PORSF 11.3.461 v.5
2/27/09

DRAFT

REMEDIAL INVESTIGATION REPORT

MCCALL OIL AND CHEMICAL CORPORATION

VOLUME 2
APPENDICES

Prepared for
McCall Oil and Chemical Corporation
Portland, Oregon

Prepared by
Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Ste 110
Portland, Oregon 97224

July 2004

USEPA SF

1372294

APPENDIX A

LEVEL I ECOLOGICAL SCOPING ASSESSMENT

LEVEL 1 ECOLOGICAL SCOPING REPORT
MCCALL OIL AND CHEMICAL CORPORATION
PORTLAND, OREGON

Prepared for

McCall Oil and Chemical Corporation

August 8, 2001

Prepared by

IT Corporation
8405 SW Nimbus Ave
Beaverton, Oregon 97008-7141

Project 820910

1.3 Locality of the facility

The locality of the facility (LOF) is defined as "any point where a human or ecological receptor contacts, or is reasonably likely to come into contact with, facility-related hazardous substances" (OAR 340-122-115(34)). The LOF is typically defined after considering potential spatial migration of a chemical. At this time, site characterization activities are ongoing and the LOF can not be completely defined for all potentially impacted media.

For the purposes of this scoping assessment, the LOF for soil is considered all surface and subsurface soil at the site. This is obviously an overestimate of the LOF, but until characterization is complete, there are insufficient data to accurately define the LOF for soil. Also, the overestimated LOF will have little bearing on findings of the scoping assessment. Other evaluations of potential risks associated with soil impacts will require a more accurate LOF definition.

Chemicals have been detected in shallow groundwater, but the spatial extent of groundwater impacts has not been fully defined. It appears that most impacted groundwater is confined to the site, but some chemicals may migrate in groundwater towards the Willamette River. For the purposes of this assessment, it is assumed that impacted groundwater discharges to surface water of the Willamette River. As a result, the Willamette River adjacent to the site is considered within the LOF. Again, this is a conservative assumption that may require modification in future assessments.

2 HABITAT CONDITIONS AND ECOLOGICAL RECEPTORS

2.1 Sensitive Environments

According to OAR 340-122-115(49), ecologically sensitive environments include: critical habitat to endangered or threatened species, wetlands, wild and scenic rivers, fishery resources, parks, wildlife refuges and a number of other habitat designations. No sensitive environments are located in the LOF for soil at the site. However, the adjacent Willamette River is considered a sensitive environment within the LOF for surface water. The Willamette River is a sensitive environment because it provides important habitat for threatened species and is an important fishery resource.

2.2 Species of Special Concern

According to DEQ guidance (DEQ, 1998), the following are considered ecologically important species for the purposes of a Scoping Assessment:

- Threatened or endangered species
- Local populations of species that are commercial or recreational resources
- Local populations of species known to be susceptible to site-related chemicals
- Local populations of vertebrate species
- Local populations of invertebrate species that provide a critical ecological function

Species that are classified as "threatened" or "endangered" receive special protection under the state and federal Endangered Species Acts (ESA). State threatened and endangered (T&E) species classifications are made by the Oregon Department of Fish and Wildlife (ODFW). Federal T&E species classifications are made by both the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The NMFS usually determines the T&E status of marine species or species that spend some portion of their life in marine systems (e.g., anadramous salmonids). The T&E status of other species is usually determined by the USFWS.

Threatened or endangered species that may occur in the area were identified by reviewing the ODFW list of state and federal T&E species that are permanent or seasonal residents of Oregon (Attachment 1). Range maps and habitat use information described in Marshall et al. (1996) were reviewed to determine if nonfish T&E species may be present in the north Portland area. Also, the Oregon Natural Heritage Program (ONHP) database was queried for observations of T&E species near the site (Attachment 2). Finally, a fisheries biologist with ODFW was

interviewed regarding the distribution of T&E fish species in the area. The results of this review are described below.

No amphibian, reptile, or mammal species that have been classified as threatened or endangered reside in the area. Three T&E bird species may occur in the area, but none are expected to use habitats within the LOF to any significant degree. These species are as follows:

- Aleutian Canada goose (*Branta canadensis leucoparela*): Members of a subpopulation of this goose have been known to occasionally stop over in the Willamette Valley during its migration between wintering grounds in California and breeding sites in Alaska (Marshall et al., 1996). However, the large majority of migrants that visit Oregon occur on the coast. The nearest potential stop over area is likely to be Sauvie Island. Upland portions of the site do not provide important foraging habitat for Canada geese, although geese were observed resting on a beach, on barges, and in the river near the western property boundary. None of the geese observed near the site were Aleutians, which can be distinguished from the more common western and Taverner's subspecies by their relatively small body size and neck ring.

- Bald eagle (*Haliaeetus leucocephalus*): Bald eagles may winter in the upper Willamette Valley, but there are few known breeding locations near the site (Marshall et al., 1996). The eagle primarily preys on fish and waterfowl, but also forages on small mammals and carrion. The site does not contain suitable habitat for this species. It is unlikely that eagles could have significant exposure to site-related chemicals in their diet because few, if any, of the COPCs are expected to accumulate in fish that an eagle may eat. Also, the site is so small relative to an eagle's foraging area that only a very small fraction of their diet could possibly contain site-related chemicals.

- Peregrine falcon (*Falco peregrinus*): The American peregrine falcon may occur throughout Oregon. These falcons typically nest on cliffs near large open areas with an ample food supply. They prey primarily on waterbirds. The site does not contain suitable habitat for this species. It is unlikely that peregrines would nest or forage extensively near the site, and these birds are unlikely to have significant exposure to site-related chemicals

Several T&E trout and salmon species (*Oncorhynchus* spp.) are present in the Willamette River near the site on a seasonal basis (Mr. Dave Ward, ODFW biologist, personal communication, February 9, 2001). The fish species of special concern that may be present in the adjacent Willamette River are as follows:

- Chinook salmon (*Oncorhyncus tshawytscha*): The section of the Willamette River adjacent to the site is within the boundaries of the Lower Columbia River Evolutionary Significant Unit (ESU) of the fall run of chinook salmon. Also, spring run chinook of the Upper Willamette River ESU pass through this section of river. These chinook ESUs have been listed as threatened by the NMFS. The lower Willamette River serves as a migration corridor for both juvenile and adult fish, and could be a rearing area for juvenile chinook. Insufficient data are available for the chinook and the other T&E salmonid species to estimate residence times in the Willamette near the site. However, fish with relatively small juveniles such as fall chinook (not spring chinook or steelhead) would be most likely to have significant residence times during rearing. Adult salmon, or fish runs with relatively large juveniles, would be expected to migrate through the lower Willamette relatively quickly.

- Steelhead (*Oncorhyncus mykiss*): The Willamette River near the site is within the Lower Columbia River ESU, and is a migration corridor for steelhead of the Upper Willamette River ESU. These steelhead ESUs have been listed as a threatened by the NMFS.

- Coho salmon (*Oncorhyncus kisutch*): The Willamette River from the mouth to Oregon City is within the Lower Columbia River / Southwest Washington ESU for coho. However, it is unclear if any significant numbers of wild coho salmon pass through the section of the Willamette near the site. This coho ESU is listed by ODFW as an endangered species, but is not considered threatened or endangered by NMFS. Instead, the NMFS has classified this coho population as a candidate species for listing.

- Cutthroat trout (*Oncorhyncus clarki clarki*): Cutthroat trout in the Willamette River and tributaries downstream from the Oregon City falls have been proposed for listing as a threatened species. As with coho, few cutthroat are expected in Willamette River near the site.

In summary, no T&E amphibian, reptile, bird, or mammal species are expected to have significant exposure to site-related chemicals. However, T&E fish species such as chinook and steelhead could possibly contact site-related chemicals if a sufficient mass of a contaminant in groundwater or stormwater migrates and discharges to the Willamette River. Even if low levels of chemicals could be present in surface water, it is unknown if juveniles of these threatened fish populations spend sufficient time in the section of river near the site to have a chemical exposure that could result in biological effects. It is highly unlikely that adult fish could have significant exposure to site-related chemicals in surface water.

Juvenile salmon undergo a complex smoltification process as they transition from freshwater to a saltwater environment. This process may involve a number of important hormonal changes. In theory, relatively brief exposures to elevated levels of certain contaminants during the juvenile stage, especially substances that accumulate in tissues and mimic endogenous hormones, could lead to significant biological effects during smoltification. This is because small changes in hormone levels could possibly have significant biological effects, and certain chemicals may be released from fat stores during smoltification. It appears that most COPCs at the site are unlikely to bioaccumulate in fish tissues. Also, the COPCs are unlikely to act as endocrine disrupters. However, for the purposes of this scoping assessment, it is assumed that T&E species could possibly be exposed to biologically significant levels of site-related contaminants.

2.3 Site Description

An IT Corporation ecologist performed a site visit from approximately 1 to 3 PM on February 2, 2001. The weather during the day of the visit included frequent rain showers, although no rain fell during the visit. The temperature was approximately 50° F, and winds were variable and from the north. A DEQ checklist of ecological conditions at the site is presented in Appendix A. Photographs of site conditions are presented in Appendix B. A map of the site with the approximate locations of buildings, sampling points, and photograph locations is presented as an attached figure.

Almost all land at the site is developed and there are no natural habitats on the property that could support important ecological receptors (Appendix B). Only a small proportion of the surface soil (less than 5%) is exposed. Most soil is covered by buildings, asphalt, or graveled parking areas. Along the entire length of the property, the riverbank has been stabilized with riprap.

The only vegetation at the site is located in an approximately 30-foot wide strip along the top of the riprap that covers the riverbank. This plant community is dominated by two exotic shrub-like species: Himalaya berry (*Rubus discolor*), and Scotch broom (*Cytisus scoparius*). Himalaya berry represents approximately 60% of the plant cover, with the remaining cover comprising Scotch broom, grasses, and other plants. The plants are patchily distributed on the riverbank, and the average height of the dominant plant species is approximately 4 feet.

3 EXPOSURE PATHWAYS

There are no significant pathways by which important ecological receptors can be exposed to site-related chemicals in soil. However, if chemicals that have been detected in groundwater or stormwater migrate to the Willamette River, then it is possible that organisms in the river could contact site-related chemicals. At present, it is unknown if contaminants in groundwater or stormwater are migrating to the river at ecologically significant levels. A DEQ checklist of ecologically important exposure pathways is presented as Appendix A.

As discussed previously, the site does not contain natural habitats that would support important terrestrial ecological receptors. Some exotic plant species such as the introduced Himalaya berry are present at the site, but these degraded plant communities do not comprise valuable habitat for most native wildlife in the area. Most of the land surface is covered with buildings, asphalt, gravel, or riprap. There are few areas with exposed surface soil, and few areas that could possibly support burrowing wildlife species (no burrows were observed). As a result, important terrestrial ecological receptors are unlikely to have significant contact with contaminates in surface or subsurface soil.

It is unlikely that ecological receptors can have direct contact with chemicals in groundwater. With the possible exception of a single tree located near the western property boundary, there are no deep-rooted plants at the site that may have roots within the shallow groundwater zone. Also, no burrowing animals were observed at the site that could potentially contact shallow groundwater or inhale volatile chemicals that migrate from groundwater into burrow air.

The dynamics of shallow groundwater flow at the site is not fully understood, but it is likely that groundwater is migrating to the Willamette River. Assuming that impacted groundwater discharges to the river, the possibility exists that aquatic ecological receptors could contact site-related chemicals. A variety of factors would cause substantial attenuation of chemicals that migrate from groundwater to surface water of the river. For example, organic chemicals such as PAHs may partition into the organic fraction of soil along the groundwater migration route. The actual mixing of impacted groundwater and ambient water from the Willamette River is likely to occur well below the bottom surface of the river (i.e., in hyporheic zone). As a result, concentrations of site-related chemicals in surface water of the river, or in sediment pore-water near the sediment/water interface (the most biologically active zone of river sediment), are expected to be much lower than concentrations in groundwater.

The site supports several active industrial operations. There are permitted facility-related discharges of stormwater runoff into the Willamette River. These facility-related discharges are managed under the National Pollutant Discharge Elimination System (NPDES) program. These stormwater discharges represent a potential pathway by which aquatic oranisms in the river could contact site-related chemicals. This scoping assessment was performed using guidance from the DEQ Environmental Cleanup and Spills program, the program that typically manages cleanup of

historical chemical releases. At present, it is unknown if stormwater contains chemicals from historical contaminant releases. Instead, chemicals in stormwater runoff may be limited to those associated with current and ongoing industrial operations.

4 RECOMMENDATIONS

At present, there are insufficient data to eliminate the possibility that site-related chemicals in groundwater or stormwater could migrate to surface water of the Willamette River where they could be encountered by aquatic ecological receptors. As a result, a Level 2 Screening Assessment (DEQ, 1999) may be required to evaluate the potential ecological risks associated with groundwater or stormwater discharge to the Willamette River. No further ecological evaluations are recommended for upland soil at the site. All available evidence indicates that there are no significant pathways by which important terrestrial ecological receptors could be exposed to site-related chemical that may be present in soil.

REFERENCES

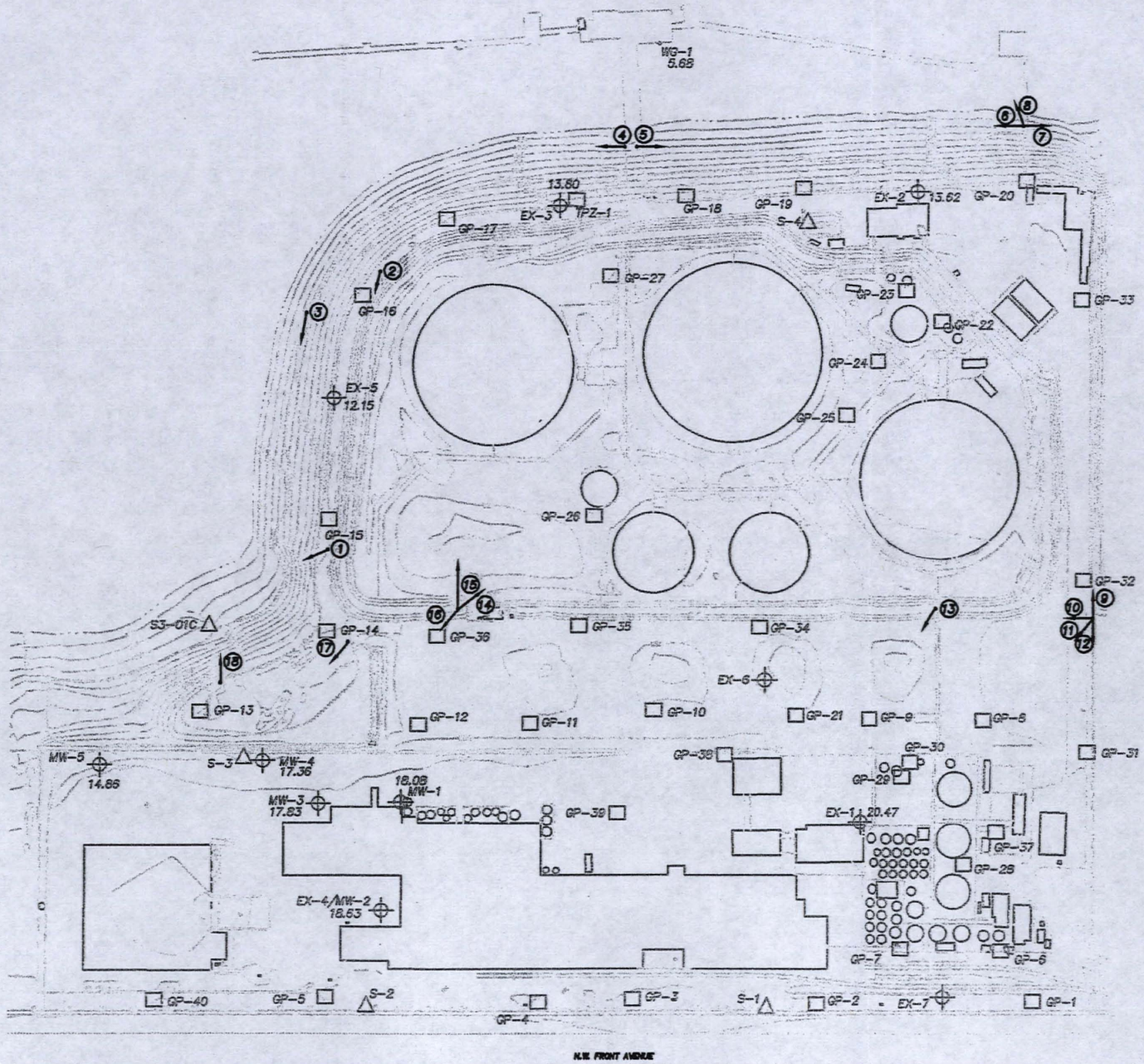
DEQ. 1998. *Guidance for Ecological Risk Assessment: Level I Scoping*. Oregon Department of Environmental Quality. November.

DEQ. 1999. *Guidance for Ecological Risk Assessment: Level 2 Screening*. Oregon Department of Environmental Quality. October.

IT. 2000. Focused Remedial Investigation Workplan, McCall Oil and Chemical Corporation. November.

IT. 2001. Focused Remedial Action Investigation Interim Action Status Report, McCall Oil and Chemical Corporation. April.

Marshall, D.B., M.W. Chilcote, and H. Weeks. 1996. *Species at Risk: Sensitive, Threatened and Endangered Vertebrates of Oregon*. 2nd Edition. Oregon Department of Fish and Wildlife, Portland, Oregon.



LIST OF MONITORING WELLS

PT#	NORTHING	EASTING	GROUND EL.	RIM EL.	TOP PVC EL.	DESCRIPTION
6000	9660.733	4156.265	35.91	35.930	35.29	MONITOR WELL EX-7
6002	10654.027	4568.183	32.34	32.350	32.07	MONITOR WELL EX-3
6003	10559.445	4693.507	33.11	33.140	32.28	MONITOR WELL EX-2
6005	10932.866	4201.783	32.14	32.190	31.87	MONITOR WELL EX-5
6006	10531.650	3993.202	35.74	35.760	35.48	MONITOR WELL MW-1
6007	10606.911	3512.937	35.25	35.270	34.56	MONITOR WELL MW-3
6008	10694.282	3508.955	34.07	34.140	33.61	MONITOR WELL MW-4
6008	10540.045	3692.241	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	4290.654	34.83	35.070	34.39	MONITOR WELL EX-6
6013	10385.543	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 #2526. ELEVATION = 34.64 FEET

LEGEND

- MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK
- PHOTO NUMBER
- PHOTO LOCATION
- ORIENTATION OF PHOTO

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	T.Williams			
	3/26/2001			

IMAGE Files: Image3.bmp
XREF Files: 1695.dwg 1695d.dwg
Dimscale: 150 Lscale: 150 Pltscale: 0
N:\Cad\Drawings\920910-McCall\920910-B11.dwg Mon, 26/Mar/01 10:58am twilliams

IT CORPORATION
15055 SW Sequoia Parkway
Suite 140
Portland, Oregon 97224
(503)624-7200 Fax(503)620-7858

McCALL OIL/GWCC
PORTLAND, OREGON

APPENDIX A

DEQ ECOLOGICAL CHECKLISTS

ATTACHMENT 1
Ecological Scoping Checklist

Site Name	McCall Oil and Chemical Corporation
Date of Site Visit	02/02/01
Site Location	Front Ave, NW Portland, Oregon
Site Visit Conducted by	Jeff Peterson, IT corporation

Part ❶

CONTAMINANTS OF INTEREST Types, Classes, Or Specific Hazardous Substances ‡ Known Or Suspected	Onsite	Adjacent to or in locality of the facility †
Petroleum hydrocarbons	Yes	~~at~~ Yes
Polynuclear aromatic hydrocarbons	Yes	~~in vicinity~~ Yes
Volatile organic chemicals	Yes	~~Air~~ Yes
~~Heavy metals~~ Copper, Chromium, Arsenic	Yes	~~at~~ Unk.

‡ As defined by OAR 340-122-115(30) † As defined by OAR 340-122-115(34)

Part ❷

OBSERVED IMPACTS ASSOCIATED WITH THE SITE	Finding
Onsite vegetation (None, Limited, Extensive)	N
Vegetation in the locality of the site (None, Limited, Extensive)	N
Onsite wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other (None, Limited, Extensive)	N
Wildlife such as macroinvertebrates, reptiles, amphibians, birds, mammals, other in the locality of the site (None, Limited, Extensive)	N
Other readily observable impacts (None, Discuss below)	N
Discussion: No signs of chemical-stressed vegetation or stained soil were observed. The site is an active industrial facility and there have been physical disturbances of soil and vegetation.	

ATTACHMENT 1
Ecological Scoping Checklist (cont'd)

Part ❸

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
Terrestrial - Wooded	
Percentage of site that is wooded	0%
Dominant vegetation type (Evergreen, Deciduous, Mixed)	P *
Prominent tree size at breast height, i.e., four feet (<6", 6" to 12", >12")	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Terrestrial - Scrub/Shrub/Grasses	
Percentage of site that is scrub/shrub	<5%
Dominant vegetation type (Scrub, Shrub, Grasses, Other)	Scrub P
Prominent height of vegetation (<2', 2' to 5', >5')	2'-5'
Density of vegetation (Dense, Patchy, Sparse)	Patchy P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	birds, mammals
Terrestrial - Ruderal	
Percentage of site that is ruderal	approx. 0%
Dominant vegetation type (Landscaped, Agriculture, Bare ground)	P
Prominent height of vegetation (0', >0' to <2', 2' to 5', >5')	
Density of vegetation (Dense, Patchy, Sparse)	P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Aquatic - Non-flowing (lentic)	
Percentage of site that is covered by lakes or ponds	0%
Type of water bodies (Lakes, Ponds, Vernal pools, Impoundments, Lagoon, Reservoir, Canal)	
Size (acres), average depth (feet), trophic status of water bodies	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	P
Vegetation present (Submerged, Emergent, Floating)	P
Obvious wetlands present (Yes / No)	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Aquatic - Flowing (lotic) - Willamette River is adjacent to Site	
Percentage of site that is covered by rivers, streams (brooks, creeks), intermittent streams, dry wash, arroyo, ditches, or channel waterway	0%
Type of water bodies (Rivers, Streams, Intermittent Streams, Dry wash, Arroyo, Ditches, Channel waterway)	River
Size (acres), average depth (feet), approximate flow rate (cfs) of water bodies	P
Bank environment (cover: Vegetated, Bare / slope: Steep, Gradual / height (in feet))	partially vegetated / 30° slope / 30' high
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	River
Tidal influence (Yes / No)	~~No~~ yes
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	River
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	Sand
Vegetation present (Submerged, Emergent, Floating)	None P
Obvious wetlands present (Yes / No)	No
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds,	Birds, fish, macroinvertebrate

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
Mammals, Other)	
Aquatic / Wetlands	
Obvious or designated wetlands present (Yes / No)	No
Wetlands suspected as site is/has (Adjacent to water body, in Floodplain, Standing water, Dark wet soils, Mud cracks, Debris line, Water marks)	
Vegetation present (Submerged, Emergent, Scrub/shrub, Wooded)	P
Size (acres) and depth (feet) of suspected wetlands	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Water discharge point (None, River, Stream, Groundwater, Impoundment)	
Tidal influence (Yes / No)	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	

* P: Photographic documentation of these features is highly recommended.

Part ❹

ECOLOGICALLY IMPORTANT SPECIES / HABITATS OBSERVED
The Willamette River is adjacent to the site. It is unknown if contaminated groundwater is reaching the Willamette River. The river supports threatened and endangered fish species and other important ecological receptors. No ecologically important terrestrial habitats are present at the site.

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in surface waters?			X
AND			
Are ecologically important species or habitats present? In Willamette River	X		
AND			
Could hazardous substances reach these receptors via surface water? (YES)	X		
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in surface waters. • Ability of hazardous substances to migrate to surface waters. • Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters. Aquatic receptors may be exposed through osmotic exchange, respiration or ventilation of surface waters. • Contaminants may be taken-up by terrestrial plants whose roots are in contact with surface waters. • Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.			
Are hazardous substances present or potentially present in groundwater?	X		
AND			
Are ecologically important species or habitats present? Willamette River	X		
AND			
Could hazardous substances reach these receptors via groundwater? (YES)			X
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in groundwater. • Ability of hazardous substances to migrate to groundwater. • Potential for hazardous substances to migrate via groundwater and discharge into habitats and/or surface waters. • Contaminants may be taken-up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1m depth). • Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in sediments?			X
AND			
Are ecologically important species or habitats present? Willamette River	X		
AND			
Could hazardous substances reach these receptors via contact with sediments? (YES)	X		
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in sediment. • Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff. • Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters. • Terrestrial plants may be exposed to sediment in an area that is only periodically inundated with water. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging.			
Are hazardous substances present or potentially present in prey or food items of ecologically important receptors?			X
AND			
Are ecologically important species or habitats present? Willamette River (YES)	X		
AND			
Could hazardous substances reach these receptors via consumption of food items?			X
When answering the above questions, consider the following: • Higher trophic level terrestrial and aquatic consumers and predators may be exposed through consumption of contaminated food sources. • In general, organic contaminants with log K_{ow} > 3.5 may accumulate in terrestrial mammals and those with a log K_{ow} > 5 may accumulate in aquatic vertebrates.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

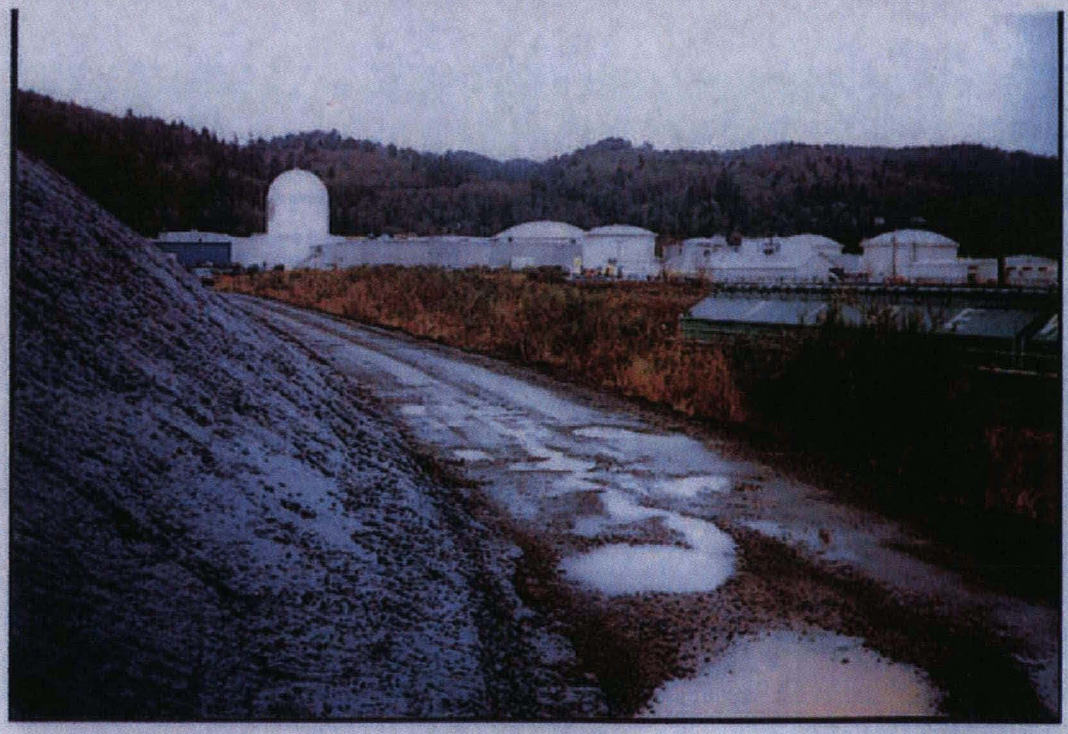
EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in surficial soils? **AND** **Are ecologically important species or habitats present?** (No) **AND** **Could hazardous substances reach these receptors via incidental ingestion of or dermal contact with surficial soils?**	X	X	
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in surficial (~1m depth) soils. • Ability of hazardous substances to migrate to surficial soils. • Significant exposure via dermal contact would generally be limited to organic contaminants which are lipophilic and can cross epidermal barriers. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash). • Contaminants in bulk soil may partition into soil solution, making them available to roots. • Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil or while grooming themselves clean of soil.			
Are hazardous substances present or potentially present in soils? **AND** **Are ecologically important species or habitats present?** (No) **AND** **Could hazardous substances reach these receptors via vapors or fugitive dust carried in surface air or confined in burrows?**	X	X	
When answering the above questions, consider the following: • Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant > 10^{-5} atm-m^3/mol and molecular weight < 200 g/mol). • Exposure via inhalation is most important to organisms that burrow in contaminated soils, given the limited amounts of air present to dilute vapors and an absence of air movement to disperse gases. • Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that could be exposed to dust disturbed by their foraging or burrowing activities or by wind movement. • Foliar uptake of organic vapors would be limited to those contaminants with relatively high vapor pressures. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

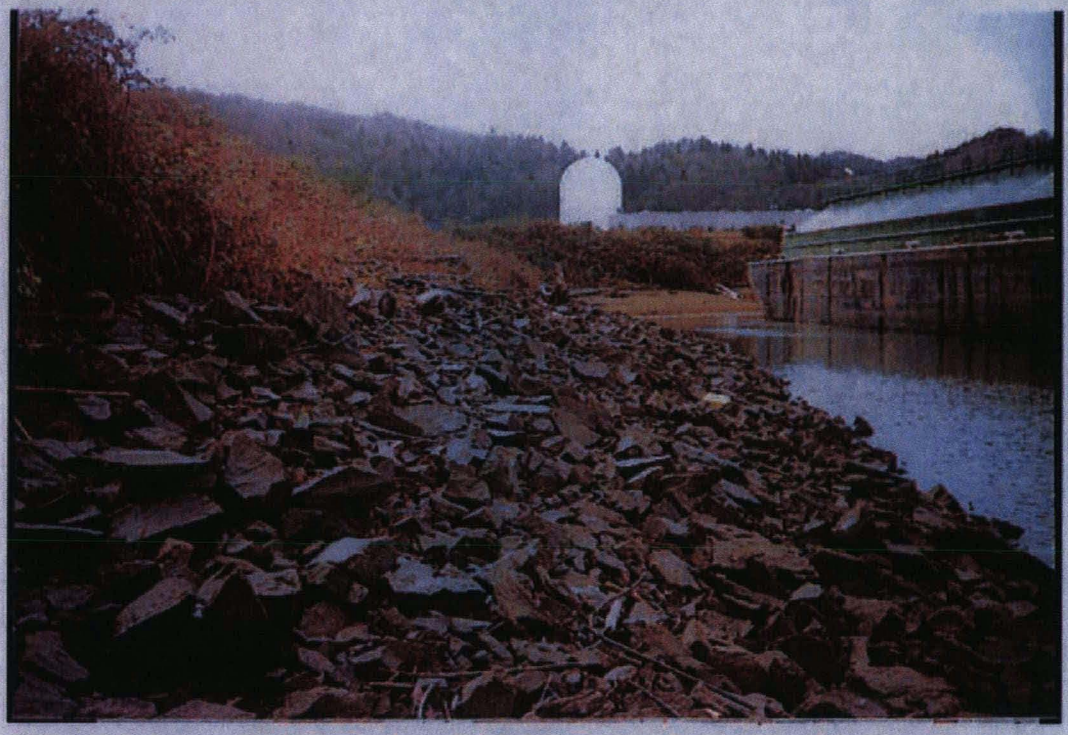
APPENDIX B

PHOTOGRAPHS

1. Photograph is oriented towards the northwest and looks down the south bank of the Willamette River. This is the only section of the property where a beach exists along the river. Several barges can be seen anchored a short distance off shore. Canadian geese and mallards can be seen resting on the beach and in the river. The yellow booms in the river were placed to help contain a petroleum release associated with a nearby facility.



