11.3.46

FOCUSED REMEDIAL INVESTIGATION
INTERIM STATUS REPORT
MCCALL OIL AND CHEMICAL CORPORATION
PORTLAND, OREGON

Submitted to:

McCall Oil and Chemical Corporation
808 SW 15th Avenue
Portland, Oregon 97205

Submitted by:

IT Corporation
A Member of The IT Group

Project No. 820910/09000000

Revision 0

April 30, 2001

USEPA SF
1187784

IT CORPORATION
A Member of The IT Group

8405 SW Nimbus Avenue Beaverton, Oregon 97008-7141 • (503) 372-3363 • Fax (503) 526-0775

TRANSMITTAL

Use F11 key to advance to next field, then type (EXCEPT DATE!)

Project/Task #: **832537 07**

TO: Betsy Striplin
Striplin Environmental Associates
15111 8th Ave SW, Suite 303
Seattle, Wa. 98166
(fill-in)

DATE: November 6, 2001

RE: Documents to comply with September 24, 2001 Request for Documents for Portland Harbor RI
(fill-in)

WE ARE SENDING:

QUANTITY	DESCRIPTION
1	McCall Oil and Chemical Corporation Focused Remedial Investigation Workplan, Nov 16, 2000
1	McCall Oil and Chemical Focused Remedial Investigation Interim Status Report, April 30, 2001
1	Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, Sept 24, 2001

For Your:

- ____ USE
- ____ APPROVAL
- ____ REVIEW/COMMENTS
- X INFORMATION
- ____ OTHER

Sent By:

- ____ REGULAR MAIL
- X FEDERAL EXPRESS
- ____ UPS
- ____ COURIER
- ____ OTHER

COMMENTS: Betsy; I think these 3 docs contain the information you requested, let me know if you need copies of any of the docs referenced in these reports. We will be sending you copies of future quarterly reports. John Edwards 503 372 3679

CC(without enclosures): Ted McCall, McCall Oil and Chemical

John Renda, IT Corp

Don Pyle, Lane Powell Spears Lubersky

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1.0 Introduction

On behalf of McCall Oil & Chemical Corporation (MOCC) and Great Western Chemical Company (GWCC), IT Corporation (ITC) developed this Interim Status Report for the focused remedial investigation (RI) at the MOCC/GWCC facility in Portland, Oregon. The RI is being conducted pursuant to a "Voluntary Agreement for Remedial Investigation and Source Control Measures" (the Agreement) entered into between MOCC/GWCC and the Oregon Department of Environmental Quality (DEQ) on August 13, 2000 (DEQ No. WMCV-NWR-00-13).

MOCC/GWCC and DEQ met on February 2 and March 26, 2001, to discuss the progress of the RI. During those meetings, ITC described the RI tasks completed to date and provided copies of the ITC working maps and site characterization data tables. Therefore, most of the data that is presented in this report has already been provided to DEQ.

RI reporting requirements are addressed on page 5-1 of the November 16, 2000, McCall Oil and Chemical Corporation Focused Remedial Investigation Workplan (RI workplan). The RI workplan states that the purpose of the interim status report is to develop preliminary conclusions about overall groundwater quality in the upper aquifer and identify whether constituents detected are at concentrations that warrant either further site characterization or risk assessment. Because this report coincides with the end of the first quarter of the RI investigation, this report will also serve as the first RI quarterly report. According to the RI workplan, quarterly reports are intended to provide the following information:

- Description of activities performed
- Summary of new data
- Description of problem(s) encountered during the reporting period, if any
- Activities planned for the upcoming quarter

3.0 Work Completed

The following tasks have been conducted in accordance with the RI Workplan.

3.1 Characterize Site Hydrogeology and Groundwater Quality

3.1.1 Test Boring Program

Forty-four (44) test borings have been completed. The Geoprobe drilling system was used for test borings GP-1 through GP-40. A combination of Geoprobe and mud rotary drilling was used for borings GP-41 through GP-44. The test borings were conducted in three phases. Borings GP-1 through -21 were completed in December 2000, GP-22 through -40 were completed in February 2001, and GP-41 through GP-44 were completed in April. The locations of the first 20 borings were described on Table 4-1 of the RI Workplan. That table has been modified to include the locations of all forty-four (44) borings and is presented as Table 1 of this report.

One purpose of the borings was to determine if potential on-site source areas have affected shallow groundwater quality. Several of the borings also were sited to determine how off-site upgradient source areas (e.g., Chevron Asphalt and Tube Forgings) are affecting groundwater. Table 1 lists the MOCC and GWCC potential source areas that were identified from review of the site operations and spill history described in the RI Proposal. The RI Proposal may be found in Appendix D of the RI Workplan. Table 1 also lists the RI test borings and pre-existing monitoring wells that address the potential on-site and off-site source areas. The locations of the test borings are shown on Figure 1.

The field investigation method for test borings GP-41 through GP-44 were different from those used for the previous test borings. At each location, a test boring was advanced to bedrock (approximately 75 feet below ground surface [bgs]) with a mud rotary drill rig to obtain soil samples at 2.5-foot depth intervals. The mud rotary boring soil samples were field screened with a flame ionization detector (FID). The borehole lithology and FID screen results were used to select four groundwater sampling depths at each of the four locations. Each depth-discrete groundwater sample was collected from a separate Geoprobe borehole. Therefore, each of the four boring sites GP-41, -42, -43, and –44 had four separate Geoprobe borings. The mud rotary and all four Geoprobe borings at each location were either backfilled with bentonite grout using a tremie pipe or with bentonite chips poured from the ground surface immediately following borehole sapling.

The test boring groundwater and soil sampling procedures were conducted according to the requirements of the RI Workplan. The test boring lithologic logs are in Appendix A. Subsurface profiles are in Appendix B.

A piezometer was installed near well EX-3 as required in the RI Workplan. This piezometer may be needed if an aquifer pump test is conducted in EX-3. A piezometer also was planned near well EX-6, but was cancelled because EX-6 is damaged beyond repair. EX-6 will be abandoned. A second piezometer may be installed near another monitoring well.

3.1.2 Monitoring Well Sampling

The existing monitoring wells were sampled in December 2000 according the to RI Workplan.

3.1.3 Analytical Testing

Laboratory analysis of the test boring groundwater and soil samples was conducted according to the RI Workplan requirements. Tables 2 and 3 list the target analytes for soil and groundwater samples obtained from the test borings and monitoring wells.

3.1.4 Water Level Monitoring

Monthly measurements of the Willamette River water level and groundwater levels in the site monitoring wells have been conducted according to the RI Workplan. These occurred in December 2000, January, February, March, and April 2001 (Table 4).

3.1.5 Hydraulic Testing

Field slug tests were completed in monitoring wells EX-1, EX-5, EX-7, and MW-4. EX-1 was substituted for EX-6, because the damaged condition of EX-6 was not known when the RI Workplan was written.

3.2 Characterize Catch Basin Stormwater and Sediments

Three site catch basins (S-1, -2, and -3) and the oil-water separator (S-4) were sampled in December 2000. Stormwater samples were obtained from S-1, -2, -3, and -4 and sediment samples were obtained from S-1, -2, and -3 per the RI workplan. A composite sample of river sediment, S3-01C, also was collected at the river outfall from catch basin S-3. The target analytes tested for these samples are shown on Tables 2 and 3.

3.3 Data Management

The soil and water quality data resulting from these investigations have been tabulated and the tables are discussed under section four of this report. The testing laboratory, Columbia

Analytical Services (CAS), has completed their internal validation of the data, but the ITC data validation is still in progress.

3.4 Land and Water Use Evaluation

This evaluation has not yet been completed.

3.5 Level 1 Ecological Scoping Assessment

The level 1 scoping assessment has been completed according the RI workplan.

3.6 Review of Historic Industrial Practices and Spill History

The RI Proposal included a detailed description of past GWCC and MOCC industrial practices. Subsequent review of the RI Proposal has resulted in additional detail and refinement of the Bulk Transfer/Tank Farm History (Appendix C). The MOCC and GWCC spill history that was presented in the RI Proposal has also been updated based on additional employee interviews (Appendix C).

basin S-3 had the highest metals concentrations, including 1,050 mg/kg copper, 454 mg/kg lead and 985 mg/kg zinc. These are total metals concentrations. The river sediment sample S3-01C had metals concentrations an order of magnitude lower than the catch basins.

5.0 Planned Work

- Conduct a preliminary risk screen following receipt and validation of all final lab reports.

- Meet with DEQ to discuss the results of the risk screen and discuss appropriate additional characterization, if needed.

FIGURES

TABLES

Table 1

Groundwater Sampling Rationale

McCall Oil and Chemical Corporation
Focused RI Workplan

Potential Source Area	Sampling Locations	Chemical Class Tested [a]	Rationale
McCall Oil & Chemical Corp.			
Diesel rack (marine terminal)	EX-2, GP-20	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of TPH/PAHs
Asphalt rack (asphalt plant)	GP-8	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of TPH/PAHs
Asphalt plant AST tank farm	GP-8, -9, -21,-28, -29, -30, -37	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of TPH/PAHs
Railcar loading/unloading facility	GP-6, -7	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of VOCs and TPH/PAHs
Marine terminal AST tank farm	GP-15 to GP-20, GP-22, -23, -24, -25, -26, -27. -34. -35. -36. EX-2. EX-3. EX-5	VOCs, SVOCs, PAHs, TPH	Document groundwater quality leaving site
Great Western Chemical Co.			
Railcar loading/unloading facility	GP-6, -7	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of VOCs and TPH/PAHs
Acid/solvent AST tank farm	EX-1, EX-6, GP-8, GP-9	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of VOCs
Drumming shed	EX-1, EX-6, GP-9, -10, -11, -38, -39, -41, -42, -43, -44	VOCs, SVOCs, PAHs, TPH	Downgradient of potential source of VOCs
Former CCA production area	EX-4 (MW-2), MW-1, MW-3, MW-4 GP-11, -12, -13, -14, -15	VOCs, SVOCs, PAHs, TPH Metals	Downgradient of documented source of metals. Source has been removed.
Upgradient Off-Site Source Areas	GP-1, -2, -3, -4, -5, -31, -32, -33, -40	VOCs, SVOCs, PAHs, TPH Metals	Evaluate groundwater quality entering the site from upgradient sources

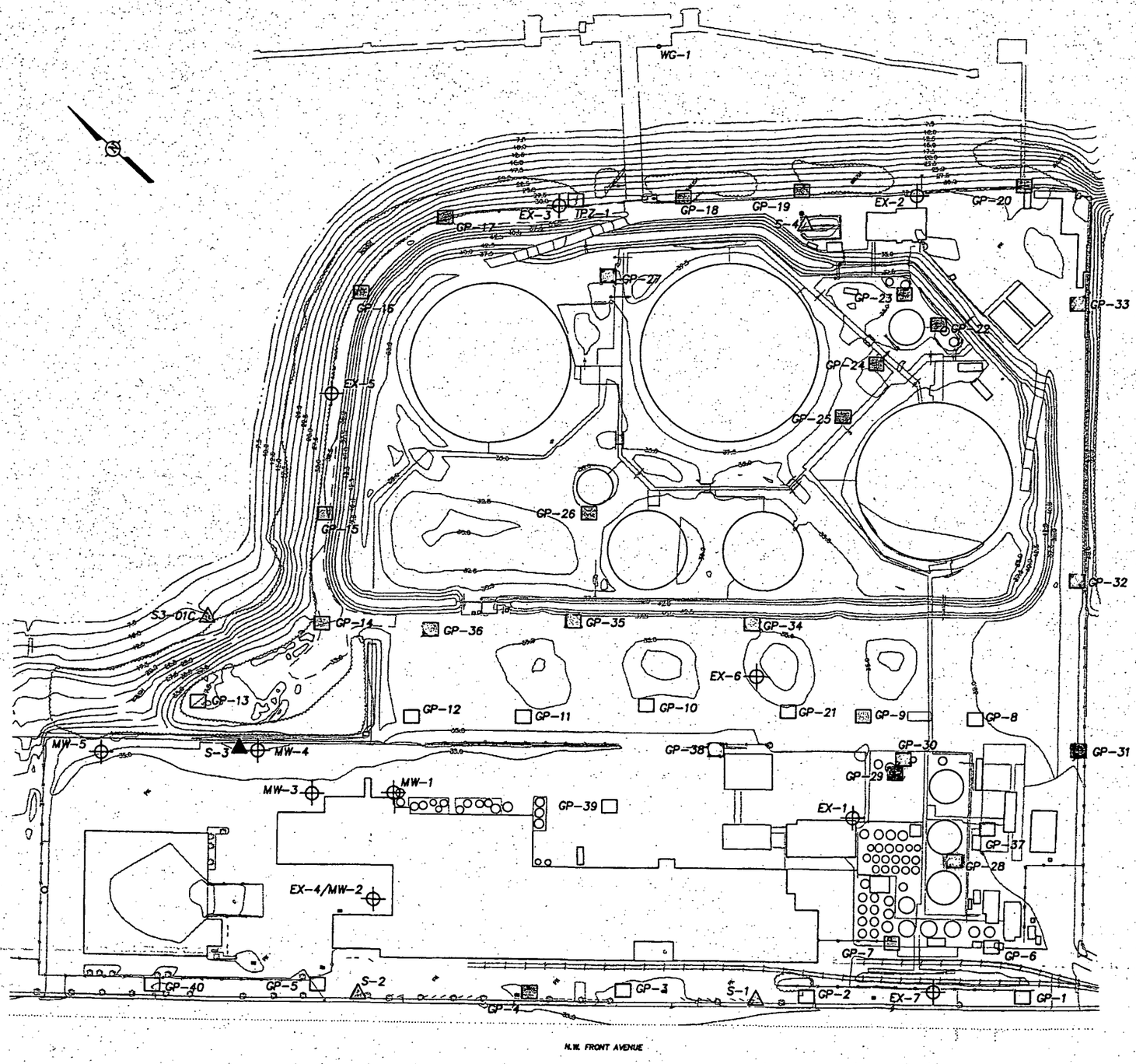
NOTE: VOCs = chlorinated VOCs; SVOCs = four semivolatile organic compounds listed in workplan; PAHs = polynuclear aromatic hydrocarbons; TPH = total petroleum hydrocarbons as diesel and oil; Metals = dissolved arsenic, chromium, and copper.

[a] List of chemicals to be tested for each chemical class is shown in QAPP (Appendix B).

Table 2
Sampling Matrix
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

		Organic Compounds							Metals	
Location	Date Sampled	VOCs	4-methylphenol	Butyl Benzyl Phthalate	Di-n-octyl Phthalate	Dibenzofuran	PAHs	Total Petroleum Hydrocarbons	As, Cu, Cr (dissolved for groundwater)	Cd, Pb, Zn (dissolved for groundwater)
Geoprobe Borings - Groundwater										
GP-1	12/11/00	X	X	X	X	X	X	X		
GP-2	12/11/00	X	X	X	X	X	X	X		
GP-3	12/11/00	X	X	X	X	X	X	X	X	
GP-4	12/11/00	X	X	X	X	X	X	X	X	
GP-5	12/11/00	X	X	X	X	X	X	X	X	
GP-6	12/14/00	X	X	X	X	X	X	X		
GP-7	12/14/00	X	X	X	X	X	X	X		
GP-8	12/12/00	X	X	X	X	X	X	X		
GP-9	12/12/00	X	X	X	X	X	X	X		
GP-10	12/12/00	X	X	X	X	X	X	X		
GP-11	12/12/00	X	X	X	X	X	X	X	X	
GP-12	12/13/00	X	X	X	X	X	X	X	X	
GP-12 Duplicate	12/13/00	X	X	X	X	X	X	X	X	
GP-13	12/12/00	X	X	X	X	X	X	X	X	
GP-14	12/13/00	X	X	X	X	X	X	X	X	
GP-15	12/13/00	X	X	X	X	X	X	X	X	
GP-16	12/13/00	X	X	X	X	X	X	X	X	
GP-17	12/13/00	X	X	X	X	X	X	X		
GP-18	12/14/00	X	X	X	X	X	X	X		
GP-19	12/14/00	X	X	X	X	X	X	X		
GP-19 Duplicate	12/14/00	X	X	X	X	X	X	X		
GP-20	12/14/00	X	X	X	X	X	X	X		
GP-21	12/12/00	X	X	X	X	X	X	X		
GP-22	02/09/01	X	X	X	X	X	X	X		
GP-22 Filtered	02/09/01		X	X	X	X	X			
GP-23	02/09/01	X	X	X	X	X	X	X		
GP-24	02/09/01	X	X	X	X	X	X	X		
GP-25	02/09/01	X	X	X	X	X	X	X		
GP-26	02/09/01	X	X	X	X	X	X	X		
GP-27	02/12/01	X	X	X	X	X	X	X		
GP-27 Filtered	02/09/01		X	X	X	X	X			
GP-28	02/12/01	X	X	X	X	X	X	X		
GP-28 Filtered	02/09/01		X	X	X	X	X			
GP-29	02/12/01	X	X	X	X	X	X	X		
GP-29 Filtered	02/09/01		X	X	X	X	X			
GP-30	02/12/01	X	X	X	X	X	X	X		
GP-30 Duplicate	02/12/01	X	X	X	X	X	X	X		
GP-31	02/13/01	X	X	X	X	X	X	X		
GP-32	02/13/01	X	X	X	X	X	X	X		
GP-33	02/13/01	X	X	X	X	X	X	X		
GP-34	02/13/01	X	X	X	X	X	X	X		
GP-35	02/13/01	X	X	X	X	X	X	X		
GP-36	02/13/01	X	X	X	X	X	X	X		
GP-37	02/14/01	X	X	X	X	X	X	X		
GP-38	02/14/01	X	X	X	X	X	X	X		
GP-38 Duplicate	02/14/01	X	X	X	X	X	X	X		
GP-39	02/14/01	X	X	X	X	X	X	X		
GP-40	02/14/01	X	X	X	X	X	X	X		

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	J. Clugston 1/10/2	4/30/01	4/30/01	82091C 2



LIST OF MONITORING WELLS

PT#	NORTHING	EASTING	GROUND EL.	RIM EL.	TOP PVC EL.	DESCRIPTION
6000	9860.733	4158.265	35.91	35.930	35.29	MONITOR WELL EX-7
6002	10884.027	4568.183	32.34	32.350	32.07	MONITOR WELL EX-3
6003	10558.448	4883.507	33.11	33.140	32.28	MONITOR WELL EX-2
6005	10932.866	4201.793	32.14	32.190	31.87	MONITOR WELL EX-5
6006	10531.660	3883.202	35.74	35.760	35.48	MONITOR WELL MW-1
6007	10606.911	3812.937	35.25	35.270	34.56	MONITOR WELL MW-3
6008	10694.292	3806.683	34.07	34.140	33.61	MONITOR WELL MW-4
6009	10840.045	3669.241	34.99	35.050	34.66	MONITOR WELL MW-5
6011	10459.152	3767.039	35.85	35.900	35.60	MONITOR WELL MW-2
6012	10295.278	4299.654	34.83	35.070	34.38	MONITOR WELL EX-6
6013	10085.543	4249.628	36.42	36.510	36.12	MONITOR WELL EX-1

HORIZONTAL DATUM

COORDINATES ARE ON A LOCAL PLANE AND ARE ASSUMED.

ELEVATION DATUM

ELEVATIONS ARE BASED ON CITY OF PORTLAND BENCHMARK #2528. ELEVATION = 34.64 FEET

LEGEND

- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK

Total LPAH Range

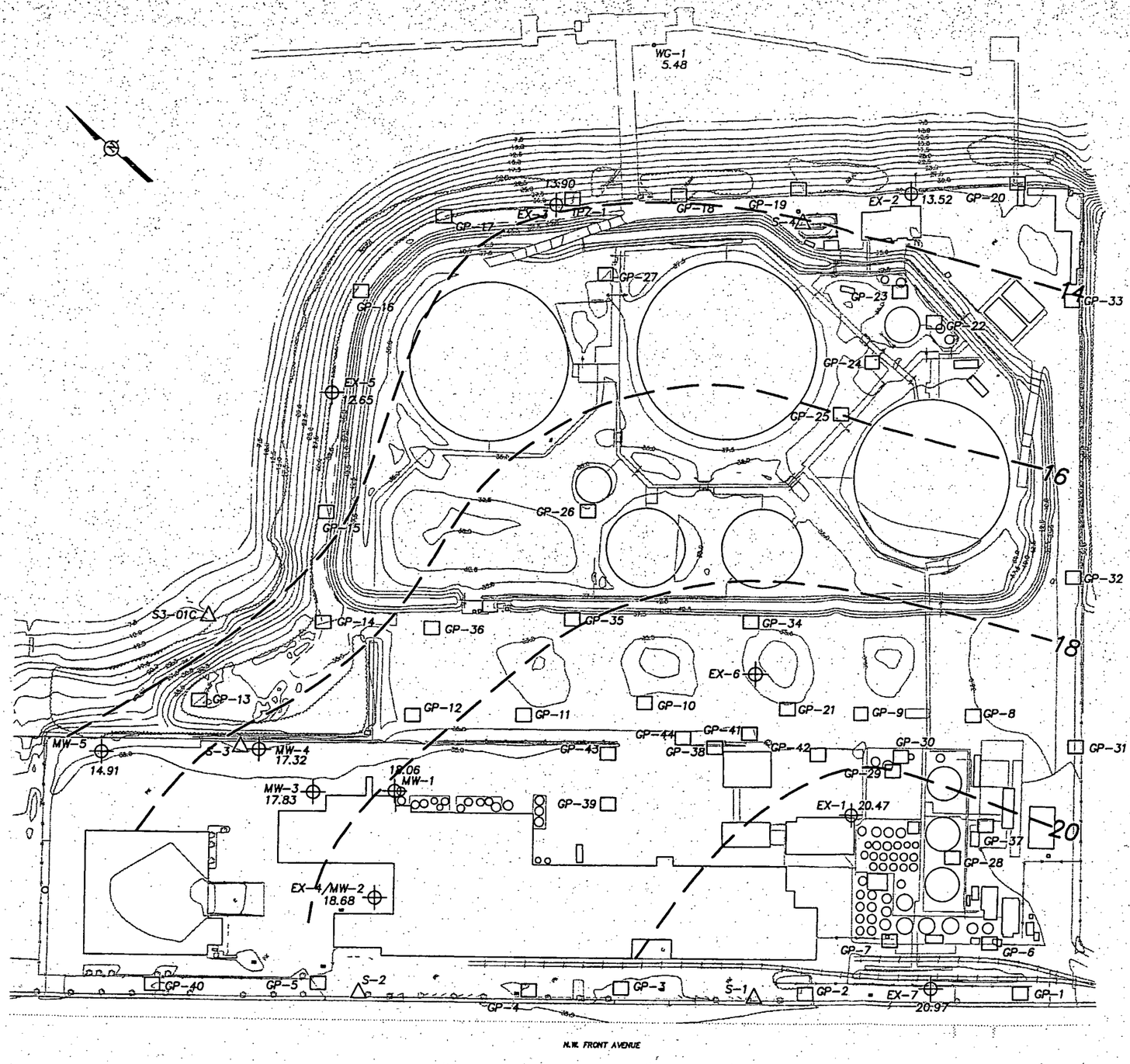
- ND
- < 1,000 mg/kg
- 1,000 - 10,000 mg/kg
- > 10,000 mg/kg

