoline Range Hydrocarbons	0790334	7/12/99	7/12/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	1.29	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		1.00	ND	"	
Surrogate: 4-BFB (FID)	"	"	"	50.0-150		84.8	%	
Surrogate: 4-BFB (PID)	"	"	"	50.0-150		98.3	"	
				B906747-04				
MW-43							Water	
Gasoline Range Hydrocarbons	0790334	7/12/99	7/12/99		50.0	146	ug/l	
Benzene	"	"	"		0.500	28.2	"	
Toluene	"	"	"		0.500	7.47	"	
Ethylbenzene	"	"	"		0.500	2.95	"	
Xylenes (total)	"	"	"		1.00	17.5	"	
Surrogate: 4-BFB (FID)	"	"	"	50.0-150		81.7	%	
Surrogate: 4-BFB (PID)	"	"	"	50.0-150		102	"	
				B906747-05				
MW-44							Water	
Gasoline Range Hydrocarbons	0790334	7/12/99	7/12/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	

North Creek Analytical - Bothell

*Refer to end of report for text of notes and definitions.

Steve Davis, Project Manager

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ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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**Gasoline Hydrocarbons (Toluene to Dodecane) and BTEX by WTPH-G and EPA 8021B
 North Creek Analytical - Bothell**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<u>MW-44 (continued)</u>				<u>B906747-05</u>			<u>Water</u>	
Toluene	0790334	7/12/99	7/12/99		0.500	0.619	ug/l	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		1.00	1.21	"	
Surrogate: 4-BFB (FID)	"	"	"	50.0-150		82.5	%	
Surrogate: 4-BFB (PID)	"	"	"	50.0-150		97.5	"	

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*Refer to end of report for text of notes and definitions.

Steve Davis, Project Manager

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ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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**Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)
 North Creek Analytical - Bothell**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
SMW-3								
Diesel Range Hydrocarbons	0790100	7/6/99	7/9/99	<u>B906747-01</u>	0.250	0.639	Water mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	50.0-150		112	%	
MW-34								
Diesel Range Hydrocarbons	0790100	7/6/99	7/9/99	<u>B906747-02</u>	0.250	4.84	Water mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	0.984	"	
Surrogate: 2-FBP	"	"	"	50.0-150		91.2	%	
MW-36								
Diesel Range Hydrocarbons	0790100	7/6/99	7/9/99	<u>B906747-03</u>	0.250	ND	Water mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	50.0-150		75.2	%	
MW-43								
Diesel Range Hydrocarbons	0790100	7/6/99	7/9/99	<u>B906747-04</u>	0.250	0.253	Water mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	50.0-150		56.5	%	
MW-44								
Diesel Range Hydrocarbons	0790100	7/6/99	7/9/99	<u>B906747-05</u>	0.250	0.393	Water mg/l	
Heavy Oil Range Hydrocarbons	"	"	"		0.750	ND	"	
Surrogate: 2-FBP	"	"	"	50.0-150		80.6	%	

North Creek Analytical - Bothell

*Refer to end of report for text of notes and definitions.