2. Photograph is oriented towards the west and shows the only portion of the site that is vegetated. The shrub that can be seen on the right is Scotch broom (an introduced species). The road in the photo is located along the top of the riprap-covered riverbank. A floating barge can be seen on the right.



3. This is another photograph of the most vegetated section of the site. As shown in the photo, plants such as Scotch broom and Himalaya berry grow along the bank and through the riprap. The photo is oriented towards the west.

4. This photograph is oriented towards the northwest and looks down the Willamette River. An approximately 25-foot strip of sparse vegetation can be observed growing along the top of the riverbank.

5. Taken from the same location as photograph #4, this photograph looks upstream and is oriented towards the southeast.

6. This photograph is oriented towards the northwest and looks down the Willamette River. As shown in the photo, very little vegetation grows along the riverbank over much of the property. Also, most of the riverbank has been stabilized with riprap. No beach areas can be seen along the river, and no quality upland habitats are present.

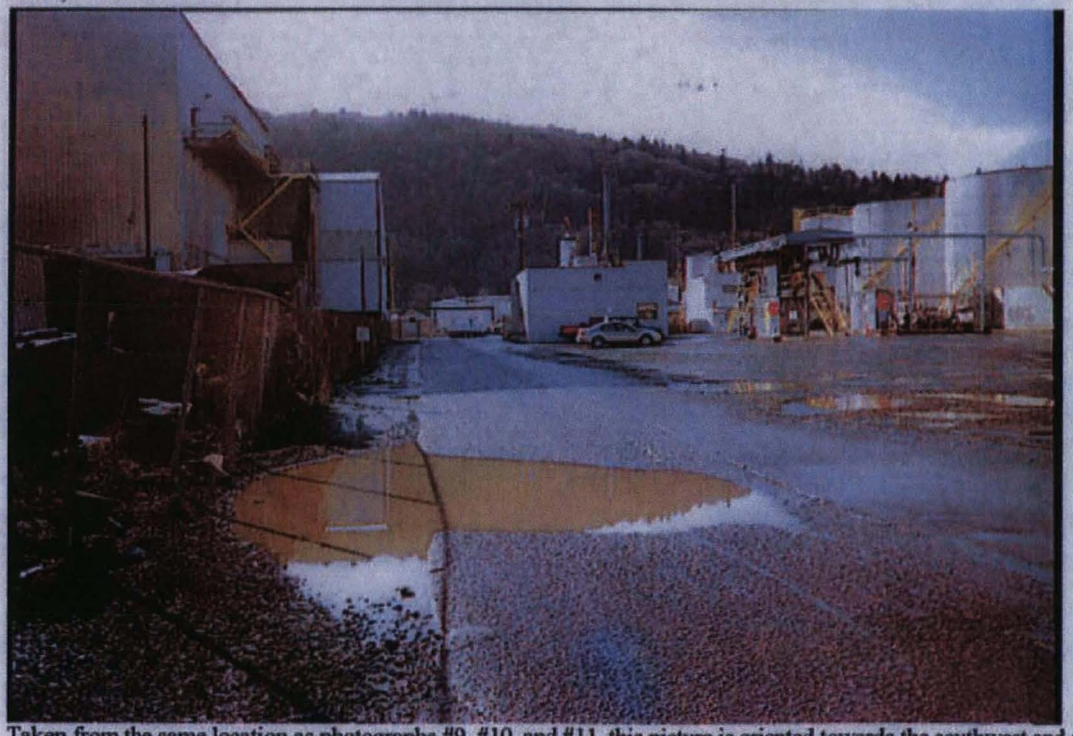
7. This photograph was taken near the northeast property boundary and looks up the Willamette River. The photo shows some of the conditions of surrounding properties because little of land shown in the photo is on the site.

8. Photograph is oriented towards the north and shows the width of the Willamette River. Also, a ship can be seen anchored and offloading.

9. Photograph is oriented towards the northeast and shows the southern property boundary. No quality upland ecological habitats are present.

10. Taken from the same location as photograph #9, this picture is oriented towards the northwest. No quality upland ecological habitats are present.

11. Taken from the same location as photographs #9 and #10, this picture is oriented towards the west. No quality upland ecological habitats are present.

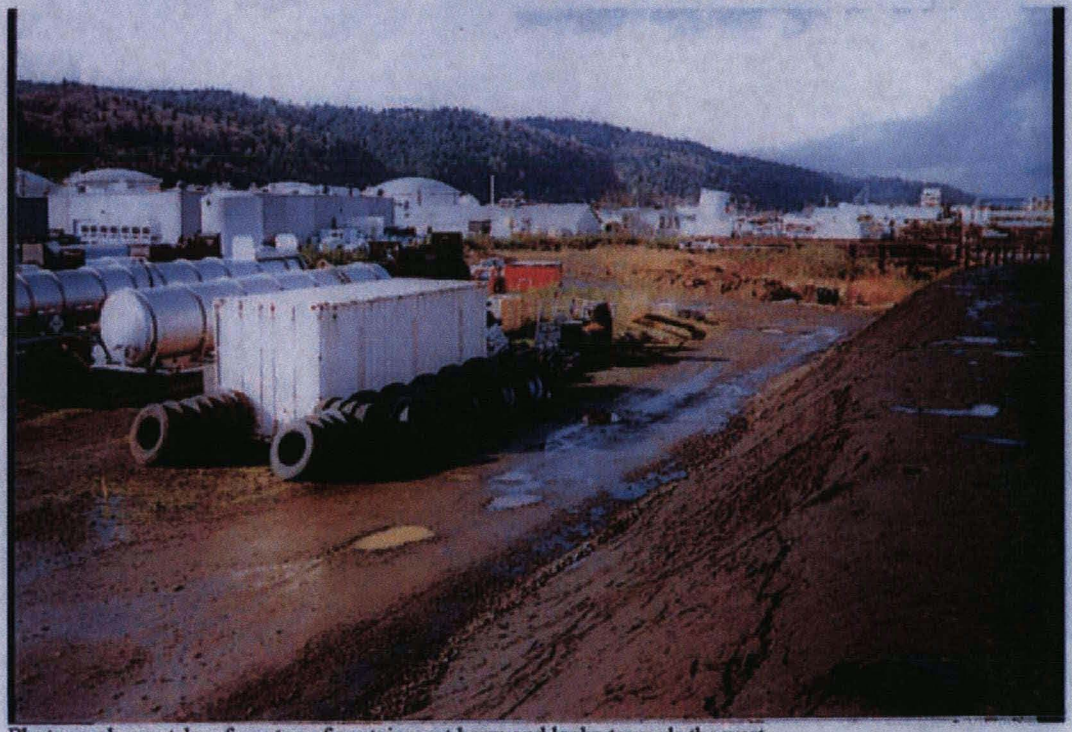


12. Taken from the same location as photographs #9, #10, and #11, this picture is oriented towards the southwest and shows the southern property boundary. No quality upland ecological habitats are present.

13. Photograph is oriented towards the west and shows much of the facility. Again, no quality upland ecological habitats are present.

14. Photograph was taken from top of containment berm and looks towards the east. The photo shows the area inside the containment basin that surrounds the above ground storage tanks. Areas of unvegetated surface soil can be seen.

15. Photograph was taken from top of containment berm and looks towards the northeast.



16. Photograph was taken from top of containment berm and looks towards the west.

17. Photograph is oriented towards the west and shows a small section of upland area that is not covered with buildings, asphalt, or gravel. Although portions of this area are vegetated, no quality upland ecological habitats are present.

18. Photograph is oriented towards the northeast. The small beach shown in photograph #1 can be seen from a different angle.

ATTACHMENT 1

THREATENED AND ENDANGERED SPECIES OF OREGON

State List of Threatened and Endangered Species

635-100-0125 The state list of threatened and endangered species is as follows:

(1) Fish - Common and Scientific Name and Status:

(a) Hutton Spring Tui Chub - *Gila bicolor ssp.* - Threatened;

(b) Borax Lake Chub - *Gila boraxobius* - Endangered;

(c) Foskett Spring Speckled Dace - *Rhinicthys osculus ssp.* - Threatened;

(d) Warner Sucker - *Catostomus warnerensis* - Threatened;

(e) Lahontan Cutthroat Trout - *Oncorhynchus clarki henshawi* - Threatened;

(f) Lost River Sucker - *Deltistes luxatus* - Endangered;

(g) Shortnose Sucker - *Chasmistes brevirostris* - Endangered;

(h) Snake River spring/summer chinook salmon - *Oncorhynchus tshawytscha* - Threatened;

(i) Snake River fall chinook salmon - *Oncorhynchus tshawytscha* - Threatened.

(2) Amphibians and Reptiles - Common and Scientific Name and Status:

(a) Green Sea Turtle - *Chelonia mydas* - Endangered;

(b) Leatherback Sea Turtle - *Dermochelys coriacca* - Endangered;

(c) Loggerhead Sea Turtle - *Caretta caretta* - Threatened;

(d) Pacific Ridley Sea Turtle - *Lepidochelys olivacea* - Threatened.

(3) Birds - Common and Scientific Name and Status:

(a) Short-tailed Albatross - *Diomeda albatross* - Endangered;

(b) Brown Pelican - *Pelecanus occidentalis* - Endangered;

(c) Aleutian Canada Goose - *Branta canadensis leucopareia* - Endangered;

(d) Bald Eagle - *Haliaeetus leucocephalus* - Threatened;

(e) American Peregrine Falcon - *Falco peregrinus anatum* - Endangered;

(f) Arctic Peregrine Falcon - *Falco peregrinus tundrius* - Endangered;

(g) Western Snowy Plover - *Charadrius alexandrinus nivosus* - Threatened;

(h) California Least Tern - *Sterna antillarum browni* - Endangered;

(i) Northern Spotted Owl - *Strix occidentalis caurina* - Threatened.

(4) Mammals - Common and Scientific Name and Status:

(a) Gray Wolf - *Canus lupus* - Endangered;

(b) Gray Whale - *Eschrichtius robustus* - Endangered;

(c) Sei Whale - *Balaenoptera borealis* - Endangered;

(d) Sperm Whale - *Physeter macrocephalus* - Endangered;

(e) Blue Whale - *Balaenoptera musculus* - Endangered;

(f) Humpback Whale - *Megaptera noraeangliae* - Endangered;

(g) Black Right Whale - *Balaena glacialis* - Endangered;

(h) Fin Whale - *Balaenoptera physalus* - Endangered;

(i) Kit Fox - *Vulpes macrotis* - Threatened;

(j) Wolverine - *Gulo gulo* - Threatened;

(k) Sea Otter - *Enhydra lutris* - Threatened;

(l) Columbia White-tailed Deer - *Odocoileus virginianus leucurus* - Endangered.

Stat. Auth.: ORS 496.138 and 496.172
Stats. Implemented: ORS 496.176 and 496.182
Hist.: Adopted 10-20-93; ef. 11-1-93

ATTACHMENT 2

OREGON NATURAL HERITAGE PROGRAM LIST OF THREATENED AND ENDANGERED SPECIES NEAR THE SITE

Oregon NATURAL HERITAGE PROGRAM

RECEIVED
FEB 22 2001
IT Corp. EUGENE

A Cooperative Project of :

The Nature Conservancy.

February 21, 2001

821 SE 14th Avenue
Portland, Oregon 97214-2537
(503) 731-3070
FAX (503) 230-9639

Jeff Peterson
IT Corporation
1475 Westec Drive, Suite 121
Eugene, OR 97402

Dear Mr. Peterson:

Thank you for requesting information from the Oregon Natural Heritage Program (ONHP). We have conducted a data system search for rare, threatened and endangered plant and animal records for your DEQ Level 1 Ecological Scoping Assessment in Portland, Oregon (T01N R01E, Section 17).

Nine (9) records were noted within a two-mile radius of your project and are included on the enclosed computer printout. A key to the fields is also included.

Please remember that the lack of rare element information from a given area does not mean that there are no significant elements there, only that there is no information known to us from the site. To assure that there are no important elements present, you should inventory the site, at the appropriate season.

Please note that at this time ONHP does not have computerized records available for all anadromous fish in Oregon. I have listed below the species that may be present within the waterways contained in the project area. I have also included their listing by the National Marine Fisheries Service (NMFS). For more information on anadromous fish you may wish to contact NMFS at: 525 NE Oregon Street; Portland, Oregon 97232-2737.

Coastal cutthroat trout	*Oncorhynchus clarki clarki*	Candidate
Columbia River cutthroat trout	*Oncorhynchus clarki*	Proposed Threatened
Chum salmon (Lower Columbia River)	*Oncorhynchus keta*	Threatened
Coho salmon (Lower Columbia River)	*Oncorhynchus kisutch*	Candidate
Steelhead (Lower Columbia River)	*Oncorhynchus mykiss*	Threatened
Steelhead (Upper Willamette River)	*Oncorhynchus mykiss*	Threatened
Chinook salmon (Lower Columbia River)	*Oncorhynchus tshawytscha*	Threatened
Chinook salmon (Upper Willamette River)	*Oncorhynchus tshawytscha*	Threatened

This data is confidential and for the specific purposes of your project and is **not to be distributed.**

If you need additional information or have any questions, please do not hesitate to contact me.

Sincerely,

Cliff Alton
Conservation Information Assistant

encl.: invoice
computer printout and data key

NAME: FALCO PEREGRINUS ANATUM
COMMON NAME: AMERICAN PEREGRINE FALCON
EO-CODE: ABNKD06071*013 LAST OBS: 1997 FED STATUS:
COUNTY(s): MULTNOMAH FIRST OBS: 1994 STATE STATUS: LE
QUAD NAMES: PORTLAND LAT: xxxxxxN SIZE:
PHYSIOGRAPHIC PROV: WV LONG: xxxxxxxW MINELEV (Feet): 50
T-R-S: 001N001E xx QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: Data Blocked, see 'DIRECTIONS' PRECISION: S
EO-RANK/COMM: D :
DIRECTIONS: Contact Oregon Natural Heritage Program (503) 731-3070
DESCRIPTION:
EO-DATA: NEST SITE. SEE ANNOBS.
EOTYPE: BREEDING SITE
COMMENTS:
ANNUAL OBSERVATION: 1997-NESTING OBSERVED
1996-2 ADULTS, AT LEAST 2 CHICKS
1995-2 ADULTS, 1 YOUNG FLEDGED
1994-2 ADULTS, 1 YOUNG FLEDGED
OWNER: STATE
MANAGED AREA: STATE HIGHWAY MAINTENANCE DIST 2B
MANAGE COMM:
PROT COMM:
BEST SOURCE: NUGENT, MARTIN. ODFW.

NAME: COCCYZUS AMERICANUS
COMMON NAME: YELLOW-BILLED CUCKOO
EO-CODE: ABNRB02020*026 LAST OBS: 1985 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1923-06-08 STATE STATUS: SC
QUAD NAMES: PORTLAND LAT: 453712N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1224300W MINELEV (Feet): 10
T-R-S: 002N001E 32 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: G
EO-RANK/COMM: D :
DIRECTIONS: PORTLAND-ALONG THE COLUMBIA RIVER FROM THE MOUTH OF THE WILLAMETTE N TO WHAT IS NOW THE PORTLAND AIRPORT
DESCRIPTION: COLUMBIA RIVER BOTTOMLANDS
EO-DATA: 1985: 1 CUCKOO HEARD. 1940: 2 BIRDS ON 7-27. 1923: AT LEAST 12 BIRDS ON 6-8.
EOTYPE:
COMMENTS: OBSERVERS: MIKE HOUCK (1985), W.H. TELFER (1940), GABRIELSON AND JEWETT (1923).
ANNUAL OBSERVATION:
OWNER: PRIVATE
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: HOUCK, MIKE. PORTLAND AUDUBON SOCIETY.

NAME: AGELAIUS TRICOLOR
COMMON NAME: TRICOLORED BLACKBIRD
EO-CODE: ABPBXB0020*002 LAST OBS: 1985 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1983 STATE STATUS: SP
QUAD NAMES: PORTLAND LAT: 453550N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1224305W MINELEV (Feet): 20
T-R-S: 001N001E 05 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: C :
DIRECTIONS: ST. JOHNS LANDFILL IN PORTLAND
DESCRIPTION: DENSE HIMALAYAN BLACKBERRIES ADJACENT TO A BLIND SLOUGH W/ SPARSE TREE COVER ALONG THE SLOUGH MARGINS
EO-DATA: 1985: A COLONY OF 20-30 BIRDS PRESENT DURING THE NESTING SEASON. 1983: 36 BIRDS OBSERVED 6/25-7/31, APPARENTLY NESTING.
EOTYPE:
COMMENTS: REPORTED BY HOUCK ET AL. THIS COLONY WOULD BE ABOUT 250 MI N OF THE CLOSEST NESTING AREAS IN THE ROGUE RIVER VALLEY

ANNUAL OBSERVATION:
OWNER: CITY
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: HOUCK ET AL. 1983. AMERICAN BIRDS. 37(6):1022. HOUCK. 1985. PERSONAL COMMUNICATION W/ONHDB

NAME: ONCORHYNCHUS KISUTCH POP 1
COMMON NAME: COHO SALMON (LOWER COLUMBIA RIVER/SW WASHINGTON COAST RUNS)
EO-CODE: AFCHA02031*037 LAST OBS: 1999-PRE FED STATUS: C
COUNTY(s): COLUMBIA FIRST OBS: STATE STATUS: LE
MULTNOMAH
CLACKAMAS
QUAD NAMES: OREGON CITY LAT: SIZE:
GLADSTONE
LAKE OSWEGO
PORTLAND
LINNTON
SAUVIE ISLAND
ST HELENS
PHYSIOGRAPHIC PROV: LONG: MINELEV (Feet):
T-R-S: QUADCODE: 4512235 MAXELEV (Feet):
4512245
4512246
4512256
4512257
4512267
4512277
T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER
DESCRIPTION:
EO-DATA: ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE
EOTYPE: REARING & MIGRATION - fish
COMMENTS: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF COHO IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.

ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: 2000 ODFW GEOGRAPHIC RESOURCES DATA; MASSEY, JAY; BENNETT, DON.

NAME: ONCORHYNCHUS TSHAWYTSCHA POP 22
COMMON NAME: CHINOOK SALMON - LOWER COLUMBIA RIVER FALL RUN
EO-CODE: AFCHA0205Y*006 LAST OBS: 1999-PRE FED STATUS: LT
COUNTY(s): CLACKAMAS FIRST OBS: STATE STATUS: SC
MULTNOMAH
COLUMBIA
QUAD NAMES: OREGON CITY LAT: SIZE:
GLADSTONE
LAKE OSWEGO
PORTLAND
LINNTON
SAUVIE ISLAND
PHYSIOGRAPHIC PROV: LONG: MINELEV (Feet):
T-R-S: QUADCODE: 4512235 MAXELEV (Feet):
4512245
4512246
4512256

4512257
4512267

T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: SCAPPOOSE BAY & TRIBUTARIES, WILLAMETTE RIVER & TRIBUTARIES
DESCRIPTION:
EO-DATA: FALL RUN; ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE
EOTYPE: REARING & MIGRATION - fish
COMMENTS: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF CHINOOK IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.
ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: 2000 ODFW GEOGRAPHIC RESOURCES DATA; MASSEY, JAY; BENNETT, DON; CALDWELL, DICK.

NAME: ONCORHYNCHUS MYKISS POP 27
COMMON NAME: STEELHEAD - LOWER COLUMBIA RIVER WINTER RUN
EO-CODE: AFCHA02132*001 LAST OBS: 1999-PRE FED STATUS: LT
COUNTY(s): CLACKAMAS FIRST OBS: STATE STATUS: SC
MULTNOMAH
COLUMBIA
QUAD NAMES: OREGON CITY LAT: SIZE:
GLADSTONE
LAKE OSWEGO
PORTLAND
LINNTON
SAUVIE ISLAND
ST HELENS
PHYSIOGRAPHIC PROV: LONG: MINELEV (Feet):
T-R-S: QUADCODE: 4512235 MAXELEV (Feet):
4512245
4512246
4512256
4512257
4512267
4512277

T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER
DESCRIPTION:
EO-DATA: WINTER RUN: ODFW DISTRIBUTIION MAPS USED TO CREATE THE 1:24,000 COVERAGE
EOTYPE: REARING & MIGRATION - fish
COMMENTS: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF STEELHEAD IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.
ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: 2000 ODFW GEOGRAPHIC RESOURCES DATA; MASSEY, JAY; BENNETT, DON.

NAME: CORYNORHINUS TOWNSENDII TOWNSENDII
COMMON NAME: PACIFIC WESTERN BIG-EARED BAT
EO-CODE: AMACC08015*071 LAST OBS: 1928-09-05 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1914 STATE STATUS: SC

QUAD NAMES: PORTLAND LAT: 453220N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1223800W MINELEV (Feet): 150
T-R-S: 001N001E 25 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: G
EO-RANK/COMM: D :
DIRECTIONS: PORTLAND - ON THE E SIDE
DESCRIPTION:
EO-DATA: ADULT MALE IN THE JEWETT COLLECTION WAS CAPTURED 9-5-28, A FEW MI FROM A CAVE ON THE E SIDE OF PORTLAND THAT WAS USED BY HUNDREDS OF BATS IN 1914, BUT WAS LATER DESTROYED BY VANDALS
EOTYPE:
COMMENTS:
ANNUAL OBSERVATION:
OWNER: PRIVATE
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: BAILEY. 1936. MAMMALS OF OREGON. MASSER & CROSS. 1981. NOTES ON THE DISTRIBUTION OF OREGON BATS

NAME: CLEMMYS MARMORATA MARMORATA
COMMON NAME: NORTHWESTERN POND TURTLE
EO-CODE: ARAAD02031*041 LAST OBS: FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: STATE STATUS: SC
QUAD NAMES: PORTLAND LAT: 453045N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1224130W MINELEV (Feet):
T-R-S: 001S001E 04 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: G
EO-RANK/COMM: D :
DIRECTIONS: PORTLAND
DESCRIPTION:
EO-DATA: SPECIES RECORDED AT THIS SITE, PER ST. JOHN. DATES NOT SPECIFIED
EOTYPE:
COMMENTS:
ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: ST. JOHN, ALAN. 1984. HERPETOLOGY OF THE LOWER WILLAMETTE VALLEY

NAME: CAREX COMOSA
COMMON NAME: BRISTLY SEDGE
EO-CODE: PMCYP032Y0*005 LAST OBS: 1887-03-06 FED STATUS:
COUNTY(s): MULTNOMAH FIRST OBS: 1887-03-06 STATE STATUS:
QUAD NAMES: PORTLAND LAT: 453342N SIZE:
PHYSIOGRAPHIC PROV: WV LONG: 1224243W MINELEV (Feet): 20
T-R-S: 001N001E 20 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: "[SWAN] ISLAND" [BRACKETED INFORMATION CAME FROM THE CAREX WORKING GROUP-ONHP/SV, 5/97]
DESCRIPTION:
EO-DATA:
EOTYPE:
COMMENTS: HERBARIUM COLLECTION: L.F. HENDERSON, S.N., 3-6-1887, ORE-16644.
ANNUAL OBSERVATION:
OWNER: PRIVATE
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: HENDERSON COLLECTION

9 Records listed.

KEY TO PRINTOUT

NAME AND COMMON NAME: The scientific and common name of the species.

EO-CODE (element occurrence code): Unique Heritage Program code for this occurrence. The first 10 characters are the code for the species, and the last 3 are the occurrence number.

STATE STATUS: For animals, Oregon Department of Fish and Wildlife status; **LE**=listed endangered, **PE**=proposed endangered, **PT**=proposed threatened, **SC** or **C**=sensitive-critical, **SV** or **V**=sensitive-vulnerable, **SP** or **P**=sensitive peripheral or naturally rare, **SU** or **U**=sensitive-undetermined.

FED STATUS: US Fish and Wildlife Service status. **LE**=listed endangered, **LT**=listed threatened, **PE** or **PT**=proposed endangered or threatened, **C**=candidate for listing with enough information available for listing, **SOC**=species of concern.

LASTOBS: Last reported sighting date, in the form YYYY-MM-DD

FIRSTOBS: First reported sighting date for this occurrence in the form YYYY-MM-DD

COUNTY(S): County name(s)

QUAD NAMES: Name of the USGS topographic quadrangle map(s) where the record is mapped.

DIRECTIONS: Site name and direction to site

LAT: latitude, North

LONG: longitude, West

T-R-S: Township, Range and Section, with township first, range second and section third (a space appears between range and section). 004S029E 32 = Township 4S, Range 29E, Section 32. Fractional townships and ranges are further defined in the T-R COMMENTS field.

T-R-S COMMENTS: Comments relating to township, range or section(s), e.g. SE4NE4 or SENE=SE 1/4 of the NE 1/4.

PHYSIOGRAPHIC PROVINCE: Code for physiographic province. **CR**=Coast Range, **WV**=Willamette Valley, **KM**=Klamath Mountains, **WC**=West slope and crest of the Cascades, **EC**=East slope of the Cascades, **BM**=Ochoco, Blue and Wallowa Mts., **BR**=Basin and Range, **HP**=High Lava Plains, **OU**=Owyhee uplands, **CB**=Columbia Basin.

WATERSHED: Hydrologic unit code

EO-DATA: Species and population biology - numbers, age, nesting success, vigor, phenology, disease, etc.

ANNUAL OBSERVATIONS: Summary of yearly observations

DESCRIPTION: Habitat information, e.g. aspect, slope, soils, associated species, community type, etc.

MINELEV: Minimum elevation, in feet.

SIZE: in acres, whole numbers. 0=unknown

COMMENTS: Miscellaneous comments

PROT COMM (Protection Comments): Comments regarding protectibility and threats.

MANAGE COMM: Comments on how the site is managed.

MANAGED AREA: BLM district, USFS Forest, Private Preserve, etc.

OWNER: federal, state, private, etc.

BEST SOURCE: Best source of information for this occurrence.

SOURCE CODE: Code for sources

APPENDIX B

BORING AND WELL LOGS

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX- 1
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 25.00'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	FID (ppm) RECOVERY PERCENT	BLOW COUNTS
1 (G)	275 100%	---
2 (G)	425 100%	---
3 (G)	270 100%	---
4 (SS)	600 100%	2-4-4
5 (SS)	95 100%	2-2-5
6 (SS)	10 100%	2-2-5
7 (SS)	50 100%	2-3-3
8 (SS)	35 100	2-3-3
9 (SS)	50 100%	2-2-3
10 (SS)	5 100%	4-5-5
11 (SS)	3 100%	3-2-3
12 (SS)	50 100%	3-3-2

GROUND WATER LEVELS: 15.35', 16.5'
DEPTH IN FEET: 5, 10, 15, 20
SAMPLES | WELL DETAILS | LITHO LOGIC COLUMN

LITHOLOGIC DESCRIPTION

0-0.2 feet: ASPHALT.

0.2-3.0 feet: SILTY SAND (SM), medium brown, 70-80% subrounded to subangular fine to medium sand, 20-30% non-plastic fines, damp, loose.

@ 2.5 feet: color of silty sand turned orange brown. Fines decrease to 10-20%.

3.0-23.7 feet: POORLY GRADED SAND WITH SILT (SP-SM), orange brown, 85-90% subrounded to subangular fine sand, 10-15% non-plastic fines, damp, loose. (DREDGE SPOILS)

@ 16.5 feet: first water, cuttings are wet.

REMARKS

1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionization detector.

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX-1
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 25.00'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	FID (ppm) RECOVERY PERCENT	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
13 (SS)	— 100%	2-2-3						
14 (SS)	3 100%	4-5-11						@ 22.5-23.0 feet: color changed to gray.
15 (SS)	— 100%	2-3-4						23.7-25.0 feet: ELASTIC SILT (MH), medium gray, medium plasticity, moist, firm, trace organic matter. (ALLUVIUM)
				25				Bottom of boring at 25.0 feet below ground surface.
				30				
				35				
				40				

WELL CONSTRUCTION DETAILS:
Well was constructed of 2-inch flush threaded schedule 40 PVC with a 0.010-inch machine slotted screen. The filter pack consists of washed 20x40 Colorado silica sand. The surface seal consists of Volclaybentonite chips hydrated with potable water. The well was completed with a heavy duty flush mount security casing cemented into place.

REMARKS
1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionization detector.

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX- 2
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 25.50'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	PID (ppm) RECOVERY PERCENT	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1 (G)	0 100%	—						0-0.2 feet: ASPHALT.
2 (G)	0 100%	—						0.2-1.5 feet: SILTY GRAVEL WITH SAND (GM), medium brown, 40-50% subangular to angular fine gravel, 30-40% subrounded to subangular fine to coarse sand, 10-20% non-plastic fines, damp. (FILL)
3 (G)	0 100%	—						1.5-25.5 feet: POORLY GRADED SAND WITH SILT (SP-SM), medium gray, 85-90% subrounded to subangular fine sand, 10-15% non-plastic fines, medium dense, damp. (DREDGE SPOILS)
4 (G)	0 100%	—		5				
5 (SS)	0 100%	6-9-9						
6 (SS)	60 100%	4-5-6						
7 (SS)	5 100%	10-8-10		10				@ 10.0 feet: noticeable white quartz sand grains.
8 (SS)	10 100	6-7-7						@ 11.5 feet: iron oxide staining evident.
9 (SS)	110 100%	4-4-4						
10 (SS)	70 100%	4-5-7		15				
11 (SS)	105 100%	3-4-8						
12 (SS)	2 100%	4-10-11	18.5' ▽ ▼					@ 18.5 feet: first water, cuttings are wet.
13 (SS)	2600 100%	12-10-14	18.56'	20				

REMARKS

1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionization detector.

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX- 2
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 25.50'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	FID (ppm) RECOVERY PERCENT	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
14 (SS)	3000 100%	4-4-5						
15 (SS)	3050 100%	3-1-2						@ 22.7-25.5 feet: interbedded elastic silt lenses with traces of organic matter.
16 (SS)	4100 100%	2-6-7		25				Bottom of boring at 25.5 feet below ground surface.
				30				WELL CONSTRUCTION DETAILS: Well was constructed of 2-inch flush threaded schedule 40 PVC with a 0.010-inch machine slotted screen. The filter pack consists of washed 20x40 Colorado silica sand. The surface seal consists of Volclaybentonite chips hydrated with potable water. The well was completed with a heavy duty flush mount security casing cemented into place.
				35				
				40				

REMARKS
1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionization detector.