SCALE

0 150 300 FEET

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 9
UPLAND SOIL AND
CATCH BASIN SEDIMENT
TOTAL LPAHs
McCALL/GWCC
PORTLAND, OREGON



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LEGEND

- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK
- INFERRED GROUNDWATER ELEVATION COUTOUR LINE (MARCH 8, 2001)

SCALE

0 150 300 FEET

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 1
GROUNDWATER ELEVATION CONTOURS
(MARCH 8, 2001)

McCALL OIL
PORTLAND, OREGON

OFFICE	DRAWN	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	TWilliams 3/15/2001	4/30/01	4/30/01	820910-B2

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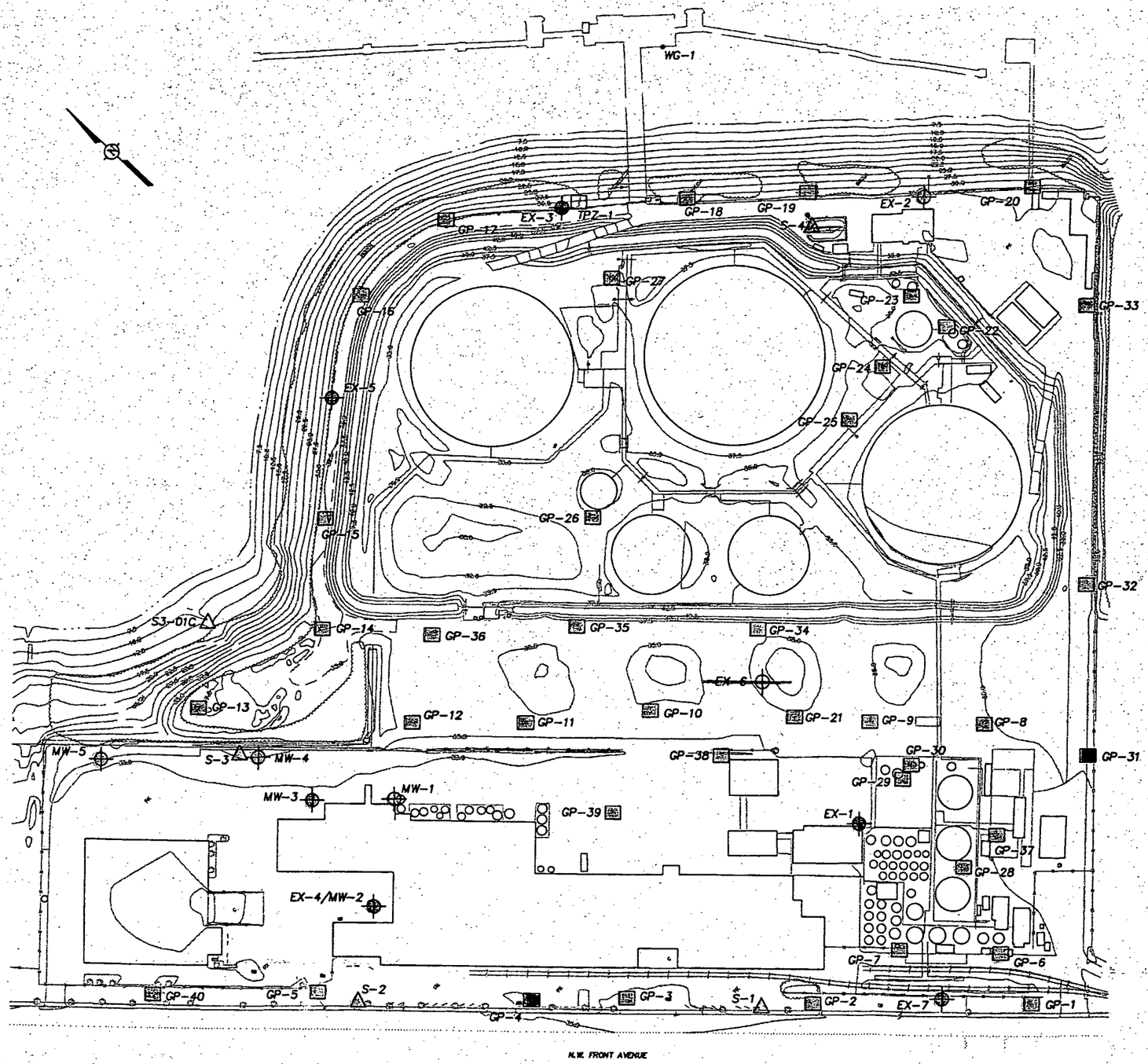

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- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK

Total TPH Range

- ND
- 1 - 1,000 µg/L
- 1,001 - 10,000 µg/L
- 10,001 - 100,000 µg/L

SCALE

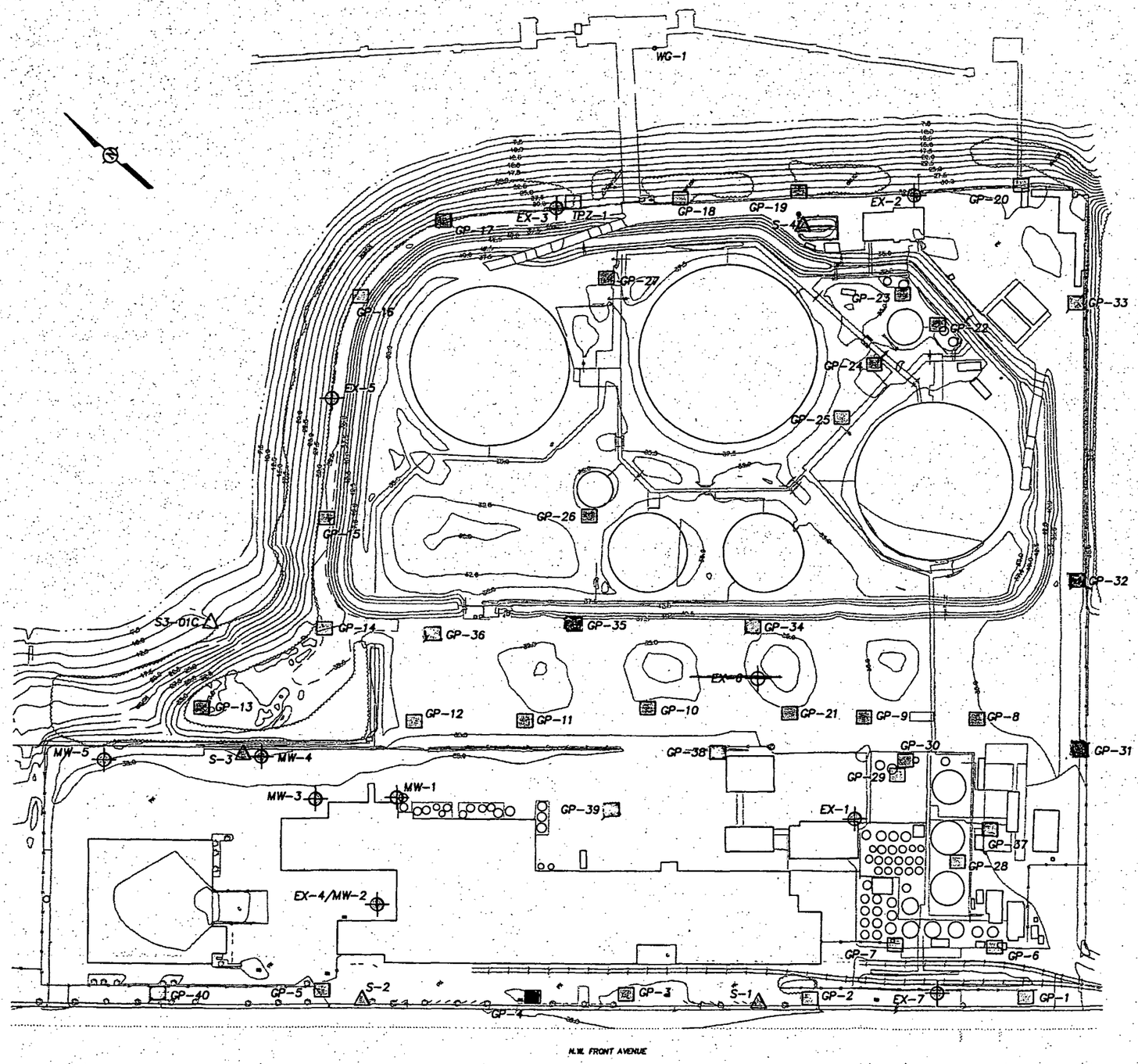
0 150 300 FEET

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 3
GROUNDWATER AND STORMWATER
TOTAL TPH
McCALL/GWCC
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	J. Clugston 1/10/2	4/20/01	4/20/01	82091C 2

02:06pm jclugston



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6003	10558.448	4883.507	33.11	33.140	32.28	MONITOR WELL EX-2
6005	10932.866	4201.793	32.14	32.190	31.87	MONITOR WELL EX-5
6006	10531.660	3883.202	35.74	35.760	35.48	MONITOR WELL MW-1
6007	10606.911	3812.937	35.25	35.270	34.56	MONITOR WELL MW-3
6008	10694.292	3806.683	34.07	34.140	33.61	MONITOR WELL MW-4
6009	10840.045	3669.241	34.99	35.050	34.66	MONITOR WELL MW-5
6011	10459.152	3767.039	35.85	35.900	35.60	MONITOR WELL MW-2
6012	10295.278	4299.654	34.83	35.070	34.38	MONITOR WELL EX-6
6013	10085.543	4249.628	36.42	36.510	36.12	MONITOR WELL EX-1

HORIZONTAL DATUM

COORDINATES ARE ON A LOCAL PLANE AND ARE ASSUMED.

ELEVATION DATUM

ELEVATIONS ARE BASED ON CITY OF PORTLAND BENCHMARK #2528. ELEVATION = 34.64 FEET

LEGEND

- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK

Total HPAH Range

- ND
- < 1 µg/L
- 1 - 5 µg/L
- > 5 µg/L

SCALE

0 150 300 FEET

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 4
GROUNDWATER AND STORMWATER
TOTAL HPAHs
McCALL/GWCC
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	J. Clugston 1/10/2001	1/10/01	4/20/01	820910-32

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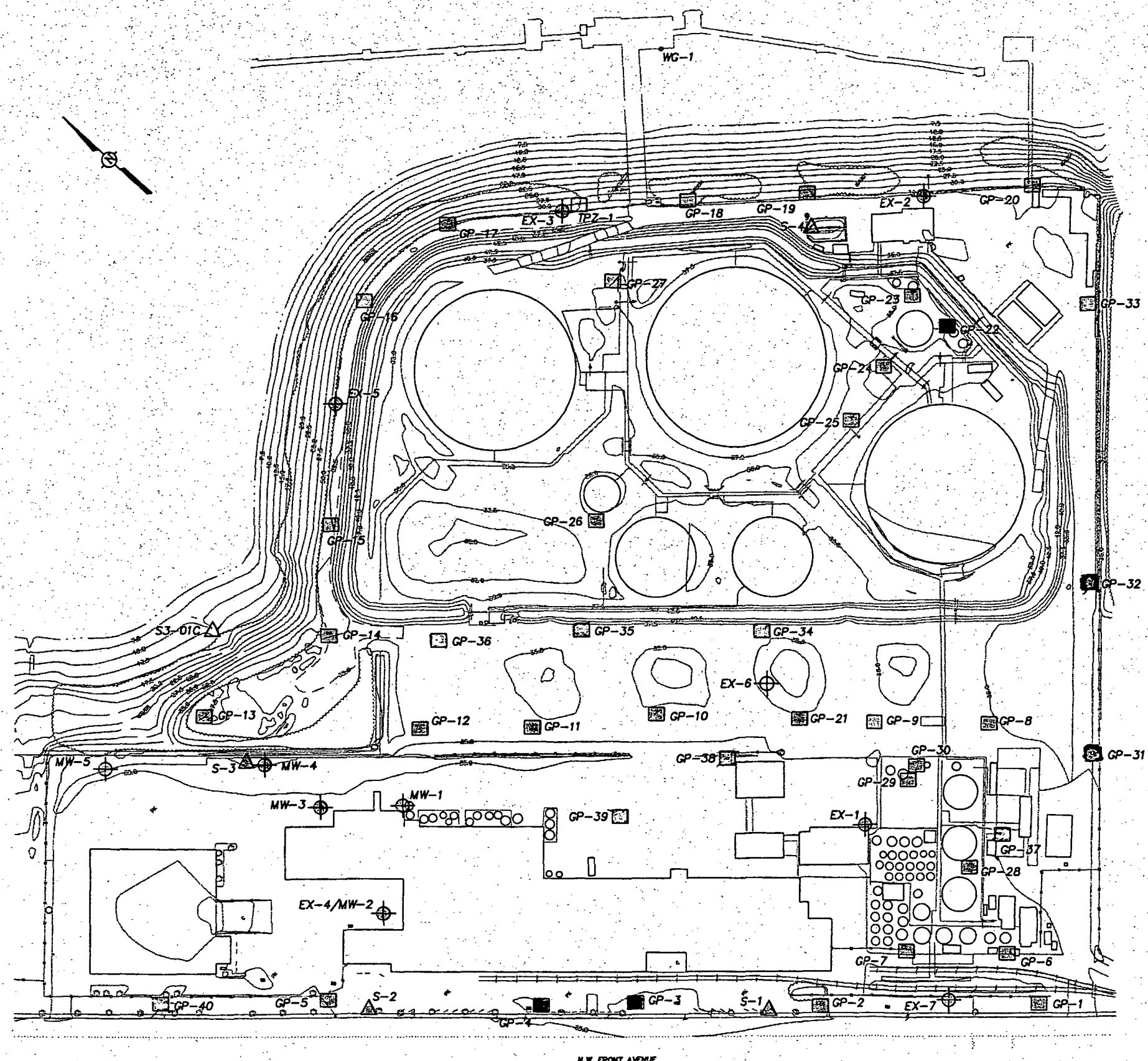

LIST OF MONITORING WELLS

PT#	NORTHING	EASTING	GROUND EL.	RIM EL.	TOP PVC EL.	DESCRIPTION
6000	9860.733	4158.265	35.91	35.930	35.29	MONITOR WELL EX-7
6002	10884.027	4568.183	32.34	32.350	32.07	MONITOR WELL EX-3
6003	10558.448	4883.507	33.11	33.140	32.28	MONITOR WELL EX-2
6005	10932.866	4201.793	32.14	32.190	31.87	MONITOR WELL EX-5
6006	10531.660	3883.202	35.74	35.760	35.48	MONITOR WELL MW-1
6007	10606.911	3812.937	35.25	35.270	34.56	MONITOR WELL MW-3
6008	10694.292	3806.683	34.07	34.140	33.61	MONITOR WELL MW-4
6009	10840.045	3669.241	34.99	35.050	34.66	MONITOR WELL MW-5
6011	10459.152	3767.039	35.85	35.900	35.60	MONITOR WELL MW-2
6012	10295.278	4299.654	34.83	35.070	34.38	MONITOR WELL EX-6
6013	10085.543	4249.628	36.42	36.510	36.12	MONITOR WELL EX-1

HORIZONTAL DATUM

COORDINATES ARE ON A LOCAL PLANE AND ARE ASSUMED.

ELEVATION DATUM

ELEVATIONS ARE BASED ON CITY OF PORTLAND BENCHMARK #2528. ELEVATION = 34.64 FEET

LEGEND

- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK

Total LPAH Range

- ND
- < 1 µg/L
- 1 - 5 µg/L
- > 5 µg/L

SCALE

0 150 300 FEET

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 5
GROUNDWATER AND STORMWATER
TOTAL LPAHs
McCALL/GWCC
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	J. Clugston 1/10/2001	4/30/01	4/30/01	820910-_7

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Table 2
Sampling Matrix
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

		Organic Compounds							Metals	
Location	Date Sampled	VOCs	4-methylphenol	Butyl Benzyl Phthalate	Di-n-octyl Phthalate	Dibenzofuran	PAHs	Total Petroleum Hydrocarbons	As, Cu, Cr (dissolved for groundwater)	Cd, Pb, Zn (dissolved for groundwater)
Geoprobe Borings - Groundwater, Continued										
GP-41-19.5	04/06/01	X								
GP-41-39.5	04/06/01	X								
GP-41-56.0	04/10/01	X								
GP-41-74.0	04/10/01	X								
GP-42-19.0	04/06/01	X								
GP-42-42.5	04/06/01	X								
GP-42-54.5	04/10/01	X								
GP-42-75.5	04/10/01	X								
GP-43-22.5	04/06/01	X								
GP-43-34.5	04/09/01	X								
GP-43-64.0	04/09/01	X								
GP-43-64.0D	04/09/01	X								
GP-43-74.5	04/09/01	X								
GP-44-22.0	04/06/01	X								
GP-44-22.0D	04/06/01	X								
GP-44-45.5	04/10/01	X								
GP-44-75.5	04/09/01	X								
GP-44-76.5	04/09/01	X								
Field Blank	12/14/00	X	X	X	X	X	X	X		
Field Blank	02/14/01	X	X	X	X	X	X	X		
Field Blank	04/10/01	X								
Monitoring Wells - Groundwater										
EX-1	12/20/00	X	X	X	X	X	X	X		
EX-2	12/20/00	X	X	X	X	X	X	X		
EX-3	12/20/00	X	X	X	X	X	X	X		
EX-4/MW-2	12/20/00	X	X	X	X	X	X	X	X	
EX-5	12/20/00	X	X	X	X	X	X	X		
EX-7	12/20/00	X	X	X	X	X	X	X		
MW-1	12/20/00	X	X	X	X	X	X	X	X	
MW-3	12/20/00	X	X	X	X	X	X	X	X	
MW-4	12/20/00	X	X	X	X	X	X	X	X	
MW-5	12/20/00	X	X	X	X	X	X	X		
Catch Basins - Storm Water										
S-1W	12/20/00		X	X	X	X	X	X	X	X
S-2W	12/20/00		X	X	X	X	X	X	X	X
S-3W	12/15/00		X	X	X	X	X	X	X	X
Oil/Water Separator - Storm Water										
S-4W	12/15/00		X	X	X	X	X	X	X	X
S-4W Duplicate	12/15/00		X	X	X	X	X	X	X	X

Table 3
Sampling Matrix
Upland Soil and Catch Basin Sediment
McCall/GWCC
Portland, Oregon

Location	Date Sampled	Organic Compounds							Metals		Total Organic Carbon	Grain Size
		VOCs	4-methylphenol	Butyl Benzyl Phthalate	Di-n-octyl Phthalate	Dibenzofuran	PAHs	Total Petroleum Hydrocarbons	As, Cu, Cr (dissolved for groundwater)	Cd, Pb, Zn (dissolved for groundwater)		
Geoprobe Borings - Soil												
GP-1 18-20	12/11/00										X	X
GP-4 10-12	12/11/00	X	X	X	X	X	X	X	X			
GP-4 18-20	12/11/00										X	X
GP-6 18-20	12/14/00										X	X
GP-7 2-4	12/14/00	X	X	X	X	X	X	X	X			
GP-8 16-18	12/12/00										X	X
GP-9 10-12	12/12/00	X	X	X	X	X	X	X	X			
GP-11 18-20	12/12/00										X	X
GP-13 22-24	12/12/00										X	X
GP-14 0-2	12/13/00		X	X	X	X	X	X	X			
GP-14 2-4	12/13/00		X	X	X	X	X	X	X			
GP-14 20-22	12/13/00		X	X	X	X	X	X	X			
GP-14 22-24	12/13/00										X	X
GP-15 0-2	12/13/00		X	X	X	X	X	X	X			
GP-15 2-4	12/13/00		X	X	X	X	X	X	X			
GP-15 20-22	12/13/00	X	X	X	X	X	X	X	X			
GP-16 0-2	12/13/00		X	X	X	X	X	X	X			
GP-16 2-4	12/13/00		X	X	X	X	X	X	X			
GP-16 16-18	12/13/00		X	X	X	X	X	X	X			
GP-16 20-22	12/13/00										X	X
GP-17 0-2	12/13/00		X	X	X	X	X	X	X			
GP-17 2-4	12/13/00		X	X	X	X	X	X	X			
GP-17 12-14	12/13/00	X	X	X	X	X	X	X	X			
GP-18 0-2	12/14/00		X	X	X	X	X	X	X			
GP-18 2-4	12/14/00		X	X	X	X	X	X	X			
GP-18 16-18	12/14/00		X	X	X	X	X	X	X			
GP-18 22-24	12/14/00										X	X
GP-19 0-2	12/14/00		X	X	X	X	X	X	X			
GP-19 2-4	12/14/00		X	X	X	X	X	X	X			
GP-19 16-18	12/14/00		X	X	X	X	X	X	X			
GP-19 18-20	12/14/00										X	X
GP-20 2-4	12/14/00		X	X	X	X	X	X	X			
GP-20 16-18	12/14/00		X	X	X	X	X	X	X			
GP-21 16-18	12/12/00										X	X
GP-22 10-12	02/09/01	X	X	X	X	X	X	X				
GP-23 16-18	02/09/01	X	X	X	X	X	X	X				
GP-24 12-14	02/09/01	X	X	X	X	X	X	X				
GP-24 16-18	02/09/01	X	X	X	X	X	X	X				
GP-25 10-12	02/09/01	X	X	X	X	X	X	X				
GP-25 14-16	02/09/01	X	X	X	X	X	X	X				
GP-26 14-16	02/09/01	X	X	X	X	X	X	X				
GP-26 18-20	02/09/01	X	X	X	X	X	X	X				
GP-27 10-12	02/12/01	X	X	X	X	X	X	X				
GP-28 12-14	02/12/01	X	X	X	X	X	X	X				
GP-29 4-6	02/12/01	X	X	X	X	X	X	X				
GP-30 4-6	02/12/01	X	X	X	X	X	X	X				
GP-31 14-16	02/13/01	X	X	X	X	X	X	X				
GP-32 10-12	02/13/01	X	X	X	X	X	X	X				
GP-33 16-18	02/13/01	X	X	X	X	X	X	X				
GP-34 12-14	02/13/01	X	X	X	X	X	X	X				
GP-35 10-12	02/13/01	X	X	X	X	X	X	X				
GP-36 12-14	02/13/01	X	X	X	X	X	X	X				
GP-38 10-12	02/13/01	X	X	X	X	X	X	X				
Catch Basins - Sediment												
S-1	12/15/00		X	X	X	X	X	X	X	X	X	
S-2	12/15/00		X	X	X	X	X	X	X	X	X	
S-3	12/15/00		X	X	X	X	X	X	X	X	X	
S3-01C	12/15/00		X	X	X	X	X	X	X	X	X	