Steve Davis, Project Manager

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ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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Gasoline Hydrocarbons (Toluene to Dodecane) and BTEX by WTPH-G and EPA 8021B/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0790056			Date Prepared: 7/2/99		Extraction Method: EPA 5030B (P/T)				
Blank			0790056-BLK1						
Gasoline Range Hydrocarbons	7/2/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	1.00			
Surrogate: 4-BFB (FID)	"	48.0		45.9	"	50.0-150	95.6		
Surrogate: 4-BFB (PID)	"	48.0		47.1	"	50.0-150	98.1		
LCS			0790056-BS1						
Gasoline Range Hydrocarbons	7/2/99	500		513	ug/l	70.0-130	103		
Surrogate: 4-BFB (FID)	"	48.0		50.4	"	50.0-150	105		
Duplicate			0790056-DUP1		B906689-02				
Gasoline Range Hydrocarbons	7/3/99		ND	ND	ug/l			25.0	
Surrogate: 4-BFB (FID)	"	48.0		45.2	"	50.0-150	94.2		
Duplicate			0790056-DUP2		B906747-02				
Gasoline Range Hydrocarbons	7/3/99		28500	25900	ug/l			25.0	9.56
Surrogate: 4-BFB (FID)	"	48.0		75.2	"	50.0-150	157		1
Matrix Spike			0790056-MS1		B906638-17				
Benzene	7/3/99	10.0	ND	8.86	ug/l	70.0-130	88.6		
Toluene	"	10.0	ND	8.83	"	70.0-130	88.3		
Ethylbenzene	"	10.0	ND	8.92	"	70.0-130	89.2		
Xylenes (total)	"	30.0	ND	25.2	"	70.0-130	84.0		
Surrogate: 4-BFB (PID)	"	48.0		47.7	"	50.0-150	99.4		
Matrix Spike Dup			0790056-MSD1		B906638-17				
Benzene	7/3/99	10.0	ND	8.83	ug/l	70.0-130	88.3	15.0	0.339
Toluene	"	10.0	ND	8.96	"	70.0-130	89.6	15.0	1.46
Ethylbenzene	"	10.0	ND	9.08	"	70.0-130	90.8	15.0	1.78
Xylenes (total)	"	30.0	ND	26.6	"	70.0-130	88.7	15.0	5.44
Surrogate: 4-BFB (PID)	"	48.0		48.3	"	50.0-150	101		
Batch: 0790334			Date Prepared: 7/12/99		Extraction Method: EPA 5030B (P/T)				
Blank			0790334-BLK1						
Gasoline Range Hydrocarbons	7/12/99			ND	ug/l	50.0			

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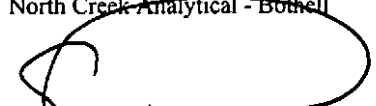
ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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**Gasoline Hydrocarbons (Toluene to Dodecane) and BTEX by WTPH-G and EPA 8021B/Quality Control
 North Creek Analytical - Bothell**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)										
	0790334-BLK1									
Benzene	7/12/99			ND	ug/l	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	1.00				
Surrogate: 4-BFB (FID)	"	48.0		40.1	"	50.0-150	83.5			
Surrogate: 4-BFB (PID)	"	48.0		46.3	"	50.0-150	96.5			
LCS										
	0790334-BS1									
Gasoline Range Hydrocarbons	7/12/99	500		486	ug/l	70.0-130	97.2			
Surrogate: 4-BFB (FID)	"	48.0		44.2	"	50.0-150	92.1			
Duplicate										
	0790334-DUP1		B907047-05							
Gasoline Range Hydrocarbons	7/12/99		ND	918	ug/l				25.0	
Surrogate: 4-BFB (FID)	"	48.0		52.3	"	50.0-150	109			
Matrix Spike										
	0790334-MS1		B906747-03							
Benzene	7/12/99	10.0	1.29	9.69	ug/l	70.0-130	84.0			
Toluene	"	10.0	ND	9.91	"	70.0-130	99.1			
Ethylbenzene	"	10.0	ND	10.3	"	70.0-130	103			
Xylenes (total)	"	30.0	ND	31.0	"	70.0-130	103			
Surrogate: 4-BFB (PID)	"	48.0		48.4	"	50.0-150	101			
Matrix Spike Dup										
	0790334-MSD1		B906747-03							
Benzene	7/12/99	10.0	1.29	9.80	ug/l	70.0-130	85.1	15.0	1.30	
Toluene	"	10.0	ND	10.0	"	70.0-130	100	15.0	0.904	
Ethylbenzene	"	10.0	ND	10.4	"	70.0-130	104	15.0	0.966	
Xylenes (total)	"	30.0	ND	31.5	"	70.0-130	105	15.0	1.92	
Surrogate: 4-BFB (PID)	"	48.0		47.1	"	50.0-150	98.1			

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ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0790100			Date Prepared: 7/6/99			Extraction Method: EPA 3510C/600 Series				
Blank			0790100-BLK1							
Diesel Range Hydrocarbons	7/9/99			ND	mg/l	0.250				
Heavy Oil Range Hydrocarbons	"			ND	"	0.750				
Surrogate: 2-FBP	"	0.325		0.250	"	50.0-150	76.9			
LCS			0790100-BS1							
Diesel Range Hydrocarbons	7/9/99	2.00		1.62	mg/l	60.0-140	81.0			
Surrogate: 2-FBP	"	0.325		0.347	"	50.0-150	107			
Duplicate			0790100-DUP2			B907080-01				
Diesel Range Hydrocarbons	7/9/99		ND	ND	mg/l				44.0	
Heavy Oil Range Hydrocarbons	"		ND	ND	"				44.0	
Surrogate: 2-FBP	"	0.602		0.584	"	50.0-150	97.0			