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX- 3
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 26.00'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	FID (ppm) RECOVERY PERCENT	BLOW COUNTS	LITHOLOGIC DESCRIPTION
1 (G)	0 100%	---	0-3.0 feet: SILTY SAND-SANDY SILT (SM/ML), orange brown, 40-60% subrounded to subangular fine sand, 40-60% non-plastic fines, dry, loose.
2 (G)	0 100%	---	
3 (G)	0 100%	---	3.0-6.5 feet: SILTY SAND (SM), medium gray, 75-85% subrounded to subangular fine sand, 15-25% non-plastic fines, dry, soft. (DREDGE SPOILS)
4 (SS)	650 100%	8-7-5	6.5-25.5 feet: POORLY GRADED SAND WITH SILT (SP-SM), dark gray, 90-95% subrounded to subangular fine sand, 5-10% non-plastic fines, dry, loose. (DREDGE SPOILS)
5 (SS)	400 100%	3-4-3	
6 (SS)	1100 100%	4-5-6	
7 (SS)	750 100%	4-4-6	
8 (SS)	1050 100%	4-3-3	
9 (SS)	700 100%	4-5-7	
10 (SS)	750 100%	4-8-8	@ 17.0 feet: first water, wet cuttings.
11 (SS)	3000 100%	4-5-7	
12 (SS)	1040 100%	7-4-5	@ 19.0 feet: iron oxide staining evident.

GROUND WATER LEVELS: 17.0', 17.96'
DEPTH IN FEET: 5, 10, 15, 20
SAMPLES
WELL DETAILS
LITHO LOGIC COLUMN

REMARKS
1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionzation detector.

LOG OF EXPLORATORY BORING

PROJECT NAME McCALL OIL/GREAT WESTERN CHEMICAL CO.
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY Bill Ehorn

BORING NO. EX- 3
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 26.00'
DATE COMPLETED 9/6/94

SAMPLE NUMBER (METHOD)	FID (ppm) RECOVERY PERCENT	BLOW COUNTS	LITHOLOGIC DESCRIPTION
13 (SS)	3100 100%	1-2-2	
14 (SS)	5500 100%	1-2-3	
15 (SS)	4500 100%	2-3-3	
			25.5-26.0 feet: ELASTIC SILT (MH), medium gray, medium plasticity, firm, trace organic matter, moist. (ALLUVIUM)
			Bottom of boring at 26.0 feet below ground surface.

GROUND WATER LEVELS | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHO LOGIC COLUMN

25
30
35
40

WELL CONSTRUCTION DETAILS:
Well was constructed of 2-inch flush threaded schedule 40 PVC with a 0.010-inch machine slotted screen. The filter pack consists of washed 20x40 Colorado silica sand. The surface seal consists of Volclaybentonite chips hydrated with potable water. The well was completed with a heavy duty flush mount security casing cemented into place.

REMARKS
1)SS = 2-inch split spoon sampler. 2)G = Grab sample. 3)FID = Flame ionization detector.

LOG OF EXPLORATORY BORING

EX-4/

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW-2
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.00'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION
			0-1.5 feet: ASPHALT.
1 SS	5-6-6-9		1.5-1.9 feet: SAND (SP), light brown, fine to medium sand, trace fines, medium dense, moist.
			1.9-2.1 feet: SILTY SAND (SM), light brown, >66% fine sand, <33% low plastic fines, medium dense, moist.
			2.1-2.4 feet: SAND (SP), as above.
2 SS	2-3-2	5	2.4-2.7 SILTY SAND (SM), as above.
			2.7-3.2 feet: SAND (SP), as above.
			3.2-3.5 feet: NO RECOVERY.
			5.0-5.4 feet: SILTY SAND (SM), as above, loose, moist.
			5.4-6.3 feet: SAND (SP), as above, loose, moist.
			6.3-6.5 feet: NO RECOVERY.
3 SS	2-1-2	10	10.0-11.3 feet: SAND (SP), brown, fine to medium sand, trace fines, up to 10% fine subangular to subrounded gravels, loose, moist.
			11.3-11.5 feet: NO RECOVERY.
4 SS	3-4-4	15	15.0-16.5 feet: SAND (SP), brown, fine to medium sand, trace fines, loose, shoe of split spoon sampler wet at 16.5 feet.
			▽ 17.2' 10-1-93 1255
		20	

REMARKS

1) SS = Split spoon sample.

EMCON Northwest, Inc.

LOG OF EXPLORATORY BORING

EX-4/

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW-2
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.00'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5 SS	1-1-2						20.0-20.8 feet: SAND (SP), gray, fine to medium sand, <10% fines, very loose, wet.
							20.8-21.0 feet: SILTY CLAY (CL), gray, medium plastic, soft, wet.
							21.0-21.1 feet: SAND (SP), as above.
							21.1-21.5 feet: NO RECOVERY.
6 SS	2-3-3-5		25				25.0-26.9 feet: SAND (SP), as above, wet.
							26.9-27.0 feet: NO RECOVERY.
							Bottom of boring at 28.0 feet below ground surface.
							WELL COMPLETION DETAILS:
							0.28 to 17.49 feet: 2-inch-diameter, Schedule 40 PVC riser pipe.
							17.49-27.06 feet: Johnson prepacked (20-40 Colorado silica sand) 0.012-inch slotted screen interval.
							27.06 to 27.75 feet: 2-inch-diameter Schedule 40 PVC sump.
							Sherwood traffic grade flush mount.
							0 to 1.5 feet: Concrete.
							1.5 to 15.5 feet: Bentonite chips hydrated with potable water.
							15.5 to 27.75 feet: 10-20 Colorado silica sand.
							27.75 to 28.0 feet: Heave.
			30				
			35				
			40				

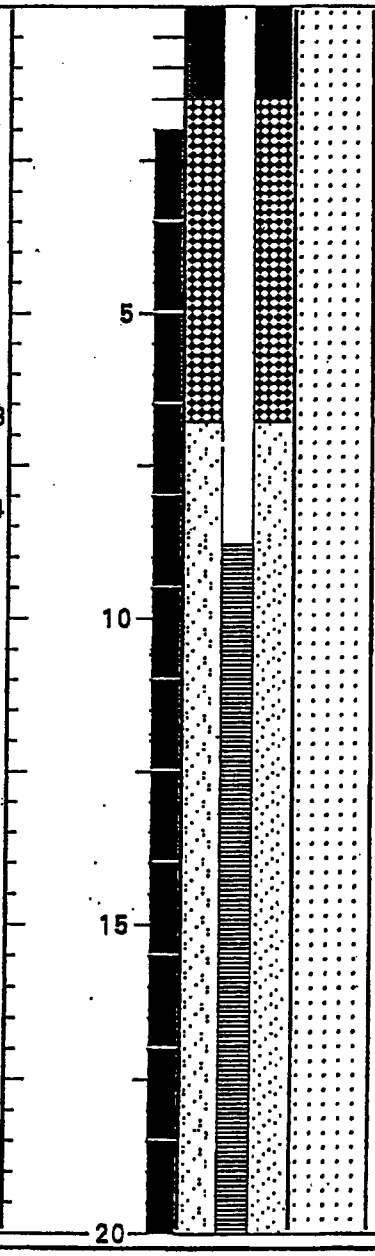
REMARKS

1) SS = Split spoon sample.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	EX- 5
LOCATION	Portland, Oregon	PAGE	1 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	32.33'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	24.00'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	LITHOLOGIC DESCRIPTION
			0 to 24.0 feet: SAND (SP), dark orangish brown to dark grayish brown, 50 to 60 percent medium sand, 40 to 50 percent fine sand, loose, moist, gravel (crushed basalt) at surface. (FILL)
2" SS	87 (0)	5-8-11 (19)	
2" SS	73 (6)	7-11-14 (25)	@ 3.5 feet: dark grayish brown.
EX-5-5' 2" SS	67 (60)	6-10-19 (29)	@ 4.9 feet: 0.1-foot layer of silty fine sand.
3" SS	73 (15)	11-24-33 (57)	@ 6.2 feet: 1 cm layer of light gray ash (?).
			@ 6.5 feet: dark gray.
3" SS	100 (700)	14-26-34 (60)	@ 7.2 feet: 1.6 foot of mixed light gray fine sand and silt with medium to coarse sand, trace fine gravel, one piece of soft brittle tar (?), 7 mm across.
3" SS	60 (15)	5-6-11 (17)	
2" SS	67 (27)	4-3-4 (7)	
2" SS	67 (10)	3-5-8 (13)	
2" SS	87 (270)	9-16-18 (34)	
2" SS	87 (500)	8-14-20 (34)	
EX-5-17 2" SS	80 (400)	7-16-19 (35)	@ 17.0 feet: wet.
3" SS	73 (800)	5-12-13 (25)	@ 19.5 feet: silty fine sand and fine sand 80 to 90 percent fine sand, 10 to 20 percent fines, a few layers of sand (as above), wet, organics common.



REMARKS

FID = Flame ionization detector, measurements in parts per million (ppm). SS = split spoon.

EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	EX-5
LOCATION	Portland, Oregon	PAGE	2 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	32.33'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	24.00'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC COLUMN	LITHOLOGIC DESCRIPTION
3" SS	80 (1050)	5-6-12 (18)						0 to 24.0 feet: SAND (SP), continued.
3" SS	87 (2000)	7-10-9 (19)						@ 20.3 feet: 0.04-foot layer of organics.
								@ 21.5 feet: 60 percent fine sand; 40 percent medium sand.
				25				Total depth drilled = 24.0 feet.
								Total depth sampled = 23.0 feet.
								WELL COMPLETION DETAILS:
								0 to 8.8 foot: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.
								8.8 to 23.3 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machine-cut slots.
				30				23.3 to 24.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap.
								0 to 1.5 feet: Concrete.
								1.5 to 6.8 feet: Bentonite chips hydrated with potable water.
								6.8 to 24.0 feet: 20 x 40 Colorado silica sand.
				35				
				40				

REMARKS

FID = Flame ionization detector, measurements in parts per million (ppm). SS = split spoon.

EMCON

LOG OF EXPLORATORY BORING

Decommissioned

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	EX- 6
LOCATION	Portland, Oregon	PAGE	1 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	35.01'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	25.00'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC COLUMN	LITHOLOGIC DESCRIPTION
3" SS	100 (0)	29-28-31 (59)						0 to 14.3 feet: SAND (SP), dark grayish brown, 50 percent medium sand, 45 percent fine sand, 5 percent fines, occasional gravel (crushed rock) to 1.5 feet, loose, damp, trace wood bark, to 1-inch-long, crushed gravel at surface. (FILL)
2" SS	100 (6)	9-20-22 (42)						
3" SS	113 (5)	12-16-22 (38)						
EX-6-4.5' 2" SS	93 (50)	10-17-21 (38)		5				@ 4.0 feet: dark orangish brown, 60 percent fine sand, 40 percent medium sand, trace fines.
3" SS	67 (300)	12-17-19 (36)						
2" SS	67 (630)	3-7-16 (23)						@ 7.0 feet: dark gray, 55 to 65 percent medium sand, 25 to 35 percent fine sand, 5 percent white medium sand, trace fines, trace wood, trace silt lenses.
3" SS	80 (40)	10-20-19 (39)		10				
2" SS	80 (5)	8-8-9 (17)						
3" SS	73 (70)	7-8-10 (18)						@ 13.0 feet: trace petroleum-like odor.
EX-6-13.5' 2" SS	87 (1500)	2-2-2 (4)						14.3 to 14.8 feet: CLAYEY SILT (ML), very dark grayish to olive brown, some organic debris, soft, wet, petroleum odor. (ALLUVIUM)
EX-6-15 3" SS	87 (1700)	9-10-11 (21)		15				14.8 to 15.0 feet: WOODY AND ORGANIC DEBRIS, black, loose, wet, sheen, petroleum odor. (ALLUVIUM)
2" SS	100 (530)	2-2-2 (4)						15.0 to 23.0 feet: SAND (SP), grayish brown, 60 percent medium sand, 40 percent fine sand, soft, wet, fine roots common. (ALLUVIUM)
2" SS	7 (NR)	1/18" (1)						
				20				

REMARKS

FID = Flame ionization detector, measurements in parts per million (ppm). Heave encountered at approximately 18.0 feet, approximately 10 gallons of potable water added. SS = Split spoon. NR = No reading.

EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	Decommissioned EX- 6
LOCATION	Portland, Oregon	PAGE	2 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	35.01'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	25.00'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC COLUMN	LITHOLOGIC DESCRIPTION
								15.0 to 23.0 feet: SAND (SP), continued.
GRAB	(600)			25				23.0 to 25.0 feet: SILT WITH FINE SAND (ML), very dark gray, 90 percent fines, 10 percent fine sand, soft, wet. (ALLUVIUM)
								Total depth drilled = 25.0 feet. Total depth sampled = 24.0 feet. WELL COMPLETION DETAILS: 0 to 9.6 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.6 to 24.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machine-cut slots. 24.0 to 24.7 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap. 0 to 1.5 feet: Concrete. 1.5 to 7.6 feet: Bentonite chips hydrated with potable water. 9.6 to 24.7 feet: 20 x 40 Colorado silica sand. 24.7 to 25.0 feet: Heave.
				30				
				35				
				40				

REMARKS

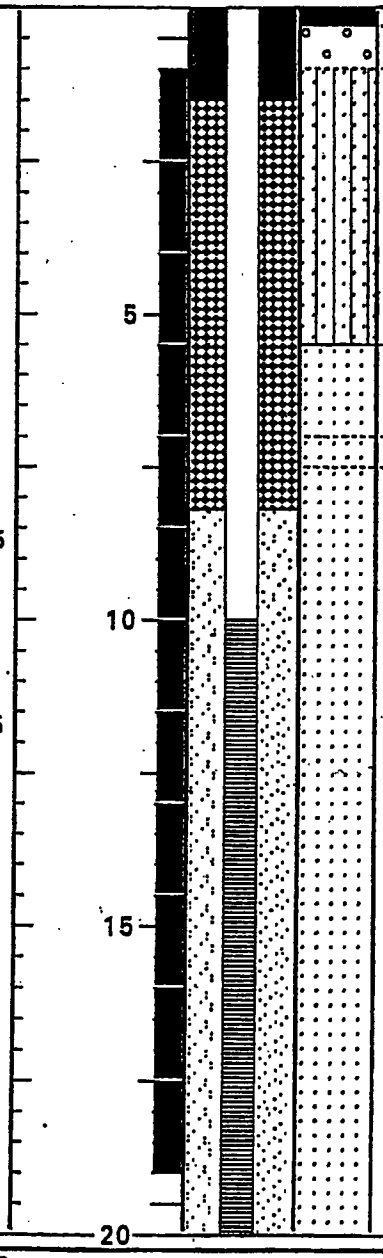
FID = Flame ionization detector, measurements in parts per million (ppm). Heave encountered at approximately 18.0 feet, approximately 10 gallons of potable water added. SS = Split spoon. NR = No reading.

EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	EX- 7
LOCATION	Portland, Oregon	PAGE	1 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	36.04'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	25.30'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	LITHOLOGIC DESCRIPTION
			0 to 0.3 foot: ASPHALT
			0.3 to 1.0 feet: GRAVEL (GP), crushed base rock.
2" SS	87 (0)	5-8-9 (17)	1.0 to 5.5 feet: FINE SAND (SP-SM), brown, 90 percent fine sand, 10 percent fines, trace medium sand, loose, moist with occasional silt layer to 1-inch. (FILL)
2" SS	87 (0)	4-7-10 (17)	
EX-7-4' 2" SS	80 (15)	4-5-5 (10)	
2" SS	67 (5)	3-4-4 (8)	5.5 to 7.0 feet: FINE SAND (SP), grayish brown, 70 percent fine sand, 30 percent medium sand interlayered with fine sand to 3/4-inch-thick, loose, moist, micaceous. (ALLUVIUM)
2" SS	73 (4)	1-3-7 (10)	7.0 to 7.5 feet: SILTY FINE SAND (SP), grayish brown, 70 percent fine sand, 30 percent silt, loose, wet (perched water), micaceous. (ALLUVIUM)
3" SS	80 (0)	6-10-15 (25)	7.5 to 25.3 feet: MEDIUM SAND (SP), brown, 60 percent medium sand, 40 percent fine sand, subangular to rounded, loose, moist. (ALLUVIUM)
2" SS	73 (2)	5-8-10 (18)	
2" SS	80 (0)	6-11-15 (26)	
2" SS	80 (4)	6-7-14 (21)	
EX-7-14.5' 2" SS	87 (2)	4-8-11 (19)	@ 14.5 feet: wet.
2" SS	87 (0)	4-6-11 (17)	
3" SS	33 (4)	2-5-10 (15)	



REMARKS

FID = Flame ionization detector, measurements in parts per million (ppm). Heave encountered at approximately 17.0 feet, approximately 40 gallons of potable water added. SS = Split spoon.

EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical Corporation	BORING NO.	EX-7
LOCATION	Portland, Oregon	PAGE	2 OF 2
DRILLED BY	GeoTech Explorations, Inc.	GROUND ELEV.	36.04'
DRILL METHOD	Hollow Stem Auger	TOTAL DEPTH	25.30'
LOGGED BY	Mike Free	DATE COMPLETED	12/19/94

SAMPLE NUMBER SAMPLE TYPE	RECOVERY PERCENT (FID, ppm)	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHOLOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				7.5 to 25.3 feet: MEDIUM SAND (SP), continued. @ 20.0 feet: dark gray.
				30				Total depth drilled = 25.3 feet. Total depth sampled = 19.0 feet. WELL COMPLETION DETAILS: 0 to 10.0 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 10.0 to 24.6 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machine-cut slots. 24.6 to 25.3 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC end cap. 0 to 1.5 feet: Concrete. 1.5 to 8.2 feet: Bentonite chips hydrated with potable water. 8.2 to 25.3 feet: 20 x 40 Colorado silica sand.
				35				
				40				

REMARKS

FID = Flame ionization detector, measurements in parts per million (ppm). Heave encountered at approximately 17.0 feet, approximately 40 gallons of potable water added. SS = Split spoon.

EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD H.S. Auger
LOGGED BY A. Coates

BORING NO. MW-1
PAGE 1 OF 1
REFERENCE ELEV. '+
TOTAL DEPTH 21.50'
DATE COMPLETED 6/13/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT (%)	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0-21.5' SAND (SM), medium brown, trace white, 30% non-plastic fines, 70% fine sand, trace fine subrounded to subangular gravel, loose to compact, moist to wet.
#1 (SS)	93%	2-3-4 (7)		5				
#2 (SS)	86%	4-2-3 (5)						@ 7-8 feet, trace fine to coarse subrounded to subangular gravel.
#3 (SS)	100%	2-3-3 (6)		10				
#4 (SS)	100%	5-6-11 (17)	▽ 16.00' 6-12-90	15				
#5 (SS)	80%	2-2-2 (4)		20				
								Bottom of borehole at 21.5 feet.
				25				

REMARKS
(SS) = Split spoon sample. Sample at depth 5-6.5 feet was named CHEM-2A, sample at depth 15-16 feet was named CHEM-2B.

SWEET-EDWARDS/EMCON

T3507.01.CHEMX.061590.MM

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 2
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.00'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0-1.5 feet: ASPHALT.
1 SS		5-6-6-9						1.5-1.9 feet: SAND (SP), light brown, fine to medium sand, trace fines, medium dense, moist.
								1.9-2.1 feet: SILTY SAND (SM), light brown, >66% fine sand, <33% low plastic fines, medium dense, moist.
								2.1-2.4 feet: SAND (SP), as above.
				5				2.4-2.7 SILTY SAND (SM), as above.
2 SS		2-3-2						2.7-3.2 feet: SAND (SP), as above.
								3.2-3.5 feet: NO RECOVERY.
								5.0-5.4 feet: SILTY SAND (SM), as above, loose, moist.
								5.4-6.3 feet: SAND (SP), as above, loose, moist.
								6.3-6.5 feet: NO RECOVERY.
3 SS		2-1-2		10				10.0-11.3 feet: SAND (SP), brown, fine to medium sand, trace fines, up to 10% fine subangular to subrounded gravels, loose, moist.
								11.3-11.5 feet: NO RECOVERY.
4 SS		3-4-4		15				15.0-16.5 feet: SAND (SP), brown, fine to medium sand, trace fines, loose, shoe of split spoon sampler wet at 16.5 feet.
			▽ 17.2' 10-1-93 1255					
				20				

REMARKS

1) SS = Split spoon sample.

EMCON Northwest, Inc.

0235-007.05 (08).23507.elm\2.10-14-93...SEELSW

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 2
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.00'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5 SS		1-1-2						20.0-20.8 feet: SAND (SP), gray, fine to medium sand, <10% fines, very loose, wet.
								20.8-21.0 feet: SILTY CLAY (CL), gray, medium plastic, soft, wet.
								21.0-21.1 feet: SAND (SP), as above.
								21.1-21.5 feet: NO RECOVERY.
6 SS		2-3-3-5		25				25.0-26.9 feet: SAND (SP), as above, wet.
								26.9-27.0 feet: NO RECOVERY.
								Bottom of boring at 28.0 feet below ground surface.
								WELL COMPLETION DETAILS:
								0.28 to 17.49 feet: 2-inch-diameter, Schedule 40 PVC riser pipe.
								17.49-27.06 feet: Johnson prepacked (20-40 Colorado silica sand) 0.012-inch slotted screen interval.
								27.06 to 27.75 feet: 2-inch-diameter Schedule 40 PVC sump.
								Sherwood traffic grade flush mount.
								0 to 1.5 feet: Concrete.
								1.5 to 15.5 feet: Bentonite chips hydrated with potable water.
								15.5 to 27.75 feet: 10-20 Colorado silica sand.
								27.75 to 28.0 feet: Heave.
				30				
				35				
				40				

REMARKS
1)SS = Split spoon sample.

EMCON Northwest, Inc.

0235-007.05 (08).23507.slm\2.10-14-93...SEELSW

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW-3
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 27.52'
DATE COMPLETED 10/4/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0-0.5 feet: ASPHALT.
								0.5-1.7 feet: SANDY GRAVEL (GW), dark gray, 70% fine to coarse subangular to angular gravels, <30% fine to coarse sand, dense, damp. (ROAD BASE)
1 SS		6-8-8-8						1.7-3.2 feet: SAND (SP), light brown, fine to medium sand, trace fines, medium dense, damp.
								3.2-3.5 feet: NO RECOVERY.
2 SS		2-2-3		5				5.0-5.7 feet: SAND (SP), brown, fine to medium sand, trace fines, medium dense, damp.
								5.7-6.5 feet: NO RECOVERY.
3 SS		2-2-2		10				10.0-11.2 feet: SAND (SP), brown, fine to medium sand, trace fines, medium dense, damp.
4 SS		2-3-4		15				15.0-16.3 feet: SANDY (SP), brown, fine to medium sand, trace fines, medium dense, moist.
								@ 18.0 feet: drilling change, became softer.
				20				

REMARKS

1) SS = Split Spoon Sample.

EMCON Northwest, Inc.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 3
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 27.52'
DATE COMPLETED 10/4/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5 SS		3-4-5						20.0-20.9 feet: SAND (SP), gray, fine to medium sand, up to 10% fines, loose, wet.
								20.9-21.0 feet: CLAYEY SILT (ML), gray, medium plastic, soft, wet.
								21.0-21.3 feet: SAND (SP), gray, fine to medium sand, up to 10% fines, loose, wet.
								21.3-21.5 feet: NO RECOVERY.
6 SS		1 for 1.5'		25				25.0-25.9 feet: CLAYEY SILT (ML), gray, medium plastic, soft, wet.
								Bottom of boring at 27.5 feet below ground surface.
								WELL COMPLETION DETAILS:
								0.68-17.26 feet: 2-inch Schedule 40 PVC riser pipe.
								17.26-26.82 feet: Johnson prepacked (20-40 Colorado silica sand) 0.012-inch slotted screen interval.
				30				26.82-27.52 feet: 2-inch Schedule 40 PVC sump.
								Sherwood traffic grade flush mount.
								0-1.5 feet: Concrete.
								1.5-15.0 feet: Bentonite chips hydrated with potable water.
				35				15.0-27.5 feet: 10-20 Colorado silica sand.
				40				

REMARKS
1)SS = Split Spoon Sample.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 4
PAGE 1 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.22'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1 SS		4-5-4-6						1.0-2.7 feet: SAND (SP), light brown, fine to medium sand, trace fines, loose, moist.
								2.7-3.0 feet: NO RECOVERY.
2 SS		3-2-3		5				5.0-5.8 feet: SAND (SP), light brown, fine to medium sand, trace fines, loose, red staining from 6.35 to 6.80 feet, moist.
								5.8-6.1 feet: SAND (SW), fine to coarse sand, local trace fine subangular gravels, moist.
								6.1-6.5 feet: NO RECOVERY.
3 SS		3-3-4		10				10.0-11.0 feet: SAND (SP), brown, fine to medium sand, trace 20% fines, loose, moist.
								11.0-11.5 feet: NO RECOVERY.
4 SS		3-3-2		15				15.0-15.9 feet: SAND (SP), brown, fine to medium sand, trace 20% fines, loose, wet at approximately 16.5 feet (drive shoe on split spoon sampler wet).
			▽ 17.4' 9-30-93 0935					15.9-16.5 feet: NO RECOVERY.
				20				

REMARKS

1) SS = Split Spoon Sample.

EMCON Northwest, Inc.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW-4
PAGE 2 OF 2
REFERENCE ELEV. ±
TOTAL DEPTH 28.22'
DATE COMPLETED 10/1/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5 SS		1-1-1-3						20.0-20.9 feet: SAND (SP), gray, 85-90% fine to medium sand, 10-15% fines, very loose, wet.
								20.9-21.25 feet: SANDY SILT (ML), gray, >60% low plastic fines, <40% fine sand, soft, wet.
								21.25-22.0 feet: SILTY SAND (SM), gray, 60-70% fine sand, 30-40% low plastic fines, soft, wet.
				25				
6 SS		0-1-1						25.0-25.5 feet: SAND (SW), gray, fine to coarse sand, very loose, wet.
								25.5-26.2 feet: CLAYEY SILT (ML), gray, medium plastic, soft, wet.
								26.2-26.5 feet: NO RECOVERY.
				30				Bottom of boring at 28.22 feet below ground surface.
								WELL COMPLETION DETAILS:
								0.50-17.96 feet: 2-inch Schedule 40 PVC riser.
								17.96-27.53 feet: Johnson prepacked (20-40 Colorado silica sand) 0.012-inch slotted screen interval.
								27.53-28.22 feet: 2-inch Schedule 40 PVC sump.
								Sherwood traffic grade flush mount.
								0-1.5 feet: Concrete.
				35				1.5-16.0 feet: Bentonite chips hydrated with potable water.
								16.0-28.22 feet: 10-20 Colorado silica sand.
				40				

REMARKS

1) SS = Split Spoon Sample.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 5
PAGE 1 OF 3
REFERENCE ELEV. ±
TOTAL DEPTH 35.50'
DATE COMPLETED 9/30/93

SAMPLE NUMBER SAMPLE TYPE	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION
1 SS	8-9-12		1.0-1.2 feet: SILTY SAND (SM), brown, 70% fine sand, 30% fines, medium dense, trace fine angular gravels, moist.
			1.2-2.2 feet: SAND (SW), brown, >90% fine to coarse sand, <10% fines, medium dense, moist, some green and red colored grains and local red and white staining. (paint or product?)
			2.2-2.5 feet: NO RECOVERY.
2 SS	2-1-1	5	5.0-5.4 feet: SAND (SW), light brown, 80% fine to coarse sand, 20% low plastic fines, local red staining (paint or product?), very loose, moist.
			5.4-6.0 feet: SAND (SP), light brown, fine to medium sand, trace fines, very loose, moist.
			6.0-7.5 feet: NO RECOVERY.
3 SS	3-2-3	10	10.0-11.5 feet: SAND (SP), light brown, fine to medium sand, trace fines, very loose, moist.
4 SS	2-3-4	15	15.0-16.5 feet: SAND (SP), light brown, fine to medium sand, trace fines, very loose, moist.
			Note: drilling change at 18.0 feet, became softer.
		20	

REMARKS
1)SS = Split Spoon Sample.

EMCON Northwest, Inc.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 5
PAGE 2 OF 3
REFERENCE ELEV. ±
TOTAL DEPTH 35.50'
DATE COMPLETED 9/30/93

SAMPLE NUMBER SAMPLE TYPE	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5 SS	1 for 1.5'						20.0-20.05 feet: SAND (SW), gray, fine to coarse, very loose, very moist.
							20.05-21.5 feet: CLAYEY SILT (ML), gray, medium plastic fines, very soft, moist to wet.
6 SS	1 for 1.5'	▽ 26.4' 9-30-93 1500	25				25.0-26.5 feet: CLAYEY SILT (ML), gray, medium plastic fines, very soft, moist to wet.
7 SS	1-1-1		30				30.0-30.4 feet: CLAYEY SILT (ML), gray, medium plastic fines, very soft, moist to wet.
							30.4-31.5 feet: SANDY SILT (ML), gray, 80% low plastic fines, 20% fine sand, soft, wet.
			35				Bottom of boring at 35.5 feet below ground surface.
							WELL COMPLETION DETAILS
							0.36-25.24 feet: 2-inch Schedule 40 PVC riser.
							25.24-34.81 feet: Johnson prepacked (20-40 Colorado silica sand) 0.012-inch slotted screen interval.
							34.81-35.50 feet: 2-inch Schedule 40 PVC sump.
							Sherwood traffic grade flush mount.
							0-1.5 feet: Concrete.
			40				

REMARKS

1)SS = Split Spoon Sample.