Table 4

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-1	36.12	09/08/94	15.35	20.77
		12/29/94	14.60	21.52
		03/29/95	13.06	23.06
		06/27/95	13.65	22.47
		07/14/95	13.82	22.30
		05/01/97	12.71	23.41
		02/03/99	13.21	22.91
		12/08/00	15.65	20.47
		01/19/01	15.46	20.66
		02/08/01	15.55	20.57
		03/08/01	15.65	20.47
		04/12/01	15.72	20.40
EX-2	32.28	09/08/94	18.56	13.72
		12/29/94	17.87	14.41
		03/29/95	17.11	15.17
		06/27/95	17.27	15.01
		07/14/95	17.42	14.86
		05/01/97	13.08	19.20
		02/03/99	16.30	15.98
		12/08/00	18.66	13.62
		01/19/01	18.67	13.61
		02/08/01	18.70	13.58
		03/08/01	18.76	13.52
		04/12/01	18.10	14.18
EX-3	32.07	09/08/94	17.96	14.11
		12/29/94	16.72	15.35
		03/29/95	15.43	16.64
		06/27/95	15.91	16.16
		07/14/95	15.96	16.11
		05/01/97	12.84	19.23
		02/03/99	15.12	16.95
		12/08/00	18.27	13.80
		01/19/01	18.13	13.94
		02/08/01	18.10	13.97
		03/08/01	18.17	13.90
		04/12/01	17.44	14.63
EX-4 (MW-2)	35.60	10/18/93	16.63	18.97
		10/28/93	16.72	18.88
		01/27/94	16.56	19.04
		09/08/94	16.86	18.74
		12/29/94	16.09	19.51
		03/29/95	14.63	20.97
		06/27/95	15.22	20.38
		07/14/95	15.41	20.19
		05/01/97	14.08	21.52
		02/03/99	14.58	21.02
		12/08/00	16.97	18.63

Table 4

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
		01/19/01	16.81	18.79
		02/08/01	16.84	18.76
		03/08/01	16.92	18.68
		04/12/01	16.96	18.64
EX-5	31.87	09/08/94	NM	
		12/29/94	15.85	16.02
		03/29/95	14.84	17.03
		06/27/95	16.32	15.55
		07/14/95	16.34	15.53
		05/01/97	12.06	19.81
		02/03/99	13.45	18.42
		12/08/00	19.72	12.15
		01/19/01	18.87	13.00
		02/08/01	18.98	12.89
		03/08/01	19.22	12.65
		04/12/01	18.96	12.91
EX-6	34.38	09/08/94	NM	
		12/29/94	13.98	20.40
		03/29/95	12.51	21.87
		06/27/95	13.04	21.34
		07/14/95	13.17	21.21
		05/01/97	11.93	22.45
		02/03/99	12.71	21.67
		12/08/00	Well casing filled with silt	

Table 4

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-7	35.29	09/08/94	NM	
		12/29/94	13.21	22.08
		03/29/95	11.69	23.60
		06/27/95	12.34	22.95
		07/14/95	12.38	22.91
		05/01/97	11.44	23.85
		02/03/99	11.81	23.48
		12/08/00	14.32	20.97
		01/19/01	14.15	21.14
		02/08/01	14.18	21.11
		03/08/01	14.30	20.99
		04/12/01	14.37	20.92
MW-1	35.48	05/11/93	15.56	19.92
		10/18/93	17.04	18.44
		10/28/93	17.16	18.32
		01/27/94	16.99	18.49
		09/08/94	NM	
		12/29/94	16.43	19.05
		03/29/95	NM	
		06/27/95	NM	
		07/14/95	NM	
		05/01/97	14.12	21.36
		02/03/99	14.83	20.65
		12/08/00	17.40	18.08
		01/19/01	17.23	18.25
		02/08/01	17.32	18.16
		03/08/01	17.42	18.06
		04/12/01	17.41	18.07
MW-3	34.56	10/18/93	16.47	18.09
		10/28/93	16.60	17.96
		01/27/94	16.40	18.16
		09/08/94	NM	
		12/29/94	15.90	18.66
		03/29/95	NM	
		06/27/95	NM	
		07/14/95	NM	
		05/01/97	13.73	20.83
		02/03/99	14.36	20.20
		12/08/00	16.73	17.83
		01/19/01	16.60	17.96
		02/08/01	16.64	17.92
		03/08/01	16.73	17.83
		04/12/01	16.73	17.83
MW-4	33.61	10/18/93	16.21	17.40
		10/28/93	16.26	17.35
		01/27/94	16.06	17.55
		09/08/94	NM	

Table 4

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
		12/29/94	15.55	18.06
		03/29/95	NM	
		06/27/95	NM	
		07/14/95	NM	
		05/01/97	13.32	20.29
		02/03/99	14.04	19.57
		12/08/00	16.25	17.36
		01/19/01	16.17	17.44
		02/08/01	16.21	17.40
		03/08/01	16.29	17.32
		04/12/01	16.28	17.33
MW-5	34.66	10/18/93	20.13	14.53
		10/28/93	20.48	14.18
		01/27/94	19.89	14.77
		09/08/94	NM	
		12/29/94	19.25	15.41
		03/29/95	NM	
		06/27/95	NM	
		07/14/95	NM	
		05/01/97	15.91	18.75
		02/03/99	18.15	16.51
		12/08/00	19.80	14.86
		01/19/01	19.69	14.97
		02/08/01	19.67	14.99
		03/08/01	19.75	14.91
		04/12/01	19.80	14.86
WG-1	37.28	10/28/93	32.82	4.46
		01/27/94	30.04	7.24
		09/08/94	NM	
		12/29/94	NM	
		03/29/95	NM	
		06/27/95	NM	
		07/14/95	NM	
		05/01/97	17.80	19.48
		02/03/99	23.02	14.26
		12/08/00	31.60	5.68
		01/19/01	31.74	5.54
		02/08/01	30.78	6.50
		03/08/01	31.80	5.48
		04/12/01	29.15	8.13

Note: Reference point elevations surveyed by WHP on September 19, 2000.

Total Petroleum Hydrocarbons
Groundwater
McCall/GWCC
Portland, Oregon

	Location	Matrix	Date Sampled	TPH - FIQ																	
				Gasoline		Naphtha Distillate		Jet Fuel as JP-4		Mineral Spirits		Jet Fuel as Jet A		Kerosene		Diesel		Heavy Fuel Oil		Lube Oil	
	Geoprobe Borings - Water µg/L (ppb)																				
1100	GP-1	Water	12/11/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
920	GP-2	Water	12/11/00	130	H	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
735	GP-3	Water	12/11/00	170	H	100	U	100	U	100	U	100	U	100	U	280	L	250	U	250	U
670	GP-4	Water	12/11/00	2500	H	100	U	100	U	100	U	100	U	100	U	7100	F	250	U	4400	L
530	GP-5	Water	12/11/00	620	H	100	U	100	U	100	U	100	U	100	U	430	Y	250	U	300	Y
1030	GP-6	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
1030	GP-7	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
755	GP-8	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
750	GP-9	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
550	GP-10	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
420	GP-11	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
310	GP-12	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	130	H	250	U	250	U
	GP-12 Duplicate	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	160	Y	250	U	250	U
140	GP-13	Water	12/12/00	110	Z	100	U	100	U	100	U	100	U	100	U	260	Y	250	U	250	U
140	GP-14	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
100	GP-15	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	2800	F	250	U	1200	F
90	GP-16	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
80	GP-17	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
90	GP-18	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
90	GP-19	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	GP-19 Duplicate	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
85	GP-20	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	550	Y	250	U	250	U
720	GP-21	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	120	Y	250	U	250	U
265	GP-22	Water	02/09/01	210	H	100	U	100	U	100	U	100	U	100	U	1100	F	250	U	250	U
220	GP-23	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	440	H	250	U	250	U
310	GP-24	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	270	H	250	U	250	U
375	GP-25	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	280	H	250	U	250	U
430	GP-26	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	300	H	250	U	500	L
185	GP-27	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	170	H	250	U	250	U
940	GP-28	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
825	GP-29	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
810	GP-30	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	GP-30 Duplicate	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	120	H	250	U	250	U
785	GP-31	Water	02/13/01	1800	H	100	U	100	U	100	U	100	U	100	U	7600	Y	250	U	4800	F
570	GP-32	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	700	H	250	U	1100	F
220	GP-33	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	320	Y	250	U	250	U
635	GP-34	Water	02/13/01	130	H	100	U	100	U	100	U	100	U	100	U	2100	Y	250	U	580	L
425	GP-35	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	200	H	250	U	270	Y
265	GP-36	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	210	Y	250	U	250	U
895	GP-37	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
655	GP-38	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	GP-38 Duplicate	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
575	GP-39	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
460	GP-40	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	640	Y	250	U	250	U
	Field Blank	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	Field Blank	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U

Table 5
Total Petroleum Hydrocarbons
Groundwater
McCall/GWCC
Portland, Oregon

	Location	Matrix	Date Sampled	TPH - FIQ																	
				Gasoline		Naphtha Distillate		Jet Fuel as JP-4		Mineral Spirits		Jet Fuel as Jet A		Kerosene		Diesel		Heavy Fuel Oil		Lube Oil	
	Monitoring Wells - Water µg/L (ppb)																				
850	EX-1	Water	12/20/00	990	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
100	EX-2	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
93	EX-3	Water	12/20/00	690	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
470	EX-4/MW-2	Water	12/20/00	640	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
90	EX-5	Water	12/20/00	950	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
1045	EX-7	Water	12/20/00	530	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
365	MW-1	Water	12/20/00	1200	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
315	MW-3	Water	12/20/00	720	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
235	MW-4	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
165	MW-5	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	Catch Basins - Storm Water µg/L (ppb)																				
	S-1W	Water	12/20/00	1100	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	S-2W	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
	S-3W	Water	02/15/01	1300	Z	100	U	100	U	100	U	100	U	100	U	510	Z	250	U	700	Z
	Oil/Water Separator - Storm Water µg/L (ppb)																				
	S-4W	Water	02/15/01	270	Z	100	U	100	U	100	U	100	U	100	U	280	Z	250	U	250	U
	S-4W Duplicate	Water	02/15/01	260	Z	100	U	100	U	100	U	100	U	100	U	300	Z	250	U	250	U

Notes: U = Not detected at method reporting limit. F = Fingerprit of the sample matches the elution pattern of calibration standard

L = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of lighter weight constituents.

H = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of heavier weight constituents.

O = The fingerprint resembles oil, but does not match the calibration standard.

Y = The fingerprint resembles a petroleum product in the correct carbon range, but the elution pattern does not match the calibration standard.

Z = The fingerprint does not resemble a petroleum product.

D = The reported result is from a dilution.

TABLE 6
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

| | Groundwater | | |

TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

	Sample Designation	Matrix	Date Sampled	2-Chloroethyl Vinyl Ether	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Trichlorotrifluoroethane	Carbon Disulfide	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
1100	GP-1	Water	12/11/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
920	GP-2	Water	12/11/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
735	GP-3	Water	12/11/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
670	GP-4	Water	12/11/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
530	GP-5	Water	12/11/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.6**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1070	GP-6	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1030	GP-7	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	**1.1**	20 U	0.5 U	0.5 U	0.5 U	0.5 U	**3.3**	0.5 U	0.5 U
755	GP-8	Water	12/12/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
750	GP-9	Water	12/12/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
550	GP-10	Water	12/12/00	5.0 U	0.5 U	0.5 U	**2.6** D	0.5 U	0.5 U	0.5 U	20 U	**2.6** D	0.5 U	0.5 U	1.0 U	0.5 U	**7.6** D	20 U	0.5 U	**210** D	0.5 U	0.5 U	**26** D	0.5 U	0.5 U
420	GP-11	Water	12/12/00	5.0 U	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	**2.2**	20 U	0.5 U	**23**	0.5 U	0.5 U	**2.5**	0.5 U	0.5 U
310	GP-12	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**2.5**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	GP-12 Duplicate	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**2.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
140	GP-13	Water	12/12/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.7**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.76**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
140	P-14	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	**0.75**	20 U	0.5 U	**15**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
100	GP-15	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	**0.52**	20 U	0.5 U	**4.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
90	GP-16	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
80	GP-17	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.54**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
90	GP-18	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
90	GP-19	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.60**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	GP-19 Duplicate	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.51**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
85	GP-20	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
720	GP-21	Water	12/13/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.54**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
265	GP-22	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.64**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
220	GP-23	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
310	GP-24	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.5**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
375	GP-25	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
430	GP-26	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
185	GP-27	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.67**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
940	GP-28	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
825	GP-29	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
810	GP-30	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	GP-30 Duplicate	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

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TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

	Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
785	GP-31	Water	02/13/01	0.5 U	**1.4**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.7**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	**9.9**	**4.4**	**7.5**	0.5 U	0.5 U
570	GP-32	Water	02/13/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**0.5**	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
820	GP-33	Water	02/13/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
635	GP-34	Water	02/13/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
425	GP-35	Water	02/13/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
265	GP-36	Water	02/13/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
895	GP-37	Water	02/14/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
655	GP-38	Water	02/14/01	0.5 U	0.5 U	**2.3**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**3.1**	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	GP-38 Duplicate	Water	02/14/01	0.5 U	0.5 U	**2.1**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**2.9**	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
575	GP-39	Water	02/14/01	0.5 U	0.5 U	**5.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**14**	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
460	GP-40	Water	02/14/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
685	GP-41-19.5	Water	04/06/01	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	0.5 U	0.5 U	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	0.5 U
	GP-41-39.5	Water	04/06/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	**0.660**	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-41-56.0	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-41-74.0	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
725	GP-42-19.0	Water	04/06/01	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	0.5 U	0.5 U	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	0.5 U
	GP-42-42.5	Water	04/06/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	**0.531**	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-42-54.5	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-42-75.5	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
540	GP-43-22.5	Water	04/06/01	0.5 U	1.0 U	**21.0**	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	0.5 U	0.5 U	5.0 U	0.5 U	**64.9**	0.5 U	0.5 U	**0.680**	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	0.5 U
	GP-43-34.5	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-43-64.0	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	**0.818**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-43-64.0D	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	**0.848**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-43-74.5	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	**0.904**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
610	GP-44-22.0	Water	04/06/01	0.5 U	1.0 U	**19.7**	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	0.5 U	0.5 U	5.0 U	0.5 U	**42.2**	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	0.5 U
	GP-44-22.0D	Water	04/06/01	0.5 U	1.0 U	**23**	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	0.5 U	0.5 U	5.0 U	0.5 U	**65.7**	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	2.0 U	1.0 U	1.0 U	0.5 U
	GP-44-45.5	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	**0.697**	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-44-75.5	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	**0.647**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
	GP-44-76.5	Water	04/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U

TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
GP-31	Water	02/13/01	**4.2**	0.5 U	0.5 U	2.0 U	**6.7**	2.0 U	2.0 U	2.0 U	2.0 U	**8.4**	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-32	Water	02/13/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-33	Water	02/13/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-34	Water	02/13/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-35	Water	02/13/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-36	Water	02/13/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-37	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-38	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-38 Duplicate	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-39	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-40	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
GP-41-19.5	Water	04/06/01	2.0 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	2.0 U	0.5 U	5.0 U	0.5 U	5.0 U	0.5 U	0.5 U	2.0 U	2.0 U
GP-41-39.5	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-41-56.0	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-41-74.0	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-42-19.0	Water	04/06/01	2.0 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	2.0 U	0.5 U	5.0 U	0.5 U	5.0 U	0.5 U	0.5 U	2.0 U	2.0 U
GP-42-42.5	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-42-54.5	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-42-75.5	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-43-22.5	Water	04/06/01	2.0 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	2.0 U	0.5 U	5.0 U	**5.5**	5.0 U	0.5 U	0.5 U	2.0 U	2.0 U
GP-43-34.5	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-43-64.0	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-43-64.0D	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-43-74.5	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-44-22.0	Water	04/06/01	2.0 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	2.0 U	0.5 U	5.0 U	0.5 U	5.0 U	0.5 U	0.5 U	2.0 U	2.0 U
GP-44-22.0D	Water	04/06/01	2.0 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	2.0 U	0.5 U	5.0 U	0.5 U	5.0 U	0.5 U	0.5 U	2.0 U	2.0 U
GP-44-45.5	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-44-75.5	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
GP-44-76.5	Water	04/09/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA

TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

	Sample Designation	Matrix	Date Sampled	2-Chloroethyl Vinyl Ether	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Trichlorotrifluoroethane	Carbon Disulfide	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
	Trip Blank	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Trip Blank	Water	02/09/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Trip Blank	Water	02/12/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Trip Blank	Water	02/14/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Field Blank	Water	12/14/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Field Blank	Water	02/14/01	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**2.8**	0.5 U	0.5 U	0.5 U	0.5 U
	Field Blank	Water	04/10/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U		NA	5.0 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	NA	0.5 U	NA	0.5 U
850	EX-1	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	**0.53**	20 U	0.5 U	0.5 U	0.5 U	0.5 U	**9.1**	0.5 U	0.5 U
100	EX-2	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
93	EX-3	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
470	EX-4/MW-2	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U
90	EX-5	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1045	EX-7	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
365	MW-1	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.53**	0.5 U	0.5 U	0.5 U	0.5 U
215	MW-3	Water	12/20/00	5.0 U	0.5 U	0.5 U	**1.2**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
235	MW-4	Water	12/20/00	5.0 U	0.5 U	0.5 U	**1.4**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
165	MW-5	Water	12/20/00	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTE: µg/L = micrograms per liter or parts per billion. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3 Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2 Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene	Styrene	Bromoform
Trip Blank	Water	12/14/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trip Blank	Water	02/09/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trip Blank	Water	02/12/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trip Blank	Water	02/14/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Field Blank	Water	12/14/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Field Blank	Water	02/14/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Field Blank	Water	04/10/01	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	NA	1.0 U
850 EX-1	Water	12/20/00	0.5 U	0.5 U	**20**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**400** D	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
100 EX-2	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
97 EX-3	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
470 EX-4/MW-2	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**0.65**	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
90 EX-5	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1045 EX-7	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
265 IW-1	Water	12/20/00	0.5 U	0.5 U	**0.56**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**3.5**	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
315 MW-3	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
235 MW-4	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
165 MW-5	Water	12/20/00	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	0.5 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

NOTE: µg/L = micrograms per liter or parts per billion. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

TABLE 7
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
Trip Blank	Water	12/14/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trip Blank	Water	02/09/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trip Blank	Water	02/12/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trip Blank	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Field Blank	Water	12/14/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Field Blank	Water	02/14/01	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Field Blank	Water	04/10/01	NA	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA
EX-1	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
EX-2	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
EX-3	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
EX-4/MW-2	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
EX-5	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
EX-7	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-1	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-3	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-4	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-5	Water	12/20/00	2.0 U	0.5 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 9
Total Petroleum Hydrocarbons
Upland Soil
McCall/GWCC
Portland, Oregon

Location	Matrix	Date Sampled	TPH - FIQ																	
			Gasoline		Naphtha Distillate		Jet Fuel as JP-4		Mineral Spirits		Jet Fuel as Jet A		Kerosene		Diesel		Heavy Fuel Oil		Lube Oil	
Geoprobe Borings - Soil mg/kg (ppm)																				
GP-4 10-12	Soil	12/11/00	39	H	10	U	10	U	10	U	10	U	10	U	220	F	25	U	200	F
GP-7 2-4	Soil	12/14/00	10	U	10	U	10	U	10	U	10	U	10	U	5500	DH	25	U	4100	DL
GP-9 10-12	Soil	12/12/00	290	H	10	U	10	U	10	U	10	U	10	U	12000	H	25	U	10000	F
GP-14 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	14	F	25	U	55	F
GP-14 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-14 20-22	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	30	Y	25	U	110	Y
GP-15 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	30	Z
GP-15 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	31	Z
GP-15 20-22	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	78	F	25	U	160	Z
GP-16 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	49	F
GP-16 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-16 16-18	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	33	H	25	U	85	Y
GP-17 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	13	H	25	U	84	F
GP-17 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-17 12-14	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	16	H	25	U	160	O
GP-18 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	21	H	25	U	210	F
GP-18 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-18 16-18	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	38	F
GP-19 0-2	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-19 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	68	H	25	U	160	L
GP-19 16-18	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-20 2-4	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-20 16-18	Soil	12/13/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-22 10-12	Soil	02/09/01	17	H	10	U	10	U	10	U	10	U	10	U	310	F	25	U	160	Y
GP-23 16-18	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	80	H	25	U	220	Y
GP-24 12-14	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	74	H	25	U	130	Y
GP-24 16-18	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	65	H	25	U	180	Y
GP-25 10-12	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	72	H	25	U	250	Y
GP-25 14-16	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	65	H	25	U	160	Y
GP-26 14-16	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	68	H	25	U	170	Y
GP-26 18-20	Soil	02/09/01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-27 10-12	Soil	02/12/01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	48	Y
GP-28 12-14	Soil	02/12/01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	25	U
GP-29 4-6	Soil	02/12/01	710	H	500	U	500	U	500	U	500	U	500	U	18000	H	1300	U	36000	F
GP-30 4-6	Soil	02/12/01	500	U	500	U	500	U	500	U	500	U	500	U	4200	H	1300	U	1700	F
GP-31 14-16	Soil	02/13/01	6300	DH	100	U	100	U	100	U	100	U	100	U	35000	DH	250	U	38000	DF
GP-32 10-12	Soil	02/13/01	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	29	F
GP-33 16-18	Soil	02/13/01	10	U	10	U	10	U	10	U	10	U	10	U	130	H	25	U	280	Y
GP-34 12-14	Soil	02/13/01	10	U	10	U	10	U	10	U	10	U	10	U	48	H	25	U	160	Y
GP-35 10-12	Soil	02/13/01	10	U	10	U	10	U	10	U	10	U	10	U	25	H	25	U	55	Y
GP-36 12-14	Soil	02/13/01	18	H	10	U	10	U	10	U	10	U	10	U	240	H	25	U	430	Y
GP-38 10-12	Soil	02/14/01	47	H	100	U	100	U	100	U	100	U	100	U	930	Y	250	U	440	Y
Catch Basins - Sediment mg/kg (ppm)																				
S-1	Soil	12/15/00	26	Y	10	U	10	U	10	U	10	U	10	U	400	H	25	U	1900	O
S-2	Soil	12/15/00	21	Y	10	U	10	U	10	U	10	U	10	U	300	H	25	U	2200	DO
S-3	Soil	12/15/00	580	Y	10	U	10	U	10	U	10	U	10	U	2400	H	25	U	7600	DO
S3-01C	Soil	12/15/00	10	U	10	U	10	U	10	U	10	U	10	U	10	U	25	U	30	Y

Notes: U = Not detected at method reporting limit. F = Fingerprint of the sample matches the elution pattern of calibration standard

L = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of lighter weight constituents.

H = The fingerprint resembles a petroleum product, but the elution pattern indicates the presence of heavier weight constituents.

O = The fingerprint resembles oil, but does not match the calibration standard.

Y = The fingerprint resembles a petroleum product in the correct carbon range, but the elution pattern does not match the calibration standard.

Z = The fingerprint does not resemble a petroleum product.

D = The reported result is from a dilution.