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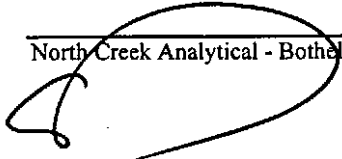
ERI 1921 Edmonds Drive SE Renton, WA 98055	Project: TOSCO #5353 Project Number: 31020 Project Manager: John Meyer	Sampled: 6/30/99 Received: 6/30/99 Reported: 7/14/99 08:08
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Notes and Definitions

#	Note
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- 1 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
- 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
- Recov. Recovery
- RPD Relative Percent Difference

North Creek Analytical - Bothell



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TOSCO CHAIN OF CUSTODY REPORT

B906747

TOSCO INFORMATION

Facility Number: *5353 Wentlake*
 Site Address: *600 Wentlake Ave N.*
 City, State, ZIP: *Spokane, WA 99201*
 Project/AWO Code: *775532511/287/3860303000*
 Tosco Manager: *Tim Johnson*
 FACILITY TYPE: (check one) BP Terminal/Bulk Plant
 Brown Bear 76 Site Other

CONSULTANT INFORMATION

Firm: *ERA* Project# *31020*
 Address: *1921 Edwards Dr SE*
Renton, WA 98055
 Phone: *(253) 227-0282* Fax: *253-227-0225*
 Project Manager: *John Meyer* E-mail:
 Sample Collection by: *Meyer*

Quality Assurance Data Level:

A B

A: Standard Summary
 B: Standard + Chromatograms

Laboratory Turnaround Days:

10 15 3 2 1

10 Day - Standard

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CON-TAINERS
<i>SMW-3</i>	<i>6/30/99</i>	<i>W</i>	<i>3</i>
<i>MW-34</i>			
<i>MW-35</i>			
<i>MW-43</i>			
<i>MW-44</i>			
6.			
7.			
8.			
9.			
10.			

TPH-HCID	TPH-Gas	BTEX	EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	Extended TPH-Diesel	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: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)
				<i>XX</i>	<i>XX</i>	<i>XX</i>								
				<i>XX</i>	<i>XX</i>	<i>XX</i>								
				<i>XX</i>	<i>XX</i>	<i>XX</i>								
				<i>XX</i>	<i>XX</i>	<i>XX</i>								

NCA SAMPLE NUMBER

B906747-01

-02

-03

-04

-05

Relinquished by: *[Signature]* **Firm:** *NCA* **Date & Time:** *6/30/99*

Received by: *[Signature]* **Firm:** *NCA* **Date & Time:** *6/30/10:30*

Comments: *12.42*
12/10/99

GROUNDWATER SAMPLING - FIELD LOG

Client Name: Tomo ERI Job No. 31000 Date: 6/30/99 Page 1 of 1
 Location: 5997 Mantlake Field Cleaning Performed: _____
 Field Crew: _____ Analysis: _____

* Case Volume = $(d_{\text{well}} - d_{\text{casing}}) \times L \times F$ where $F =$
 0.163 for a 2" inside diameter well casing
 0.652 for a 4" inside diameter well casing
 1.467 for a 6" inside diameter well casing

Well No.	Time	Depth Water (ft.)	Depth Well (ft.)	Case Dia. (in)	Case Vol* (gal)	Purge Vol. (gal)	Conduct. (µS/cm X1000)	Temp. (Deg F)	pH	TURB. NTU	PI0 PPM	Comments
97	Day	7.97	8.00	0.37	6.0	0.163	214					CPH 0.3' - 144. Sup
43		8.00	8.00									N/P
42		8.07	8.07									N/P
44		8.44	8.44									N/P
36		9.55	9.52									N/P
3		9.52	9.52									N/P
33		9.52	9.52									N/P
35		9.52	9.52									N/P
32A		9.60	9.60									N/P
34		10.18	10.18									N/P
4		8.20	8.20									CPH 7.00
11												
10												

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