LOG OF EXPLORATORY BORING

PROJECT NAME CHEMAX
LOCATION Portland, Oregon
DRILLED BY GeoTech Explorations
DRILL METHOD Hollow Stem Auger
LOGGED BY C. Hultgren

BORING NO. MW- 5
PAGE 3 OF 3
REFERENCE ELEV. ±
TOTAL DEPTH 35.50'
DATE COMPLETED 9/30/93

SAMPLE NUMBER SAMPLE TYPE		BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								1.5-22.5 feet: Bentonite chips hydrated with potable water. 22.5-35.5 feet: 10-20 Colorado silica sand.
				45				
				50				
				55				
				60				

REMARKS
1)SS = Split Spoon Sample.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-6
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	26.5'
LOGGED BY	J. Renda	DATE COMPLETED	9/26/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: GRAVEL FILL
10		7 11 9		5				5.0 to 6.3 feet: SAND (SP); gray to black, fine to medium sand, trace fines.
								6.3 to 6.5 feet: SILT (ML); medium gray, non- to low-plasticity fines.
500		4 5 5		10				10.0 to 11.5 feet: SAND (SP); gray to black, fine to medium sand, trace red, green, and white roofing sands.
2000		1 1 3		15				15.0 to 16.2 feet: SILT (ML); medium gray, non- to low-plasticity fines.
								16.2 to 16.3 feet: ORGANIC lense; wood and roots.
								16.3 to 16.5 feet: SAND (SP); gray to black, fine to medium sand.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-6**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**26.5'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**9/26/01**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
100		1 1 2						**20.0 to 21.0 feet: SAND (SP)**; gray to black, fine to medium sand.
								21.0 to 21.1 feet: WOOD CHUNK
								21.1 to 21.5 feet: SILT (ML); medium gray, non- to low-plasticity fines.
600		1 0 1		25				**25.0 to 26.0 feet: SAND (SP)**; gray to black, fine to medium sand.
								26.0 to 26.5 feet: SILT (ML); medium gray, non- to low-plasticity fines.
								Boring Terminated at 25.0 feet. Split-spoon advanced to 26.5 feet.
								Well set at terminal depth. Refer to well completion details.
				30				**WELL COMPLETION DETAILS** 0 to 14.1 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 14.1 to 24.1 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 24.1 to 24.6 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap.
								0 to 1.0 feet: Concrete. 1.0 to 13.0 feet: Bentonite chips hydrated with potable water. 13.0 to 25.0 feet: 10-20 Colorado Silica Sand.
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-7
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	30.0'
LOGGED BY	J. Renda	DATE COMPLETED	9/26/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: GRAVEL FILL
0		3 3 3		5				**5.0 to 6.0 feet: SAND (SP)**; medium to dark brown, fine to medium sand, trace silt. **6.0 to 6.5 feet: SILT (ML)**; brown and gray mottled, low- to medium-plasticity fines, moist.
0		9 11 4		10				**10.0 to 11.5 feet: SAND (SP)**; medium to dark brown fine to medium sand, trace fines, trace medium gravel, dense.
0		11 23 19		15				**15.0 to 16.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, trace fines, trace medium to coarse gravel.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-7**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**30.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**9/26/01**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1000		5 7 7						**20.0 to 21.5 feet: SILTY SAND (ML)**; dark gray, 80 percent fine to medium sands, 20 percent non-plastic fines.
3000		6 9 8		25				**25.0 to 26.5 feet: SILT (ML)**; medium to dark brown, low- to medium-plasticity fines, organic rich with wood fragments.
3000		0 0 2		30				**30.0 to 31.5 feet: SILT (ML)**; grayish green, medium-plasticity fines, trace wood and roots, mottled.
				35				Boring Terminated at 30.0 feet. Split-spoon advanced to 31.5 feet. Well set at terminal depth. Refer to well completion details. **WELL COMPLETION DETAILS** 0 to 19.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 19.5 to 29.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 29.5 to 30.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 feet: Concrete. 1.0 to 18.0 feet: Bentonite chips hydrated with potable water. 18.0 to 30.0 feet: 10-20 Colorado Silica Sand.
				40				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-8
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	30.0'
LOGGED BY	J. Renda	DATE COMPLETED	9/26/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
2		6 10 8		5				**5.0 to 6.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, trace silt.
1000		14 20 17		10				**10.0 to 10.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, trace silt. @ 10.4 feet: 0.1-foot-thick rust discoloration and wood fragments. **10.5 to 11.5 feet: SILTY SAND (SM)**; dark gray, 80 percent fine to medium sand, 20 percent non- to low-plasticity fines.
4000		3 5 6		15				**15.0 to 16.5 feet: SILTY SAND (SM)**; dark gray, 80 percent fine to medium sand, 15 to 20 percent non- to low-plasticity fines, trace wood fragments.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-8
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	30.0'
LOGGED BY	J. Renda	DATE COMPLETED	9/26/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
4000		5 7 5						**20.0 to 21.5 feet: SILTY SAND (SM)**; dark gray, 80 percent fine to medium sand, 15 to 20 percent non- to low-plasticity fines, trace wood fragments.
6000		3 3 5		25				**25.0 to 26.5 feet: SILT (ML)**; medium to dark gray, non- to low-plasticity fines, trace wood fragments, laminated.
500		1 2 2		30				**30.0 to 31.0 feet: SAND (SP)**; gray to black, fine to medium sand, oily, petroleum hydrocarbon-like odor, wet. **31.0 to 31.5 feet: SILT (ML)**; dark gray, low- to medium-plasticity fines. Boring Terminated at 30.0 feet. Split-spoon advanced to 31.5 feet. Well set at terminal depth. Refer to well completion details. **WELL COMPLETION DETAILS** 0 to 19.2 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 19.2 to 29.2 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 29.2 to 29.7 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 feet: Concrete. 1.0 to 18.0 feet: Bentonite chips hydrated with potable water. 18.0 to 30.0 feet: 10-20 Colorado Silica Sand.
				35				
				40				

IT CORPORATION

REMARKS

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-9**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**25.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**11/16/01**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
5		4 3 3		5				**5.0 to 6.5 feet: SAND (SP);** medium to dark brown, fine to medium sand, trace fines.
3		2 4 5		10				**10.0 to 11.5 feet: SAND (SP);** medium to dark brown, fine to medium sand, trace fines.
2		3 6 6		15				**15.0 to 16.5 feet: SAND (SP);** medium to dark brown, fine to medium sand, trace fines.
				20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-9**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**25.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**11/16/01**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
400		2 2 2						**20.0 to 21.5 feet: SAND (SP);** dark gray to black, fine to medium sand, trace fines, wet.
400		3 10 20		25				**25.0 to 26.5 feet: SAND (SP);** dark gray to black, fine to medium sand, trace fines, wet.
								Boring Terminated at 25.0 feet. Split-spoon advanced to 26.5 feet. Well set at terminal depth. Refer to well completion details. **WELL COMPLETION DETAILS** 0 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 14.5 to 24.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 24.5 to 25.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 feet: Concrete. 1.0 to 12.2 feet: Bentonite chips hydrated with potable water. 12.2 to 25.0 feet: 10-20 Colorado Silica Sand.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-10
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	1/7/02

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
								0.5 to 2.0 feet: GRAVEL FILL
								2.0 to 2.5 feet: CONCRETE
1	1.0	3 4 5		5				5.0 to 5.3 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines. 5.3 to 5.5 feet: SILT (ML); medium brown, non- to low-plasticity fines, moist. 5.5 to 5.7 feet: SAND (SP); medium brown. 5.7 to 5.8 feet: SILT (ML); medium brown. 5.8 to 6.0 feet: SAND (SP); medium brown.
1	1.5	9 2 2		10				10.0 to 11.5 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines, moist.
15	1.3	2 2 4		15				15.0 to 15.5 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines, moist. 15.5 to 15.6 feet: SILT (ML); medium to dark gray, non- to low-plasticity fines, moist. 15.6 to 16.3 feet: SAND (SP); dark gray, fine to medium sand, trace fines, wet.
				20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-10
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	1/7/02

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
10	0.2	2 8 12						**20.0 to 20.2 feet: SAND (SP);** dark gray, fine to medium sand, trace fines, wet.
								Boring Terminated at 20.0 feet. Split-spoon advanced to 21.5 feet. Well set at terminal depth. Refer to well completion details. **WELL COMPLETION DETAILS** 0 to 9.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.5 to 19.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 19.5 to 20.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 feet: Concrete. 1.0 to 7.5 feet: Bentonite chips hydrated with potable water. 7.5 to 20.0 feet: 10-20 Colorado Silica Sand.
				25				
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-11
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	J. Renda	DATE COMPLETED	1/7/02

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
								0.5 to 7.0 feet: GRAVEL (GW)
NA	0	10 3 5		5				
4	1.5	7 4 3		10				10.0 to 11.5 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines.
4000	1.0	5 5 5		15				15.0 to 16.5 feet: SAND (SP); dark gray to black, fine to medium sand, oil saturated, gasoline-like odor, moist.
				20				

IT CORPORATION

REMARKS

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-11
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	J. Renda	DATE COMPLETED	1/7/02

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	LITHOLOGIC DESCRIPTION
700	1.5	1 1 1	**20.0 to 20.5 feet: SAND (SP)**; dark gray to black, fine to medium sand, oil saturated, gasoline-like odor, wet. **20.5 to 21.5 feet: SILT (ML)**; greenish-gray, low- to medium-plasticity fines, gasoline-like odor, moist.
50	1.5	2 2 5	**25.0 to 26.5 feet: SILT (ML)**; greenish-gray, grading to tan and light gray mottled, low- to medium plasticity fines.
			Boring Terminated at 25.0 feet. Split-spoon advanced to 26.5 feet. Well set at terminal depth. Refer to well completion details.

WELL COMPLETION DETAILS

0 to 9.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.
9.5 to 24.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen.
24.5 to 25.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap.

0 to 1.0 feet: Concrete.
1.0 to 8.0 feet: Bentonite chips hydrated with potable water.
8.0 to 25.0 feet: 10-20 Colorado Silica Sand.

25
30
35
40

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-12**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**25.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**1/7/02**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	LITHOLOGIC DESCRIPTION
			0 to 0.5 foot: ASPHALT
2	1.0	4 11 7	**5.0 to 6.5 feet: SAND (SP);** medium brown, fine to medium sand, trace fines.
700	1.5	2 1 2	**10.0 to 11.5 feet: SILT (ML);** medium gray, low- to medium-plasticity fines.
300	0.5	1 2 2	**15.0 to 16.5 feet: SAND (SP);** medium gray, fine sand, trace fines.

GROUND WATER LEVEL | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHO-LOGIC COLUMN

5
10
15
20

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-12**
LOCATION	**Portland, Oregon**	PAGE	**2 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**25.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**1/7/02**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
7	1.0	6 15 13						**20.0 to 21.5 feet: SAND (SP)**; medium gray, fine to medium sand, trace fines.
500	1.5	2 2 3		25				**25.0 to 26.5 feet: SILT (ML)**, medium gray, non- to low-plasticity. @ 25.5 feet: 0.2-foot-thick sandy/oily lense. Boring Terminated at 25.0 feet. Split-spoon advanced to 26.5 feet. Well set at terminal depth. Refer to well completion details. **WELL COMPLETION DETAILS** 0 to 9.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.5 to 24.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen. 24.5 to 25.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap. 0 to 1.0 feet: Concrete. 1.0 to 8.0 feet: Bentonite chips hydrated with potable water. 8.0 to 25.0 feet: 10-20 Colorado Silica Sand.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	**McCall Oil and Chemical**	BORING NO.	**MW-13**
LOCATION	**Portland, Oregon**	PAGE	**1 of 2**
DRILLED BY	**Geo-Tech Explorations, Inc.**	REFERENCE ELEV.	
DRILL METHOD	**Hollow-stem Auger**	TOTAL DEPTH	**30.0'**
LOGGED BY	**J. Renda**	DATE COMPLETED	**1/7/02**

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 1.0 foot: GRAVEL (GW)
5	0.1	4 4 5		5				**5.0 to 5.1 feet: SAND (SP)**; medium to dark, fine to medium sand, trace fines.
20	1.0	3 2 3		10				**10.0 to 11.5 feet: SAND (SP)**; medium gray, fine and fine to medium stratified sand, in layers of 0.3-foot thick.
200	1.0	3 2 6		15				**15.0 to 16.5 feet: SAND (SP)**; medium gray, fine sand, laminated.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-13
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	30.0'
LOGGED BY	J. Renda	DATE COMPLETED	1/7/02

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	LITHOLOGIC DESCRIPTION
700	1.0	3 6 6	**20.0 to 20.5 feet: SAND (SP);** medium to dark gray, fine sand, trace fines. **20.5 to 21.5 feet: SAND (SP);** medium to dark gray, fine to medium sand, trace fines.
700	1.0	1 2 2	**25.0 to 26.5 feet: SAND (SP);** medium gray, fie sand with wood fragment laminations, trace fines.
2000	1.5	2 4 9	**30.0 to 31.5 feet: SILT (ML);** medium gray, low to medium plasticity fines wit wood fragments, wet.

Boring Terminated at 30.0 feet. Split-spoon advanced to 31.5 feet.
Well set at terminal depth. Refer to well completion details.

WELL COMPLETION DETAILS
0 to 14.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.
14.5 to 29.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen.
29.5 to 30.0 feet: 0.020-inch machined slots and 2-inch-diameter threaded end cap.

0 to 1.0 feet: Concrete.
1.0 to 13.0 feet: Bentonite chips hydrated with potable water.
13.0 to 30.0 feet: 10-20 Colorado Silica Sand.

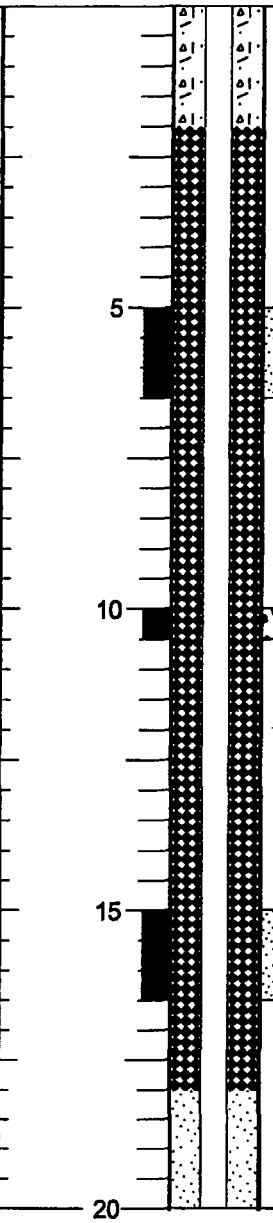
REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	1 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-Inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (in feet)	BLOWS PER 6 INCHES	LITHOLOGIC DESCRIPTION
SS	1.1	5 11 22	**5.0 to 6.5 feet: SAND (SP)**; medium to dark brown; fine to medium sand; trace silt; moist.
SS	0.3	50	**10.0 to 10.5 feet: SANDY GRAVEL WITH SILT (GW-GM)**; medium brown; fine to medium; angular to subrounded gravel; fine to coarse sand; nonplastic to low plasticity fines; dense; moist.
SS	1.3	30 5 10	**15.0 to 16.5 feet: SILTY SAND (SM)**; medium brown; fine sand; 15 to 25 percent nonplastic fines; medium density; moist.



REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	2 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (in feet)	BLOWS PER 6 INCHES	LITHOLOGIC DESCRIPTION
SS	1.5	3 4 8	**20.0 to 21.5 feet: SILT (ML)**; dark gray; low plasticity fines; trace fine sand; trace wood debris and glass; stiff; moist to wet.
SS	1.5	4 5 8	**25.0 to 26.5 feet: SILTY SAND (SP)**; dark gray; fine sand interbedded with nonplastic to low plasticity fines; wet.
SS	1.3	3 4 6	**30.0 to 31.5 feet: SILT (ML)**; dark gray; low plasticity fines; 5 to 10 percent fine sand; trace roots and wood fragments; wet.
SS	1.5	3 4 8	**35.0 to 36.5 feet: SILT (ML)**; same as above.
			Boring terminated at 35.0 feet. Split-spoon advanced to 36.5 feet.
			See Page 3 for Well Completion Details

GROUND WATER LEVEL | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHO-LOGIC COLUMN

25 30 35 40

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	3 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (In feet)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				45				**WELL COMPLETION DETAILS** 0 to 20.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 20.8 to 34.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots. 34.8 to 35.3 feet: 2-inch-diameter threaded end cap. 0 to 2.0 feet: Concrete. 2.0 to 18.0 feet: Pure Gold bentonite chips hydrated with potable water. 18.0 to 35.3 feet: 20-40 Colorado silica sand.
				50				
				55				
				60				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-15
LOCATION		PAGE	1 of 2
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163328 L64734

SAMPLE METHOD	RECOVERY (in feet)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 5.5 feet: SANDY GRAVEL WITH SILT (GW-GM); medium brown; fine to coarse; angular to subrounded gravel; fine to coarse sand; 10 to 20 percent nonplastic to low plasticity fines; moist.
SS	1.0	20 11 12		5				**5.5 to 6.0 feet: SILT (ML);** medium brown; nonplastic to low plasticity fines; trace brick and wood fragments; moist.
SS	0.6	30 21 11		10				**10.0 to 11.5 feet: SILTY SAND (SM);** dark brown to black; fine to medium sand; nonplastic to low plasticity fines; trace wood; wire; and brick fragments; moist.
SS	1.5	7 8 10		15				**15.0 to 16.0 feet: SAND (SP);** dark gray; fine sand; loose; wet. **16.0 to 16.5 feet: SILT (SM);** dark gray to black; low plasticity fines with wood and root fragments; 5 to 10 percent fine sand; wet.
				20				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-15
LOCATION		PAGE	2 of 2
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163328 L64734

SAMPLE METHOD	RECOVERY (in feet)	BLOWS PER 6 INCHES	LITHOLOGIC DESCRIPTION
SS	0.4	8 10 11	**20.0 to 21.5 feet: SAND (SP)**; grayish brown; fine sand; 5 to 15 percent nonplastic fines; wet.
SS	1.4	3 7 13	**25.0 to 25.5 feet: SAND (SP)**; same as above. **25.5 to 26.5 feet: SILT (ML)**; tan; medium plasticity fines; trace orange streaks; stiff; moist.

Boring terminated at 25.0 feet.
Split-spoon advanced to 36.5 feet.

WELL COMPLETION DETAILS

0 to 9.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe.
9.5 to 24.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots.
24.5 to 25.0 feet: 2-inch-diameter threaded end cap.

0 to 2.0 feet: Concrete.
2.0 to 8.0 feet: Pure Gold bentonite chips hydrated with potable water.
8.0 to 25.0 feet: 20-40 Colorado silica sand.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

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						@ 18.0 feet: 0.1-foot silt lense.
				20				

IT CORPORATION

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.

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	PID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				Boring terminated at 20.0 feet. Borehole 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 = 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	LITHOLOGIC 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)
		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						18.0 to 20.0 feet: SAND (SP); gray to black; fine to medium sand; trace silt.
				20				

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

MCCALL.gds.1.2/5/01.MCCALL...820910

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
				25				Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 14.8', pH = 6.88, Conductivity = 278 µS, Temp. = 14.5°C.

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	PID	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. 15.4 to 20.0 feet: SAND (SP); medium to dark gray; fine to medium sand; petroleum hydrocarbon odor; sheen.
		4						
		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
				25				Boring terminated at 20.0 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 = 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
				25				Boring terminated at 20.0 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 = 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						
		1		10				
		0						
		0		15				
		1	▽					@ 17.8 feet: wet.
		1						19.0 to 20.0 feet: SAND (SP); medium to dark gray; fine to medium sand; trace silt.
				20				

IT CORPORATION

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.

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				

IT CORPORATION

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.

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	PID	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						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.
		1		5				3.0 to 8.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		1						
		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		10				9.0 to 20.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		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
				25				Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

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.

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.
		0						3.0 to 3.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
		0						3.5 to 4.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		1						4.0 to 4.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
		0						4.5 to 5.5 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		0		10				5.5 to 6.0 feet: SILT (ML); light to medium brown; non to low plasticity fines; wet.
		1						6.0 to 9.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
		0						9.0 to 9.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines; petroleum hydrocarbon odor.
		4	▽	15				9.5 to 17.0 feet: SAND (SP); light to medium brown; fine to medium sand; trace silt.
								@ 15.7 feet: wet.
		3						17.0 to 17.5 feet: SILT (ML); medium to dark gray; non to low plasticity fines; trace silt.
		2						17.5 to 20.0 feet: SAND (SP); medium to dark gray; fine to medium sand; trace silt.
				20				@ 19.5 feet: 0.1-foot wood fragment.

IT CORPORATION

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.

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
				25				Boring terminated at 20.0 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 = 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)
		3						2.0 to 2.5 feet: SILT (ML); medium to dark brown; non to low plasticity fines; wood fragments.
		3		5				2.5 to 5.5 feet: SAND (SP); medium gray with red and green grains; fine to medium sand.
		2						5.5 to 5.7 feet: SAND (SP); red; fine to medium sand. (ROOFING SAND)
		3						5.7 to 5.9 feet: SAND (SP); green and yellow; fine to medium sand. (ROOFING SAND)
		105		10				5.9 to 6.2 feet: SAND (SP); red and white; fine to medium sand. (ROOFING SAND)
		2						6.2 to 7.0 feet: SAND (SP); light to medium brown; fine to medium sand.
		2	▽					7.0 to 8.0 feet: SAND (SP); red, green, white and dark brown, fine to medium sands, layered. (ROOFING SAND)
		30		15				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.
		1000						11.0 to 17.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
								@ 14.5 feet: wet.
								17.0 to 18.5 feet: SAND (SP); dark gray to black; fine to medium sand; trace silt.
				20				18.5 to 20.0 feet: SILT (ML); medium to dark gray; low to medium plasticity fines; trace root hairs.

IT CORPORATION

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.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-8
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	PID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

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.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-9
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
		0						0 to 2.0 feet: SANDY GRAVEL (GW); fine to coarse, angular basalt gravel with sand and silt. (FILL)
		1						2.0 to 3.8 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		0		5				3.8 to 4.0 feet: SILT (ML); medium to dark gray; non to low plasticity fines. 4.0 to 6.5 feet: SAND (SP); gray to black; fine to medium sand; trace silt. Slight petroleum hydrocarbon-like odor.
		2						6.5 to 7.0 feet: SILT (ML); medium to dark gray; non to low plasticity fines. 7.0 to 14.5 feet: SAND (SP); gray to black; fine to medium sand; trace silt; trace red and green roofing sand.
		1		10				
		1						@ 11.5 to 12.0 feet: consolidated oily layer.
		2						
		2	▽	15				14.5 to 17.8 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		3						
		70						17.8 to 19.0 feet: SAND (SP); gray to black; fine to medium sand; trace silt. 19.0 to 20.0 feet: SILT (ML); medium to dark gray; non to low plasticity fines.
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.0', pH = 7.13, Conductivity = 474 µS, Temp. = 14.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-9
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
				25				Boring terminated at 20.0 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 = 15.0', pH = 7.13, Conductivity = 474 µS, Temp. = 14.8°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-10
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 0.5 foot: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt. (FILL)
								0.5 to 3.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		3						**3.0 to 13.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
								@ 3.5 feet: wood fragment.
		3		5				
								@ 6.0 feet: 0.2-foot gray silt lense.
		5						@ 7.0 feet: 0.2-foot gray silt lense.
		4						
				10				
		5						
		5						**13.0 to 14.0 feet: SILTY SAND (SM)**; medium to dark gray; 80 percent fine to medium sand; 20 percent non to low plasticity fines.
		4	▽	15				**14.0 to 20.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
		4						@ 17.5 to 18.5 feet: color change to brown.
		4						
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.7', pH = 6.97, Conductivity = 557 µS, Temp. = 14.2°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-10
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

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 15.7', pH = 6.97, Conductivity = 557 µS, Temp. = 14.2°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-11
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	PID	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. (FILL)
		3						**2.0 to 7.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		3		5				
		4						**7.0 to 7.1 feet: SAND (SP)**; rust-colored; consolidated.
		5						**7.1 to 7.3 feet: SILT (ML)**; medium to dark gray; non to low plasticity fines with charred wood fragments.
				10				**7.3 to 13.5 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace red, green, and white roofing sands.
		3						@ 10.5 feet: 0.2-foot-thick gray silt layer.
		5						@ 11.5 feet: red, green and white roofing sands no longer present.
		2		15				**13.5 to 14.0 feet: SILT (ML)**; medium brown; non to low plasticity fines; root hairs.
		2	▽					**14.0 to 20.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
		8		20				

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 16.9', pH = 6.96, Conductivity = 343 µS, Temp. = 14.1°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-11
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
				25				Boring terminated at 20.0 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 = 16.9', pH = 6.96, Conductivity = 343 µS, Temp. = 14.1°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-12
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 1.0 foot: SANDY GRAVEL (GW); fine to coarse, angular basalt and gravel with sand and silt. (FILL)
		1						1.0 to 3.0 feet: SAND (SP); medium brown; fine to medium sand with silt and gravel.
		1						3.0 to 8.0 feet: SAND (SP); medium brown; fine to medium sand.
		1		5				
		1						
		1						8.0 to 9.2 feet: GRAVELLY SAND (SP); grayish brown; 80 to 85 percent fine to medium sand; 15 to 20 percent fine to medium gravel, subrounded; trace silt.
		9		10				9.2 to 10.0 feet: SAND (SP); medium brown; fine to medium sand.
								10.0 to 12.0 feet: SILT (ML); medium to dark gray; low to medium plasticity fines.
		1						12.0 to 15.0 feet: SAND (SP); medium to dark gray; fine to medium sand.
		1		15				15.0 to 16.0 feet: SILT (ML); medium to dark gray; low to medium plasticity fines.
		1						16.0 to 24.0 feet: SAND (SP); medium to dark gray; fine to medium sand; trace silt.
		1						
		1		20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 19.5', pH = 6.84, Conductivity = 519 µS, Temp. = 9.6°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-12
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
		10						16.0 to 24.0 feet: SAND (SP); continued.
				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 = 19.5', pH = 6.84, Conductivity = 519 µS, Temp. = 9.6°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-13
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 1.0 foot: SAND (SP); medium brown; fine to medium sand; trace silt.
		1						1.0 to 3.0 feet: ASPHALT DEBRIS
		1						3.0 to 7.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		1		5				@ 5.0 feet: 0.5-foot-thick asphalt and gravel layer.
		1						7.0 to 13.0 feet: SILT (ML); medium brown; low to medium plasticity fines with coarse gravel and asphalt.
		2						@ 7.8 feet: a piece of copper wire.
		0		10				
		1						13.0 to 14.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
		1		15				14.0 to 18.0 feet: SILT (ML); medium brown; low to medium plasticity fines. Some gray-brown mottling; root hairs.
		1						
		1						18.0 to 22.0 feet: SAND (SP); medium brown; fine to medium sand; trace silt.
				20				

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 21.0', pH = 6.96, Conductivity = 673 µS, Temp. = 11.7°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-13
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
		15	▽					**18.0 to 22.0 feet: SAND (SP)**; continued.
		2						**22.0 to 24.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
				25				Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 21.0', pH = 6.96, Conductivity = 673 µS, Temp. = 11.7°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-14
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	PID	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		1						**0 to 0.5 foot: GRAVELLY SAND (SP)**; medium brown; fine to medium sand with fine to coarse, subangular to subrounded gravel.
		1						**0.5 to 18.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace fines.
		1		5				
		1						
		1		10				@ 9.0 to 9.7 feet: SILT (ML); medium brown; low to medium plasticity.
		1						
		1		15				@ 14.0 to 18.0 feet: trace gravel.
		1						@ 16.0 to 18.0 feet: increase in silt.
		1						
		1		20				**18.0 to 20.0 feet: GRAVEL AND COBBLES**

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 22.2', pH = 6.96, Conductivity = 542 µS, Temp. = 9.3°C.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-14
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
		4	▽					**20.0 to 24.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace fines.
		1						@ 21.8 feet: roots and wood fragment.
				25				Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

REMARKS

(1) Flame Ionization Detector calibrated to 98 ppm Isobutylene. (2) Groundwater sample collected at terminal depth. DTW = 22.2', pH = 6.96, Conductivity = 542 µS, Temp. = 9.3°C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-15
LOCATION	Portland, Oregon	PAGE	1 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
		1						**0 to 0.5 foot: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt. (FILL)
		1						**0.5 to 12.0 feet: SAND (SP)**; medium brown; fine to medium sand; trace silt.
		1		5				
		1						@ 7.0 feet: 0.2-foot silt lense with charred wood. Trace green and red roofing sand.
		1						@ 9.0 feet: yellow rock. Firebrick?
		2		10				@ 11.0 feet: gray, silty sand with charred wood.
		1						**12.0 to 16.5 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.
		2		15				
		3						**16.5 to 18.5 feet: SILT (ML)**; medium to dark gray; low to medium plasticity fines; trace fine to medium sand.
		8						**18.5 to 22.0 feet: SAND WITH SILT (SP-SM)**; medium to dark gray; 85 to 90 percent fine to medium sand; 10 to 15 percent low plasticity fines; trace roots, twigs,
				20				

IT CORPORATION

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.

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
		200						and wood fragments.
		40	▽					@ 21.0 feet: wet.
		40		25				**22.0 to 27.5 feet: SILT (ML);** medium to dark gray; low plasticity fines; decrease in moisture.
		60						**27.5 to 29.5 feet: SILT (ML);** medium to dark gray; low to medium plasticity fines.
		600						**29.5 to 30.5 feet: SAND (SP);** medium to dark gray; fine to medium sand; oily.
		400		30				**30.5 to 31.0 feet: SILT (ML);** medium to dark gray; low to medium plasticity fines.
								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				

IT CORPORATION

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.

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
		1						**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		5				@ 4.0 to 5.0 feet: increase in sand.
		1						@ 5.4 feet: wood fragment.
		1						**5.5 to 8.5 feet: SAND (SP)**; medium to dark gray; fine to medium sand; trace silt.
		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.
		1		10				**9.5 to 15.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand.
		2						
		20		15				**15.0 to 20.0 feet: SILT (SM)**; medium to dark gray; non to low plasticity fines; micaceous.
		20						@ 19.0 feet: 0.2-foot sand layer, medium to dark gray.
				20				

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-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				

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-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.
								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		15				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.
		1	▽					
				20				

IT CORPORATION

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.

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	LITHOLOGIC 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.**
		300						@ 22.0 feet: black plastic sheeting.
								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	PID	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						**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.
				10				**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						
		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						**17.0 to 24.0 feet: SAND (SP)**; gray to black; fine to medium sand; trace silt.
				20				

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						
				25				Boring terminated at 24.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

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.

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
		1						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		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				

IT CORPORATION

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.

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
				25				Boring terminated at 20.0 feet. Boring backfilled with bentonite chips.
				30				
				35				
				40				

IT CORPORATION

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.

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						**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				**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				
		2						@ 16.0 feet: roofing sand no longer present.
		1	▽					
				20				

IT CORPORATION

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.

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				

IT CORPORATION

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.

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	PID	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						
		4		10				@ 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				

IT CORPORATION

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.

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

IT CORPORATION

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.

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.
		10		5				@ 2.5 to 4.0 feet: slight petroleum hydrocarbon-like odor.
		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.
		300		15				**13.4 to 14.5 feet: SILT (ML)**; medium to dark gray; low to medium plasticity fines; wet. **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. **17.0 to 21.0 feet: SAND (SP)**; medium to dark gray; fine to medium sands; trace silt. @ 17.8 feet: laminated wood.
		250		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
		600	▽	25				**17.0 to 21.0 feet: SAND (SP)**; continued. @ 21.0 feet: wet.
		200						**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.
				30				Boring terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				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	PID (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.
		6		10				**9.5 to 10.0 feet: SAND (SP)**; medium to dark brown; fine to medium sands, subangular; trace silts. **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.
		500						**17.4 to 18.2 feet: SILT (ML)**; dark gray; medium to high plasticity fines; wet. **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				

IT CORPORATION

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.

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						**8.0 to 10.0 feet: SILT (ML)**; medium to dark gray; non to low plasticity fines.
		600		10				**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. **12.0 to 17.2 feet: SILT (ML)**; dark gray; low to medium plasticity fines. @ 14.0 to 14.9 feet: wet silt.
		400		15				
		2000						**17.2 to 18.0 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts.
		500	▽					**18.2 to 20.0 feet: SILT (ML)**; dark gray; medium to high plasticity clays; wet. @ 18.6 feet: wet.
				20				

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				

IT CORPORATION

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.