Table 8
Metals
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

	Location		Matrix	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Lead	Zinc
	Geoprobe Borings - Groundwater µg/L (ppb)									
735	GP-3	Dissolved	Water	12/11/00	35.8		4.75	3.71		
670	GP-4	Dissolved	Water	12/11/00	19.3		5.89	3.69		
520	GP-5	Dissolved	Water	12/11/00	22.5		8.06	3.04		
420	GP-11	Dissolved	Water	12/12/00	14.7		5.04	2.33		
310	GP-12	Dissolved	Water	12/13/00	11.1		6.1	1 U		
	GP-12 Duplicate	Dissolved	Water	12/13/00	11.3		5.0	0.5		
140	GP-13	Dissolved	Water	12/12/00	61.9		7.63	5.35		
140	GP-14	Dissolved	Water	12/13/00	4.8		5.1	1.3		
100	GP-15	Dissolved	Water	12/13/00	18.6		8.1	1.1		
	Field Blank	Dissolved	Water	12/13/00	0.5 U		0.3	0.2 U		
	Monitoring Wells - Groundwater µg/L (ppb)									
470	EX-4/MW-2	Dissolved	Water	12/20/00	8.8		8.1	2.0		
365	MW-1	Dissolved	Water	12/20/00	2.50 U		9.5	514		
315	MW-3	Dissolved	Water	12/20/00	39.7	0.10 U	0.4 U	0.5	0.04 U	1.3
235	MW-4	Dissolved	Water	12/20/00	12.7		1.00 U	1.00 U		
	Catch Basins - Storm Water µg/L (ppb)									
	S-1W	Total	Water	12/20/00	0.5 U	0.05 U	0.4	3.8	0.43	200
	S-2W	Total	Water	12/20/00	1 U	0.22	2.0	9.9	5.93	113
	S-3W	Dissolved	Water	12/15/00	1 U	0.63	2.9	29.6	1.62	596
	Oil/Water Separator - Storm Water µg/L (ppb)									
	S-4W	Dissolved	Water	12/15/00	0.5 U	0.22	0.8	4.9	0.05	47.1
	S-4W Duplicate	Dissolved	Water	12/15/00	0.5 U	0.21	0.6	4.7	0.04	45.0

Note: U = not detected at method reporting limit. µg/L = micrograms per liter. ppb = parts per billion.

TABLE 10
PAHs and SVOCs (µg/kg)
Upland Soil and Catch Basin Sediment
McCall/GWCC

Sample Designation	GP-4 10-12		GP-7 2-4		GP-9 10-12		GP-14 0-2		GP-14 2-4		GP-14 20-22		GP-15 0-2		GP-15 2-4		GP-15 20-22		GP-16 0-2		GP-16 2-4		GP-16 16-18	
Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Date Sampled	12/11/00		12/14/00		12/12/00		12/13/00		12/13/00		12/13/00		12/13/00		12/13/00		12/13/00		12/13/00		12/13/00		12/13/00	
LPAHs																								
Naphthalene	110	U	40	JD	70	JD	7.5	U	7.4	U	25		1	J	7.9	U	150		1	J	7.9	U	27	
Acenaphthylene	110	U	83	U	160	U	0.7	J	0.5	J	6	J	0.5	J	7.9	U	40		7.6	U	7.9	U	5	J
Acenaphthene	110	U	70	JD	80	JD	7.5	U	7.4	U	9.4	U	7.6	U	7.9	U	84		7.6	U	7.9	U	7	J
Fluorene	110	U	89	D	280	D	7.5	U	0.6	J	3	J	0.8	J	7.9	U	240		7.6	U	7.9	U	4	J
Phenanthrene	140	D	520	D	1800	D	7.5	U	7.4	U	55		13		7.9	U	1300	D	3	J	7.9	U	36	
Anthracene	10	JD	140	D	210	D	0.9	J	0.7	J	8	J	2	J	7.9	U	65		7.6	U	7.9	U	8	J
2-Methylnaphthalene	110	U	380	D	420	D	0.6	J	0.5	J	9.9		1	J	7.9	U	64		1	J	0.8	J	8	J
Total LPAH	150		1239		2860		2.2		2.3		106.9		18.3				1943		5		0.8		95	
HPAHs																								
Fluoranthene	70	JD	83	U	310	D	6	J	2	J	94		34		7.9	U	330		8	J	1	J	30	
Pyrene	160	D	83	U	1200	D	7	J	2	J	130		29		0.7	J	390		7	J	1	J	89	
Benz(a)anthracene	80	JD	240	D	330	D	4	J	1	J	40		17		7.9	U	110		5	J	0.9	J	38	
Chrysene	100	JD	740	D	1300	D	7	J	1	J	63		28		0.7	J	130		7	J	1	J	48	
Benzo(b)fluoranthene	50	JD	83	U	160	U	5	J	1	J	56		25		0.7	J	96		6	J	1	J	30	
Benzo(k)fluoranthene	40	JD	83	U	160	U	5	J	1	J	46		22		0.9	J	97		6	J	2	J	33	
Benzo(a)pyrene	80	JD	70	JD	210	D	6	J	0.8	J	76		24		0.7	J	160		5	J	1	J	44	
Indeno(1,2,3-cd)pyrene	60	JD	30	JD	60	JD	6	J	1	J	89		24		1	J	130		7	J	2	J	28	
Dibenz(a,h)anthracene	20	JD	20	JD	20	JD	1	J	15	U	10	J	5	J	0.7	J	20	J	1	J	16	U	4	J
Benzo(g,h,i)perylene	70	JD	60	JD	100	JD	8	J	2	J	100		23		1	J	140		8	J	2	J	33	
Total HPAHs	730		1160		3530		55		42		704		231		6		1603		60		12		377	
SVOCs																								
3- and 4-Methylphenol Coelution	2200	U	1700	U	3300	U	150	U	150	U	190	U	150	U	160	U	60	J	150	U	160	U	180	U
Dibenzofuran	110	U	20	JD	80	JD	0.6	J	0.7	J	2.0	J	0.8	J	7.9	U	47		7.6	U	7.9	U	2	J
Butyl Benzyl Phthalate	220	U	170	U	930	D	15	U	15	U	19	U	4	J	16	U	26	U	0.7	J	16	U	18	U
Di-n-octyl Phthalate	2200	U	1700	U	3300	U	150	U	150	U	190	U	150	U	160	U	260	U	150	U	160	U	180	U

NOTE: µg/kg = micrograms per kilogram or part per billion. U = not detected at or above the indicated method reporting limit. J = estimated concentration. D = reported result is from a dilution.

TABLE 11
VOLATILE ORGANIC COMPOUNDS (µg/kg)
UPLAND SOIL
McCall/GWCC

Sample Designation	Matrix	Date Sampled	Dichlorodifluoromethane	Chloromethane	Vinyl Chloride	Bromomethane	Chloroethane	Trichlorofluoromethane	Acetone	1,1-Dichloroethene	Carbon Disulfide	Trichlorotrifluoroethane	Methylene Chloride	*trans*-1, 2-dichloroethene	1,1-Dichloroethane	2-Butanone	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
GP-4 10-12	Soil	12/11/00	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	64 U	6.4 U	6.4 U	6.4 U	13 U	6.4 U	6.4 U	26 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U
GP-7 2-4	Soil	12/14/00	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	**87**	5.6 U	5.6 U	5.6 U	11 U	5.6 U	5.6 U	22 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
GP-9 10-12	Soil	12/12/00	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	**410**	5.5 U	5.5 U	5.5 U	11 U	5.5 U	5.5 U	**100**	5.5 U	**5.7**	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
GP-15 20-22	Soil	12/14/00	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	**100**	6.9 U	6.9 U	6.9 U	14 U	6.9 U	6.9 U	28 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
GP-17 12-14	Soil	12/13/00	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	57 U	5.7 U	5.7 U	5.7 U	11 U	5.7 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
GP-22 10-12	Soil	02/09/01	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	**93**	7.2 U	7.2 U	7.2 U	14 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U
GP-23 16-18	Soil	02/09/01	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	75 U	7.5 U	7.5 U	7.5 U	15 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U
GP-24 12-14	Soil	02/09/01	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	73 U	7.3 U	7.3 U	7.3 U	15 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
GP-24 16-18	Soil	02/09/01	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	67 U	6.7 U	6.7 U	6.7 U	13 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
GP-25 10-12	Soil	02/09/01	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	74 U	7.4 U	7.4 U	7.4 U	15 U	7.4 U	7.4 U	30 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
GP-25 14-16	Soil	02/09/01	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	**92**	7.4 U	7.4 U	7.4 U	15 U	7.4 U	7.4 U	29 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
GP-26 14-16	Soil	02/09/01	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	73 U	7.3 U	7.3 U	7.3 U	15 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
GP-26 18-20	Soil	02/09/01	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	63 U	6.3 U	6.3 U	6.3 U	13 U	6.3 U	6.3 U	25 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
GP-27 10-12	Soil	02/12/01	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	56 U	5.6 U	5.6 U	5.6 U	11 U	5.6 U	5.6 U	23 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
GP-28 12-14	Soil	02/12/01	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	54 U	5.4 U	5.4 U	5.4 U	11 U	5.4 U	5.4 U	21 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
GP-29 4-6	Soil	02/12/01	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	11 U	0.28 U	0.28 U	0.28 U	0.56 U	0.28 U	0.28 U	11 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
GP-30 4-6	Soil	02/12/01	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	57 U	5.7 U	5.7 U	5.7 U	11 U	5.7 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
GP-31 14-16	Soil	02/13/01	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	11 U	0.29 U	0.29 U	0.29 U	0.57 U	0.29 U	0.29 U	11 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
GP-32 10-12	Soil	02/13/01	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	53 U	5.3 U	5.3 U	5.3 U	11 U	5.3 U	5.3 U	21 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U
GP-33 16-18	Soil	02/13/01	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	60 U	6.0 U	6.0 U	6.0 U	12 U	6.0 U	6.0 U	24 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
GP-34 12-14	Soil	02/13/01	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	71 U	7.1 U	7.1 U	7.1 U	14 U	7.1 U	7.1 U	28 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U
GP-35 10-12	Soil	02/13/01	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	58 U	5.8 U	5.8 U	5.8 U	12 U	5.8 U	5.8 U	23 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U
GP-36 12-14	Soil	02/13/01	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	**75**	7.0 U	7.0 U	7.0 U	14 U	7.0 U	7.0 U	28 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U
GP-38 10-12	Soil	12/13/00	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	**110**	6.2 U	6.2 U	6.2 U	12 U	6.2 U	6.2 U	25 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U

NOTE: µg/kg = micrograms per kilogram or part per billion. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

TABLE 11
VOLATILE ORGANIC COMPOUNDS (µg/kg)
UPLAND SOIL
McCall/GWCC

Sample Designation	Matrix	Date Sampled	1,2-Dichloroethane	Benzene	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	2-Chloroethyl Vinyl Ether	Dibromomethane	2-Hexanone	cis-1,3-Dichloropropene	Toluene	trans 1,3-Dichloropropene	1,1,2-Trichloroethane	4-Methyl-2-pentanone	1,3-Dichloropropane	Tetrachloroethene	Dibromochloromethane	1,2-Dibromoethane	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	m,p-Xylenes	o-Xylene
GP-4 10-12	Soil	12/11/00	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	13 U	6.4 U	26 U	6.4 U	6.4 U	6.4 U	6.4 U	26 U	6.4 U	6.4 U	6.4 U	26 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U
GP-7 2-4	Soil	12/14/00	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	11 U	5.6 U	22 U	5.6 U	5.6 U	5.6 U	5.6 U	22 U	5.6 U	5.6 U	5.6 U	22 U	**9.5**	5.6 U	5.6 U	5.6 U	5.6 U
GP-9 10-12	Soil	12/12/00	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	11 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
GP-15 20-22	Soil	12/14/00	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	14 U	6.9 U	28 U	6.9 U	6.9 U	6.9 U	6.9 U	28 U	6.9 U	6.9 U	6.9 U	28 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U
GP-17 12-14	Soil	12/13/00	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	11 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	23 U	**8.6**	5.7 U	5.7 U	5.7 U	5.7 U
GP-22 10-12	Soil	02/09/01	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	14 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	29 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U
GP-23 16-18	Soil	02/09/01	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U	15 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	7.5 U	7.5 U
GP-24 12-14	Soil	02/09/01	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	15 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
GP-24 16-18	Soil	02/09/01	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U	13 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	6.7 U	6.7 U
GP-25 10-12	Soil	02/09/01	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	15 U	7.4 U	30 U	7.4 U	7.4 U	7.4 U	7.4 U	30 U	7.4 U	7.4 U	7.4 U	30 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
GP-25 14-16	Soil	02/09/01	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U	15 U	7.4 U	29 U	7.4 U	7.4 U	7.4 U	7.4 U	29 U	7.4 U	7.4 U	7.4 U	29 U	7.4 U	7.4 U	7.4 U	7.4 U	7.4 U
GP-26 14-16	Soil	02/09/01	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	15 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
GP-26 18-20	Soil	02/09/01	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	13 U	6.3 U	25 U	6.3 U	6.3 U	6.3 U	6.3 U	25 U	6.3 U	6.3 U	6.3 U	25 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
GP-27 10-12	Soil	02/12/01	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	11 U	5.6 U	23 U	5.6 U	5.6 U	5.6 U	5.6 U	23 U	5.6 U	5.6 U	5.6 U	23 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
GP-28 12-14	Soil	02/12/01	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	11 U	5.4 U	21 U	5.4 U	5.4 U	5.4 U	5.4 U	21 U	5.4 U	5.4 U	5.4 U	21 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
GP-29 4-6	Soil	02/12/01	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U	0.28 U	11 U	0.28 U	0.28 U	0.28 U	0.28 U	11 U	0.28 U	0.28 U	0.28 U	1.1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
GP-30 4-6	Soil	02/12/01	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	11 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	5.7 U	23 U	5.7 U	**19**	5.7 U	23 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U
GP-31 14-16	Soil	02/13/01	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	2.9 U	0.29 U	11 U	0.29 U	0.29 U	0.29 U	0.29 U	11 U	0.29 U	0.29 U	0.29 U	1.1 U	0.29 U	0.29 U	0.29 U	0.29 U	**0.85**
GP-32 10-12	Soil	02/13/01	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	11 U	5.3 U	21 U	5.3 U	5.3 U	5.3 U	5.3 U	21 U	5.3 U	5.3 U	5.3 U	21 U	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U
GP-33 16-18	Soil	02/13/01	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	12 U	6.0 U	24 U	6.0 U	6.0 U	6.0 U	6.0 U	24 U	6.0 U	6.0 U	6.0 U	24 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
GP-34 12-14	Soil	02/13/01	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U	14 U	7.1 U	28 U	7.1 U	7.1 U	7.1 U	7.1 U	28 U	7.1 U	7.1 U	7.1 U	28 U	7.1 U	7.1 U	7.1 U	7.1 U	7.1 U
GP-35 10-12	Soil	02/13/01	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U	12 U	5.8 U	23 U	5.8 U	5.8 U	5.8 U	5.8 U	23 U	5.8 U	5.8 U	5.8 U	23 U	5.8 U	5.8 U	5.8 U	5.8 U	5.8 U
GP-36 12-14	Soil	02/13/01	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U	14 U	7.0 U	28 U	7.0 U	7.0 U	7.0 U	7.0 U	28 U	7.0 U	7.0 U	7.0 U	28 U	7.0 U	7.0 U	7.0 U	7.0 U	7.0 U
GP-38 10-12	Soil	12/13/00	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U	12 U	6.2 U	25 U	6.2 U	6.2 U	6.2 U	6.2 U	25 U	6.2 U	6.2 U	6.2 U	25 U	6.2 U	6.2 U	6.2 U	6.2 U	6.2 U

NOTE: µg/kg = micrograms per kilogram or part per billion. U = not detected at or above the indicated method reporting limit. J = estimated concentration.

TABLE 11
VOLATILE ORGANIC COMPOUNDS (µg/kg)
UPLAND SOIL
McCall/GWCC

Sample Designation	Matrix	Date Sampled	Styrene	Bromoform	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
GP-4 10-12	Soil	12/11/00	6.4 U	6.4 U	26 U	6.4 U	6.4 U	6.4 U	26 U	26 U	26 U	26 U	26 U	26 U	26 U	6.4 U	26 U	6.4 U	26 U	6.4 U	26 U	26 U	26 U	26 U	26 U
GP-7 2-4	Soil	12/14/00	5.6 U	5.6 U	22 U	5.6 U	5.6 U	5.6 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.6 U	22 U	5.6 U	22 U	5.6 U	22 U	22 U	22 U	22 U	22 U
GP-9 10-12	Soil	12/12/00	5.5 U	5.5 U	22 U	5.5 U	5.5 U	5.5 U	22 U	22 U	22 U	22 U	22 U	22 U	22 U	5.5 U	22 U	5.5 U	22 U	5.5 U	22 U	22 U	22 U	22 U	22 U
GP-15 20-22	Soil	12/14/00	6.9 U	6.9 U	28 U	6.9 U	6.9 U	6.9 U	28 U	28 U	28 U	28 U	28 U	28 U	28 U	6.9 U	28 U	6.9 U	28 U	6.9 U	28 U	28 U	28 U	28 U	28 U
GP-17 12-14	Soil	12/13/00	5.7 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	23 U	23 U	23 U	23 U	23 U	23 U	23 U	5.7 U	23 U	5.7 U	23 U	5.7 U	23 U	23 U	23 U	23 U	23 U
GP-22 10-12	Soil	02/09/01	7.2 U	7.2 U	**80**	7.2 U	7.2 U	7.2 U	29 U	29 U	29 U	29 U	29 U	29 U	**170**	7.2 U	29 U	7.2 U	**35**	7.2 U	29 U	29 U	29 U	**30**	29 U
GP-23 16-18	Soil	02/09/01	7.5 U	7.5 U	30 U	7.5 U	7.5 U	7.5 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	7.5 U	30 U	7.5 U	30 U	7.5 U	30 U	30 U	30 U	30 U	30 U
GP-24 12-14	Soil	02/09/01	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	29 U	29 U	29 U	29 U	29 U	29 U	29 U	7.3 U	29 U	7.3 U	29 U	7.3 U	29 U	29 U	29 U	29 U	29 U
GP-24 16-18	Soil	02/09/01	6.7 U	6.7 U	27 U	6.7 U	6.7 U	6.7 U	27 U	27 U	27 U	27 U	27 U	27 U	27 U	6.7 U	27 U	6.7 U	27 U	6.7 U	27 U	27 U	27 U	27 U	27 U
GP-25 10-12	Soil	02/09/01	7.4 U	7.4 U	30 U	7.4 U	7.4 U	7.4 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	7.4 U	30 U	7.4 U	30 U	7.4 U	30 U	30 U	30 U	30 U	30 U
GP-25 14-16	Soil	02/09/01	7.4 U	7.4 U	29 U	7.4 U	7.4 U	7.4 U	29 U	29 U	29 U	29 U	29 U	29 U	29 U	7.4 U	29 U	7.4 U	29 U	7.4 U	29 U	29 U	29 U	29 U	29 U
GP-26 14-16	Soil	02/09/01	7.3 U	7.3 U	29 U	7.3 U	7.3 U	7.3 U	29 U	29 U	29 U	29 U	29 U	29 U	29 U	7.3 U	29 U	7.3 U	29 U	7.3 U	29 U	29 U	29 U	29 U	29 U
GP-26 18-20	Soil	02/09/01	6.3 U	6.3 U	25 U	6.3 U	6.3 U	6.3 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	6.3 U	25 U	6.3 U	25 U	6.3 U	25 U	25 U	25 U	25 U	25 U
GP-27 10-12	Soil	02/12/01	5.6 U	5.6 U	23 U	5.6 U	5.6 U	5.6 U	23 U	23 U	23 U	23 U	23 U	23 U	23 U	5.6 U	23 U	5.6 U	23 U	5.6 U	23 U	23 U	23 U	23 U	23 U
GP-28 12-14	Soil	02/12/01	5.4 U	5.4 U	21 U	5.4 U	5.4 U	5.4 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	5.4 U	21 U	5.4 U	21 U	5.4 U	21 U	21 U	21 U	21 U	21 U
GP-29 4-6	Soil	02/12/01	0.28 U	0.28 U	1.1 U	0.28 U	0.28 U	0.28 U	1.1 U	1.1 U	1.1 U	**2.4**	1.1 U	**5.1**	1.1 U	0.28 U	**1.4**	0.28 U	1.1 U	0.28 U	1.1 U	1.1 U	1.1 U	**1.3**	1.1 U
GP-30 4-6	Soil	02/12/01	5.7 U	5.7 U	23 U	5.7 U	5.7 U	5.7 U	23 U	23 U	23 U	23 U	23 U	23 U	23 U	5.7 U	23 U	5.7 U	23 U	5.7 U	23 U	23 U	23 U	23 U	23 U
GP-31 14-16	Soil	02/13/01	0.29 U	0.29 U	1.1 U	0.29 U	0.29 U	0.29 U	**2.0**	1.1 U	1.1 U	1.1 U	1.1 U	**1.4**	**1.4**	0.29 U	1.1 U	0.29 U	**3**	0.29 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
GP-32 10-12	Soil	02/13/01	5.3 U	5.3 U	21 U	5.3 U	5.3 U	5.3 U	21 U	21 U	21 U	21 U	21 U	21 U	21 U	5.3 U	21 U	5.3 U	21 U	5.3 U	21 U	21 U	21 U	21 U	21 U
GP-33 16-18	Soil	02/13/01	6.0 U	6.0 U	24 U	6.0 U	6.0 U	6.0 U	24 U	24 U	24 U	24 U	24 U	24 U	24 U	6.0 U	24 U	6.0 U	24 U	6.0 U	24 U	24 U	24 U	24 U	24 U
GP-34 12-14	Soil	02/13/01	7.1 U	7.1 U	28 U	7.1 U	7.1 U	7.1 U	28 U	28 U	28 U	28 U	28 U	28 U	28 U	7.1 U	28 U	7.1 U	28 U	7.1 U	28 U	28 U	28 U	28 U	28 U
GP-35 10-12	Soil	02/13/01	5.8 U	5.8 U	23 U	5.8 U	5.8 U	5.8 U	23 U	23 U	23 U	23 U	23 U	23 U	23 U	5.8 U	23 U	5.8 U	23 U	5.8 U	23 U	23 U	23 U	23 U	23 U
GP-36 12-14	Soil	02/13/01	7.0 U	7.0 U	28 U	7.0 U	7.0 U	7.0 U	28 U	28 U	28 U	28 U	28 U	28 U	28 U	7.0 U	28 U	7.0 U	28 U	7.0 U	28 U	28 U	28 U	28 U	28 U
GP-38 10-12	Soil	12/13/00	6.2 U	6.2 U	25 U	6.2 U	6.2 U	6.2 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	6.2 U	25 U	6.2 U	25 U	6.2 U	25 U	25 U	25 U	25 U	25 U

Table 12
Metals
Upland Soil and Catch Basin Sediment
McCall/GWCC
Portland, Oregon

Location		Matrix	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Lead	Zinc
Geoprobe Borings - Soil mg/kg (ppm)									
GP-4 10-12	Total	Soil	12/11/00	3.3		11.6	15.7		
GP-7 2-4	Total	Soil	12/14/00	2.9		13.3	16.8		
GP-9 10-12	Total	Soil	12/12/00	2.4		14.2	19.3		
GP-14 0-2	Total	Soil	12/14/00	2.2		13.1	17.4		
GP-14 2-4	Total	Soil	12/14/00	1.7		12.3	13.4		
GP-14 20-22	Total	Soil	12/14/00	4.6		14.5	19.0		
GP-15 0-2	Total	Soil	12/14/00	1.7		11.1	18.1		
GP-15 2-4	Total	Soil	12/14/00	1.8		12.7	14.7		
GP-15 20-22	Total	Soil	12/14/00	3.1		22.8	27.1		
GP-16 0-2	Total	Soil	12/14/00	1.6		10.9	15.4		
GP-16 2-4	Total	Soil	12/14/00	1.8		14.0	15.4		
GP-16 16-18	Total	Soil	12/14/00	3.2		12.9	20.7		
GP-17 0-2	Total	Soil	12/14/00	1.5		9.96	13.4		
GP-17 2-4	Total	Soil	12/14/00	1.8		11.9	14.6		
GP-17 12-14	Total	Soil	12/13/00	2.2		16.6	18.7		
GP-18 0-2	Total	Soil	12/14/00	1.3		8.88	13.7		
GP-18 2-4	Total	Soil	12/14/00	1.6		11.1	13.5		
GP-18 16-18	Total	Soil	12/14/00	2.5		12.6	16.9		
GP-19 0-2	Total	Soil	12/14/00	1.6		10.1	12.3		
GP-19 2-4	Total	Soil	12/14/00	1.9		12.9	15.0		
GP-19 16-18	Total	Soil	12/14/00	1.6		10.6	13.2		
GP-20 2-4	Total	Soil	12/14/00	1.6		11.1	14.2		
GP-20 16-18	Total	Soil	12/13/00	1.6		9.11	11.6		
Catch Basins - Sediment mg/kg (ppm)									
S-1	Total	Sediment	12/15/00	5.2	2.00	48.9	137	145	638
S-2	Total	Sediment	12/15/00	7.5	1.42	63.7	316	211	584
S-3	Total	Sediment	12/15/00	37.9	2.86	144	1050	454	985
S3-01C	Total	Sediment	12/15/00	4.4	0.12	11.9	27.4	8.58	82.7

Note: U = not detected at method reporting limit. mg/kg = milligrams per kilogram. ppm = parts per million.