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				

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-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
				25				Boring terminated at 20.0 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 = 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						
		200		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.
		3000						@ 22.15 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 = 22.15', 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.
		30						@ 18.0 to 18.5 feet: decreased plasticity.
				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	PID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		80						**18.5 to 21.2 feet: SAND (SP)**; continued.
		300	▽					**21.2 to 24.0 feet: SILT (ML)**; dark gray; non to low plasticity fines; high dilatancy noted. @ 23.2 feet: wet.
		40		25				**24.0 to 27.5 feet: SAND (SP)**; dark gray; fine to medium sands, subangular, trace felsics; trace silts; wet.
		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						@ 18.5 to 19.0 feet: grayish brown color.
				20				

IT CORPORATION

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.

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. **3.5 to 17.2 feet: SAND (SP)**; light to medium brown; fine to medium sands, subangular. @ 4.0 to 5.0 feet: oily; petroleum hydrocarbon-like odor, trace wood.
		3						@ 6.0 to 6.5 feet: trace red and yellow roofing sands.
		1						@ 6.5 to 6.7 feet: oily; petroleum hydrocarbon-like odor to sand.
		1		10				
		0						
		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				

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-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
				25				**19.7 to 20.0 feet: SILT (ML)**; medium to dark gray; non to low plasticity fines; wet.
				30				Boring terminated at 20.0 feet.
				35				Borehole backfilled with bentonite chips.
				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						**0 to 1.0 foot:** SANDY GRAVEL (GW); fine to coarse angular gravel; fine to coarse sands. (FILL)
		2						**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.
		9		5				**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.
		0						@ 4.9 to 5.5 feet: oily; 0.2 foot chunk of brittle tar with copper wire, trace red and green roofing sands.
		0		10				**5.5 to 17.2 feet:** SAND (SP); medium to dark brown sand; fine to medium sands, subangular, trace felsics; trace silts.
		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				

IT CORPORATION

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.

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
				25				**19.5 to 20.0 feet: SILT (ML)**; dark gray; medium to high plasticity fines; wet.
				30				Boring terminated at 20.0 feet.
				35				Borehole backfilled with bentonite chips.
				40				

IT CORPORATION

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.

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	PID (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		20				**19.0 to 19.3 feet: SILT (ML)**; dark gray; medium to high plasticity fines.

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-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
				25				**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.
				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				

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-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				

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-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.
		20		5				3.5 to 4.0 feet: SILT (ML); dark gray; non to low plasticity fines. 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						8.0 to 12.0 feet: SAND (SP); medium to dark gray; fine to medium sands, subangular; trace silts.
		300		10				@ 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				

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-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	PID (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						
		50		15				14.0 to 14.5 feet: SANDY GRAVEL (GW); fine to coarse angular basalt gravel; fine to coarse sands; trace silts.
								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
		100						**14.5 to 24.7 feet: SAND (SP)**; continued.
		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				

IT CORPORATION

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.

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						
		60		10				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				

IT CORPORATION

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.

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				

IT CORPORATION

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.

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						18.2 to 20.0 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 = 15.3', pH = 5.90, conductivity = 346, temp = 11.7°C.

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
				25				Boring terminated at 20.0 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 = 15.3', pH = 5.90, conductivity = 346, temp = 11.7°C.

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
		1						0 to 0.5 feet: ASPHALT
								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.
								8.0 to 8.5 feet: SILT (ML); dark gray; low to medium plasticity fines; moist.
				10				8.5 to 9.0 feet: SAND (SP); dark brown; fine to medium sands.
		300						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.
		5	▽	15				@ 15.0 feet: wet.
								15.0 to 16.0 feet: SAND (SP); dark brown; fine to medium sands.
								16.0 to 16.5 feet: SILT (ML); dark gray; low to medium plasticity fines.
		200						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						18.0 to 19.2 feet: SAND (SP); dark gray; fine to medium sands.
				20				

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-38
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
				25				**19.2 to 20.0 feet: SILT (ML);** dark gray; medium to high plasticity fines.
				30				Boring terminated at 20.0 feet.
				35				Borehole backfilled with bentonite chips.
				40				

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	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 foot: ASPHALT
		2						0.5 to 1.5 feet: SANDY GRAVEL (GW); fine to coarse angular basalt gravel, fine to coarse sands. (FILL)
		7						1.5 to 17.5 feet: SAND (SP); medium to dark brown; fine to medium sands, subangular; trace silts.
		0		5				@ 3.2 to 3.7 feet: increased silt.
		0						
		0						
		0		10				@ 9.5 feet: trace red, yellow and green roofing sands.
		0						
		0						
		0		15				
		2	▽					@ 16.5 feet: wet.
		60						17.5 to 20.0 feet: SAND (SP); dark gray; fine to medium sands, subangular, trace felsics; trace silts.
				20				

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.

IT CORPORATION

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
				25				Boring terminated at 20.0 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 = 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.
		0		5				2.0 to 2.3 feet: SILT (ML); medium to dark brown; medium to high plasticity fines.
		0						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		10				
		0						
		0						
		1		15				
		2	▽					@ 18.4 feet: wet.
		40		20				

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				

IT CORPORATION

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.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-41
LOCATION	Portland, Oregon	PAGE	1 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary and Direct Push	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/3/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		2						**0 to 1.0 foot: ASPHALT AND BASE FILL**
		1						**1.0 to 6.0 feet: SAND (SP)**; light to medium brown, fine to medium, subangular to well rounded sand.
		1		5				@ 3.6 feet: 0.2 foot silt lense.
		50						**6.0 to 7.8 feet: SILT (ML)**; gray; low to medium plasticity fines, trace root hairs, petroleum hydrocarbon-like sheen.
		200						**7.8 to 8.5 feet: SAND (SP)**; gray; fine to medium, subangular to subrounded sand, trace silt.
								8.5 to 8.8 feet: SANDY SILT (SM); light to medium brown, 70 percent low to medium plasticity fines, 30 percent subangular to subrounded sand.
		4		10				**8.8 to 9.2 feet: SILT (ML)**; gray; low to medium plasticity fines.
		200						**9.2 to 17.5 feet: SAND (SP)**; gray, fine to medium, subangular to subrounded sand.
		4		15				@ 14.0 feet: 0.2 foot silt lense, brown.
		250	▽					**17.5 to 19.0 feet: SAND (SP)**; brown, fine to medium, subangular to subrounded sand.
		1000						@ 17.5 feet: wet.
								19.0 to 24.5 feet: SILT (ML); gray, medium to high plasticity, trace root hairs, trace fine micaceous sand,
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) 0 to 52.0 feet logged from Geoprobe borehole. 52.0 to 77.5 feet logged from mud rotary borehole.

IT CORPORATION

MCCALL3.gdx:2.5/25/01.MCCALL3...820910/09000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-41
LOCATION	Portland, Oregon	PAGE	2 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary and Direct Push	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/3/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		800						horizontal black banding.
		1000						
		1500		25				**24.5 to 27.0 feet: SILT (ML)**; light greenish gray, trace charred wood, trace fine gravel, moist.
		300						**27.0 to 28.0 feet: CLAYEY SILT (MH)**; light reddish brown, medium to high plasticity silt, mottled, trace weathered fine gravel fragments.
		25						**28.0 to 31.5 feet: SILT (ML)**; light brown, medium to high plasticity fines, mottled, moist.
		20		30				
		20						**31.5 to 39.0 feet: SAND (SP)**; light to medium brown; fine sand, subangular to subrounded, trace silt, wet.
		6		35				
		30						
		60						**39.0 to 44.0 feet: SILT (ML)**; light to medium brown, medium plasticity fines.
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) 0 to 52.0 feet logged from Geoprobe borehole. 52.0 to 77.5 feet logged from mud rotary borehole.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-41
LOCATION	Portland, Oregon	PAGE	3 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary and Direct Push	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/3/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		15						**39.0 to 44.0 feet: SILT (ML)**, continued.
		10						
		1		45				**44.0 to 72.5 feet: SILTY SAND (SM)**; light to medium brown, 60 to 70 percent fine sand, subangular to subrounded, micaceous, 30 to 40 percent non to low plasticity fines.
		4						
		3						
		1		50				
		3						
		3		55				@ 55.0 to 56.0 feet: increase in silt.
		5						@ 57.5 to 58.0 feet: silt lense.
				60				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) 0 to 52.0 feet logged from Geoprobe borehole. 52.0 to 77.5 feet logged from mud rotary borehole.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-41
LOCATION	Portland, Oregon	PAGE	4 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary and Direct Push	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/3/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		4						**44.0 to 72.5 feet: SILTY SAND (SM)**, continued.
		4						
				65				
		6						
		6						
				70				@ 70.0 feet: 0.2-foot silt lense.
		5						
		7						**72.5 to 73.2 feet: SILT (ML)**; light to medium brown, low to medium plasticity, 5 to 10 percent fine to medium sand.
								73.2 to 73.6 feet: SAND (SP); dark gray to black, fine to medium sand.
		15		75				**73.6 to 75.0 feet: SILT (ML)**; gray, non to low plasticity fines, dense.
								75.0 to 75.3 feet: SAND (SP); dark gray to black, fine to medium sand.
								75.3 to 77.5 feet: BASALT
								Boring terminated at 77.5 feet. Borehole backfilled with high solids bentonite grout.
				80				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene. (2) 0 to 52.0 feet logged from Geoprobe borehole. 52.0 to 77.5 feet logged from mud rotary borehole.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-42
LOCATION	Portland, Oregon	PAGE	1 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/4/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 1.0 foot: ASPHALT and BACKFILL
								1.0 to 2.7 feet: SILTY SAND (SM); light to medium brown, 80 percent fine to medium, subangular to subrounded sand, 20 percent non to low plasticity fines.
	5 6 8	1						**2.7 to 9.0 feet: SAND (SW)**; medium to dark gray; fine to coarse, subangular to subrounded sand, 30 to 50 percent green, red, white, and yellow roofing sands.
	4 6 9	1		5				
	5 8 12	7						
	11 10 11	20		10				**9.0 to 13.9 feet: SAND (SP)**; gray to black; fine to medium sand, trace fines, oily with petroleum hydrocarbon-like odor. @ 9.0 feet: oily wood fragment.
	7 6 8	35						**13.9 to 17.5 feet: SAND (SP)**; brown, fine to medium, subangular to subrounded sand.
	6 4 6	7	▽	15				@ 16.5 feet: wet.
	6 6 5	300						**17.5 to 19.0 feet: SAND (SP)**; gray to black, fine to medium, subangular to subrounded.
				20				**19.0 to 25.0 feet: SAND (SP)**; light to medium gray, fine sand, subangular to subrounded, trace silt.

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-42
LOCATION	Portland, Oregon	PAGE	2 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/4/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	0 0 0	1000						**19.0 to 25.0 feet: SAND (SP)**, continued.
	0 0 3	1500						
	1 2 4	550		25				**25.0 to 40.0 feet: SILT (ML)**; light to medium gray, medium to high plasticity fines.
	2 2 3	100						@ 27.5 to 35.0 feet: mottled brown and gray.
	2 2 5	25		30				
	2 2 2	15						
	0 2 2	6		35				
	2 2 4	8						@ 37.5 to 38.4 feet: fine sand lense.
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-42
LOCATION	Portland, Oregon	PAGE	3 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/4/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	4 5 7	5						**40.0 to 55.0 feet: SILTY SAND (SM)**; light to medium brown, fine, subangular to subrounded sand.
	1 0 3	3						
	1 3 5	8		45				
	3 6 7	25						
	1 2 5	20		50				
	3 4 8	15						
	3 3 6	3		55				**55.0 to 56.0 feet: SILT (ML)**; light to medium brown, low to medium plasticity fines. **56.0 to 70.0 feet: SILTY SAND (SM)**; light to medium brown, fine, subangular to subrounded sand. @ 57.5 feet: 0.5-foot silt lense.
	5 8 10	2						
				60				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-42
LOCATION	Portland, Oregon	PAGE	4 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/4/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	LITHOLOGIC DESCRIPTION
	5 6 8	2	**56.0 to 70.0 feet: SILTY SAND (SM),** continued. @ 61.0 feet: 1-foot silt lense.
	3 4 5	1	
	5 5 6	1	@ 65.0 feet: 1-foot silt lense.
	6 5 7	1	
	14 16 18	1	**70.0 to 72.5 feet: SILT (ML);** gray; low to medium plasticity fines, grading to fine sand.
	13 20 28	10	**72.5 to 75.0 feet: SILT (ML);** gray, non to low plasticity fines, dense, crumbles.
	50/0.3"	7	**75.0 to 75.3 feet: SAND (SP);** gray to black, subangular to subrounded, fine to medium sand. **75.3 to 77.5 feet: BASALT**
			Boring terminated at 77.5 feet. Borehole backfilled with bentonite chips.

GROUND WATER LEVEL | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHO-LOGIC COLUMN

65 70 75 80

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

MCCALL3.gds:2.5/25/01.MCCALL3...820910/09000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-43
LOCATION	Portland, Oregon	PAGE	1 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	LITHOLOGIC DESCRIPTION
			0 to 0.8 foot: ASPHALT and BASE FILL
	10 12 13	4	**0.8 to 5.7 feet: SAND (SP)**; light to medium brown; fine to medium sand, trace silt.
	6 6 9	40	**5.7 to 22.5 feet: SAND (SP)**; dark gray, fine to medium sand, subrounded, trace silt.
	6 6 6	500	@ 9.0 to 14.0 feet: trace wood chips.
	5 5 5	2000	
	8 12 16	400	
	8 8 6	900	@ 16.2 to 16.5 feet: color grades to brown.
	8 6 6	200	

GROUND WATER LEVEL | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHO-LOGIC COLUMN

5
10
15
20

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm Isobutylene.

IT CORPORATION

MCCALL3.gdx:2.5/25/01.MCCALL3...820910/09000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-43
LOCATION	Portland, Oregon	PAGE	2 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
		600						**5.7 to 22.5 feet: SAND (SP)**, continued.
		5000						**22.5 to 28.5 feet: SILT (ML)**; dark gray, medium plasticity fines, horizontal black banding.
		2000		25				@ 26.3 to 28.5 feet: mottled brown and gray.
		80						**28.5 to 30.5 feet: SILT (ML)**; gray; low to medium plasticity fines.
		1000		30				**30.5 to 31.0 feet: SILT (ML)**; light to medium brown, medium plasticity fines, trace root hairs.
								31.0 to 31.5 feet: SILT (ML); gray; medium plasticity fines, trace root hairs.
		2000						**31.5 to 38.0 feet: SILT (ML)**; gray; medium to high plasticity fines.
								@ 33.5 feet: black lamination.
		1500		35				
		70						**38.0 to 40.5 feet: SILT (ML)**; mottled brown and gray; medium plasticity fines.
				40				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-43
LOCATION	Portland, Oregon	PAGE	3 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	LITHOLOGIC DESCRIPTION
	2		**38.0 to 40.5 feet: SILT (ML)**, continued.
	2	20	**40.5 to 41.0 feet: SILT (ML)**; light to medium brown; medium plasticity fines.
	5		**41.0 to 55.8 feet: SAND (SP)**; light to medium brown, fine sand, subangular to subrounded; trace silt.
	1		
	0	7	
	3		
	2		@ 45.0 to 45.5 feet: increase in silt content.
	1	6	
	4		@ 46.0 to 46.5 feet: increase in silt content.
	2		
	3	4	
	9		@ 48.5 feet: 0.3 foot silt lense.
	1		
	3	2	@ 50.5 feet: 0.5-foot silt lense.
	4		
	4		
	6	3	
	8		@ 53.8 feet: silt in shoe of sampler.
	1		
	2	5	
	1		**55.8 to 60.0 feet: SILT (ML)**; medium brown; medium plasticity fines.
	1		
	3	7	
	7		

45 50 55 60

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-43
LOCATION	Portland, Oregon	PAGE	4 of 4
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	77.5'
LOGGED BY	John Renda	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	5 6 9	3						**60.0 to 65.5 feet: SAND (SP)**; light to medium brown, fine sand, subangular to subrounded, trace silt.
	5 8 9	3						
	1 8 15	5		65				**65.5 to 67.5 feet: SILT (ML)**; light to medium brown, low to medium plasticity fines.
	6 7 10	4						**67.5 to 72.5 feet: SAND (SP)**; light to medium brown, fine sand, subangular to subrounded, trace silt.
	10 8 7	6		70				
	11 24 29	60						**72.5 to 73.5 feet: SILT (ML)**; gray, low to medium plasticity fines.
								73.5 to 74.5 feet: SAND (SP); gray; fine to medium sand, subangular to subrounded.
	50/0.			75				**74.5 to 77.5 feet: BASALT**
								Boring terminated at 77.5 feet. Borehole backfilled with bentonite chips.
				80				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm Isobutylene.

IT CORPORATION

MCCALL3.gdx:2.5/25/01.MCCALL3...820910/09000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-44
LOCATION	Portland, Oregon	PAGE	1 of 5
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	82.5'
LOGGED BY	Jason Thomason	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
								0.5 to 1.5 feet: GRAVEL (GW). (FILL)
	14 17 17	2						**1.5 to 6.0 feet: SAND (SP);** medium to dark brown, medium to coarse grained, subrounded, trace fines, trace mica.
	7 5 4	20		5				**6.0 to 7.5 feet: SILTY SAND (SM);** dark gray, 80 percent fine sand, subrounded, 20 percent low plasticity fines.
	4 6 12	20						**7.5 to 21.5 feet: SAND (SP);** dark gray to black, medium grained, subrounded, trace fines; trace felsics.
	9 13 11	50		10				
	13 10 8	150						
	4 4 4	60		15				
	4 6 8	20	▽					@ 17.5 feet: wet.
				20				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-44
LOCATION	Portland, Oregon	PAGE	2 of 5
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	82.5'
LOGGED BY	Jason Thomason	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	6 5 4	400						**7.5 to 21.5 feet: SAND (SP)**, continued.
	0 0 0	1000						**21.5 to 23.0 feet: SILT (ML)**; dark gray, low to medium plasticity fines; trace fine sand. **23.0 to 23.5 feet: SILTY SAND (SM)**; medium to dark gray, 75 percent very fine sand, 25 percent low plasticity fines; wet.
	1 0 0	200		25				**23.5 to 25.5 feet: SILT (ML)**; dark gray, medium plasticity fines; trace fine sand. **25.5 to 27.5 feet: SILTY SAND (SM)**; dark gray, 60 percent very fine sand, 40 percent silt and medium plasticity fines.
	1 1 1	1500						**27.5 to 28.8 feet: SILT (ML)**; dark gray, medium plasticity fines.
	4 6 7	50		30				**28.8 to 35.3 feet: SILT (ML)**; medium to dark gray with red-brown mottling, medium plasticity fines, trace medium to coarse basalt sands.
	3 3 3	5						@ 32.5 feet: increased fine sand, trace gravel.
	2 1 2	3		35				**35.3 to 36.3 feet: SILTY SAND (SM)**; medium to dark gray with red-brown mottling; very fine grained, medium plasticity fines; micaceous; wet. **36.3 to 37.5 feet: SILT (ML)**; medium to dark gray with red-brown mottling, medium plasticity fines, trace sand.
	2 2 6	1						**37.5 to 41.3 feet: SILTY SAND (SM)**; medium gray with red-brown mottling, 80 percent very fine sand; micaceous, wet. @ 38.5 feet: 0.1-foot silt lense.
				40				

IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-44
LOCATION	Portland, Oregon	PAGE	3 of 5
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	82.5'
LOGGED BY	Jason Thomason	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	2 3 4	1						**37.5 to 41.3 feet: SILTY SAND (SM),** continued. @ 40.0 feet: 0.3 feet dark brown silt, reddish mottling.
								41.3 to 42.5 feet: SILT (ML); dark brown with red-brown mottling, medium plasticity fines, trace coarse basalt sand.
	4 2 6	0						**42.5 to 46.0 feet: SILTY SAND (SM);** dark brown, 80 percent fine sand, 20 percent low plasticity fines; micaceous.
	1 2 5	2		45				**46.0 to 47.5 feet: SILT (ML);** dark brown, low to medium plasticity fines, trace fine micaceous sand.
	1 5 10	4						**47.5 to 71.0 feet: SILTY SAND (SM);** dark brown, 60 to 80 percent fine sand, 20 to 40 percent low to medium plasticity fines, micaceous, wet.
	5 5 6	4		50				@ 51.3 feet: 0.2 foot dark brown silt, decreased moisture.
	3 6 8	5						
	4 4 7	5		55				
	3 5 6	5						
				60				

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-44
LOCATION	Portland, Oregon	PAGE	4 of 5
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	82.5'
LOGGED BY	Jason Thomason	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	4 6 7	4						**47.5 to 71.0 feet: SILTY SAND (SM)**, continued. @ 60.5 to 60.7 feet: increased silt.
	6 8 9	4						
	3 5 8	2		65				@ 65.0 feet: increased silt, reddish-brown mottling.
	7 8 12	3						@ 68.0 feet: increased coarseness.
	3 2 8	4		70				@ 70.7 to 71.0 feet: dark brown silt. **71.0 to 75.5 feet: SILTY SAND (SM)**; dark gray to black, 80 percent fine sand, 20 percent low to medium plasticity fines.
	3 4 8	40						@ 74.0 feet: increased coarseness.
	4 16 34	30		75				**75.5 to 76.2 feet: SAND (SP)**; dark gray to black sand, subrounded, trace gravel. **76.2 to 82.5 feet: GRAVEL (GW)**; black, coarse basalt gravel, angular, vesicular fragments, trace rounded gravels. (BASALT)
	50/4" 50/1.5"	30						@ 77.5 feet: 0.3 foot recovery.
				80				

REMARKS

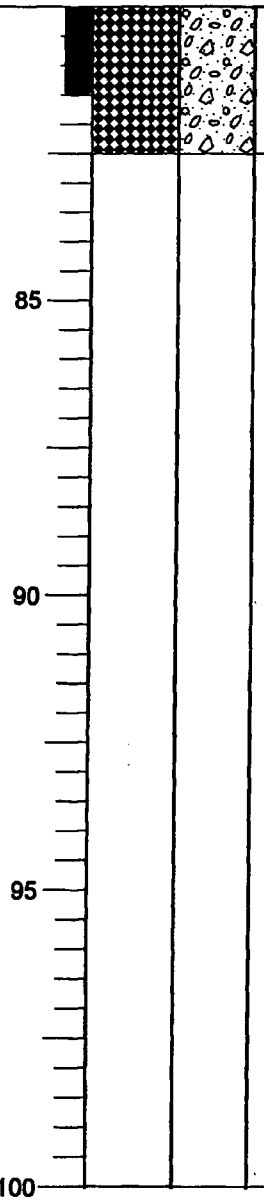
1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall/GWCC	BORING NO.	GP-44
LOCATION	Portland, Oregon	PAGE	5 of 5
DRILLED BY	GeoTech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Mud Rotary	TOTAL DEPTH	82.5'
LOGGED BY	Jason Thomason	DATE COMPLETED	4/5/01

SAMPLE NUMBER (SAMPLE TYPE)	BLOW COUNTS	FID (ppm)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
	100/4"	100/4"						**76.2 to 82.5 feet: GRAVEL (GW)**, continued. @ 80.0 feet: 0.1 foot recovery.
								Boring terminated at 82.5 feet below ground surface. Borehole backfilled with coarse bentonite chips.



IT CORPORATION

REMARKS

1) Flame Ionization Detector calibrated to 98 ppm isobutylene.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-45
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1	4.0							**0 to 3.0 feet: GRAVEL FILL**
10								**3.0 to 15.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
20	4.0			5				@ 3.2 feet: 0.1-foot-thick tar-like layer.
0								@ 3.5 feet: 0.2-foot-thick tar-like layer.
0	2.0			10				@ 5.2 feet: 0.1-foot-thick tar-like layer.
2	4.0			15				**15.5 to 23.5 feet: SAND (SP)**; gray to black, fine to medium sand, oil saturated, gasoline-like odor, moist.
1000								
600	2.0			20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-45
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
800	4.0			25				**15.5 to 23.5 feet: SAND (SP); continued.** @ 22.0 feet: wet.
500				30				**23.5 to 24.0 feet: SILT (ML); dark gray, medium to high plasticity fines.** Boring Terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				35				
				40				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-46
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1	4.0							**0 to 4.0 feet: GRAVEL FILL**
1								
5	4.0			5				**4.0 to 12.0 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
1								@ 6.0 feet: 0.1-foot-thick tar-like layer.
4	2.0			10				@ 7.8 feet: 0.1-foot-thick tar-like layer.
8000	1.0			15				**12.0 to 23.7 feet: SAND (SP)**; gray to black, fine to medium sand, oil saturated, gasoline-like odor.
400	2.0			20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-46
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
2000	4.0							**12.0 to 23.7 feet: SAND (SP)**; continued.
								23.7 to 24.0 feet: SILT (ML); dark gray, non- to low-plasticity fines.
				25				Boring Terminated at 24.0 feet.
								Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-47
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 Inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
1	4.0							**0 to 4.0 feet: GRAVEL FILL**
0								
0	6.0			5				**4.0 to 14.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
0	4.0			10				
1								
0	4.0							
>10000				15				**14.5 to 19.8 feet: SAND (SP)**; gray to black, fine to medium sand, oil saturated, gasoline-like odor.
3000	4.0			20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-47
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
2000	4.0							**19.8 to 24.0 feet:** SILT (ML); dark gray, medium to low plasticity fines. **19.8 to 24.0 feet:** SILT (ML); continued.
				25				Boring Terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-48
LOCATION	Portland, Oregon	PAGE	1 of 1
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	16.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	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 with sand and silt. (FILL)
	4.0							**2.0 to 3.8 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
4								@ 3.0 feet: 0.2-foot-thick tar-like layer.
								3.8 to 8.0 feet: SAND (SP); medium to dark gray, fine to medium sand.
1				5				
	4.0							
15								@ 7.0 to 7.7 feet: trace green, red, and white roofing sands.
								8.0 to 8.5 feet: SAND (SP); medium to dark brown, fine to medium sand.
9								**8.5 to 15.0 feet: SAND (SP)**; medium to dark gray; fine to medium sand.
	4.0			10				@ 9.0 to 11.4 feet: trace red, green, and white roofing sands.
60								@ 11.4 feet: 0.1-foot-thick tar-like layer with wood fibers.
1								
	4.0							
0				15				**15.0 to 16.0 feet: SAND (SP)**; medium to dark brown, fine to medium sand.
								Boring Terminated at 16.0 feet. Borehole backfilled with bentonite chips.
				20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-49
LOCATION	Portland, Oregon	PAGE	1 of 1
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	16.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	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 with sand and silt. (FILL)
	4.0							**1.5 to 3.5 feet: SILTY SAND (SM)**; medium brown, 60 to 70 percent fine to medium sand, 30 to 40 percent non- to low-plasticity fines.
2								
1				5				**3.5 to 7.0 feet: SAND (SP)**; light to medium gray, fine to medium sand. @ 4.0 to 6.0 feet: 10 to 15 percent non- to low-plasticity fines.
	3.0							@ 6.0 to 7.0 feet: trace red, green, and white roofing sands.
1								**7.0 to 9.0 feet: SAND (SP)**; light to medium brown, fine to medium sand, trace fines. @ 8.0 to 9.0 feet: increase in fines.
0								**9.0 to 14.5 feet: SAND (SP)**; light to medium gray, fine to medium sand, trace fines.
	4.0			10				@ 10.3 feet: 0.4-foot-thick red, green, and white roofing sands layer. @ 10.7 feet: 0.6-foot-thick layer, slightly oily, trace wood fragments.
8								
20								
	4.0							
5				15				**14.5 to 16.0 feet: SAND (SP)**; light to medium brown, fine to medium sand, trace fines.
								Boring Terminated at 16.0 feet. Borehole backfilled with bentonite chips.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-50
LOCATION	Portland, Oregon	PAGE	1 of 1
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	16.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/14/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
10	4.0							**0 to 2.0 feet: SANDY GRAVEL (GW)**; fine to coarse, angular basalt gravel with sand and silt. (FILL)
200								**2.0 to 3.0 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
1	3.0			5				**3.0 to 4.0 feet: SILT (ML)**; medium gray, non- to low-plasticity fines.
100								**4.0 to 7.5 feet: SAND (SP)**; light to medium gray, fine sand, trace fines.
1	3.0			10				**7.5 to 8.0 feet: SAND (SP)**; light to medium gray, fine to medium sand with red, green, and white roofing sands, trace fines. **8.0 to 11.5 feet: SAND (SP)**; light to medium gray, fie to medium sand, trace fines.
25								
90	4.0			15				**11.5 to 14.0 feet: SILTY SAND (SM)**; light to medium gray, fine to medium sand, trace wood fragments, slight petroleum-hydrocarbon-like odor, trace gravel.
6								**14.0 to 16.0 feet: SAND (SP)**; light to medium gray, fine to medium sand, trace fines.
				20				Boring Terminated at 16.0 feet. Borehole backfilled with bentonite chips.

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-51
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
15	2.0							**0 to 4.0 feet: SILTY SAND (SM)**; silty sand with gravel, brick, and asphalt chunks. (FILL)
3	4.0			5				**4.0 to 11.0 feet: SAND (SP)**; medium to dark brown, fine to medium sand.
20								
20	4.0			10				
300								**11.0 to 20.0 feet: SILTY SAND (SM)**; medium to dark gray, fine to medium sand, non- to low-plasticity fines.
1000	3.0			15				@ 15.8 feet: increase in density.
5	4.0							@ 20.0 feet: wet.
7				20				

IT CORPORATION

REMARKS

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-51
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
20	2.0							**20.0 to 24.0 feet: SAND (SP)**; gray to black, fine to medium sand, trace fines.
				25				Boring Terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-52
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5								0 to 0.5 foot: ASPHALT
								0.5 to 1.0 foot: SAND (SP); red, white, and green, medium to coarse roofing sands.
	4.0							1.0 to 18.0 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines.
0								
				5				
1	2.0							
0								
	4.0			10				
2								
6								
	4.0							
1				15				
3								
	4.0							@ 18.2 feet: wet.
								18.0 to 18.2 feet: SAND (SP); rusty brown, fine to medium sand.
200								18.2 to 20.0 feet: SAND (SP); gray to black, fine to medium sand, trace fines.
				20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-52
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				25				Boring Terminated at 20.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-53
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 0.5 foot: ASPHALT
5								0.5 to 7.3 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines.
	4.0							
0								
				5				
1	3.0							
								7.3 to 7.5 feet: SILT (ML); rusty brown, laminated, non- to low-plasticity fines.
								7.5 to 10.0 feet: SILT (ML); gray, non- to low-plasticity fines, trace fine sand.
0								
	4.0			10				10.0 to 11.0 feet: SANDY SILT (ML); medium to dark brown, non- to low-plasticity fines, fie to medium sand.
2								@ 10.4 feet: 0.2-foot wood debris.
								11.0 to 12.0 feet: SAND (SP); medium to dark brown, fine to medium sand, trace fines.
								12.0 to 13.7 feet: SILT (ML); medium gray, non- to low-plasticity fines, trace fine sand.
6								
	4.0							13.7 to 20.0 feet: SAND (SP); light to medium brown, fine to medium sand, trace fines.
1				15				
3								
	4.0							@ 18.4 to 20.0 feet: color grades to gray.
200								@ 19.0 feet: wet.
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-53
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	20.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	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

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-54
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0 to 3.0 feet: GRAVEL FILL
1	2.0							
								3.0 to 15.5 feet: SAND (SP); medium to dark brown, fine to medium sand, subangular to subrounded.
				5				
2	3.0							
				10				
0	2.0							
0								
	4.0			15				
1000								**15.5 to 20.0 feet: SAND (SP)**; gray to black, fine to medium sand, oil saturated, gasoline-like odor.
2000	2.0							
				20				

REMARKS

IT CORPORATION

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-54
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
5000 500	4.0			25 30 35 40				**20.0 to 24.0 feet: SILT (ML)**; dark gray, medium to low plasticity fines. Boring Terminated at 24.0 feet. Borehole backfilled with bentonite chips.