APPENDIX A
TEST BORING LOGS

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	T.Williams 3/20/01	JFF 4/30/01	7/30/01	82091 37

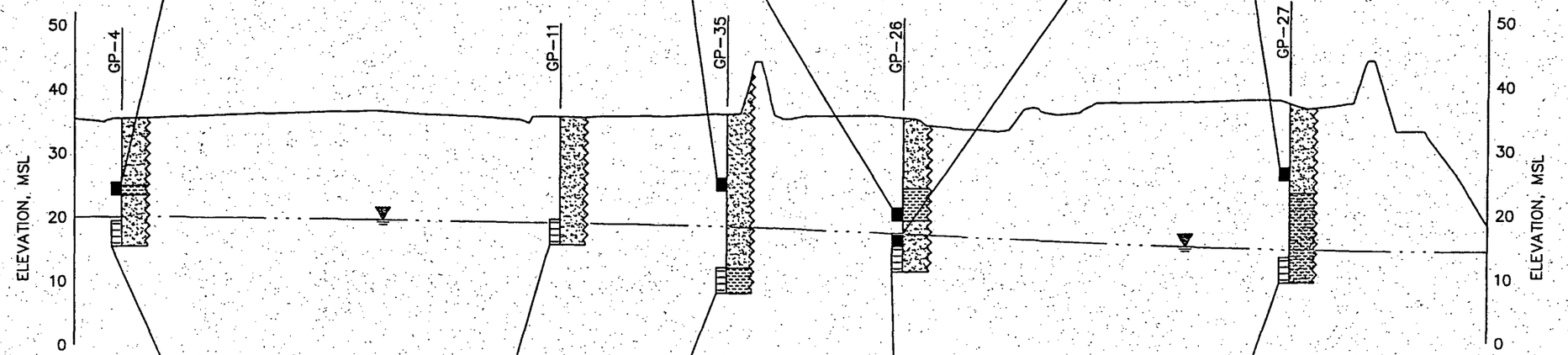
GP-4	
VOCs	ND
HPAH	730
LPAH	150
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	220
TPH-L	200
TPH-G	39

GP-35	
VOCs	ND
HPAH	165
LPAH	38
SVOCs	
4M	ND
DB	0.8
BBP	0.7
DNP	ND
TPH-D	25
TPH-L	55
TPH-G	ND

GP-26	
VOCs	ND
HPAH	501
LPAH	226
SVOCs	
4M	180
DB	9
BBP	ND
DNP	ND
TPH-D	68
TPH-L	170
TPH-G	ND

GP-26	
VOCs	ND
HPAH	68
LPAH	36
SVOCs	
4M	ND
DB	2
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-27	
VOCs	ND
HPAH	49
LPAH	21
SVOCs	
4M	ND
DB	0.8
BBP	2
DNP	ND
TPH-D	ND
TPH-L	48
TPH-G	ND



GP-4	
VOCs	ND
HPAH	61.5
LPAH	646
SVOCs	
4M	ND
DB	19
BBP	ND
DNP	ND
TPH-D	7100
TPH-L	4400
TPH-G	2500

GP-11	
VOCs	197.6
HPAH	0.201
LPAH	0.13
SVOCs	
4M	0.03
DB	0.09
BBP	0.2
DNP	ND
TPH-D	130
TPH-L	ND
TPH-G	ND

GP-35	
VOCs	109.5
HPAH	5.39
LPAH	1.37
SVOCs	
4M	1.5
DB	0.03
BBP	0.43
DNP	ND
TPH-D	200
TPH-L	270
TPH-G	ND

GP-26	
VOCs	ND
HPAH	0.710
LPAH	0.52
SVOCs	
4M	1.3
DB	0.02
BBP	0.08
DNP	ND
TPH-D	300
TPH-L	500
TPH-G	ND

GP-27	
VOCs	ND
HPAH	0.94
LPAH	1.53
SVOCs	
4M	0.49
DB	0.12
BBP	1.7
DNP	ND
TPH-D	170
TPH-L	ND
TPH-G	ND

HORIZONTAL SCALE

0 100 200 FEET

VERTICAL SCALE

0 20 40 FEET

VERTICAL EXAGGERATION = 5X

TABLE DESCRIPTIONS

GP-1	
VOCs	
HPAH	
LPAH	
SVOCs	
4M	
DB	
BBP	
DNP	
TPH-D	
TPH-L	
TPH-G	

WELL NAME
TOTAL CHLORINATED VOLATILE ORGANIC COMPOUNDS
HEAVY POLYNUCLEAR AROMATIC HYDROCARBONS
LIGHT POLYNUCLEAR AROMATIC HYDROCARBONS
SEMI-VOLATILE ORGANIC COMPOUNDS
4-METHYLPHENOL
DIBENZOFURAN
BUTYL BENZYL PHTHALATE
DI-N-OCTYL PHTHALATE
TOTAL PETROLEUM HYDROCARBONS - DIESEL
TOTAL PETROLEUM HYDROCARBONS - LUBE OIL
TOTAL PETROLEUM HYDROCARBONS - GASOLINE
ND - NOT DETECTED
NT - NOT TESTED

GEOLOGY LEGEND:

- GRAVEL
- SAND
- SILTY SAND
- SILT
- GEOPROBE OR WELL SCREEN
- SOIL SAMPLE LOCATION
- ESTIMATED WATER TABLE ELEVATION (FT. MSL)

NOTES:

THE LITHOLOGY OF THE SITE CONSISTS OF MEDIUM BROWN TO DARK GRAY MEDIUM SAND WITH INTERBEDS OF SILTY SAND, SILT, AND TRACE GRAVEL.

ALL DETECTED CONCENTRATIONS REPORTED IN PARTS PER BILLION, EXCEPT SOIL TPH REPORTED IN PARTS PER MILLION.

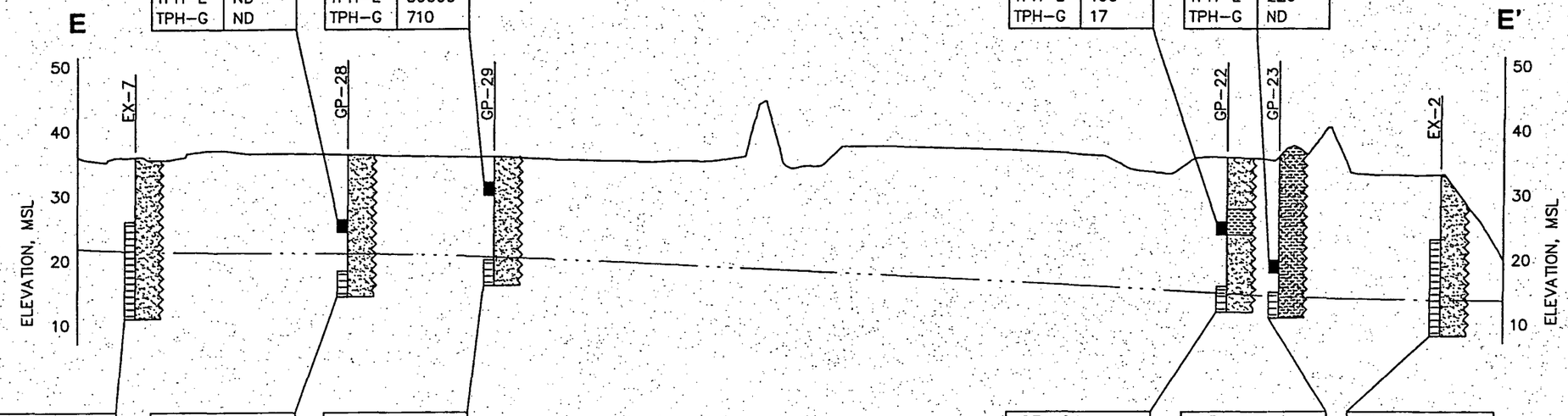
IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 5

CROSS SECTION D-D'

McCALL OIL
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	T.Williams 3/20/2001	JTP 4/30/01	4/30/01	82091C 38



GP-28	
VOCs	ND
HPAH	1
LPAH	ND
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-29	
VOCs	ND
HPAH	13630
LPAH	21370
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	18000
TPH-L	36000
TPH-G	710

GP-22	
VOCs	ND
HPAH	261
LPAH	512
SVOCs	
4M	ND
DB	32
BBP	ND
DNP	ND
TPH-D	310
TPH-L	160
TPH-G	17

GP-23	
VOCs	ND
HPAH	496
LPAH	154
SVOCs	
4M	60
DB	6
BBP	ND
DNP	ND
TPH-D	80
TPH-L	220
TPH-G	ND

EX-7	
VOCs	ND
HPAH	0.016
LPAH	ND
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-28	
VOCs	ND
HPAH	1.64
LPAH	0.12
SVOCs	
4M	ND
DB	ND
BBP	0.25
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-29	
VOCs	33
HPAH	3.91
LPAH	0.94
SVOCs	
4M	0.28
DB	ND
BBP	0.33
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-22	
VOCs	ND
HPAH	0.406
LPAH	19.53
SVOCs	
4M	0.1
DB	0.86
BBP	0.098
DNP	ND
TPH-D	1100
TPH-L	ND
TPH-G	210

GP-23	
VOCs	ND
HPAH	0.205
LPAH	0.22
SVOCs	
4M	0.2
DB	0.097
BBP	0.05
DNP	ND
TPH-D	440
TPH-L	ND
TPH-G	ND

EX-2	
VOCs	ND
HPAH	0.10
LPAH	0.078
SVOCs	
4M	0.02
DB	ND
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

HORIZONTAL SCALE

0 100 200 FEET

VERTICAL SCALE

0 20 40 FEET

VERTICAL EXAGGERATION = 5X

TABLE DESCRIPTIONS

GP-1	
VOCs	
HPAH	
LPAH	
SVOCs	
4M	
DB	
BBP	
DNP	
TPH-D	
TPH-L	
TPH-G	

WELL NAME
TOTAL CHLORINATED VOLATILE ORGANIC COMPOUNDS
HEAVY POLYNUCLEAR AROMATIC HYDROCARBONS
LIGHT POLYNUCLEAR AROMATIC HYDROCARBONS
SEMI-VOLATILE ORGANIC COMPOUNDS
4-METHYLPHENOL
DIBENZOFURAN
BUTYL BENZYL PHTHALATE
DI-N-OCTYL PHTHALATE
TOTAL PETROLEUM HYDROCARBONS - DIESEL
TOTAL PETROLEUM HYDROCARBONS - LUBE OIL
TOTAL PETROLEUM HYDROCARBONS - GASOLINE
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GEOLOGY LEGEND:

- GRAVEL
- SAND
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- SOIL SAMPLE LOCATION
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NOTES:

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ALL DETECTED CONCENTRATIONS REPORTED IN PARTS PER BILLION, EXCEPT SOIL TPH REPORTED IN PARTS PER MILLION.

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 6

CROSS SECTION E-E'

McCALL OIL
PORTLAND, OREGON

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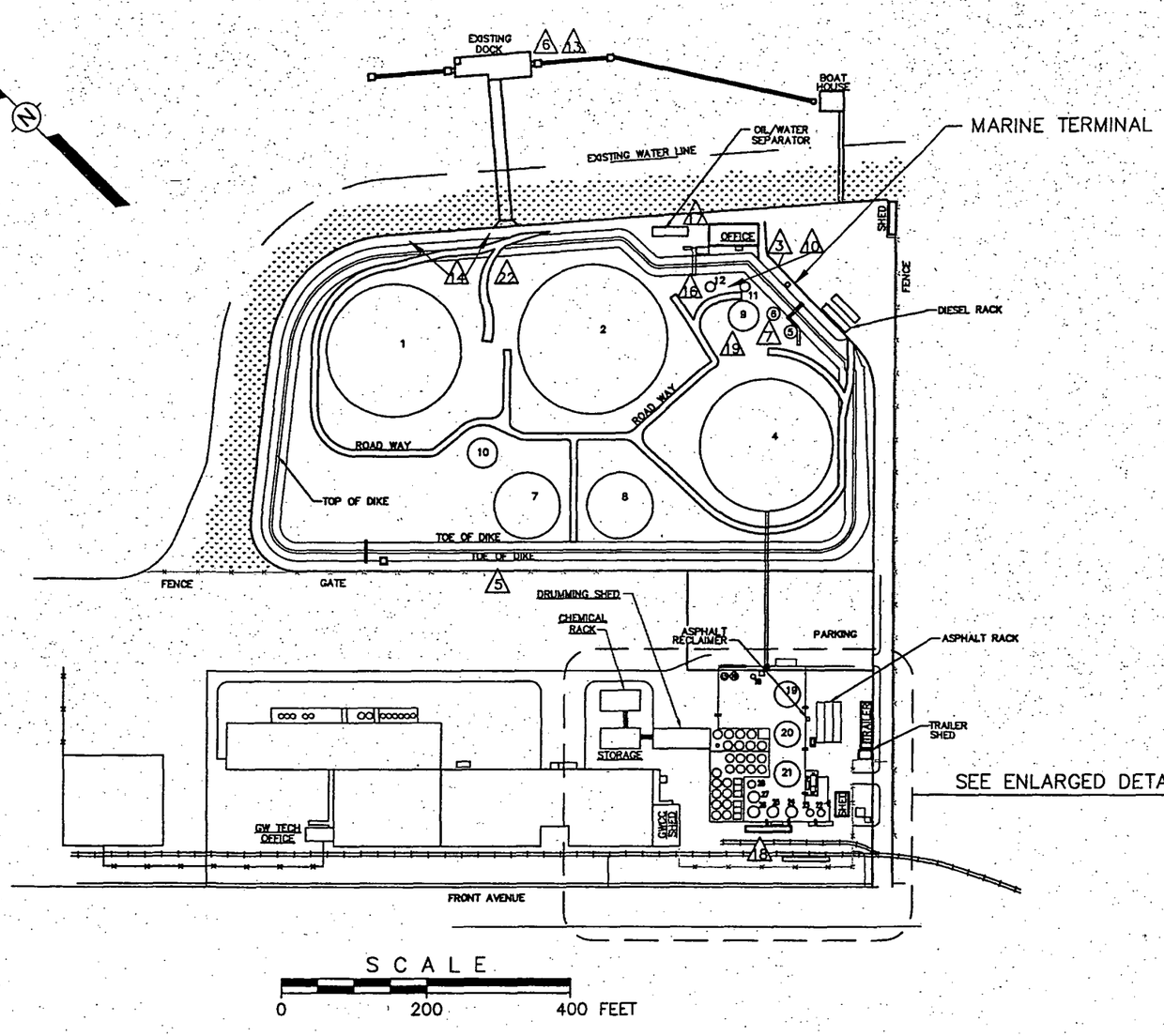

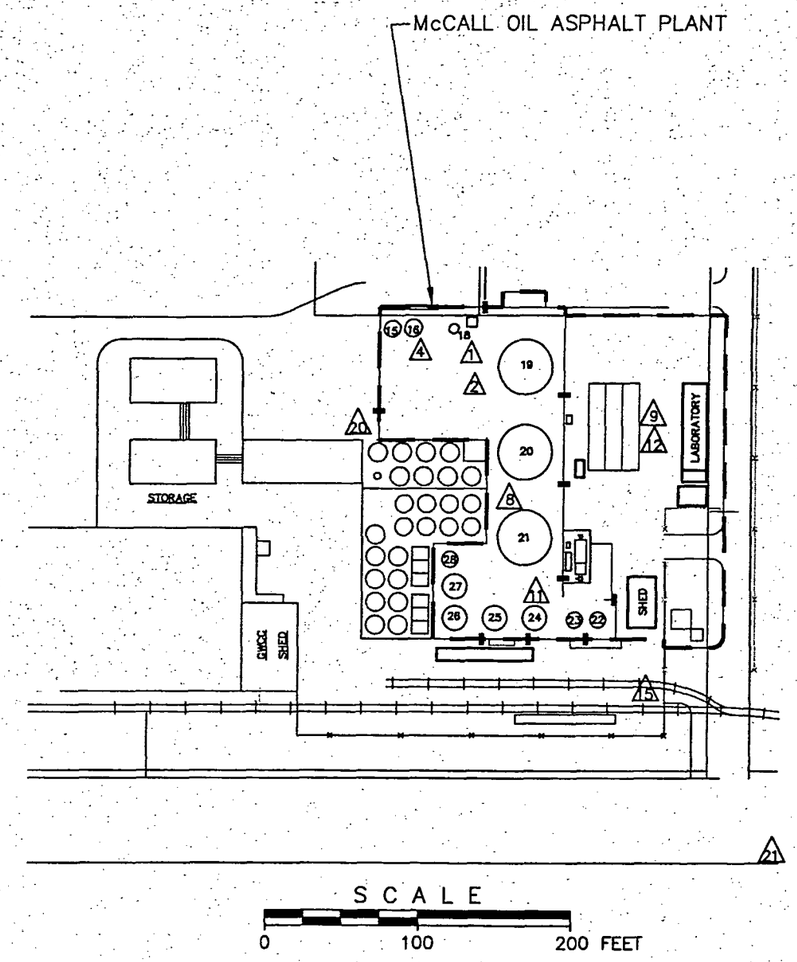

LEGEND:
15 APPROXIMATE LOCATION OF RELEASE (REFER TO TABLE 5 FOR SUMMARY.)

NOTE:
MAP MODIFIED FROM McCALL OIL, EVACUATION PLAN, PORTLAND MARINE TERMINAL, "C-1", 8-26-93, PROJECT 1923 (1923.01\C01B.DWG)

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 7
McCALL OIL HISTORICAL RELEASE LOCATIONS
REMEDIAL INVESTIGATION
McCALL OIL AND CHEMICAL CORPORATION
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
Portland	R. Bricker 5-22-00	4/30/01	4/30/01	807595-B5

Apr 24, 2001 - 2:...
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APPENDIX C
BULK TRANSFER/TANK FARM HISTORY
AND
REVISED MAPS AND TABLES OF HISTORIC MCCALL AND GREAT WESTERN RELEASES

Portland Branch – Bulk Transfer/Tank Farm History
(1985 – 2001)

1. **Sulfuric Acid:** Bulk liquid product has been delivered to the branch via rail car on a continuous basis from 1985 to present. Overall, the weekly average has been about three cars of sulfuric a week; during the period 1985 to 1995, rail deliveries occurred at a rate of about four cars per week. Product is top-unloaded, using air pressure, into the bulk sulfuric acid above-ground storage tank. During the period 1985 to 1989, product was offloaded and loaded at the acid loading/unloading rack situated near the McCall asphalt plant (same location as current asphalt loading/unloading rack). From 1989 to present, bulk sulfuric acid has been offloaded and loaded at the current GWCC acid loading/unloading rack. Bulk product has been re-packaged into 55-gallon drums, warehoused and delivered to customers since 1985.

2. **Hydrochloric Acid:** Bulk liquid product has been delivered to the facility by tanker truck only on an average of two times per month and offloaded in the area located in front of the drumming area into the bulk HCl tank. Product subsequently is transferred into 55-gallon drums for deliveries to customers. No bulk loading out of HCl has occurred at the facility. Product has never been delivered by rail.

3. **Nitric Acid:** Every four weeks or so, bulk liquid product has been delivered to the facility by tanker truck only on an average of once per month and offloaded in the area located in front of the drumming area into the bulk nitric tank. Product subsequently is transferred into 55-gallon drums for deliveries to customers. Only a few tanker trucks have been loaded out with bulk nitric over the lifespan of the facility. From about 1985 to 1989, averaging one time per month, Nitric acid was loaded at the rack situated near the McCall asphalt plant as part of the blend Evac containing Nitric acid, Phosphoric acid, Citric acid, and water. From 1989 to present, this blending has been performed at the GWCC loading rack with similar frequency. On occasion, Nitric acid has been mixed with water to make EVAC products. Product never has been delivered to the facility by rail.

4. **Phosphoric Acid**: Every four weeks or so, bulk liquid product has been delivered to the facility by tanker truck only on an average of once per month and offloaded in the area located in front of the drumming area into the bulk phosphoric tank. Product subsequently is transferred into 55-gallon drums for deliveries to customers. Occasionally, phosphoric acid product has been cut with water. No bulk loading or

unloading was performed at the acid loading/unloading rack situated near the McCall asphalt plant with the exception of the Evac blend described above. Product never has been delivered by rail.

5. **Acetone:** From approximately 1985 to 1993, bulk liquid product was delivered by rail car via a bottom unloading process into a storage tank located in the solvent tank farm. Also, bulk product has been *unloaded* at both solvent loading racks from common carrier tanker trucks and *loaded* at both solvent loading racks by GWCC trucks and common carrier trucks. Product was re-packaged from bulk storage tanks into pails and drums in the solvent drumming area. Some bulk blending operations were performed in the solvent drumming area. The facility has not handled bulk acetone since the early nineties; currently, vendor packaged drums of acetone are warehoused and distributed at the facility. Some downpacking from drums to pails currently is performed.

6. **Isopropyl Alcohol:** From approximately 1985 to 1993, bulk liquid product was delivered by rail car via a bottom unloading process. From 1985 to present, product has been *unloaded* at both solvent loading racks from common carrier tanker trucks and *loaded* at both solvent loading racks by GWCC trucks and common carrier trucks. Product was re-packaged from bulk storage tanks into drums in the solvent drumming area. For the last several years, bulk product has been re-packaged into 330-gallon totes.

7. **Methanol:** Bulk liquid methanol product was delivered by rail car via a bottom unloading process from 1985 to about 1995 and stored in bulk in the solvent tank farm. Product has been *unloaded* and *loaded* at both solvent loading racks and re-packaged into 55-gallon drums. Currently, methanol is received by tanker trucks only, re-packaged into 55-gallon drums, and delivered to customers in drums. Product is stored in bulk.

8. **N-Propyl Alcohol:** Bulk product has been delivered by rail car and tanker trucks and stored in the solvent tank farm. This product was never unloaded or loaded at the former solvent loading/unloading rack at the McCall asphalt plant. The product is re-packaged into 55-gallon drums and delivered to customers in drums and in bulk.

9. **N-Propyl Acetate:** Bulk product has been delivered by rail car and tanker trucks. This product has never been re-packaged; primarily, it has been used as a blend to

mix with N-Propyl Alcohol. N-Propyl Acetate has not been unloaded or loaded at the former solvent loading/unloading rack located near the McCall asphalt plant.

10. **Anhydrol products:** Bulk product has been delivered by rail car on occasion and stored in the solvent tank farm and loaded at both racks. Primarily, these products have been delivered to the facility via tanker trucks. Product has been delivered to customers in bulk and drums or pails.

11. **Styrene:** Bulk styrene has been delivered to the facility by rail car and stored in the solvent tank farm. Product has been unloaded and loaded at both solvent loading racks. There has been some re-packaging. Product is not in current inventory.

12. **Methyl Ethyl Ketone (MEK):** Bulk MEK has been delivered by rail car and tanker truck. Product has been unloaded and loaded at both solvent loading/unloading racks. MEK has been re-packaged from bulk storage tanks into containers; occasionally, the product has been re-packaged directly from tanker trucks into containers.

13. **Methyl Isobutyl Keytone (MIBK):** Bulk MIBK has been delivered by rail car and tanker truck. Product has been unloaded and loaded at both solvent loading/unloading racks. Product has been re-packaged into containers from storage tanks and, on occasion, directly from tanker trucks.

14. **Triethylamine:** Bulk product has been delivered to the facility by rail car and tanker truck. This product never was loaded or unloaded at the former solvent loading/unloading rack which was located near the McCall asphalt plant. Product has been re-packaged from bulk storage tanks and tanker trucks.

15. **350B, Special Napthalite, Solvent 25, Solvent 225, Solvent 450 (Mineral Spirits):** 350B and Special Napthalite were delivered by rail; the other mineral spirits products never were received by rail. Only 350B utilized both the former and current solvent loading racks. All mineral spirits products have been re-packaged from bulk to 55-gallon drums. All of products were loaded and unloaded via tanker truck.

16. **Propylene Glycol:** Bulk product has been delivered by rail car on occasion and stored in the solvent tank farm for bulk customer delivery and re-packaging into drums. Product never was loaded or unloaded at the former solvent loading/unloading rack located near the McCall asphalt plant.

17. **Ethylene Glycol:** Bulk product has been delivered by rail car on occasion and stored in the solvent tank farm for bulk customer delivery and re-packaging into drums. Product never was loaded or unloaded at the former solvent loading/unloading rack.

18. **Anthraquinone:** This non-hazardous coagulator has been delivered since 1996 via isotainer and occasional rail car.

19. **Xylene:** Significant volumes of product have been received by rail car and tanker trucks for storage in the solvent tank farm for bulk delivery and re-packaging into drums. Product has been loaded/unloaded at both solvent loading racks.

20. **Toluene:** Significant volumes of product have been received by rail car and tanker trucks for storage in the solvent tank farm for bulk delivery and re-packaging into drums. Product has been loaded/unloaded at both solvent loading racks. Since 1999, toluene is no longer delivered to the facility by rail.

21. **Calcium Chloride:** This non-hazardous, salt-based product has been delivered by tanker truck only – no rail car delivery. Product is stored in the solvent tank farm and re-packaged into drums and totes. Calcium chloride never was loaded/unloaded at the former solvent loading rack located near the McCall asphalt plant.

22. **Trichloroethylene (TCE) and Trichloroethane:** Product has been delivered to the facility by tanker truck only – never by rail – for storage in the solvent tank farm. Product has been offloaded and re-packaged in the solvent drumming area only. Product has been delivered to customers in bulk and in 55-gallon drums. Some Trichloroethane product was received in drums and pumped into tanker trucks in the solvent drumming area. Neither product was loaded or unloaded at the former solvent loading rack located near the McCall asphalt plant. These products have not been received, shipped, or packaged since 1991.

23. **Methylene Chloride:** Product has been delivered to the facility by tanker truck only – never by rail – for storage in the solvent tank farm. Product was drummed, offloaded, and loaded in the drumming area prior to 1999. Product has been loaded from the new solvent loading rack since 1999. Product never was loaded or unloaded at the former solvent loading rack located near the McCall asphalt plant. Some Methylene Chloride product was received in drums and pumped into tanker trucks in the solvent drumming area. Product is not in current inventory.

24. **Perchlorethylene:** Bulk product has been delivered to the facility by tanker truck only – never by rail – for storage in the solvent tank farm. Product has been drummed, offloaded, and loaded in the drumming area. From 1985 to about 1994, product was pumped into GWCC's 500-gallon portable tanker truck for delivery to dry cleaning customers. Product is not in current inventory.

25. **Caustic Soda:** Bulk caustic was stored in a tank located in the McCall tank farm located directly southeast of the current McCall loading rack. All product was loaded/unloaded by tanker truck. Product has never been received by rail. Prior to 1985, Caustic Soda was loaded into rail cars by McCall employees. From 1985 to 1987, GWCC employees loaded Caustic Soda into rail cars at the facility. Caustic has not been stored in bulk at the facility since 1987. Presently, Caustic is drummed off tanker trucks in the GWCC acid drumming area.

Table 5

McCall Oil & Chemical Corporation
Summary of Historical Spill Releases – McCall

Spill No.	Dates	Material Released	Location	
1	1955-80	Medium cure (MC) products (containing kerosene distillates); Rapid cure (RC) products (containing petroleum naphthalene); stove oil; all used to manufacture asphalt cold-patch.	Douglas Asphalt Plant	Approximately 4 or 5 spill incidents involving 4,000 to 10,000 gallons per incident occurred in this area prior to the construction of the lube oil tank farm in 1982. Typically, the spilled product was recovered to the extent practicable, and the waste materials would be collected in 55-gallon metal drums and sent to St. John's Landfill.
2	Mid-1960's	MC-250; MC-products contain kerosene distillates; MC-250 is 25% stove oil and 75% paving-grade asphalt.	Douglas Asphalt Plant	Operator error during the routine transfer of MC-250 resulted in the release of approximately 8,000 to 10,000 gallons of MC-250 into the aboveground storage tank containment area at the Douglas MC plant. The MC-250 remained a homogeneous mixture as it quickly cooled and hardened. The usable material was recovered using jackhammers and shovels. Unusable spilled material was sent to the St. John's Landfill.
3	Mid-1970's	Oil and water	Marine Terminal Slop Tank	The slop tank valve was inadvertently left open and an unknown quantity of oil and water was released into the Willamette River.
4	1982	Lube oil	McCall Lube Oil Plant	The lube oil plant was constructed in 1982. During construction, a lube oil spill occurred resulting in the release of an unknown quantity of lube oil into the aboveground storage tank area. Lube oil was recovered to the extent practical using a vacuum truck.
5	1955-80	Re-refined oil	Marine Terminal Tanks 10 and 7	The re-refined oil line between tanks 7 and 10 in the McCall Terminal leaked as a hose was disconnected from a product-transfer truck, resulting in the release of a small quantity (<25 gallons) of oil onto the surrounding soil. All visibly stained soil was excavated and disposed in an off-site landfill. The oil was nearly solid at ambient temperature.

Table 5

McCall Oil & Chemical Corporation
Summary of Historical Spill Releases – McCall

Spill No.	Dates	Material Released	Location	
6	Mid-1970's	Asphalt	Marine Dock	
7	Early-1980's	Bunker Fuel	Marine Terminal Tank 6	The bunker fuel tank (Tank 6) at the McCall Terminal was overfilled, resulting in the release of approximately 100 gallons of bunker fuel onto the surrounding soil. The spill was immediately cleaned up and all visibly stained soil was excavated and disposed at Hillsboro landfill.
8	1984	Bunker Fuel (#6 fuel oil, marine fuel or industrial fuel oil)	Asphalt Plant Tank 20	Approximately 800 barrels of bunker fuel was released at the McCall asphalt plant due to a tank manhole cover left open during tank filling operations. The Oregon DEQ was notified and cleanup operation were conducted by Environmental Pacific.
9	1985	Caustic soda	Asphalt Plant	Tanker truck at the former loading rack (currently the asphalt loading rack) contained caustic soda. Tanker truck overfill resulted in the release of approximately 60 gallons of caustic soda.
10	1989	Oil and water	Marine Terminal Slop Tank	The contents of the slop tank overflowed and an unknown quantity of oil and water was released onto the ground. Visibly impacted soils were removed immediately following the incident.
11	1989	Asphalt	Asphalt Plant Tank 24	Approximately 200 gallons of asphalt were inadvertently released from Tank 24. The spilled asphalt was collected using jackhammers and shovels and disposed of at an off-site landfill. Cleanup conducted by NW Field Services.
12	Unknown	Asphalt flux	Flintkote	Small shipments (i.e., 1-2 truckloads) of asphalt flux overfilled on several occasions. The quantity is estimated to be small, but occurred periodically. The material was cleaned up following each incident.
13	1991	Asphalt	Marine Dock	A hose barge burst during asphalt loading operations at the

Table 5

McCall Oil & Chemical Corporation
Summary of Historical Spill Releases – McCall

Spill No.	Dates	Material Released	Location	
				new marine dock resulting in the release of an unknown quantity of asphalt into the river.
14	1983	Water and emulsified asphalt	Marine Terminal	Emulsified asphalt was sprayed onto the soil berm surrounding the aboveground storage tank farm at the McCall Oil terminal to prevent berm erosion. Following the application of asphalt, rain ensued prior to the asphalt hardening, resulting in storm water discharge containing trace amounts of asphalt.
15	1991	Bunker Fuel	Asphalt Plant Railcar Loading Area	A railcar tank bleeder-valve handle was inadvertently opened during product transfer operations and approximately 20 gallons of bunker fuel was released onto the surrounding soil during a period of heavy rainfall. Absorbent pads were immediately placed on the standing water and soil impacted with bunker fuel. No subsequent soil excavation was required.
16	1975-82	Oil and Water	Marine Terminal Slop Tank	Two separate spills of diesel fuel from slop Tank 12 occurred during this period. Approximately 50 gallons of oil and water were released during each incident. While skimming the oil water separator, the operator left the skimmer unattended and overfilled a tank.
17	10/13/98	Diesel Fuel	Oil Water Separator	Oil and water Spill OERS No. 98-2471. Temporary blockage of outlet for new separator resulted in light sheen on river. Estimate less than 2 gallons of diesel.
18	11/19/99	Bunker Fuel	Rail tank car	Rail tank car overflow during offloading. Foss Environmental removed 11 drums soil and ballast. Estimated 85 gallons released.

Table 5

McCall Oil & Chemical Corporation
Summary of Historical Spill Releases – McCall

Spill No.	Dates	Material Released	Location	
19	7/16/95	RFO Bunker Blend	Marine Terminal[1]	A flange gasket cracked and split, allowing oil to seep by it under the pressure of the positive displacement pump. Estimated 50 gallons released and recovered.
20	1/12/90	Reclaimer motor oil	Lube tank farm area[1]	A camlock fitting came loose during delivery pump off. Oil absorbent applied immediately. NW Field Services vacuumed standing oil, dug out oil, stained fill/absorbent. Estimated 200 gallons spilled onto area paved with asphalt and recovered.
21	8/10/90	Asphalt Mix Oil	Asphalt Plant/NW Front Avenue[1]	Spill occurred as customer truck departed the facility. Product drained into storm drain on Front Avenue in sufficient volume to react with storm water and boil over.
22	10/4/2000	Bunker Fuel	Marine terminal near 10" flow meter	Spill occurred when the casing of a 10" flow meter failed. Pipeline pressure caused 250 to 300 gallons to spray on the ground near meter. Foss Environmental vacuum removed five 55 gallon drums of oil. Approximately 7.5 tons contaminated soil was removed and placed in a drop box for landfill disposal at ?

[1] *The locations of Spill Nos. 19 through 22 are being added to Figure 7 and the revised Figure will be sent out as a report supplement.*

Table 9

Great Western Chemical Corporation
Summary of Historical Spill Releases - GWCC

Number	Dates	Material Released	Location (see Figure 12)	Description
1	1988 or 1989?	H_2SO_4	On blacktop (drumming area)	A drum of H_2SO_4 split open. Spill was diked and cleaned up with sorbent material.
2	?	CO630 (surfactant)	Railcar loading area	Release during tank car offloading - cleaned up.
3	?	H_2SO_4	Acid tank farm	Valve apparently left open; quantity unknown, but spill contained within bermed area.
4	1987 or 1988?	H_2SO_4	Acid tank farm	Bottom of tank corroded, approximately 20,000 gallons spilled into bermed area. Acid was pumped into trucks and tanks were repaired and raised onto pads.
5	?	Rinsate	Drum rinse area	Rinsate from acid drum rinsing operations occasionally flowed onto unpaved area.
6	?	Calgon Cat-Floc	Technical Center railcar loading area	Several incidental spills, cleaned up and put into totes.
7	1990	1,1,9-Triethylamine	Portland Branch railcar loading area	Railcar leaked over the weekend in the loading area. Soil was tested by Hahn & Associates. No further action required. No detections. Amount of spill was below the reportable quantity limit.
8	1984 (?) - 1988	$CuSO_4$	$CUSO_4$ containment structure	Crack in the concrete $CuSO_4$ containment structure was discovered during decommissioning activities. Soil was overexcavated beneath the structure and soil and concrete were disposed of off-site at Chemical Waste Management hazardous waste landfill at Arlington, Oregon.
9	1984 (?) - 1989	CCA	CCA process area	A prior release was discovered in 1992 during excavation in the former CCA Process Area. Soil and concrete were excavated and confirmation samples were collected from the excavation. Concrete and soil were disposed of off-site at Chemical Waste Management hazardous waste landfill at Arlington, Oregon. Groundwater monitoring continues.
10	1/21/99	Sodium hydroxide (caustic soda)	Storage yard[1]	Tote bin of caustic soda fell from forklift. Contents released onto asphalt pavement drainage ditch. Spill diked and fully contained; no release to land or water. All materials cleaned up. Estimated 2,000 lbs. of combined material and absorbent material.
11	4/28/93	Diesel Fuel	Parking lot[1]	A distributor was operating a truck and backed over a stake on the RR grade, puncturing the diesel tank. Estimated 30 gallons was spilled onto asphalt-paved parking area. All materials thoroughly cleaned up – no release to land or water.

Table 9

Great Western Chemical Corporation
Summary of Historical Spill Releases - GWCC

Number	Dates	Material Released	Location (see Figure 12)	Description
12	3/26/96	Sulfuric acid	Acid loading rack[1]	A driver was filling his tanker truck with no gauges, resulting in an overflow of product. Estimated 150-200 gallons was spilled in contained area. All materials cleaned up – no release to land or water.
13	6/24/99	Sulfuric acid	GWEM receiving dock[1]	Drum slipped from drum pick, dropping 12-18". Drum split open; 55 gallons of product splashed onto receiving dock. Spill cleaned – no release to environment.
14	5/19/99	Sulfuric acid	GWEM warehouse[1]	Drum slipped off the drum pick while being lifted causing release of 500 gallons of product onto floor. Spill cleaned – no release to environment.
15	4/26/00	Sulfuric acid	Tank farm[1]	Contractor dropped pipe onto valve resulting in leakage of product onto graveled area adjacent to the truck scale. Foss Environmental excavated materials and performed confirmation sampling. Estimated release of 70 gallons.
16	8/5/98	Lacquer thinner	Warehouse	Forklift pierced bottom of drum resulting in release of approximately 25 gallons of product onto warehouse floor. Product was contained and absorbed. No release to the environment.
17	9/22/98	Sodium hypochlorite	GWEM Warehouse[1]	A tote ruptured while being moved to the trailer. Approximately 220 gallons of product was spilled. Material was contained with absorbent. No release to the environment.
18	1/7/99	pH water	Storage yard[1]	A hose ruptured during pumpdown of one of the pH pumps. Unknown quantity ran into the asphalt trench. Drainage valves were closed – no material reached the river. Ditch was hosed down, materials were pumped into a tote and returned to remediation tank.
19	3/1/99	Lubricoat	Tech Center loading bay[1]	Tote overturned causing release of 200 gallons of product onto paved truck area. Sewer hole was covered immediately. Material was absorbed. No release to tank or water.
20	3/21/96	Naphtha solvent	Rail tank car[1]	A gasket leaked while unloading a railcar. Salvaged product was pumped into recovered drums. Estimated 40 lbs released and recovered.

[1] The locations of spills 10 through 20 are being added to Figure 12 and the revised Figure will be sent out as a report supplement.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-1
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**0 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel. (FILL)
		1						**1.5 to 20.0 feet: SAND (SP)**; light to medium brown; fine to medium sand; trace silt.
		0		5				
		1						
		0		10				
		1						
		1	▽					
		0		15				@ 14.6 feet: wet.
		1						
		1		20				@ 18.0 feet: 0.1-foot silt lense.

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.6', pH = 7.06, Conductivity = 207 µS, Temp. = 12.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-1
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.6', pH = 7.06, Conductivity = 207 µS, Temp. = 12.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-2
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.3 foot: ASPHALT
		0						0.3 to 1.5 feet: SANDY GRAVEL (GW); fine to coarse, angular basalt gravel. (FILL)
		0						1.5 to 18.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		0		5				
		1						
		1		10				
		1						
		0						
		0	▽	15				@ 14.5 feet: wet.
		0						
		2		20				18.0 to 20.0 feet: SAND (SP); gray to black; fine to medium sand; trace silt.

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.8', pH = 6.86, Conductivity = 278 µS, Temp. = 14.5°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-2
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.8', pH = 6.86, Conductivity = 278 µS, Temp. = 14.5°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-3
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		0						**0 to 0.3 foot:** ASPHALT **0.3 to 1.5 feet:** SANDY GRAVEL (GW); fine to coarse, angular basalt gravel. (FILL)
		1						**1.5 to 14.0 feet:** SAND (SP); light to medium brown; fine to medium sand; trace silt.
		1		5				
		5						@ 7.0 feet: 0.1-foot silt lense.
		1		10				
		2						
		2						
		12	▽	15				**14.0 to 14.5 feet:** SILT (ML); light to medium brown; non to low plasticity; micaceous. **14.5 to 15.4 feet:** SANDY SILT (ML); medium to dark gray; 60 to 70 percent non to low plasticity fines; 30 to 40 percent fine to medium sand. @ 14.7 feet: wet.
		4						**15.4 to 20.0 feet:** SAND (SP); medium to dark gray; fine to medium sand; petroleum hydrocarbon odor; sheen.
		4		20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.7', pH = 6.98, Conductivity = 330 µS, Temp. = 14.1°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-3
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.7', pH = 6.98, Conductivity = 330 µS, Temp. = 14.1°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-4
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 10.5 feet:** SAND (SP); light to medium brown; fine to medium sand; trace silt.
		0						
		0		5				
		2						
		4		10				
		4						**10.5 to 12.0 feet:** SILT (ML); light to medium brown; non to low plasticity fines. @ 10.7 feet: oil spot.
		NR						**10.0 to 20.0 feet:** SAND (SP); medium to dark gray; fine to medium sand; petroleum hydrocarbon odor.
		150	▽	15				@ 15.3 feet: wet.
		200						
		50		20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.3', pH = 6.92, Conductivity = 371 µS, Temp. = 17.5°C. (3) NR = No Recovery.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-4
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.3', pH = 6.92, Conductivity = 371 µS, Temp. = 17.5°C. (3) NR = No Recovery.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-5
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.5'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular gravel; fine to coarse sand. (FILL)
		0						**1.5 to 19.0 feet: SAND (SP)**; light to medium brown; fine to medium sand; trace silt.
		2		5				
		1						
		1		10				
		1						
		0						
		0		15				
		1	∇					@ 17.8 feet: wet.
		1		20				**19.0 to 20.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 17.8', pH = 6.70, Conductivity = 488 µS, Temp. = 13.9°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-5
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.5'
LOGGED BY	J. Renda	DATE COMPLETED	12/11/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**20.0 to 20.5 feet: BASALT COBBLE OR BOULDER.** Free product on basalt fragments.
								Refusal at 20.5 feet.
								Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 17.8', pH = 6.70, Conductivity = 488 µS, Temp. = 13.9°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-6
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						0 to 1.5 feet: ASPHALT AND GRAVEL BASE FILL
								1.5 to 2.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		1						2.0 to 3.0 feet: SILT (ML); light to medium brown; non to low plasticity fines.
								3.0 to 8.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		1		5				
		1						
								8.0 to 9.0 feet: SILTY SAND (SM); light to medium brown; 80 percent fine to medium sand; 20 percent non to low plasticity fines.
		1						9.0 to 20.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
				10				
		1						
		2						
		1	▽	15				@ 15.6 feet: wet.
		1						
		1		20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.6', pH = 7.07, Conductivity = 260 µS, Temp. = 10.7°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-6
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm Isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.6', pH = 7.07, Conductivity = 260 µS, Temp. = 10.7°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-7
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		15						**0 to 2.0 feet: ASPHALT AND GRAVEL BASE FILL.** 0.2-foot piece of tar at base of asphalt.
		1						**2.0 to 2.8 feet: SILTY SAND (SM);** medium to dark gray; 80 percent fine to medium sand; 20 percent low to non plasticity fines.
		0		5				**2.8 to 3.0 feet: SAND (SP);** light to medium brown; fine to medium sand; trace silt.
								3.0 to 3.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
								3.5 to 4.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		0						**4.0 to 4.5 feet: SILT (ML);** medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
								4.5 to 5.5 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
								5.5 to 6.0 feet: SILT (ML); light to medium brown; non to low plasticity fines; wet.
		0						**6.0 to 9.0 feet: SAND (SP);** light to medium brown; fine to medium sand; trace silt.
				10				**9.0 to 9.5 feet: SILT (ML);** medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
		1						**9.5 to 17.0 feet: SAND (SP);** light to medium brown; fine to medium sand; trace silt.
		0						
		4	▽	15				@ 15.7 feet: wet.
		3						**17.0 to 17.5 feet: SILT (ML);** medium to dark gray; non to low plasticity fines; trace silt.
								17.5 to 20.0 feet: SAND (SP); medium to dark gray; fine to medium sand; trace silt.
		2		20				@ 19.5 feet: 0.1-foot wood fragment.