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-55
LOCATION	Portland, Oregon	PAGE	1 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
100	3.0							**0 to 4.0 feet: GRAVEL FILL**
5	4.0			5				**4.0 to 14.5 feet: SAND (SP)**; medium to dark brown, fine to medium sand, subangular to subrounded.
9	4.0			10				
7	4.0							
7000				15				**14.5 to 18.5 feet: SAND (SP)**; gray to black, fine to medium sand, oil saturated, gasoline-like odor.
3000	2.0							**18.4 to 24.0 feet: SILT (ML)?**; driller noted softer drilling, no recovery.
				20				

REMARKS

IT CORPORATION

MCCAL4.gds:1.2/18/02.MCCAL4...832537/01000000

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	GP-55
LOCATION	Portland, Oregon	PAGE	2 of 2
DRILLED BY	Geo-Tech Explorations, Inc.	REFERENCE ELEV.	
DRILL METHOD	Geoprobe	TOTAL DEPTH	24.0'
LOGGED BY	J. Renda	DATE COMPLETED	11/15/01

FID (ppm)	RECOVERY (feet)	BLOW COUNTS (per 6 inches)	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
No Recovery	0							**18.4 to 24.0 feet: SILT (ML)?; continued.**
				25				Boring Terminated at 24.0 feet. Borehole backfilled with bentonite chips.
				30				
				35				
				40				

REMARKS

IT CORPORATION

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME: McCall Oil and Chemical — BORING #: GP-56
PROJECT NUMBER: 030162-02 — DATE BEGAN: 10/06/03
GEOLOGIST/ENGINEER: J. Renda — DATE COMPLETED: 10/06/03
DRILLING CONTRACTOR: GeoTech Explorations, Inc. — TOTAL DEPTH: 15 feet
DRILLING METHOD: Direct Push — SHEET: 1 OF 1
HOLE DIAMETER: 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						GW	0.0 to 0.5 feet: **GRAVEL FILL**
					1	ML	0.5 to 1.0 feet: **SANDY SILT (ML)**; gray; nonplastic to low plasticity fines; fine sand; damp.
					2	ML/OL	1.0 to 4.5 feet: **SILT WITH ORGANICS (ML/OL)**; dark brown; nonplastic to low plasticity fines layered with fine wood chips.
			3.5		3		
					4		
					5	SW	4.5 to 15.0 feet: **GRAVELLY SAND (SW)**; medium brown; fine to medium sand; 15 to 20 percent gravel; fine to medium; angular to subangular.
					6		
					7		
			5		8		
					9		
					10		
					11		
					12		
			5		13		@ 12.0 feet: color change to gray; wet. @ 12.2 to 12.5 feet: oil saturated.
					14		
					15		@14.5 feet: color change to medium brown.
					16		Boring advanced to 15.0 feet below ground surface. Borehole backfilled with bentonite chips.
					17		
					18		
					19		
					20		

Remarks:

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME: McCall Oil and Chemical — BORING #: GP-57
PROJECT NUMBER: 030162-02 — DATE BEGAN: 10/06/03
GEOLOGIST/ENGINEER: J. Renda — DATE COMPLETED: 10/06/03
DRILLING CONTRACTOR: GeoTech Explorations, Inc. — TOTAL DEPTH: 20 feet
DRILLING METHOD: Direct Push — SHEET: 1 OF 1
HOLE DIAMETER: 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0.0 to 0.5 feet: **ASPHALT.**
					1		0.5 to 20.0 feet: **SAND (SP)**; medium to dark brown; fine to medium sand; subangular to subrounded.
					2		
			0		3		
					4		
					5		
					6		
					7		
			4		8		
					9		
					10	SP	
					11		
					12		
			5		13		
					14		
					15		@ 15.5 feet: wet.
					16		
					17		
			5		18		@ 18.0 feet: color change to gray.
					19		
					20		

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall Oil and Chemical — BORING # GP-58
PROJECT NUMBER 030162-02 — DATE BEGAN 10/06/03
GEOLOGIST/ENGINEER J. Renda — DATE COMPLETED 10/06/03
DRILLING CONTRACTOR GeoTech Explorations, Inc. — TOTAL DEPTH 15 feet
DRILLING METHOD Direct Push — SHEET 1 OF 1
HOLE DIAMETER 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0.0 to 0.5 feet: **ASPHALT.**
					1		0.5 to 20.0 feet: **SAND (SP)**; medium brown; fine to medium sand; subangular to subrounded.
					2		
			4		3		
					4		
					5		
					6		
					7		
			2		8	SP	
					9		
					10		
					11		
					12		@ 12.0 feet: wet.
							@ 12.5 feet: color change to gray.
			5		13		
					14		
					15		@ 14.0 feet: color change to brown.
					16		Boring advanced to 15.0 feet below ground surface. Borehole backfilled with bentonite chips.
					17		
					18		
					19		
					20		

Remarks:

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall Oil and Chemical — BORING # GP-59
PROJECT NUMBER 030162-02 — DATE BEGAN 10/06/03
GEOLOGIST/ENGINEER J. Renda — DATE COMPLETED 10/06/03
DRILLING CONTRACTOR GeoTech Explorations, Inc. — TOTAL DEPTH 20 feet
DRILLING METHOD Direct Push — SHEET 1 OF 1
HOLE DIAMETER 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
					1	GW	0.0 to 1.0 feet: **GRAVEL FILL**
			3		2–6	SW	1.0 to 10.5 feet: **GRAVELLY SAND (SW)**; medium brown; fine to medium sand; 15 to 20 percent gravel; fine to coarse; angular to subrounded.
			3		7–11	SW	
			4		12–15	SP	10.5 to 15.2 feet: **SAND (SP)**; medium brown; fine to medium sand; subangular to subrounded.
					16	SP	@ 15.0 to 15.2 feet: Color change to gray; oil saturated; petroleum hydrocarbon-like odor.
			5		17–20	ML	15.2 to 20.0 feet: **SILT (ML)**; greenish gray; low to medium plasticity fines.

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME: McCall Oil and Chemical | BORING #: GP-60
PROJECT NUMBER: 030162-02 | DATE BEGAN: 10/06/03
GEOLOGIST/ENGINEER: J. Renda | DATE COMPLETED: 10/06/03
DRILLING CONTRACTOR: GeoTech Explorations, Inc. | TOTAL DEPTH: 20 feet
DRILLING METHOD: Direct Push | SHEET: 1 OF 1
HOLE DIAMETER: 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0.0 to 0.5 feet: **ASPHALT.**
					1		0.5 to 3.0 feet: **GRAVEL FILL**
					2	GW	
			3		3		
					4		3.0 to 20.0 feet: **SAND (SP)**; light to medium brown; fine to medium sand; subangular to subrounded.
					5		
					6		
					7		
			4.5		8		
					9		
					10		
					11		
					12	SP	
			5		13		
					14		
					15		@ 14.5 feet: wet.
					16		
					17		
			5		18		
					19		@ 18.5 feet: color change to gray.
					20		

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall Oil and Chemical — BORING # GP-61
PROJECT NUMBER 030162-02 — DATE BEGAN 10/06/03
GEOLOGIST/ENGINEER J. Renda — DATE COMPLETED 10/06/03
DRILLING CONTRACTOR GeoTech Explorations, Inc. — TOTAL DEPTH 20 feet
DRILLING METHOD Direct Push — SHEET 1 OF 1
HOLE DIAMETER 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0.0 to 0.5 feet: **ASPHALT.**
					1	SW	0.5 to 10.0 feet: **GRAVELLY SAND (SW);** medium brown; fine to medium sand; 25 to 30 percent gravel; fine to medium; angular to subrounded.
			3		3		
			2.5		8		
			3		13		10.0 to 20.0 feet: **SAND (SP);** light to medium brown; fine to medium sand; subangular to subrounded.
					15	SP	
			4		17		@ 16.0 feet: wet.
					18		@ 18.0 feet: color change to gray.

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall Oil and Chemical — BORING # GP-62
PROJECT NUMBER 030162-02 — DATE BEGAN 10/06/03
GEOLOGIST/ENGINEER J. Renda — DATE COMPLETED 10/06/03
DRILLING CONTRACTOR GeoTech Explorations, Inc. — TOTAL DEPTH 20 feet
DRILLING METHOD Direct Push — SHEET 1 OF 1
HOLE DIAMETER 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
					1	GW	0.5 to 2.0 feet: **GRAVEL FILL**
					2		
					3	ML	2.0 to 4.5 feet: **GRAVELLY SILT (ML)**; medium brown; low plasticity fines; 15 to 20 percent gravel; fine to medium; angular to subrounded; charred wood fragments.
			3		4		
					5	SP	4.5 to 19.5 feet: **SAND (SP)**; medium brown; fine to coarse sand; subangular to subrounded.
					6		@ 4.5 to 9.0 feet: alternating layers of green, white, and red roofing sands.
					7		
			2		8		
					9		
					10		
					11		
					12		
			5		13		
					14		
					15		
					16		@ 16.0 feet: wet.
					17		
			3		18		@ 18.0 feet: color change to gray.
					19		
					20	ML	19.5 to 20.0 feet: **SILT (ML)**; gray; low to medium plasticity fines.

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall Oil and Chemical — BORING # GP-63
PROJECT NUMBER 030162-02 — DATE BEGAN 10/06/03
GEOLOGIST/ENGINEER J. Renda — DATE COMPLETED 10/06/03
DRILLING CONTRACTOR GeoTech Explorations, Inc. — TOTAL DEPTH 20 feet
DRILLING METHOD Direct Push — SHEET 1 OF 1
HOLE DIAMETER 2-inch

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLE NAME	SAMPLING DATA: RECOVERY (feet)	SAMPLING DATA: DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
							0.0 to 0.5 feet: **ASPHALT.**
					1	GW	0.5 to 2.5 feet: **GRAVEL FILL**
					2		
			3		3	SP	2.5 to 20.0 feet: **SAND (SP)**; light to medium brown; fine to medium sand; subangular to subrounded.
					4		
					5		
					6		
					7		
			3		8		
					9		
					10		
					11		
					12		
			4		13		
					14		
					15		
					16		@ 16.0 feet: wet.
					17		
			5		18		@ 18.0 feet: color change to gray.
					19		
					20		

Remarks: Boring advanced to 20.0 feet below ground surface.
Borehole backfilled with bentonite chips.

APPENDIX C

AQUIFER TEST REPORT

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

July 15, 2002
020162-02

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the second quarter 2002, and work planned for the third quarter 2002.

WORK COMPLETED, SECOND QUARTER 2002

- Submitted first quarter sampling results to DEQ on May 15, 2002
- Performed aquifer testing using Ferris Time-Lag Method

PLANNED THIRD QUARTER 2002 RI TASKS

- Meet with DEQ on August 6 to discuss RI results.
- Data Management and Reporting.
- Project Management and Meetings.

AQUIFER TEST RESULTS

On June 3, 2002, pressure transducers were installed in monitoring wells EX-5, MW-6, MW-7 and the Willamette River at location WG-1. The pressure transducers were removed on June 11, 2002. The locations of the monitoring wells and WG-1 are shown in Figure 1. Water levels were recorded at 1-minute intervals to evaluate response time of water levels in the monitoring wells associated with the tidal fluctuations in the Willamette River.

Figure 2 is a plot of pressure head at WG-1 in feet. The period of each tidal event was calculated and an average period for the duration of the test was calculated at 742 minutes.

Calculations are shown on the attached worksheet. Figures 3, 4, and 5 display comparison plots between WG-1 and EX-5, WG-1 and MW-6, and WG-1 and MW-7, respectively. The aquifer thickness was estimated from the depth to basalt (75 feet) measured at borings GP-41, GP-42, GP-43, and GP-44.

Hydraulic conductivity values were calculated at 3.4×10^{-3} ft/minute at EX-5, 5.4×10^{-3} ft/minute at MW-6, and 1.6×10^{-1} ft/minute at MW-7. These data are still being evaluated, however, they preliminarily indicate a range of aquifer conditions from a low hydraulic conductivity typical of a silty, very-fine sand at EX-5 up to a high hydraulic conductivity typical of a coarse sand at MW-7.

PROBLEMS ENCOUNTERED

The time setting on the transducer in EX-5 was one hour fast. Data were corrected before analyzed.

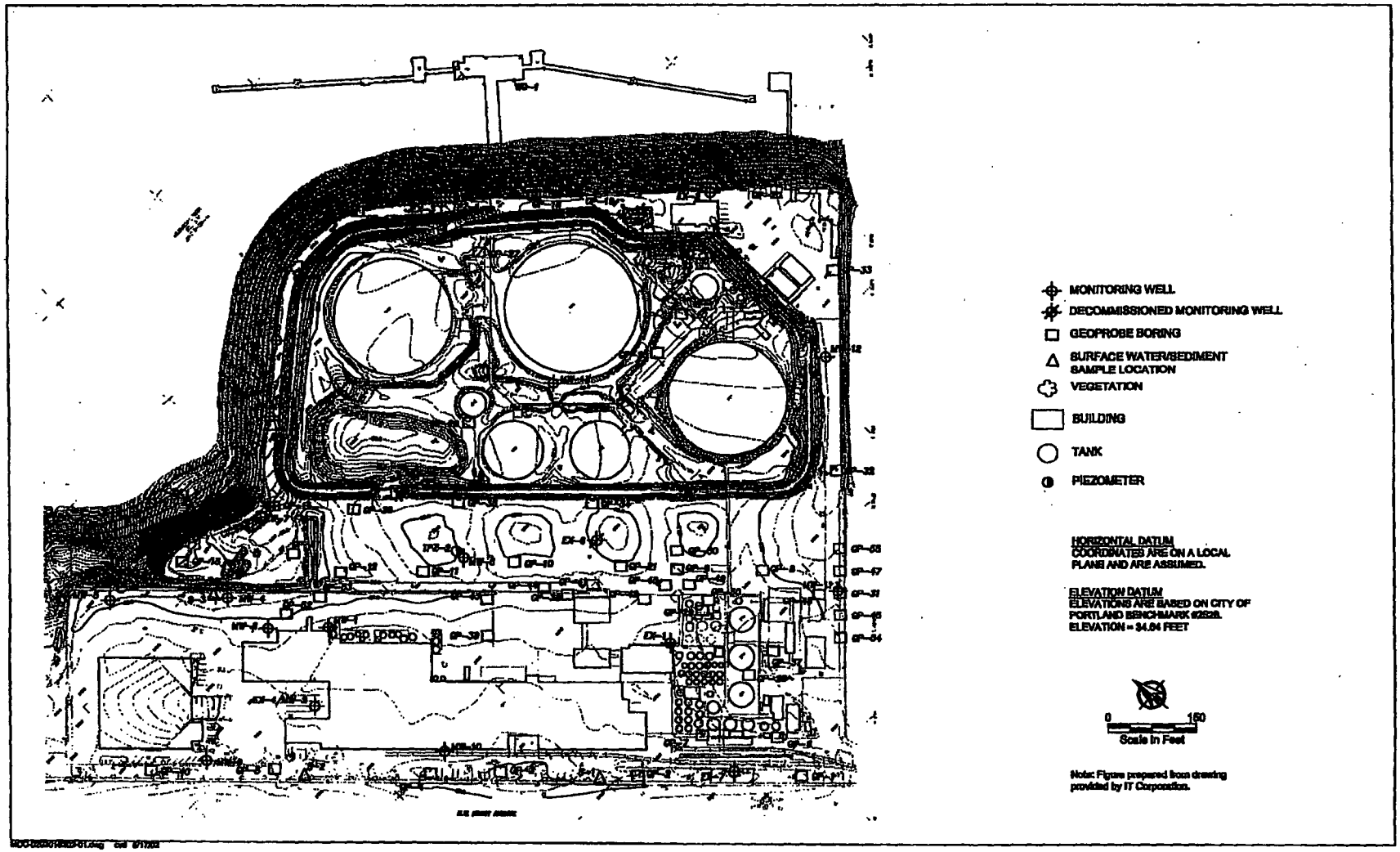
If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

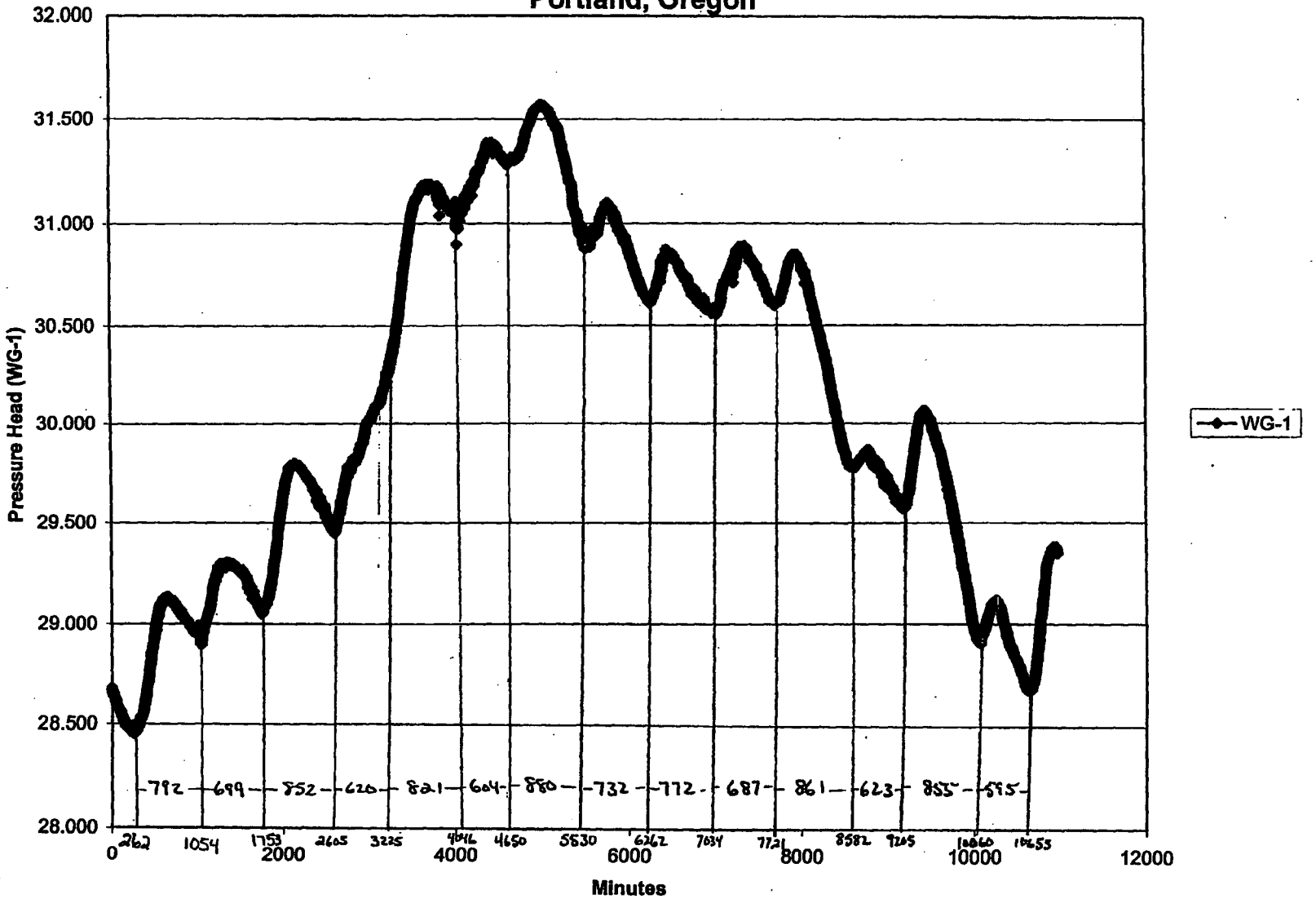
Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP



ANCHOR ENVIRONMENTAL, L.L.C.

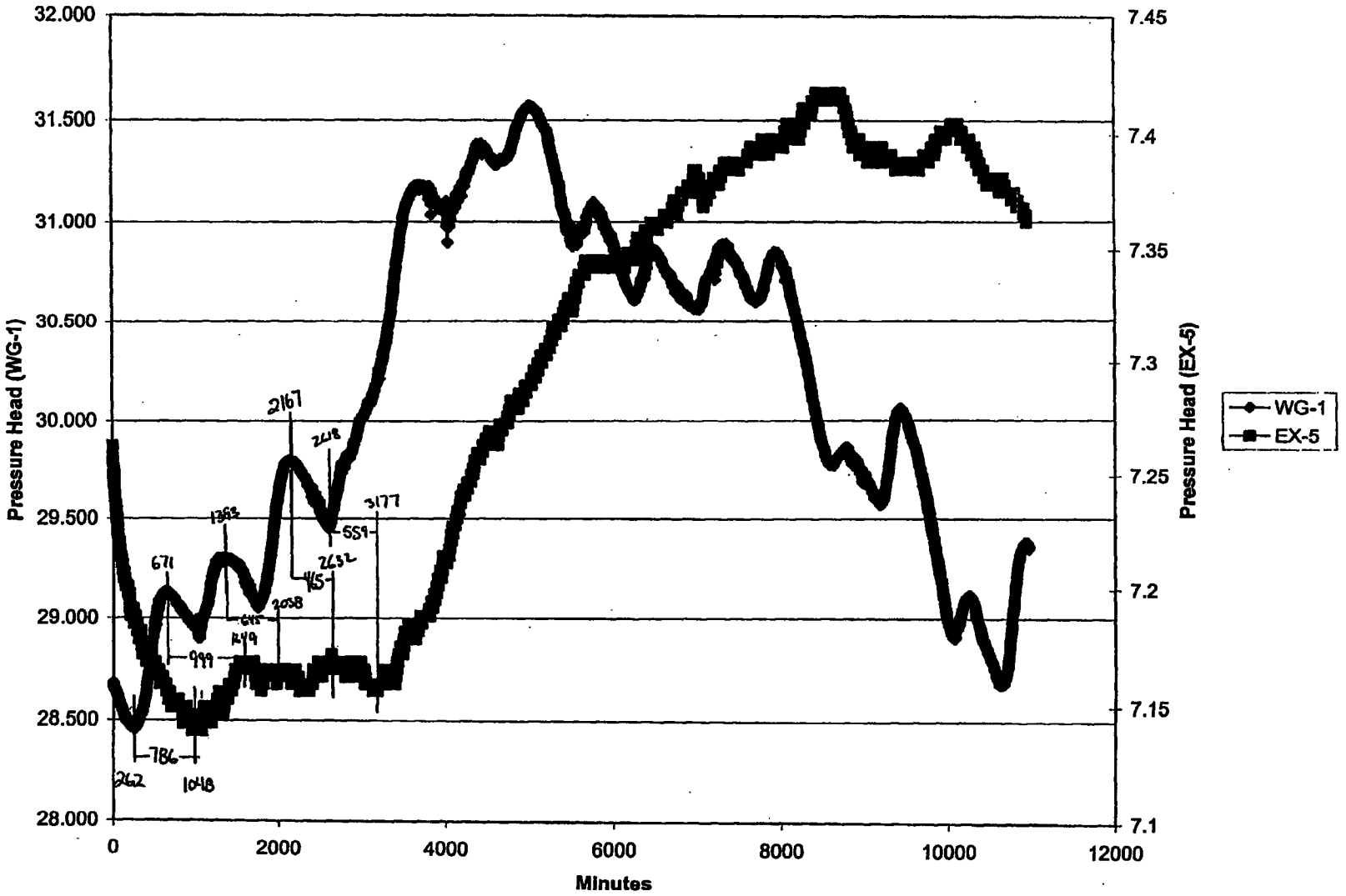
Figure 1
Boring and Well Locations
McCall Oil

Figure 2
Willamette River Tidal Period
McCall Oil and Chemical Corporation
Portland, Oregon



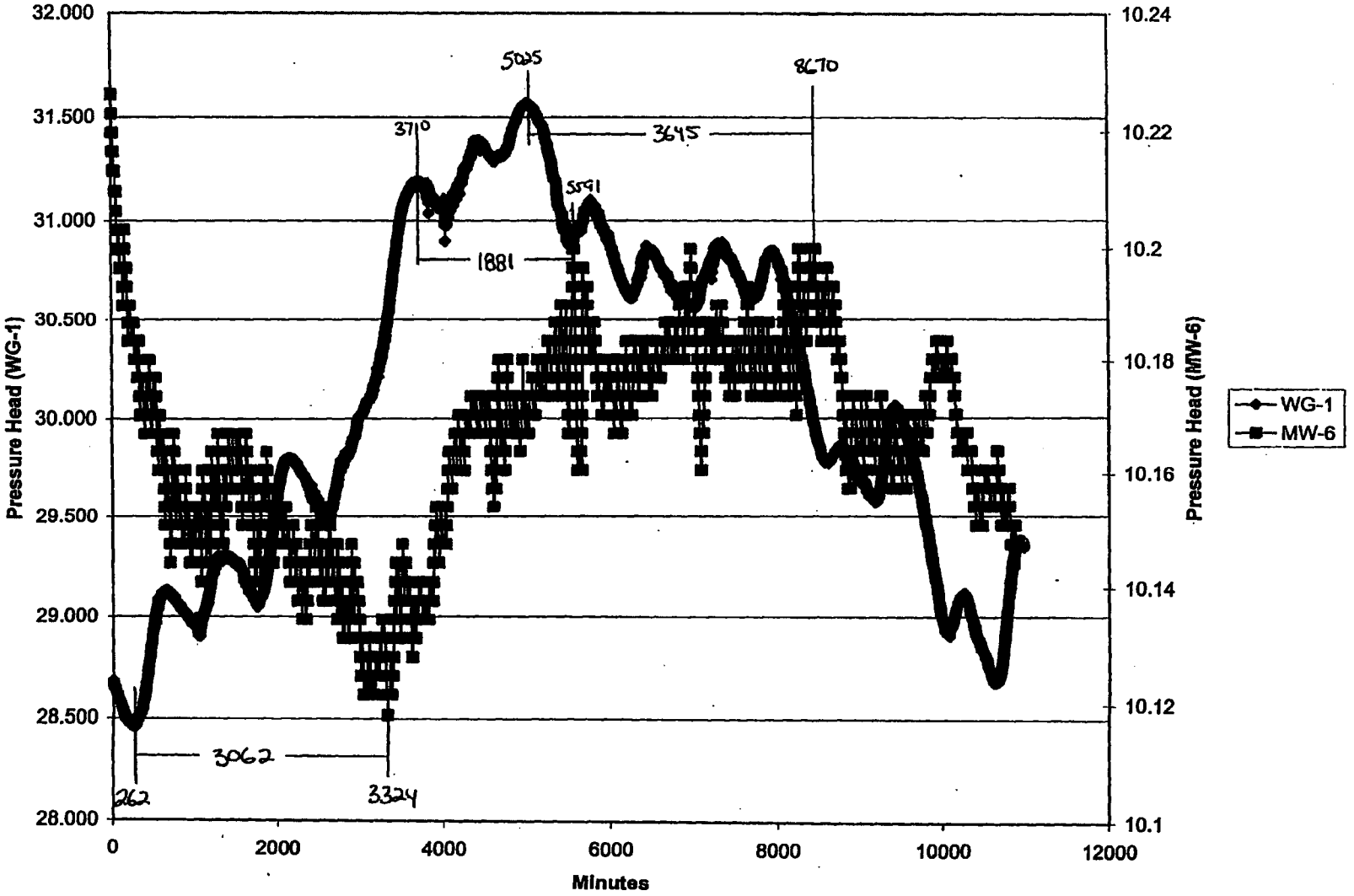
\\Union\Portland\Projects\McCall Portland\Raw data\Willamette - period

Figure 3
Time Lag WG-1/EX-5
McCall Oil and Chemical Corporation
Portland, Oregon



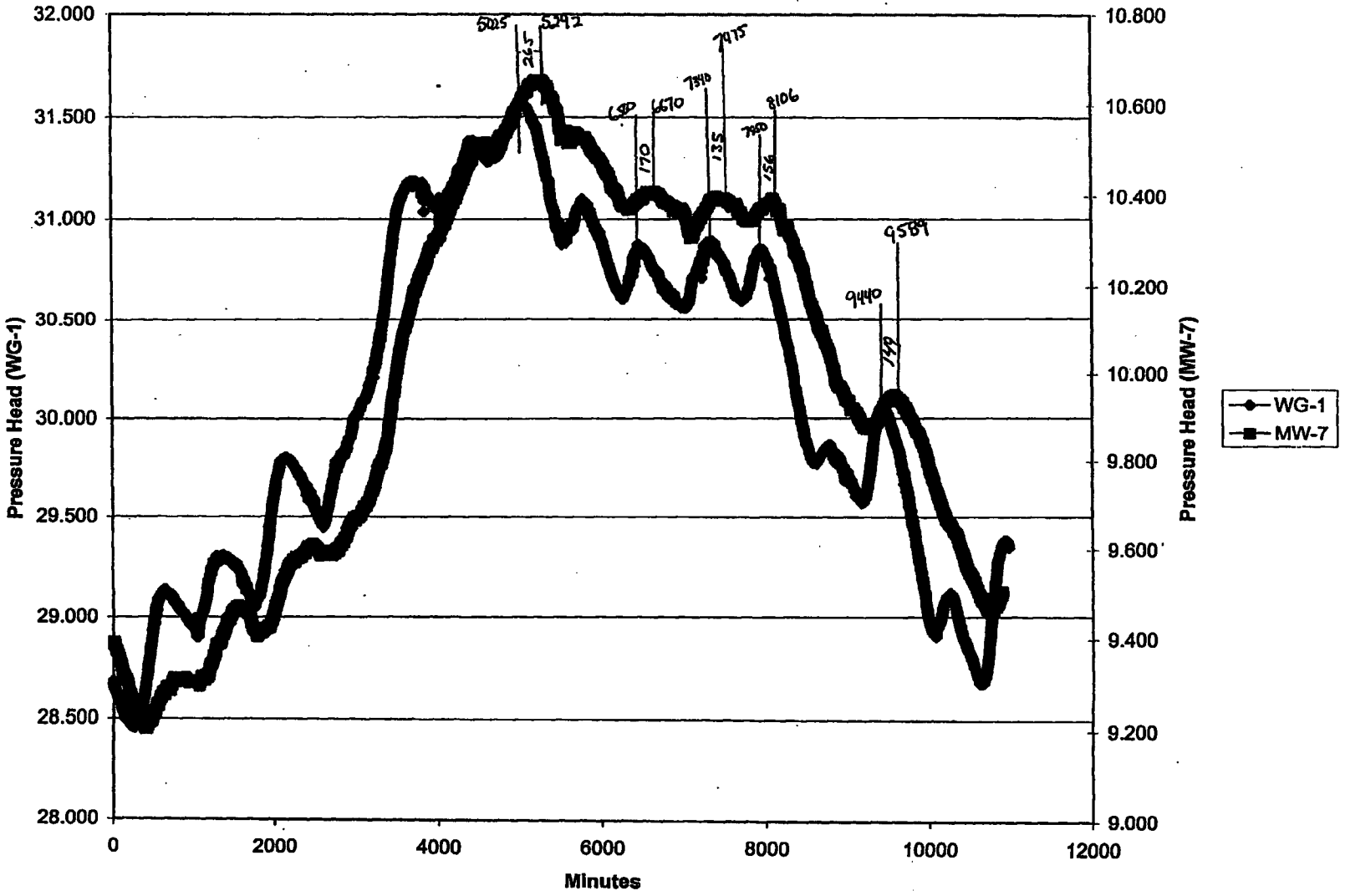
\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-EX5

Figure 4
Time Lag WG-1/MW-6
McCall Oil and Chemical Corporation
Portland, Oregon



\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-MW6

Figure 5
Time Lag WG-1/MW-7
McCall Oil and Chemical Corporation
Portland, Oregon



\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-MW7

Worksheet
Time Lag Calculations
McCall Oil and Chemical
Portland, Oregon

T = Transmissivity
S = Specific storage
t_0 = period
x = distance of well from river
t = lag
PI = 3.14159
K = Hydraulic conductivity

$T/S = (t_0/4*PI)(x/t)^2$
K = T/Aquifer Thickness

Willamette River Period Measured at WG-1

Low Tide (minutes after start of test)	Period (minutes)
262	
1054	792
1753	699
2605	852
3225	620
4046	821
4650	604
5530	880
6262	732
7034	772
7721	687
8582	861
9205	623
10060	855
10655	595
t_0 =	742

WG-1/EX-5

t_0 =	742	minutes
x =	90	feet
S =	0.2	(estimated value)
t =	690.8	minutes
DTW =	16.55	feet (on 6/3/02 16:40)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	58.45	feet
T =	0.200449402	ft^2/minute
K =	0.003429417	ft/minute
K =	4.938359945	ft/day

Worksheet
Time Lag Calculations
McCall Oil and Chemical
Portland, Oregon

WG-1/MW-6

t_0 =	742	minutes
x =	475	feet
S =	0.2	(estimated value)
t =	2862.7	minutes
DTW =	14.28	feet (on 6/3/02 16:03)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	60.72	feet
T =	0.325132173	ft^2/minute
K =	0.005354614	ft/minute
K =	7.710644425	ft/day

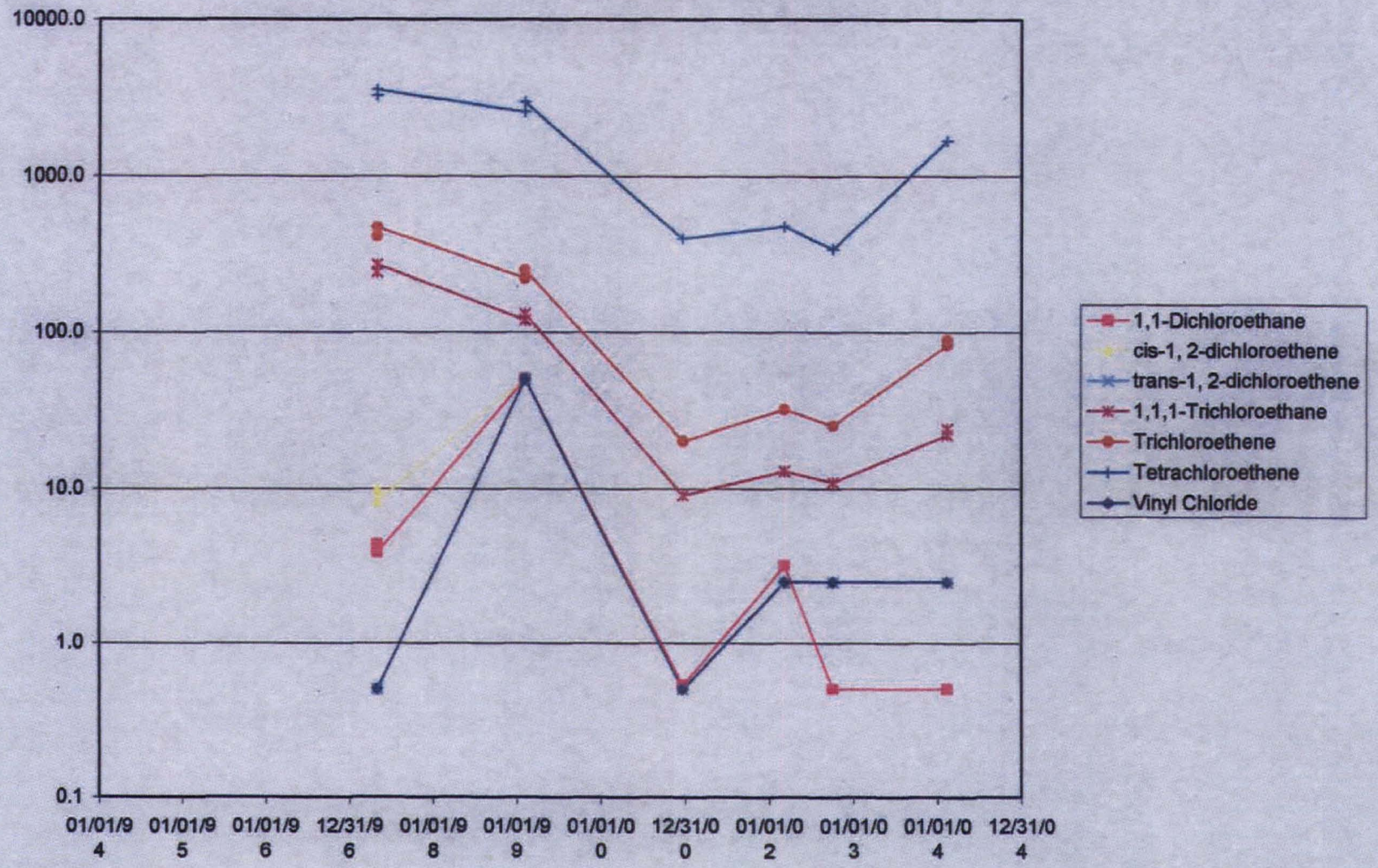
WG-1/MW-7

t_0 =	742	minutes
x =	150	feet
S =	0.2	(estimated value)
t =	173.2	minutes
DTW =	20.64	feet (on 6/3/02 16:26)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	54.36	feet
T =	8.857499704	ft^2/minute
K =	0.162941496	ft/minute
K =	234.6357538	ft/day

APPENDIX D

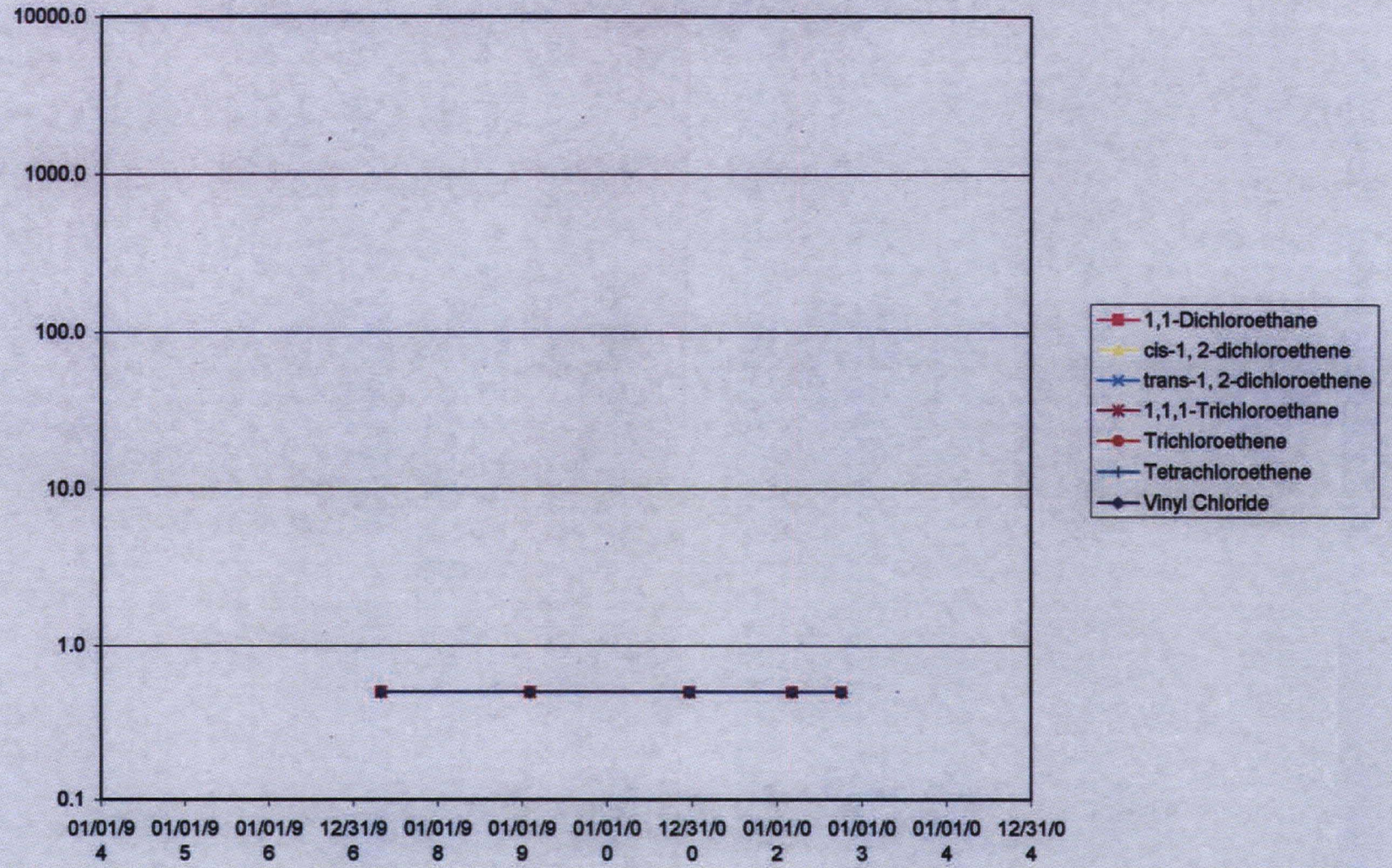
WATER QUALITY TREND PLOTS

Time Series Concentration Plot - VOCs
EX-1
McCall Oil and Chemical Corporation
Portland, Oregon



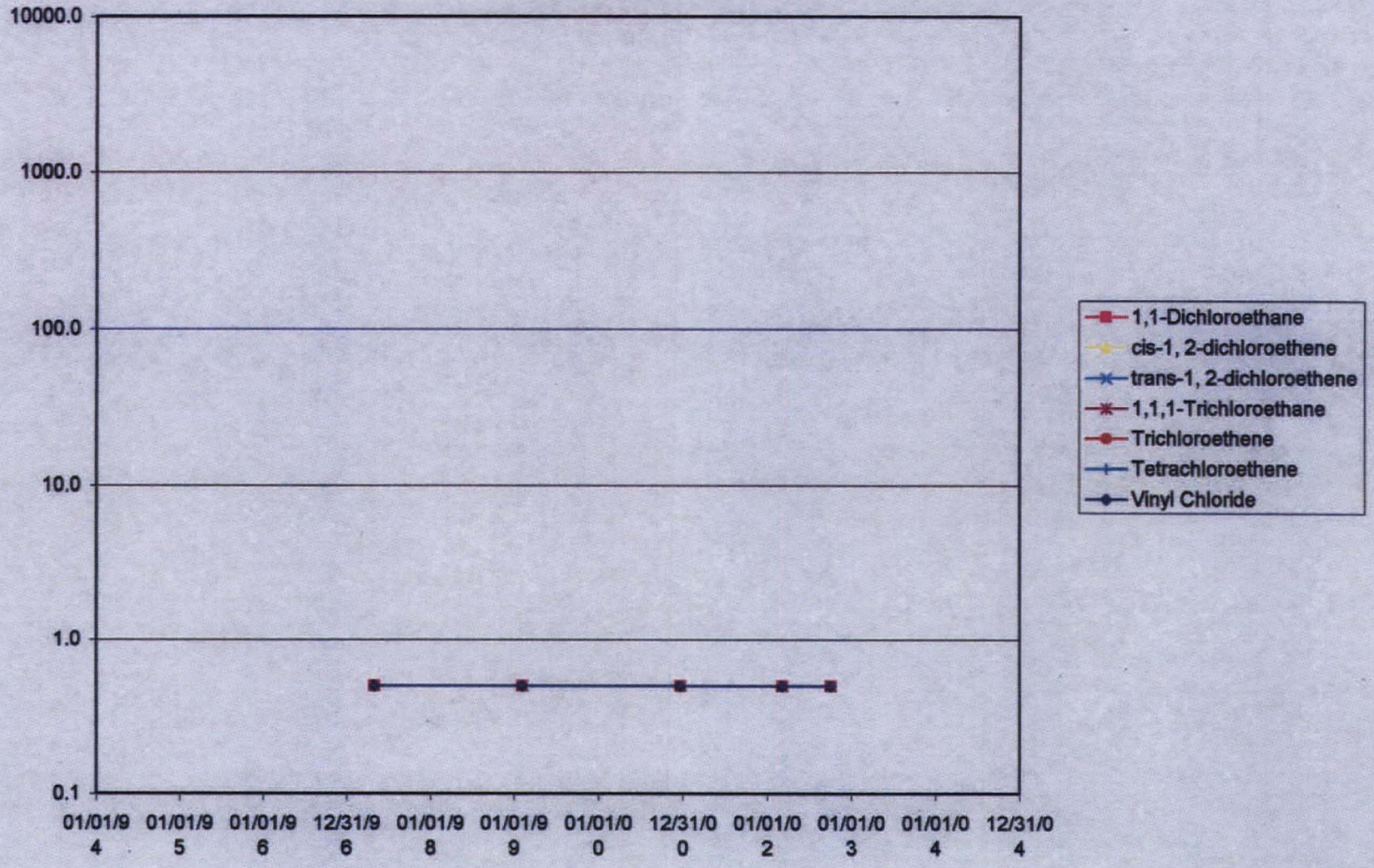
P:\Projects\McCall Portland\database\VOCs.XLS\EX-1

Time Series Concentration Plot - VOCs
EX-2
McCall Oil and Chemical Corporation
Portland, Oregon



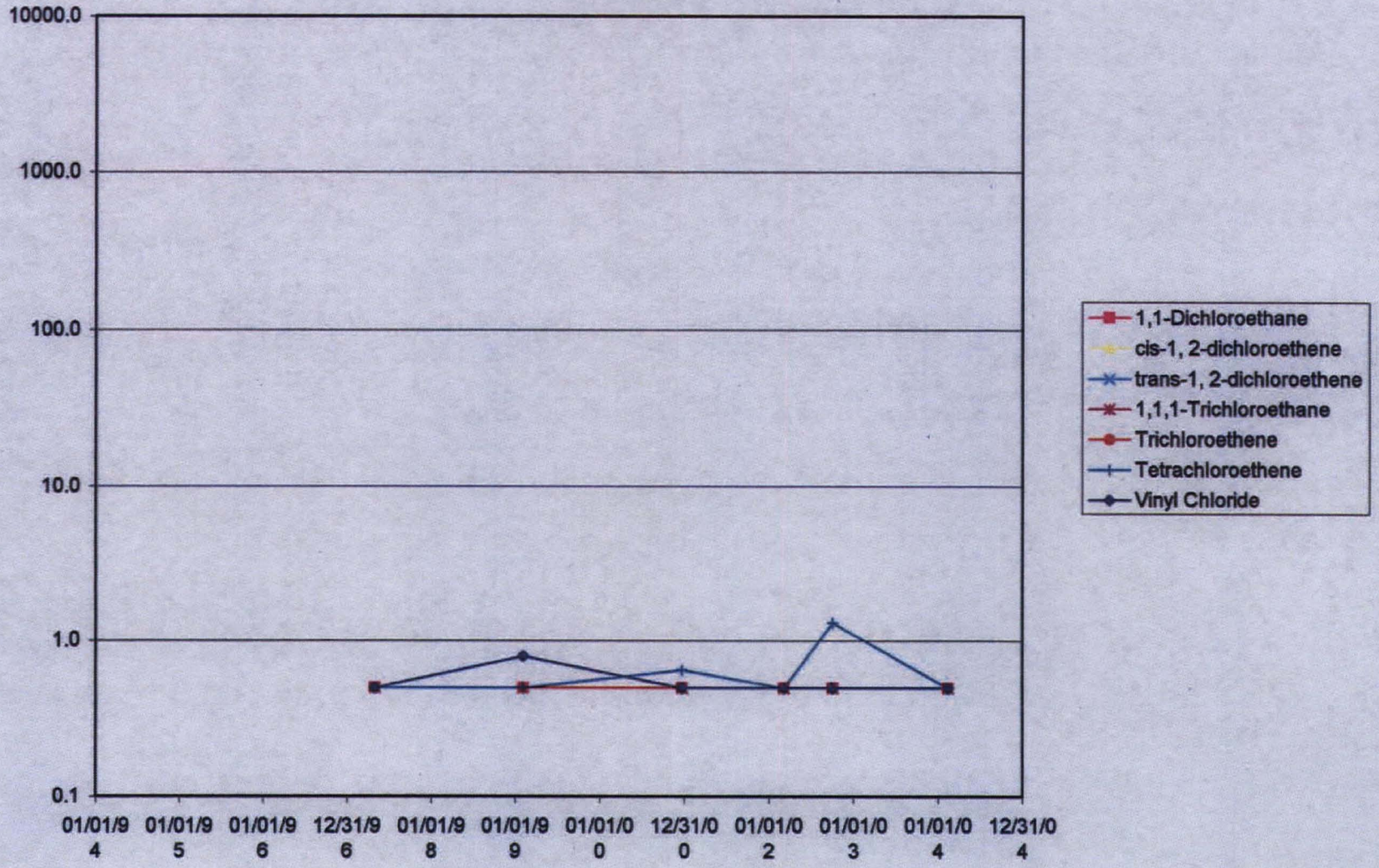
P:\Projects\McCall Portland\database\VOCs.XLS\EX-2

Time Series Concentration Plot - VOCs
EX-3
McCall Oil and Chemical Corporation
Portland, Oregon



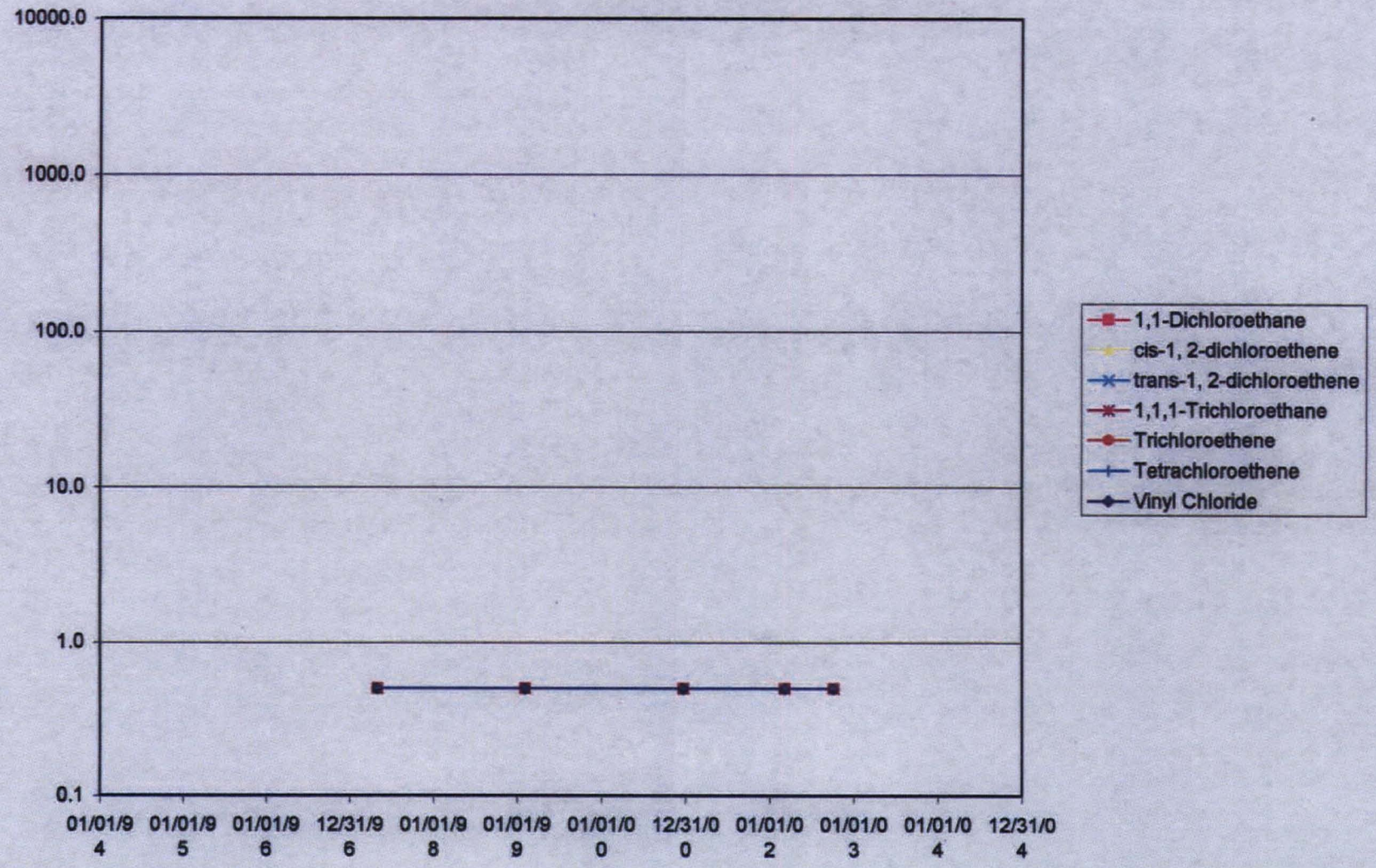
P:\Projects\McCall Portland\database\VOCs.XLS\EX-3

Time Series Concentration Plot - VOCs
EX-4
McCall Oil and Chemical Corporation
Portland, Oregon



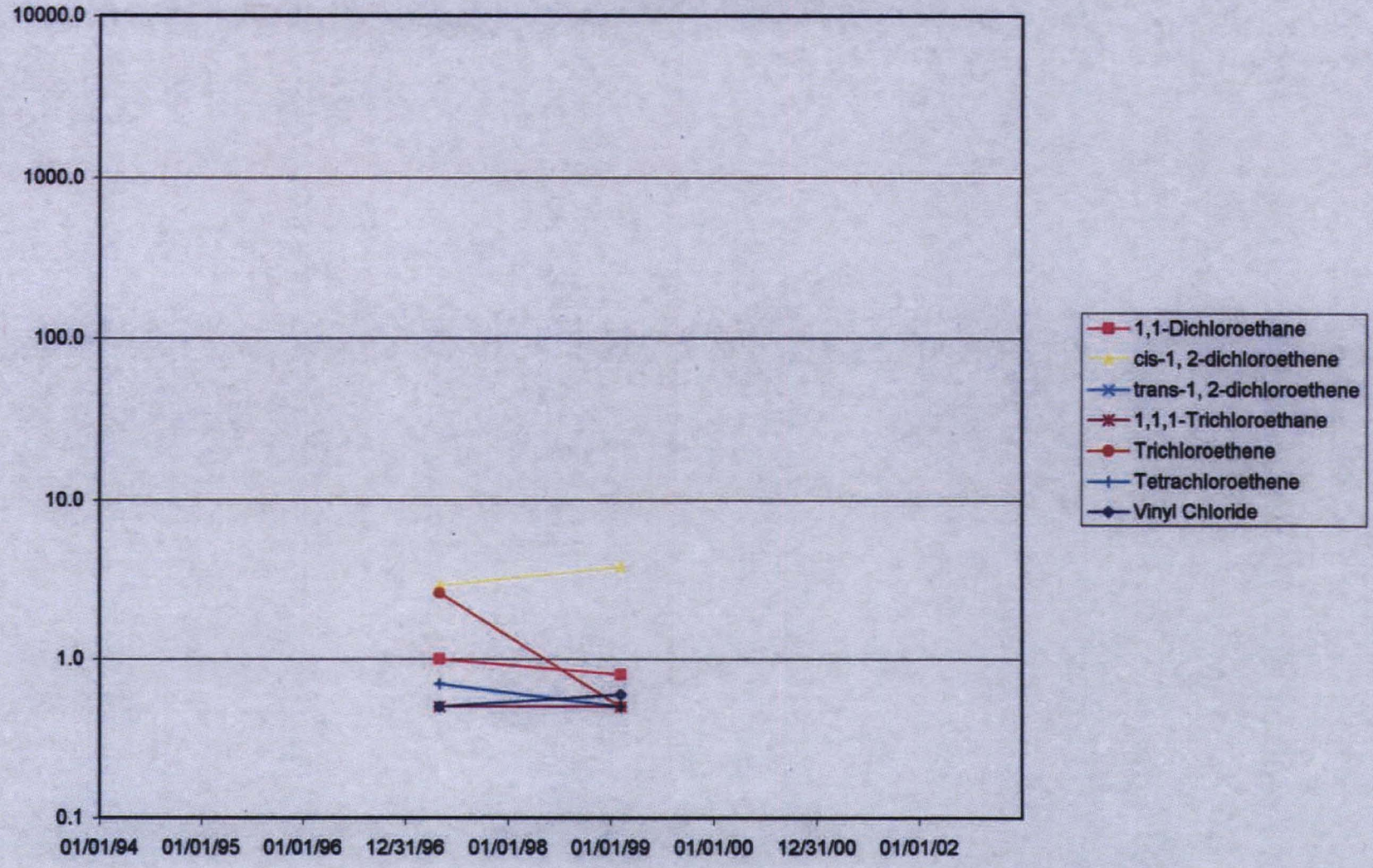
P:\Projects\McCall Portland\database\VOCs.XLS\EX-4

Time Series Concentration Plot - VOCs
EX-5
McCall Oil and Chemical Corporation
Portland, Oregon



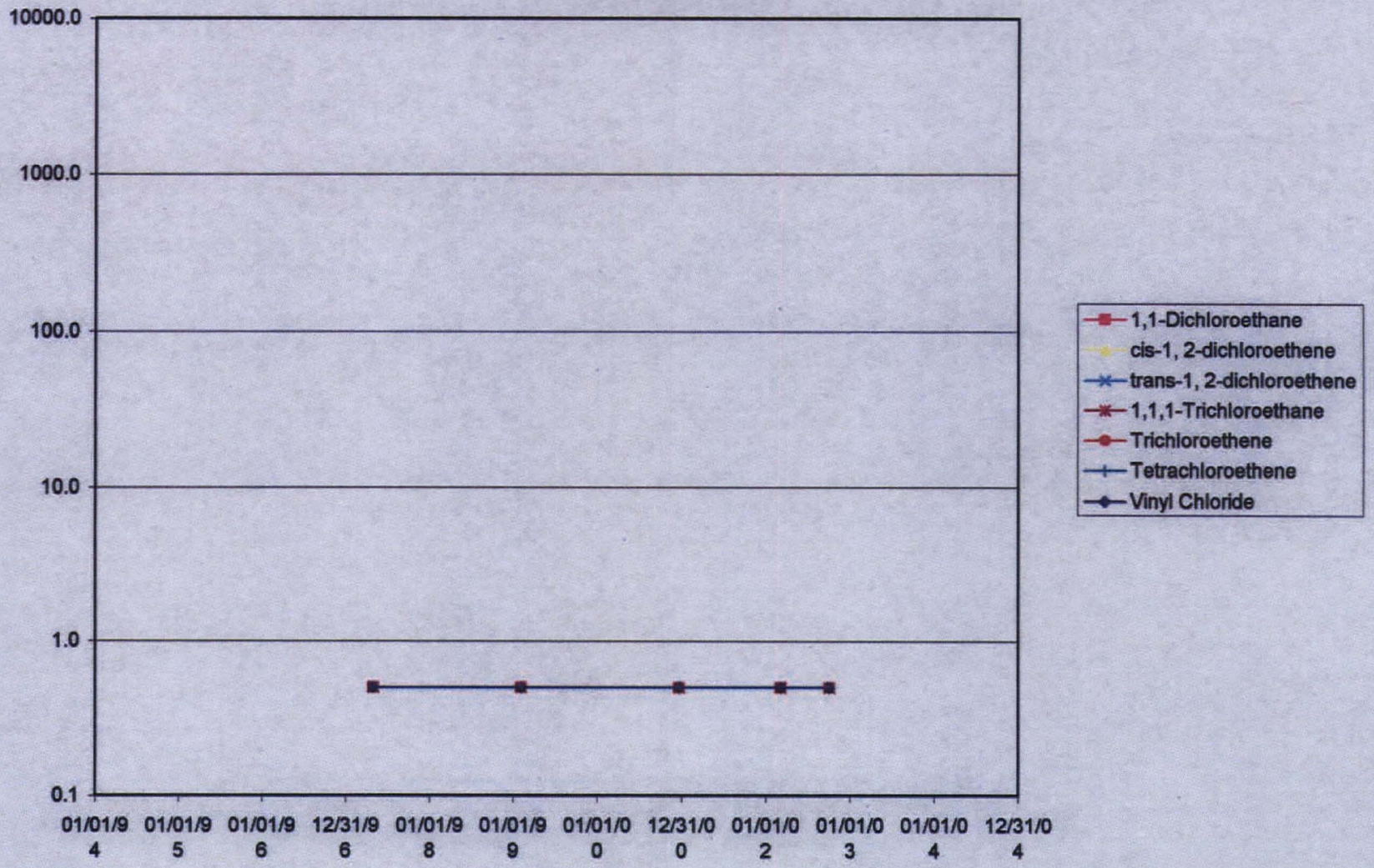
P:\Projects\McCall Portland\database\VOCs.XLS\EX-5

Time Series Concentration Plot - VOCs
EX-6
McCall Oil and Chemical Corporation
Portland, Oregon