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.7', pH = 6.95, Conductivity = 242 µS, Temp. = 15.4°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-7
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.7', pH = 6.95, Conductivity = 242 µS, Temp. = 15.4°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-8
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/12/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**0 to 2.0 feet:** SANDY GRAVEL (GW); fine to coarse, angular basalt gravel with sand. (FILL)
								2.0 to 2.5 feet: SILT (ML); medium to dark brown; non to low plasticity fines; wood fragments.
		3						**2.5 to 5.5 feet:** SAND (SP); medium gray with red and green grains; fine to medium sand.
		3		5				
								5.5 to 5.7 feet: SAND (SP); red; fine to medium sand. (ROOFING SAND)
								5.7 to 5.9 feet: SAND (SP); green and yellow; fine to medium sand. (ROOFING SAND)
		2						**5.9 to 6.2 feet:** SAND (SP); red and white; fine to medium sand. (ROOFING SAND)
								6.2 to 7.0 feet: SAND (SP); light to medium brown; fine to medium sand.
		3						**7.0 to 8.0 feet:** SAND (SP); red, green, white and dark brown, fine to medium sands, layered. (ROOFING SAND)
				10				
		105						**8.0 to 11.0 feet:** SAND (SP); red, green, tan, and brown; fine to medium sand. @ 10.5 feet: chunk of brittle tar-like material.
								11.0 to 17.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		2						
			▽					@ 14.5 feet: wet.
		2		15				
		30						**17.0 to 18.5 feet:** SAND (SP); dark gray to black; fine to medium sand; trace silt.
		1000						**18.5 to 20.0 feet:** SILT (ML); medium to dark gray; low to medium plasticity fines; trace root hairs.
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.5', pH = 7.10, Conductivity = 487 µS, Temp. = 8.0°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-15
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	32.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/13/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								and wood fragments.
		200						@ 21.0 feet: wet.
								22.0 to 27.5 feet: SILT (ML); medium to dark gray; low plasticity fines; decrease in moisture.
		40	∇					
		40		25				
		60						
								27.5 to 29.5 feet: SILT (ML); medium to dark gray; low to medium plasticity fines.
		600						
				30				**29.5 to 30.5 feet: SAND (SP)**; medium to dark gray; fine to medium sand; oily.
								30.5 to 31.0 feet: SILT (ML); medium to dark gray; low to medium plasticity fines.
		400						**31.0 to 32.0 feet: SAND AND SILT (SP/ML)**, stratified.
								Boring terminated at 32.0 feet. Boring backfilled with bentonite chips.
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 23.3', pH = 6.71, Conductivity = 571 µS, Temp. = 10.5°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-16
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/13/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: SANDY GRAVEL (GW); fine to coarse, angular basalt gravel with sand and silt. (FILL)
		1						**0.5 to 5.5 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1						@ 4.0 to 5.0 feet: increase in sand.
		1		5				@ 5.4 feet: wood fragment.
								5.5 to 8.5 feet: SAND (SP); medium to dark gray; fine to medium sand; trace silt.
		1						
		1						**8.5 to 9.5 feet: SILTY SAND (SM)**; medium brown; 80 to 85 percent fine to medium sand; 15 to 20 percent non to low plasticity fines.
				10				**9.5 to 15.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand.
		1						
		2		15				**15.0 to 20.0 feet: SILT (SM)**; medium to dark gray; non to low plasticity fines; micaceous.
		20						
		20		20				@ 19.0 feet: 0.2-foot sand layer, medium to dark gray.

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 20.6', pH = 6.96, Conductivity = 280 µS, Temp. = 13.5°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-16
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/13/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		300	∇					**20.0 to 22.0 feet: SILTY SAND (SM)**; medium to dark gray; 80 to 85 percent fine to medium sand; 15 to 20 percent non to low plasticity fines. @ 21.0 feet: 0.1-foot greenish gray clay lense.
		20						**22.0 to 24.0 feet: SANDY SILT (ML)**; medium to dark gray; 60 to 70 percent non to low plasticity fines; 30 to 40 percent fine to medium sand. @ 23.0 feet: 0.1-foot greenish gray clay lense.
				25				Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 20.6', pH = 6.96, Conductivity = 280 µS, Temp. = 13.5°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-17
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/13/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 0.5 foot: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt. (FILL)
		1						**0.5 to 6.1 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1		5				@ 6.0 feet: 0.1-foot iron staining.
		3						**6.1 to 12.5 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
		1		10				
		3						
		10						**12.5 to 13.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
								13.0 to 13.3 feet: GRAVEL (GP); gray to black; fine to medium; angular to subangular, basalt gravel.
		1		15				**13.3 to 13.4 feet: SILT (ML)**; medium brown; non to low plasticity fines.
								13.4 to 13.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines.
		1						**13.5 to 21.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt; trace red and green roofing sands.
		1	∇					@ 15.0 feet: black plastic sheeting.
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 19.2', pH = 6.78, Conductivity = 383 µS, Temp. = 14.4°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-17
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/13/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								13.5 to 21.0 feet: SAND (SP); continued.
		200						**21.0 to 24.0 feet: SANDY SILT (ML)**; medium to dark gray; 60 to 70 percent non to low plasticity fines; 30 to 40 percent fine to medium sand. @ 22.0 feet: black plastic sheeting.
		300						
								Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 19.2', pH = 6.78, Conductivity = 383 µS, Temp. = 14.4°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-18
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 2.0 feet: SILTY GRAVEL (GW)**; fine to medium; angular basalt gravel with non to low plasticity fines. (FILL) @ 1.0 foot: phone line.
		2						**2.0 to 7.8 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1		5				
		1						
		1						**7.8 to 8.0 feet: SILT (ML)**; medium brown; low plasticity fines.
		1		10				**8.0 to 9.5 feet: SILTY SAND (SM)**; medium brown; 80 to 85 percent fine to medium sand; 15 to 20 percent non to low plasticity fines.
		1						**9.5 to 15.8 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt; trace white, red, and green roofing sand; trace fine to medium gravel.
		1						
		1		15				
		1						**15.8 to 16.0 feet: SILT (ML)**; medium to dark gray; low plasticity fines.
		1	▽					**16.0 to 17.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1		20				**17.0 to 24.0 feet: SAND (SP)**; gray to black; fine to medium sand; trace silt.

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.1', pH = 6.74, Conductivity = 682 µS, Temp. = 13.1°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-18
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**17.0 to 24.0 feet: SAND (SP)**; continued.
		2						
								Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.1', pH = 6.74, Conductivity = 682 µS, Temp. = 13.1°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-19
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: SILTY GRAVEL (GW); fine to medium, angular basalt gravel with non to low plasticity fines. (FILL)
		1						**0.5 to 12.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1						
		1		5				@ 4.0 to 5.0 feet: increase in SILT to 10 to 15 percent.
		0						
		0		10				@ 10.0 feet: 0.1-foot lense of light tan to light gray silt.
		0						@ 11.0 feet: 0.1-foot lense of light tan to light tray silt.
		0						**12.0 to 20.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
		1		15				
		1						
		0		20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.4', pH = 6.76, Conductivity = 676 µS, Temp. = 15.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-19
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.4', pH = 6.76, Conductivity = 676 µS, Temp. = 15.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-20
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		1						**0.5 to 2.0 feet: SILTY GRAVEL (GW)**; fine to medium, angular basalt gravel with non to low plasticity fines. (FILL)
		1						**2.0 to 4.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt. @ 2.3 feet: color change to medium to dark gray. @ 2.8 feet: color change to medium brown. @ 3.1 feet: color change to medium to dark gray.
		NS		5				**4.0 to 8.0 feet: soil locked up in sampler**, removed with pressure washer. Soil not logged.
		NS						
		4		10				**8.0 to 10.2 feet: SILTY SAND (SM)**; medium to dark gray; 80 to 85 percent fine to medium sand; 15 to 20 percent non to low plasticity fines. @ 9.0 feet: color change to medium brown, trace gravel. @ 9.2 feet: color change to medium to dark gray, wood fragment.
		2						**10.2 to 20.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt; trace red, green, and white roofing sand. @ 11.8 to 12.0 feet: wood fragments.
		1						
		1		15				
								@ 16.0 feet: roofing sand no longer present.
		2						
		1	▽	20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.6', pH = 7.06, Conductivity = 628 µS, Temp. = 9.5°C. NS = Not screened.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-20
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/14/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		150						**20.0 to 24.0 feet:** 1.0 foot recovery: 0.3 foot **SAND (SP)**; medium to dark gray; 0.7 foot **SILT (ML)**; medium to dark gray; medium to high plasticity fines.
				25				Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 18.6', pH = 7.06, Conductivity = 628 µS, Temp. = 9.5°C. NS = Not screened.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall/GWCC**	BORING NO.	**GP-21**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Direct Push**	TOTAL DEPTH	**20.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**12/12/00**

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**0 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt.
		2						**2.0 to 1.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt. @ 3.0 feet: 0.5-foot silt lense, medium brown with wood fragments.
		1		5				
		2						@ 7.5 feet: 0.5-foot silt lense, dark gray with wood fragments. @ 8.0 to 11.8 feet: trace roofing sands.
		4		10				
		4						@ 11.8 feet: 0.2-foot tan silica sand.
		3						
		NR	▽	15				
		70						
		400						**18.0 to 20.0 feet: SILT (ML)**; medium to dark gray; medium plasticity fines.
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.2', pH = 7.19, Conductivity = 4.79 µS, Temp. = 14.4°C. (3) NR = No recovery.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-21
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	12/12/00

SAMPLE NUMBER	SAMPLE TYPE	FID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.2', pH = 7.19, Conductivity = 4.79 µS, Temp. = 14.4°C. (3) NR = No recovery.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-22
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		9						**0 to 2.5 feet: SILTY SAND (SM)**; reddish brown; 80 percent fine to medium sand, subangular; 20 percent low plasticity fines; moist.
		50						**2.5 to 8.0 feet: SAND (SP)**; medium to dark gray; medium sand; trace silt; trace felsic grains. @ 2.5 to 4.0 feet: slight petroleum hydrocarbon-like odor.
		10		5				
		15						
		80						**8.0 to 9.0 feet: SANDY SILT (ML)**; medium to dark gray; 15 to 20 percent fine to medium sand; 20 percent non to low plasticity fines.
		1000		10				**9.0 to 12.0 feet: SILT (ML)**; medium to dark gray; 20 to 30 percent low to medium plasticity fines. @ 10.0 feet: wet. @ 11.0 feet: oil sheen.
		100						**12.0 to 13.4 feet: SAND (SP)**; medium to dark brown; fine to medium sand; trace silt; trace felsic grains; wet.
								13.4 to 14.5 feet: SILT (ML); medium to dark gray; low to medium plasticity fines; wet.
		300		15				**14.5 to 16.5 feet: SILTY SAND (SM)**; medium to dark gray; 80 percent fine to medium sand; 15 to 20 percent low to medium plasticity fines. @ 16.5 feet: oil sheen.
		150						**16.5 to 17.0 feet: SILT (ML)**; medium to dark gray; low to medium plasticity fines.
		250						**17.0 to 21.0 feet: SAND (SP)**; medium to dark gray; fine to medium sands; trace silt. @ 17.8 feet: laminated wood.
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 21.0', pH = 6.49, conductivity = 773, temp = 16.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-22
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								17.0 to 21.0 feet: SAND (SP); continued.
			▽					@ 21.0 feet: wet.
		600						**21.0 to 21.8 feet: SILT (ML)**; medium to dark gray; low to medium plasticity fines; wet.
								21.8 to 24.0 feet: SAND (SP); medium to dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		200						
								Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 21.0', pH = 6.49, conductivity = 773, temp = 16.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-23
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		7						**0 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt. (FILL)
		2						**2.0 to 5.4 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace silt.
		5		5				**5.4 to 7.8 feet: SAND (SP)**; medium to dark gray; fine to medium sands, trace felsic grains, subangular; trace silt.
		5						@ 6.4 to 7.5 feet: increased silt.
		70						**7.8 to 9.5 feet: SILT (ML)**; dark gray; low plasticity fines.
				10				**9.5 to 10.0 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular; trace silts.
		6						**10.0 to 10.4 feet: SANDY GRAVEL (GW)**; fine to medium basalt gravel; fine to medium sands.
								10.4 to 13.4 feet: SAND (SP); dark gray; fine to medium; laminated; subangular; trace silts.
		40						**13.4 to 14.0 feet: SILT (ML)**; dark gray; low to medium plasticity fines; wet.
		1000		15				**14.0 to 14.4 feet: SAND (SP)**; dark gray; fine to medium sands, trace felsics, subangular; trace silts.
								14.4 to 15.0 feet: SILT (ML); dark gray; low to medium plasticity fines; moist.
		2000						**15.0 to 17.4 feet: SILTY SAND (SM)**; dark brownish gray; 80 percent fine to medium sands; 20 percent low to medium plasticity fines.
								17.4 to 18.2 feet: SILT (ML); dark gray; medium to high plasticity fines; wet.
		500						**18.2 to 20.0 feet: SAND (SP)**; dark gray; fine to medium sands; trace silts; laminated.
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.2', pH = 6.43, conductivity = 468, temp = 15.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-23
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		250						**20.0 to 22.0 feet: SILT (ML)**; dark gray; medium high plasticity fines; wet.
		40	▽					**22.0 to 24.0 feet: SAND (SP)**; dark gray; fine to medium sands, trace felsics; trace silts. @ 22.2 feet: wet.
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.2', pH = 6.43, conductivity = 468, temp = 15.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-24
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**0 to 0.5 foot: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to medium sands.
		5						**0.5 to 3.5 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular; trace silts.
		40		5				**3.5 to 8.0 feet: SAND (SP)**; medium to dark gray sand; fine to medium sand, subangular; trace silts. @ 3.5 to 5.5 feet: slight petroleum hydrocarbon-like odor.
		25						
		100		10				**8.0 to 10.0 feet: SILT (ML)**; medium to dark gray; non to low plasticity fines.
		600						**10.0 to 10.4 feet: SAND (SP)**; dark gray; medium sands; trace silts; trace felsics.
								10.4 to 10.5 feet: SILT (ML); dark gray; low to medium plasticity fines.
		2000						**11.5 to 12.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		400		15				**12.0 to 17.2 feet: SILT (ML)**; dark gray; low to medium plasticity fines. @ 14.0 to 14.9 feet: wet silt.
		2000						**17.2 to 18.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		500	∇	20				**18.2 to 20.0 feet: SILT (ML)**; dark gray; medium to high plasticity clays; wet. @ 18.6 feet: wet.

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.6', pH = 6.64, conductivity = 600, temp = 15.6°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-24
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2000						**20.0 to 24.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts. @ 20.0 to 24.0 feet: only 2.0 feet recovery.
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.6', pH = 6.64, conductivity = 600, temp = 15.6°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-25
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 1.1 feet: SANDY GRAVEL (GW); fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		2						**1.1 to 7.9 feet: SAND (SP)**; medium dark brown; fine to medium sands, subangular, trace felsics; trace silts.
		2						@ 2.5 to 3.2 feet: increased fine sands.
		2		5				
		2						@ 7.8 feet: wood laminations.
		300						**7.9 to 16.0 feet: SILT (ML)**; dark gray; low to medium plasticity fines; moist.
		1000		10				@ 10.0 to 12.0 feet: oily, slight petroleum hydrocarbon-like odor.
		800						@ 13.9 to 16.0 feet: increased moisture.
		2500		15				
		350						**16.0 to 17.8 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; red and green roofing sands; wet.
		500	▽					**17.8 to 20.0 feet: SILT (ML)**; dark gray; medium to high plasticity fines. @ 17.8 to 18.2 feet: trace wood. @ 18.4 feet: wet.
				20				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.4', pH = 7.13, conductivity = 746, temp = 12.0°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-25
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.4', pH = 7.13, conductivity = 746, temp = 12.0°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-26
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 1.0 foot: SANDY GRAVEL (GW); fine to coarse; angular basalt gravel; fine to coarse sands. (FILL)
		5						**1.0 to 9.4 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace fines.
		2						
		2		5				
		2						
		5						
				10				**9.4 to 11.0 feet: SAND (SP)**; dark gray; fine sand; trace silts.
								@ 10.4 to 11.0 feet: coarsening sands.
		200						**11.0 to 16.0 feet: SILT (ML)**; dark gray; non to low plasticity fines.
								@ 11.8 feet: trace wood.
		350						
								@ 14.0 to 16.0 feet: trace sand lenses.
		3000		15				
								16.0 to 24.0 feet: SILTY SAND (SM); dark gray; 80 percent fine to medium sands, subangular; 15 to 20 percent nonplastic fines; trace wood.
		80						
								@ 18.0 to 19.5 feet: increased moisture.
		5000						
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.15', pH = 7.05, conductivity = 545, temp = 9.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-26
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/9/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		3000						**16.0 to 24.0 feet: SILTY SAND (SM)**; continued.
			▽					@ 22.15 feet: wet.
		3000						
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.15', pH = 7.05, conductivity = 545, temp = 9.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-27
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	28.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel; fine to coarse sands. (FILL)
		1						**2.0 to 7.5 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace silts.
		1		5				@ 5.9 to 7.5 feet: increased fine sands.
		2						**7.5 to 7.9 feet: SILT (ML)**; gray; non to low plasticity fines.
		2		10				**7.9 to 11.4 feet: SAND (SP)**; dark gray; fine to medium sands, trace felsics, subangular; trace silts.
		150						**11.4 to 14.2 feet: SILT (ML)**; dark gray; non to low plasticity fines; trace sands.
		50						@ 13.2 to 14.2 feet: increased plasticity.
		30		15				**14.2 to 17.5 feet: SILTY SAND (SM)**; dark gray; 75 to 80 percent fine sands, 20 to 25 percent nonplastic fines; subangular sands.
		30						**17.5 to 18.5 feet: SILT (ML)**; dark gray; low too medium plasticity fines; moist.
								@ 18.0 to 18.5 feet: decreased plasticity.
		30		20				**18.5 to 21.2 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 23.2', pH = 6.10, conductivity = 465, temp = 12.0°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall/GWCC**	BORING NO.	**GP-27**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**GeoTech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Direct Push**	TOTAL DEPTH	**28.0'**
LOGGED BY	**J. Thomason**	DATE COMPLETED	**2/12/01**

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								18.5 to 21.2 feet: SAND (SP); continued.
		80						**21.2 to 24.0 feet: SILT (ML)**; dark gray; non to low plasticity fines; high dilatancy noted.
		300	▽					@ 23.2 feet: wet.
								24.0 to 27.5 feet: SAND (SP); dark gray; fine to medium sands, subangular, trace felsics; trace silts; wet.
		40		25				
		150						
								27.5 to 28.0 feet: SILT (ML); dark gray; non to low plasticity fines.
								Boring terminated at 28.0 feet.
								Borehole backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 23.2', pH = 6.10, conductivity = 465, temp = 12.0°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-28
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	22.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 0.5 foot:** SAND (SP); light to medium brown; medium sands; trace gravel, subangular. (FILL)
		1						**0.5 to 11.2 feet:** SAND (SP); medium to dark brown; fine to medium sands, subangular, trace felsics; trace silts; trace red and green roofing sands.
		1		5				
		1						
		0		10				
		1						**11.2 to 11.5 feet:** SILT (ML); dark gray; non to low plasticity fines; moist.
		1						**11.5 to 19.5 feet:** SAND (SP); dark brown; fine to medium sand, subangular, trace felsics; trace silts; trace red and green roofing sands.
		1	▽	15				@ 15.2 feet: wet.
		1						
		2		20				@ 18.5 to 19.0 feet: grayish brown color.

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.2', pH = 6.55, conductivity = 393, temp = 17.9°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-28
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	22.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		30						**19.5 to 22.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts; trace red and green roofing sands.
								Boring terminated at 22.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.2', pH = 6.55, conductivity = 393, temp = 17.9°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-29
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		0						**0 to 1.2 feet: SANDY GRAVEL (GW)**; fine to coarse angular gravel; fine to coarse subangular sands. (FILL)
		2						**1.2 to 3.1 feet: SAND (SP)**; light to medium brown; fine to medium sands, subangular; trace silts; trace red and green roofing sands.
		20		5				**3.1 to 3.5 feet: SILT (ML)**; gray; non to low plasticity fines; moist; trace sand.
		3						**3.5 to 17.2 feet: SAND (SP)**; light to medium brown; fine to medium sands, subangular.
		1		10				@ 4.0 to 5.0 feet: oily; petroleum hydrocarbon-like odor, trace wood.
		1						@ 6.0 to 6.5 feet: trace red and yellow roofing sands.
		0						@ 6.5 to 6.7 feet: oily; petroleum hydrocarbon-like odor to sand.
		1	▽	15				@ 15.3 feet: wet.
		20						**17.2 to 19.7 feet: SAND (SP)**; dark gray; fine to medium sands, subangular; trace silts; wet.
		200		20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.3', pH = 6.83, conductivity = 461, temp = 22.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-29
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								19.7 to 20.0 feet: SILT (ML); medium to dark gray; non to low plasticity fines; wet.
								Boring terminated at 20.0 feet.
								Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.3', pH = 6.83, conductivity = 461, temp = 22.2°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-30
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 1.0 foot: SANDY GRAVEL (GW); fine to coarse angular gravel; fine to coarse sands. (FILL)
		0						**1.0 to 3.5 feet: SAND (SP)**; light to medium brown; fine to medium sands, subangular, trace felsics; trace silts; trace red and green roofing sands.
		2						**3.5 to 5.5 feet: SAND (SP)**; medium to dark gray; fine to medium sands, subangular, trace red, green and blue roofing sands; trace silts; slight petroleum hydrocarbon-like odor.
		9		5				@ 4.9 to 5.5 feet: oily; 0.2 foot chunk of brittle tar with copper wire, trace red and green roofing sands.
		0						**5.5 to 17.2 feet: SAND (SP)**; medium to dark brown sand; fine to medium sands, subangular, trace felsics; trace silts.
		0		10				
		0						
		0						
		1	▽	15				@ 15.2 feet: wet.
		20						**17.2 to 19.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular; trace silts; wet.
		400		20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.2', pH = 7.55, conductivity = 426, temp = 19.3°C.

IT CORPORATION

MCCALL2.gds:2.3/15/01.MCCALL2..820910

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-30
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/12/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								19.5 to 20.0 feet: SILT (ML); dark gray; medium to high plasticity fines; wet.
								Boring terminated at 20.0 feet.
								Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.2', pH = 7.55, conductivity = 426, temp = 19.3°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-31
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		30						**0 to 4.0 feet: SANDY GRAVEL (GW)**; fine to coarse gravel, angular; fine to coarse subangular sands. (FILL)
		20						
		20		5				**4.0 to 14.5 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace silts.
		20						
		15		10				
		20						
		30	▽					@ 14.0 feet: wet.
		500		15				**14.5 to 19.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular; oil saturated; high petroleum hydrocarbon-like odor.
		600						
		600						**19.0 to 19.3 feet: SILT (ML)**; dark gray; medium to high plasticity fines.
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 14.0', pH = 8.37, conductivity = 672, temp = 12.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-31
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								19.3 to 19.7 feet: SILTY SAND (SM); dark gray; 80 percent fine to medium sands; 15 to 20 percent low to medium plasticity fines.
								19.7 to 20.0 feet: SILT (ML); dark gray; low to medium plasticity fines.
								Boring terminated at 20.0 feet.
								Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 14.0', pH = 8.37, conductivity = 672, temp = 12.2°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-32
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		20						**0.5 to 20.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse brown sands; trace silts.
		30						
		10		5				
		10						
								@ 8.0 to 9.0 feet: increased silts and sands, interstitial.
		10						
				10				
		40						
		20						
		20		15				@ 15.0 to 15.5 feet: silty, medium brown.
		20						
								@ 18.0 to 20.0 feet: silty, slight petroleum hydrocarbon-like odor.
		30	▽					
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 19.7', pH = 6.64, conductivity = 542, temp = 13.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-32
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0.5 to 20.5 feet: SANDY GRAVEL (GW); continued. @ 19.7 feet: wet.
		200						**20.5 to 22.5 feet: SILTY SAND (SM)**; dark gray; 80 percent fine to medium sands; 15 to 20 percent nonplastic fines; trace clay.
		400						**22.5 to 24.0 feet: SILT (ML)**; dark gray; medium to high plasticity fines; moist.
				25				First boring attempt resulted in refusal at 17.3 feet in coarse gravel. Second boring was completed to 24.0 feet, approximately 5.0 feet northeast of first boring. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 19.7', pH = 6.64, conductivity = 542, temp = 13.8°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-33
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		5						**0.5 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		5						**1.5 to 4.8 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular; trace silts; trace felsics.
		20		5				**4.8 to 9.5 feet: SILT (ML)**; dark gray; low to medium plasticity fines; moderate petroleum hydrocarbon-like odor.
		30						
		60						@ 9.5 feet: trace wood.
				10				**9.5 to 12.0 feet: SILTY SAND (SM)**; dark gray; 80 percent fine sands, subangular; 15 to 20 percent nonplastic fines.
		20						
								12.0 to 12.5 feet: SILT (ML); dark gray; non to low plasticity fines.
		300						**12.5 to 12.7 feet: SAND (SP)**; dark brown; medium sands, subangular, trace felsics; trace silts.
								12.7 to 17.0 feet: SILT (ML); dark gray; medium plasticity fines.
		300		15				@ 12.7 to 13.5 feet: increased moisture, increased plasticity.
		400						**17.0 to 17.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular; trace silts.
								17.5 to 18.0 feet: SILT (ML); dark gray; medium plasticity fines; moist.
		20	∇					**18.0 to 23.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
				20				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 19.6', pH = 6.07, conductivity = 788, temp = 13.0°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-33
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		10						**18.0 to 23.5 feet: SAND (SP)**, continued. @ 19.6 feet: wet.
		200						**23.5 to 24.0 feet: SILT (ML)**; dark gray; medium to high plasticity fines.
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 19.6', pH = 6.07, conductivity = 788, temp = 13.0°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-34
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		40						**0.5 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		50						**2.0 to 3.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
								3.5 to 4.0 feet: SILT (ML); dark gray; non to low plasticity fines.
		20		5				**4.0 to 7.5 feet: SAND (SP)**; medium to dark gray; fine to medium sands, subangular; trace silts.
		50						**7.5 to 8.0 feet: SILT (ML)**; medium to dark gray; low to medium plasticity fines.
		1		10				**8.0 to 12.0 feet: SAND (SP)**; medium to dark gray; fine to medium sands, subangular; trace silts.
		300						@ 11.0 to 12.0 feet: increased silt.
		2000						**12.0 to 15.2 feet: SILT (ML)**; dark gray; medium plasticity fines; trace sand.
		40		15				**15.2 to 17.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular grave; fine to coarse sands.
		300						**17.5 to 22.0 feet: SILT (ML)**; dark gray; medium to high plasticity fines; slight petroleum-hydrocarbon odor.
		300		20				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 21.4', pH = 6.33, conductivity = 840, temp = 17.0°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-34
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1500	∇					**17.5 to 22.0 feet: SILT (ML)**; continued. @ 21.4 feet: wet.
		800						**22.0 to 23.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular; trace silts; oily; petroleum hydrocarbon-like odor; trace wood.
								23.5 to 24.0 feet: SILT (ML); dark gray; low to medium plasticity fines.
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 21.4', pH = 6.33, conductivity = 840, temp = 17.0°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-35
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	28.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		30						**0.5 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		50						**2.0 to 14.0 feet: SAND (SP)**; medium to dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		20		5				
		30						@ 7.2 to 8.0 feet: increased silt.
		70		10				
		200						@ 11.7 feet: 0.1 foot silt lense; dark gray.
		90						
								14.0 to 14.5 feet: SANDY GRAVEL (GW); fine to coarse angular basalt gravel; fine to coarse sands; trace silts.
		50		15				**14.5 to 24.7 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		60						@ 17.2 feet: trace gravel.
		20		20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.85', pH = 6.51, conductivity = 559, temp = 16.0°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall/GWCC**	BORING NO.	**GP-35**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**GeoTech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Direct Push**	TOTAL DEPTH	**28.0'**
LOGGED BY	**J. Thomason**	DATE COMPLETED	**2/13/01**

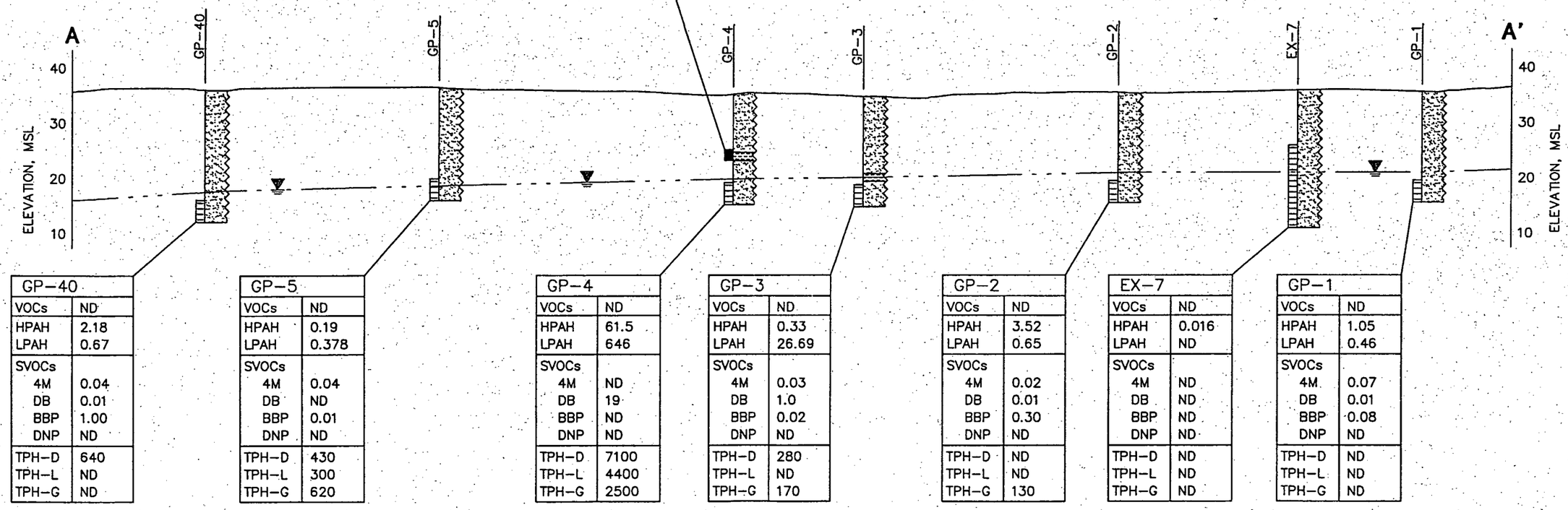
SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								14.5 to 24.7 feet: SAND (SP); continued.
		100						
		100	▽					@ 22.9 feet: wet.
		500		25				**24.7 to 25.2 feet: SILT (ML)**; dark gray; low to medium plasticity fines; wet.
								25.2 to 25.6 feet: SAND (SP); dark gray; fine to medium sands, subangular; trace silts.
		200						**25.6 to 27.0 feet: SILT (ML)**; dark gray; non to low plasticity fines; moist.
								27.0 to 28.0 feet: SILT (ML); dark gray; non to low plasticity fines; moist.
								Boring terminated at 28.0 feet.
								Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 22.85', pH = 6.51, conductivity = 559, temp = 16.0°C.

IT CORPORATION

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	T.Williams 3/20/2[illegible]	JFT 4/30/01	[illegible] 4/30/01	82091[illegible]4



GP-4	
VOCs	ND
HPAH	730
LPAH	150
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	220
TPH-L	200
TPH-G	39

GP-40	
VOCs	ND
HPAH	2.18
LPAH	0.67
SVOCs	
4M	0.04
DB	0.01
BBP	1.00
DNP	ND
TPH-D	640
TPH-L	ND
TPH-G	ND

GP-5	
VOCs	ND
HPAH	0.19
LPAH	0.378
SVOCs	
4M	0.04
DB	ND
BBP	0.01
DNP	ND
TPH-D	430
TPH-L	300
TPH-G	620

GP-4	
VOCs	ND
HPAH	61.5
LPAH	646
SVOCs	
4M	ND
DB	19
BBP	ND
DNP	ND
TPH-D	7100
TPH-L	4400
TPH-G	2500

GP-3	
VOCs	ND
HPAH	0.33
LPAH	26.69
SVOCs	
4M	0.03
DB	1.0
BBP	0.02
DNP	ND
TPH-D	280
TPH-L	ND
TPH-G	170

GP-2	
VOCs	ND
HPAH	3.52
LPAH	0.65
SVOCs	
4M	0.02
DB	0.01
BBP	0.30
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	130

EX-7	
VOCs	ND
HPAH	0.016
LPAH	ND
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-1	
VOCs	ND
HPAH	1.05
LPAH	0.46
SVOCs	
4M	0.07
DB	0.01
BBP	0.08
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

HORIZONTAL SCALE

0 100 200 FEET

VERTICAL SCALE

0 20 40 FEET

VERTICAL EXAGGERATION = 5X

TABLE DESCRIPTIONS

GP-1		WELL NAME
VOCs		TOTAL CHLORINATED VOLATILE ORGANIC COMPOUNDS
HPAH		HEAVY POLYNUCLEAR AROMATIC HYDROCARBONS
LPAH		LIGHT POLYNUCLEAR AROMATIC HYDROCARBONS
SVOCs		SEMI-VOLATILE ORGANIC COMPOUNDS
4M		4-METHYLPHENOL
DB		DIBENZOFURAN
BBP		BUTYL BENZYL PHTHALATE
DNP		DI-N-OCTYL PHTHALATE
TPH-D		TOTAL PETROLEUM HYDROCARBONS – DIESEL
TPH-L		TOTAL PETROLEUM HYDROCARBONS – LUBE OIL
TPH-G		TOTAL PETROLEUM HYDROCARBONS – GASOLINE

ND – NOT DETECTED
NT – NOT TESTED

GEOLOGY LEGEND:

- GRAVEL
- SAND
- SILTY SAND
- SILT
- GEOPROBE OR WELL SCREEN
- SOIL SAMPLE LOCATION
- ESTIMATED WATER TABLE ELEVATION (FT. MSL)

NOTES:

THE LITHOLOGY OF THE SITE CONSISTS OF MEDIUM BROWN TO DARK GRAY MEDIUM SAND WITH INTERBEDS OF SILTY SAND, SILT, AND TRACE GRAVEL.

ALL DETECTED CONCENTRATIONS REPORTED IN PARTS PER BILLION, EXCEPT SOIL TPH REPORTED IN PARTS PER MILLION.

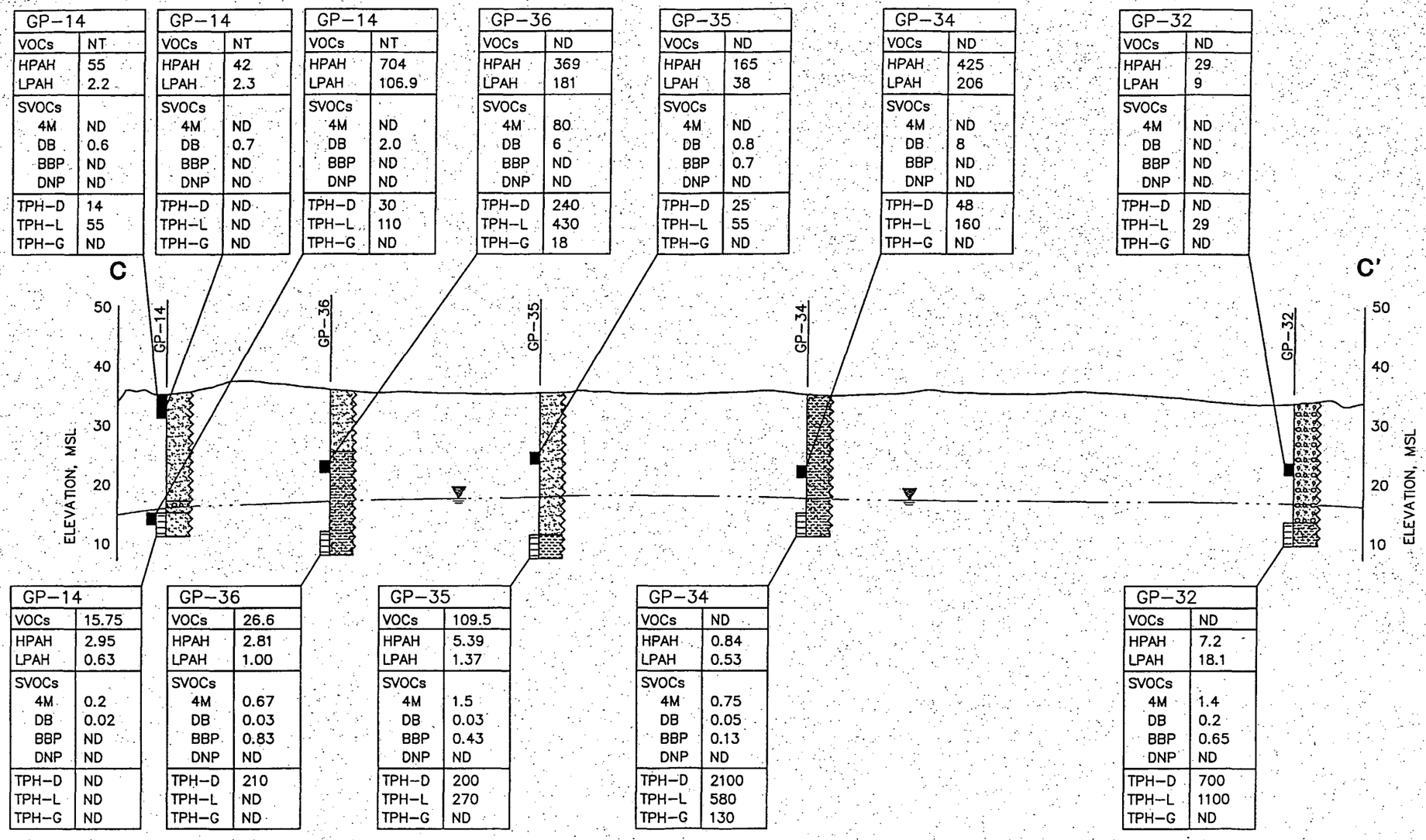
IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7658

FIGURE 2

CROSS SECTION A-A'

McCALL OIL
PORTLAND, OREGON

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	T.Williams 3/20/2001	JFF 4/30/01	4/30/01	82091L B6



GP-14	
VOCs	NT
HPAH	55
LPAH	2.2
SVOCs	
4M	ND
DB	0.6
BBP	ND
DNP	ND
TPH-D	14
TPH-L	55
TPH-G	ND

GP-14	
VOCs	NT
HPAH	42
LPAH	2.3
SVOCs	
4M	ND
DB	0.7
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-14	
VOCs	NT
HPAH	704
LPAH	106.9
SVOCs	
4M	ND
DB	2.0
BBP	ND
DNP	ND
TPH-D	30
TPH-L	110
TPH-G	ND

GP-36	
VOCs	ND
HPAH	369
LPAH	181
SVOCs	
4M	80
DB	6
BBP	ND
DNP	ND
TPH-D	240
TPH-L	430
TPH-G	18

GP-35	
VOCs	ND
HPAH	165
LPAH	38
SVOCs	
4M	ND
DB	0.8
BBP	0.7
DNP	ND
TPH-D	25
TPH-L	55
TPH-G	ND

GP-34	
VOCs	ND
HPAH	425
LPAH	206
SVOCs	
4M	ND
DB	8
BBP	ND
DNP	ND
TPH-D	48
TPH-L	160
TPH-G	ND

GP-32	
VOCs	ND
HPAH	29
LPAH	9
SVOCs	
4M	ND
DB	ND
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	29
TPH-G	ND

GP-14	
VOCs	15.75
HPAH	2.95
LPAH	0.63
SVOCs	
4M	0.2
DB	0.02
BBP	ND
DNP	ND
TPH-D	ND
TPH-L	ND
TPH-G	ND

GP-36	
VOCs	26.6
HPAH	2.81
LPAH	1.00
SVOCs	
4M	0.67
DB	0.03
BBP	0.83
DNP	ND
TPH-D	210
TPH-L	ND
TPH-G	ND

GP-35	
VOCs	109.5
HPAH	5.39
LPAH	1.37
SVOCs	
4M	1.5
DB	0.03
BBP	0.43
DNP	ND
TPH-D	200
TPH-L	270
TPH-G	ND

GP-34	
VOCs	ND
HPAH	0.84
LPAH	0.53
SVOCs	
4M	0.75
DB	0.05
BBP	0.13
DNP	ND
TPH-D	2100
TPH-L	580
TPH-G	130

GP-32	
VOCs	ND
HPAH	7.2
LPAH	18.1
SVOCs	
4M	1.4
DB	0.2
BBP	0.65
DNP	ND
TPH-D	700
TPH-L	1100
TPH-G	ND

HORIZONTAL SCALE

0 100 200 FEET

VERTICAL SCALE

0 20 40 FEET

VERTICAL EXAGGERATION = 5X

TABLE DESCRIPTIONS

GP-1	
VOCs	
HPAH	
LPAH	
SVOCs	
4M	
DB	
BBP	
DNP	
TPH-D	
TPH-L	
TPH-G	

WELL NAME
TOTAL CHLORINATED VOLATILE ORGANIC COMPOUNDS
HEAVY POLYNUCLEAR AROMATIC HYDROCARBONS
LIGHT POLYNUCLEAR AROMATIC HYDROCARBONS
SEMI-VOLATILE ORGANIC COMPOUNDS
4-METHYLPHENOL
DIBENZOFURAN
BUTYL BENZYL PHTHALATE
DI-N-OCTYL PHTHALATE
TOTAL PETROLEUM HYDROCARBONS – DIESEL
TOTAL PETROLEUM HYDROCARBONS – LUBE OIL
TOTAL PETROLEUM HYDROCARBONS – GASOLINE
ND – NOT DETECTED
NT – NOT TESTED

GEOLOGY LEGEND:

- GRAVEL
- SAND
- SILTY SAND
- SILT
- GEOPROBE OR WELL SCREEN
- SOIL SAMPLE LOCATION
- ESTIMATED WATER TABLE ELEVATION (FT. MSL)

NOTES:

THE LITHOLOGY OF THE SITE CONSISTS OF MEDIUM BROWN TO DARK GRAY MEDIUM SAND WITH INTERBEDS OF SILTY SAND, SILT, AND TRACE GRAVEL.

ALL DETECTED CONCENTRATIONS REPORTED IN PARTS PER BILLION, EXCEPT SOIL TPH REPORTED IN PARTS PER MILLION.

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FIGURE 4

CROSS SECTION C-C'

McCALL OIL
PORTLAND, OREGON

APPENDIX B
SUBSURFACE PROFILES

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-36
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	28.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
		0						**0.5 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		0						**1.5 to 10.5 feet: SAND (SP)**; yellowish brown to medium brown sand; fine to medium sands, subangular; trace silts.
		0		5				
		0						
		1		10				
		60						**10.5 to 11.0 feet: SILT (ML)**; dark gray; low to medium plasticity fines; moist.
								11.0 to 12.5 feet: SAND (SP); medium to dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		800						**12.5 to 14.0 feet: SILT (ML)**; dark gray; low to medium plasticity fines; moist.
		5		15				**14.0 to 19.8 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts; trace red and green roofing sands.
		30						
		20		20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 23.5', pH = 6.58, conductivity = 562, temp = 15.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-36
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	28.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/13/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		40						**19.8 to 24.0 feet: SILTY SAND (SM)**; dark gray; 75 to 80 percent fine sands; 20 to 25 percent silts; trace felsics. @ 19.8 to 20.2 feet: laminated fine sand.
		90	▽					@ 23.5 feet: wet.
								24.0 to 25.5 feet: SILT (ML); dark gray; non to low plasticity fines; moist.
		400		25				**25.5 to 27.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		300						**27.5 to 28.0 feet: SILT (ML)**; dark gray; high plasticity fines; moist. Boring terminated at 28.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 23.5', pH = 6.58, conductivity = 562, temp = 15.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-37
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.4 foot: CONCRETE
		1						**0.4 to 18.2 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace red and green roofing sands; trace silts.
		1						
		1		5				
		1						
		0		10				
		1						
		1						
		1	▽	15				@ 15.3 feet: wet.
		2						
		70		20				**18.2 to 20.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.3', pH = 5.90, conductivity = 346, temp = 11.7°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-37
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.3', pH = 5.90, conductivity = 346, temp = 11.7°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-38
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 feet: ASPHALT
		1						**0.5 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt grave; fine to coarse sands. (FILL)
		0						**1.5 to 6.0 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace silts.
		2		5				
		40						**6.0 to 7.0 feet: SILT (ML)**; dark gray; non to low plasticity fines; moist; slight petroleum hydrocarbon-like odor.
		40						**7.0 to 8.0 feet: SAND (SP)**; dark gray; fine to medium sand, subangular, trace silts; slight petroleum hydrocarbon-like odor. @ 7.0 feet: piece of brittle black tar.
		300		10				**8.0 to 8.5 feet: SILT (ML)**; dark gray; low to medium plasticity fines; moist. **8.5 to 9.0 feet: SAND (SP)**; dark brown; fine to medium sands. **9.0 to 9.5 feet: SAND (SP)**; dark gray; fine to medium sand, subangular; trace silts; trace red sands. **9.5 to 11.5 feet: SILT (ML)**; dark gray; low to medium plasticity fines; trace sands; trace wood.
		2						**11.5 to 15.0 feet: SAND (SP)**; dark gray; fine to medium sand, subangular; trace silts. @ 15.0 feet: wet.
		5	∇	15				**15.0 to 16.0 feet: SAND (SP)**; dark brown; fine to medium sands.
		200						**16.0 to 16.5 feet: SILT (ML)**; dark gray; low to medium plasticity fines. **16.5 to 17.2 feet: SAND (SP)**; dark gray; fine to medium sands. **17.2 to 18.0 feet: SAND (SP)**; dark brown; fine to medium sands; wet.
		200		20				**18.0 to 19.2 feet: SAND (SP)**; dark gray; fine to medium sands.

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 15.0', pH = 6.22, conductivity = 620, temp = 15.8°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-39
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	20.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								Boring terminated at 20.0 feet. Borehole backfilled with bentonite chips.
				25				
				30				
				35				
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 16.5', pH = 6.71, conductivity = 342, temp = 13.7°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-40
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		0						**0 to 1.5 feet: SANDY GRAVEL (GW)**; fine to coarse angular basalt gravel; fine to coarse sands. (FILL)
		1						**1.5 to 2.0 feet: SAND (SW)**; medium to dark brown; fine to coarse sands; poorly sorted, subangular; trace silts.
								2.0 to 2.3 feet: SILT (ML); medium to dark brown; medium to high plasticity fines.
		0		5				**2.3 to 19.5 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular, trace felsics; trace silts; abundant plant roots.
		0						
		0		10				
		0						
		0						
		1		15				
		2						
		40	▽	20				@ 18.4 feet: wet.

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.4', pH = 6.71, conductivity = 420, temp = 13.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-40
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Direct Push	TOTAL DEPTH	24.0'
LOGGED BY	J. Thomason	DATE COMPLETED	2/14/01

SAMPLE NUMBER	SAMPLE TYPE	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		80						**19.5 to 24.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts, slight petroleum hydrocarbon-like odor.
		200						
				25				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.
2) Water sample taken at terminal depth. DTW = 18.4', pH = 6.71, conductivity = 420, temp = 13.8°C.

IT CORPORATION