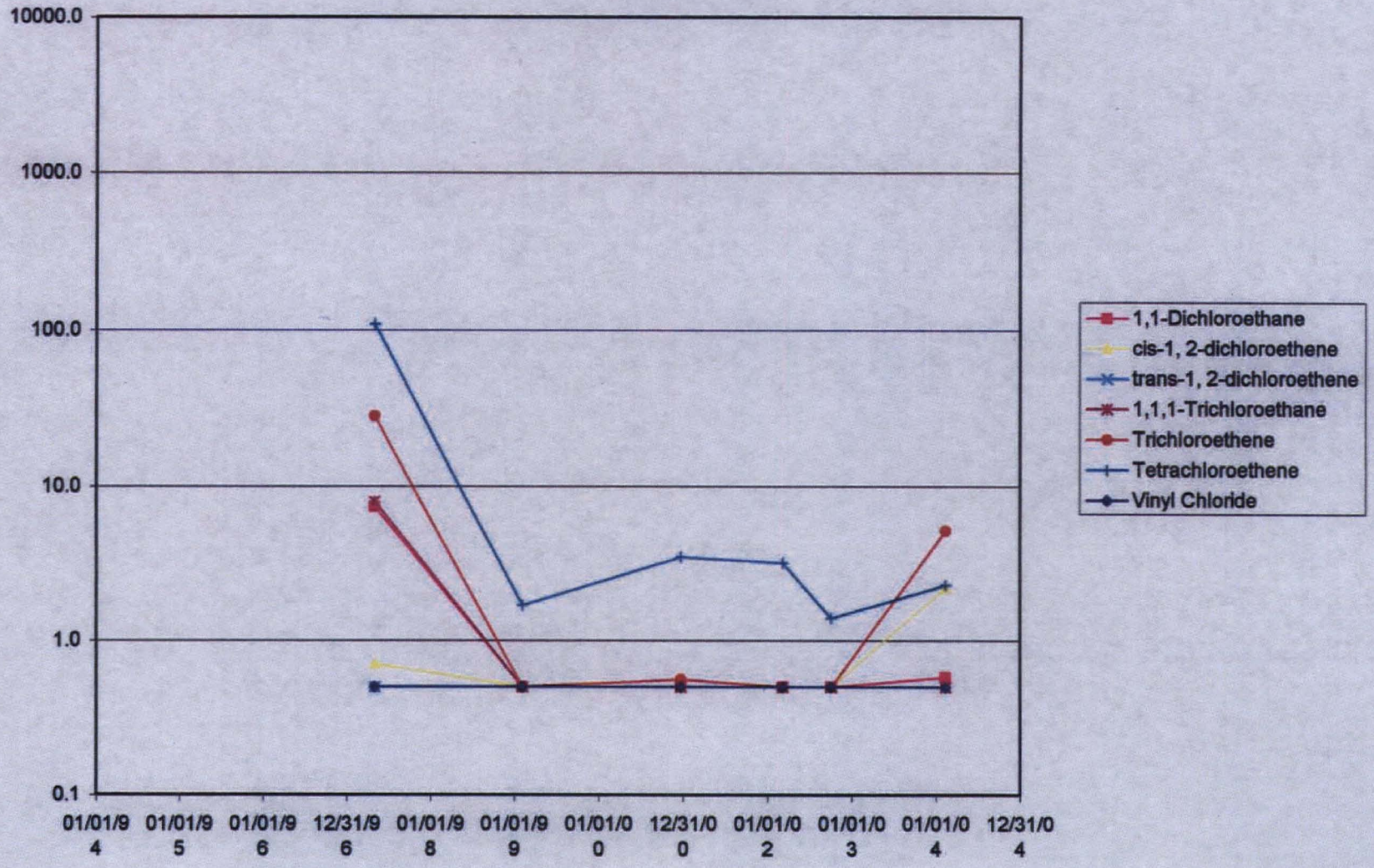
P:\Projects\McCall Portland\database\VOCs.XLS\EX-6

Time Series Concentration Plot - VOCs
EX-7
McCall Oil and Chemical Corporation
Portland, Oregon



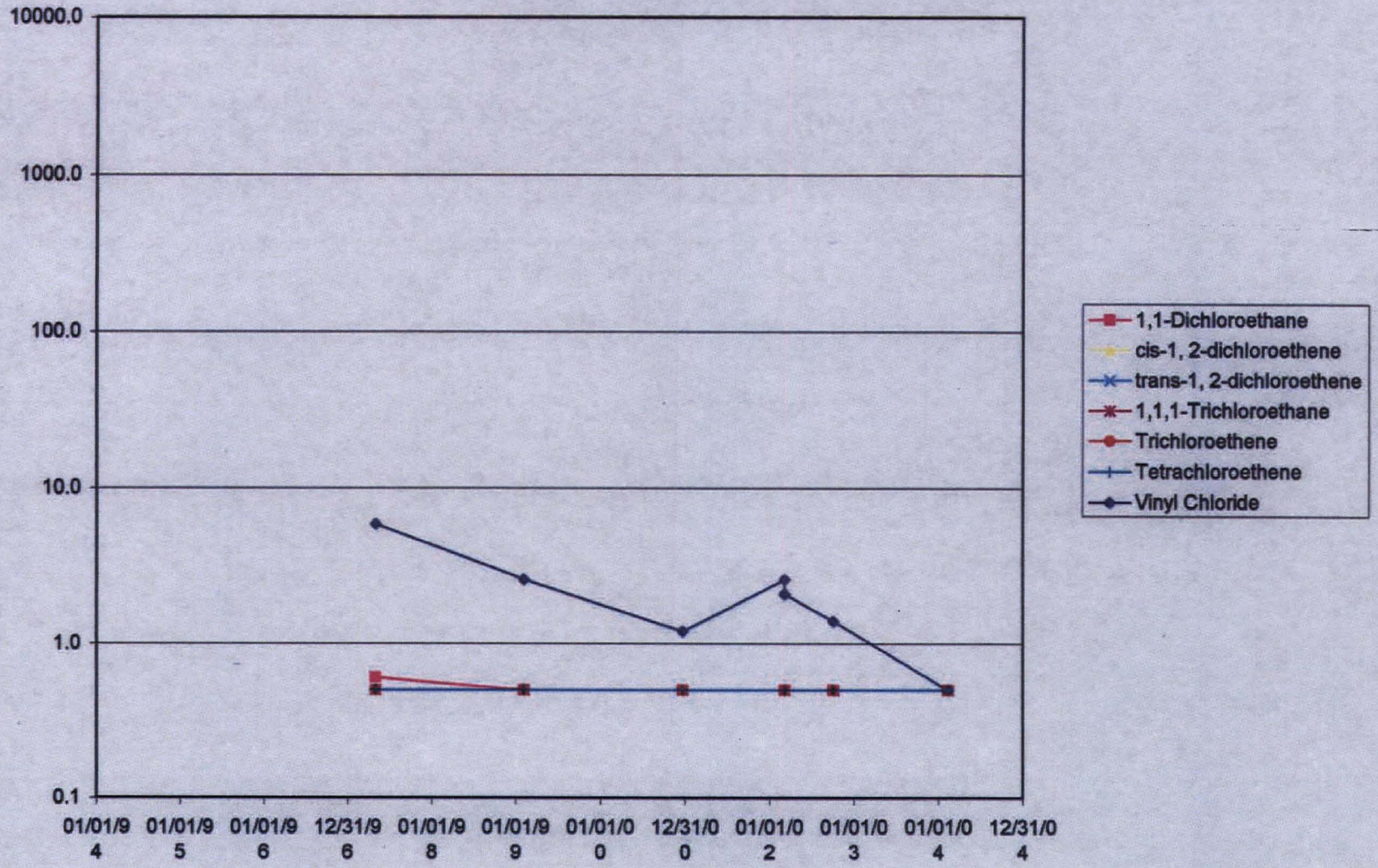
P:\Projects\McCall Portland\database\VOCs.XLS\EX-7

Time Series Concentration Plot - VOCs
MW-1
McCall Oil and Chemical Corporation
Portland, Oregon



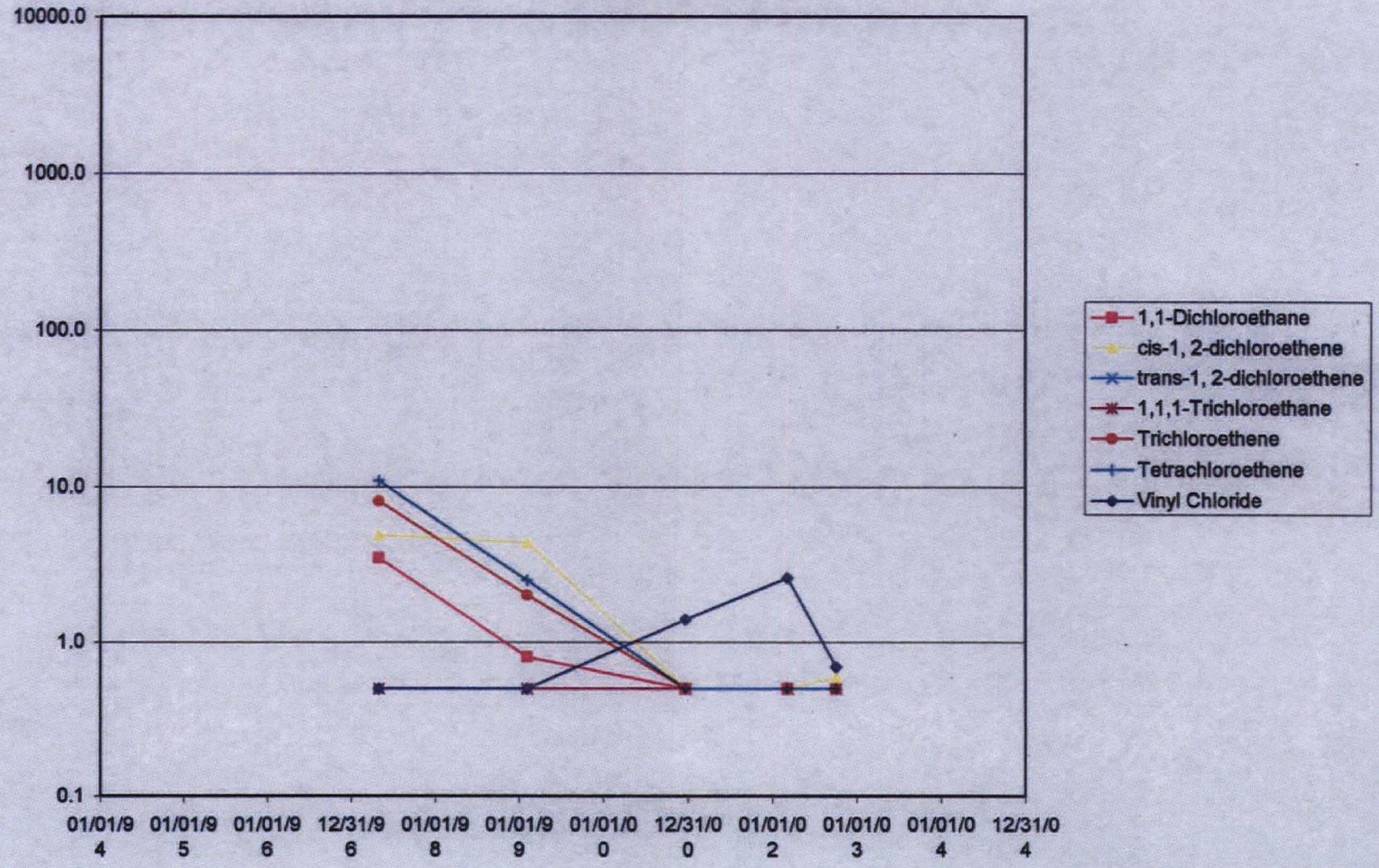
P:\Projects\McCall Portland\database\VOCs.XLS\MW-1

Time Series Concentration Plot - VOCs
MW-3
McCall Oil and Chemical Corporation
Portland, Oregon



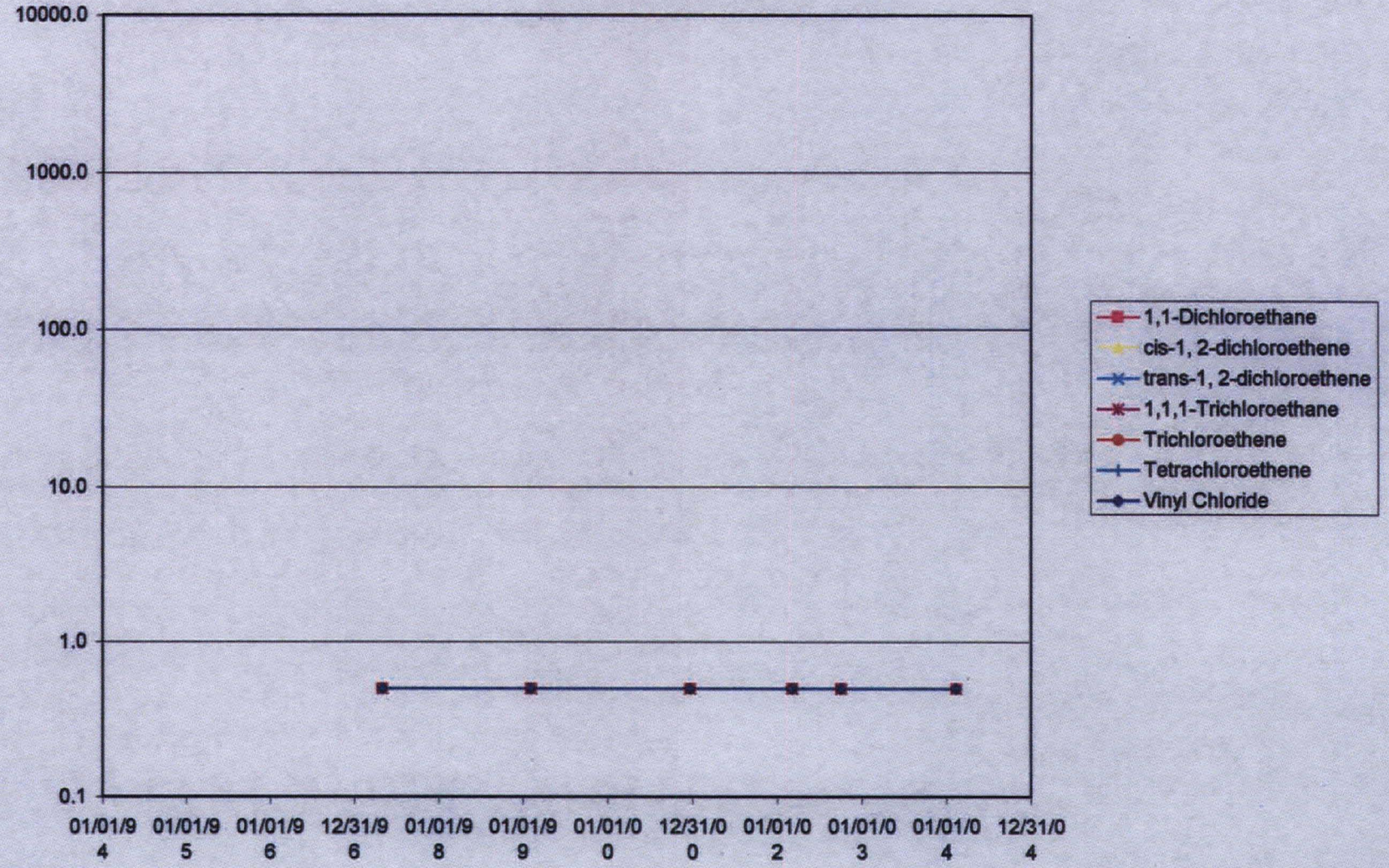
P:\Projects\McCall Portland\database\VOCs.XLS\MW-3

Time Series Concentration Plot - VOCs
MW-4
McCall Oil and Chemical Corporation
Portland, Oregon



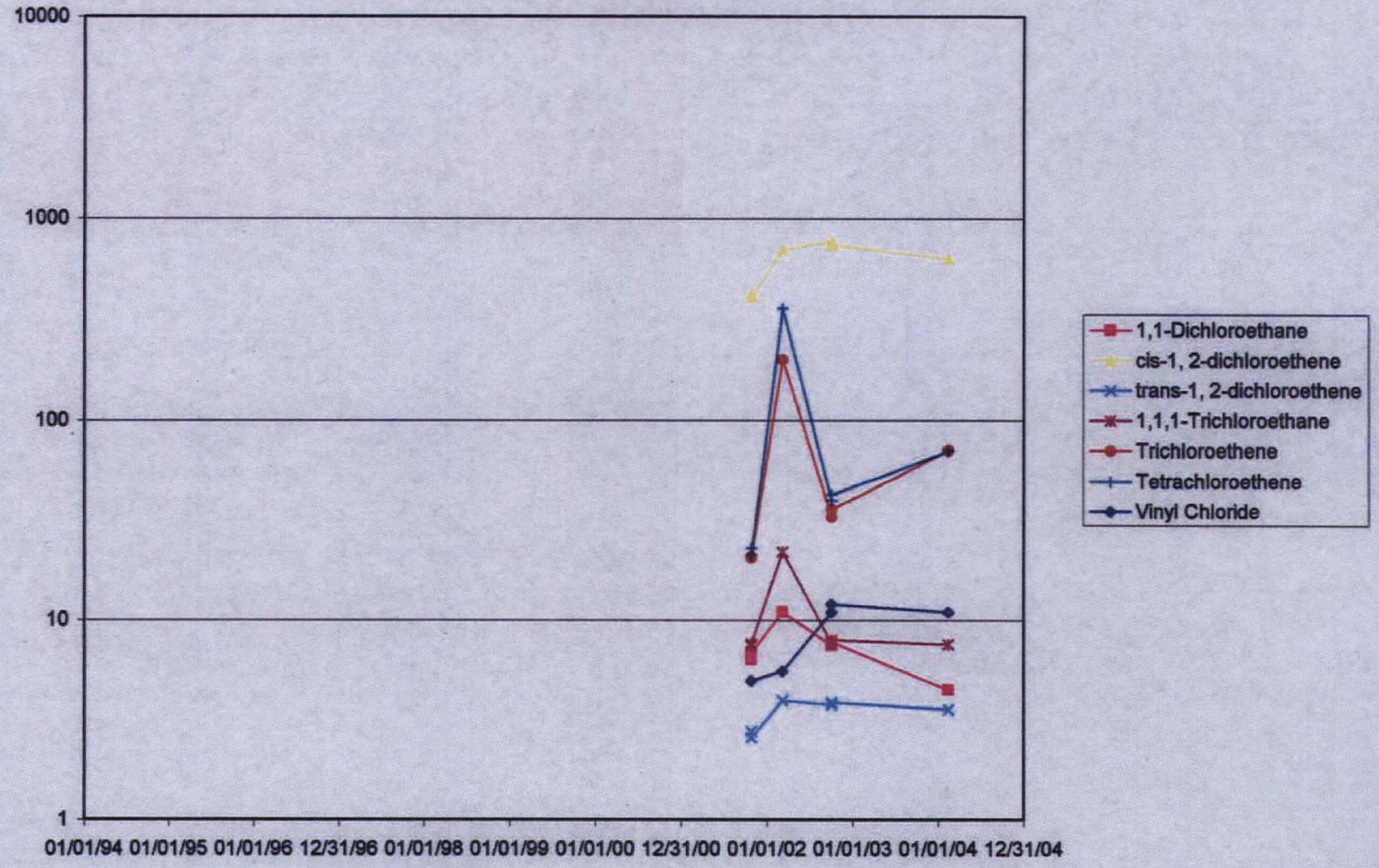
P:\Projects\McCall Portland\database\VOCs.XLS\MW-4

Time Series Concentration Plot - VOCs
MW-5
McCall Oil and Chemical Corporation
Portland, Oregon



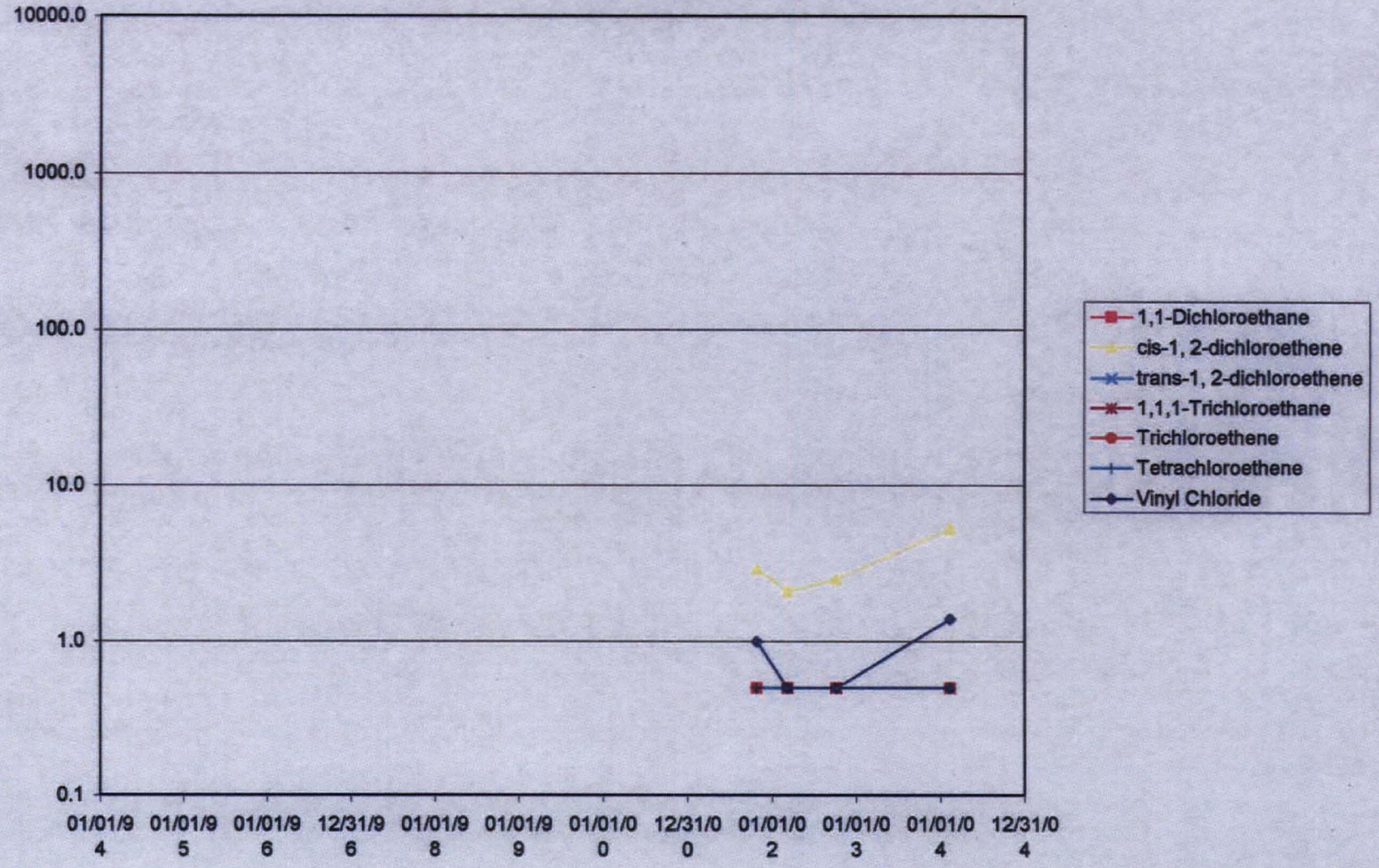
P:\Projects\McCall Portland\database\VOCs.XLS\MW-5

Time Series Concentration Plot - VOCs
MW-6
McCall Oil and Chemical Corporation
Portland, Oregon



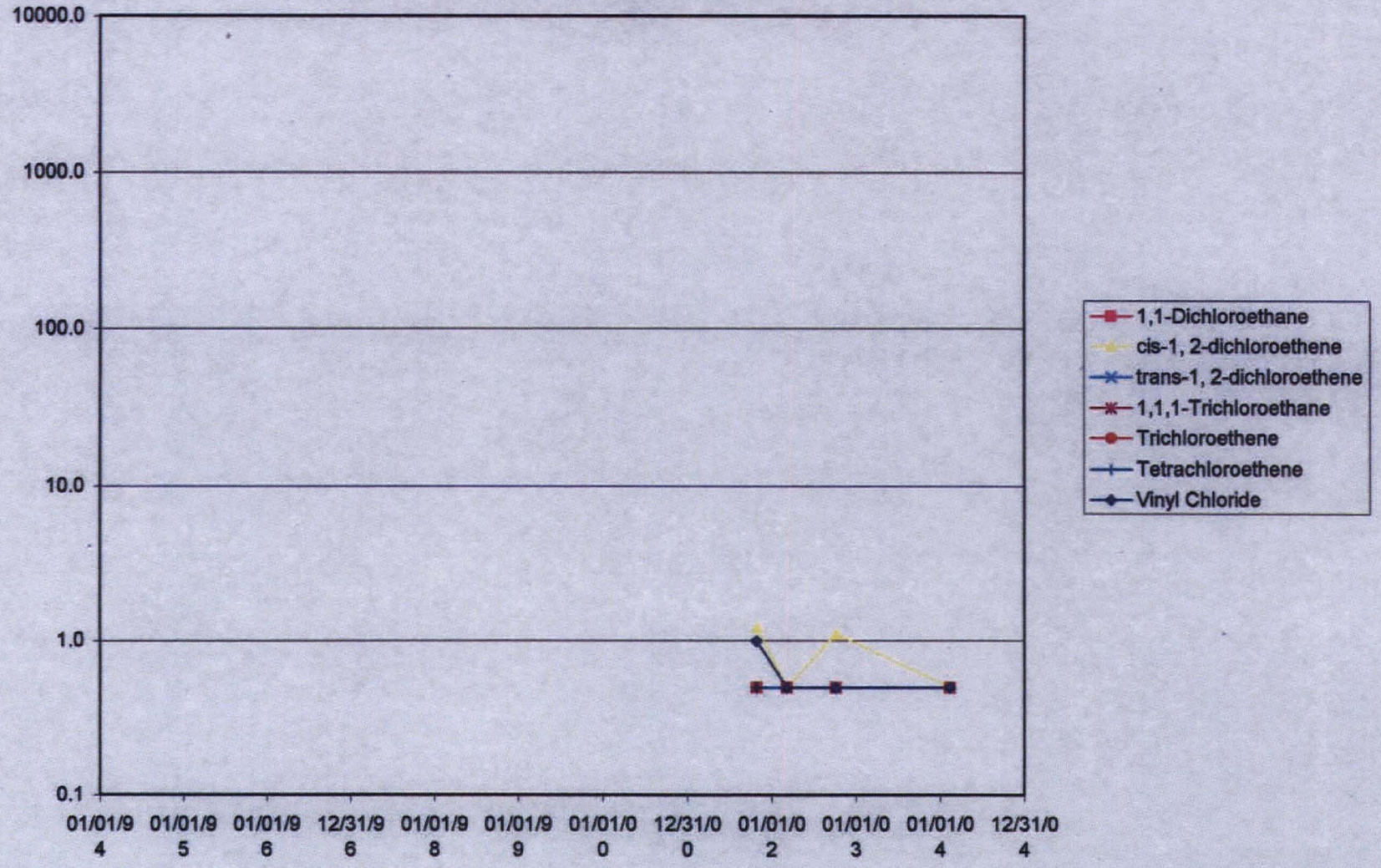
P:\Projects\McCall Portland\database\VOCs.XLS\MW-6

Time Series Concentration Plot - VOCs
MW-7
McCall Oil and Chemical Corporation
Portland, Oregon



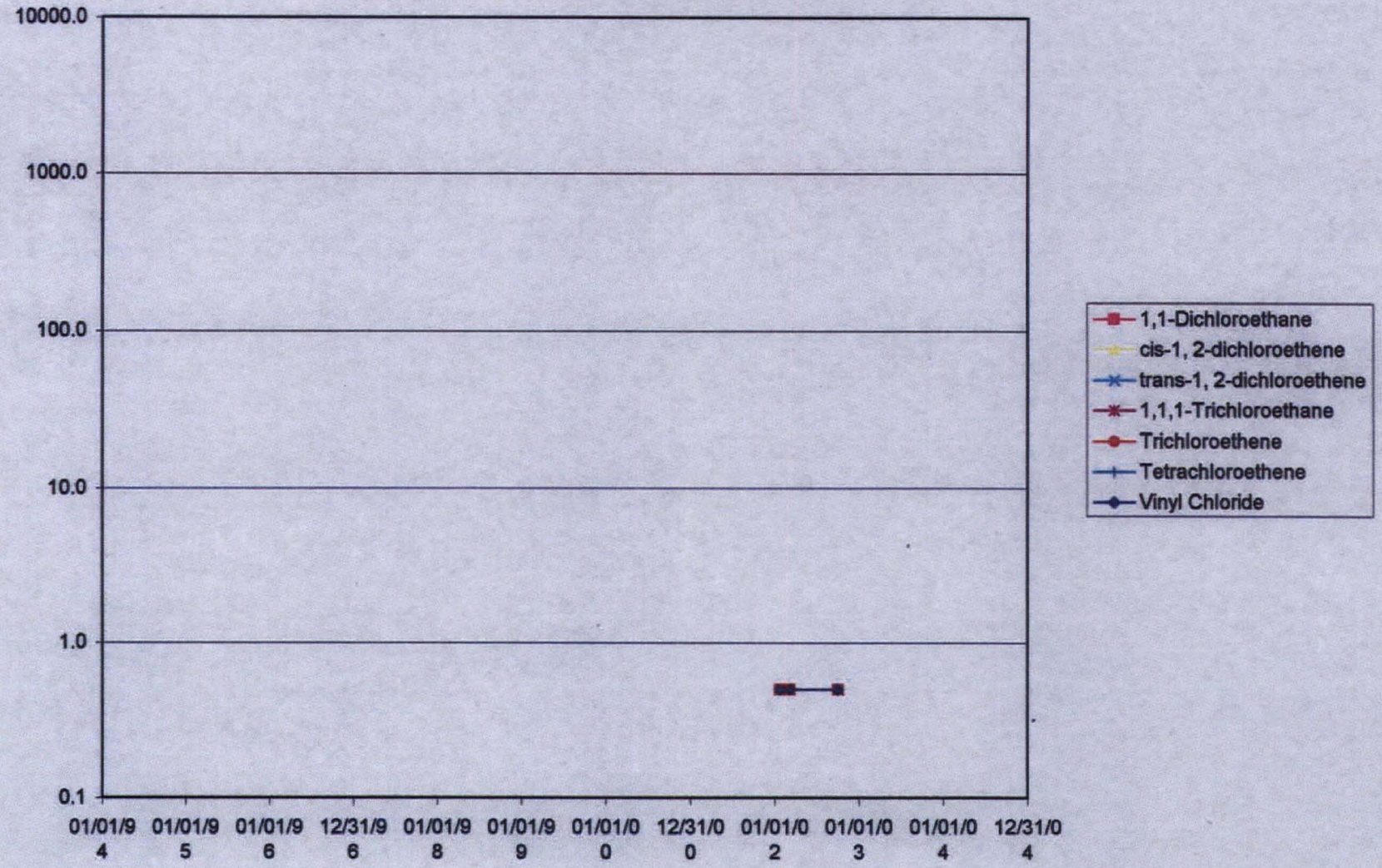
P:\Projects\McCall Portland\database\VOCs.XLS\MW-7

Time Series Concentration Plot - VOCs
MW-8
McCall Oil and Chemical Corporation
Portland, Oregon



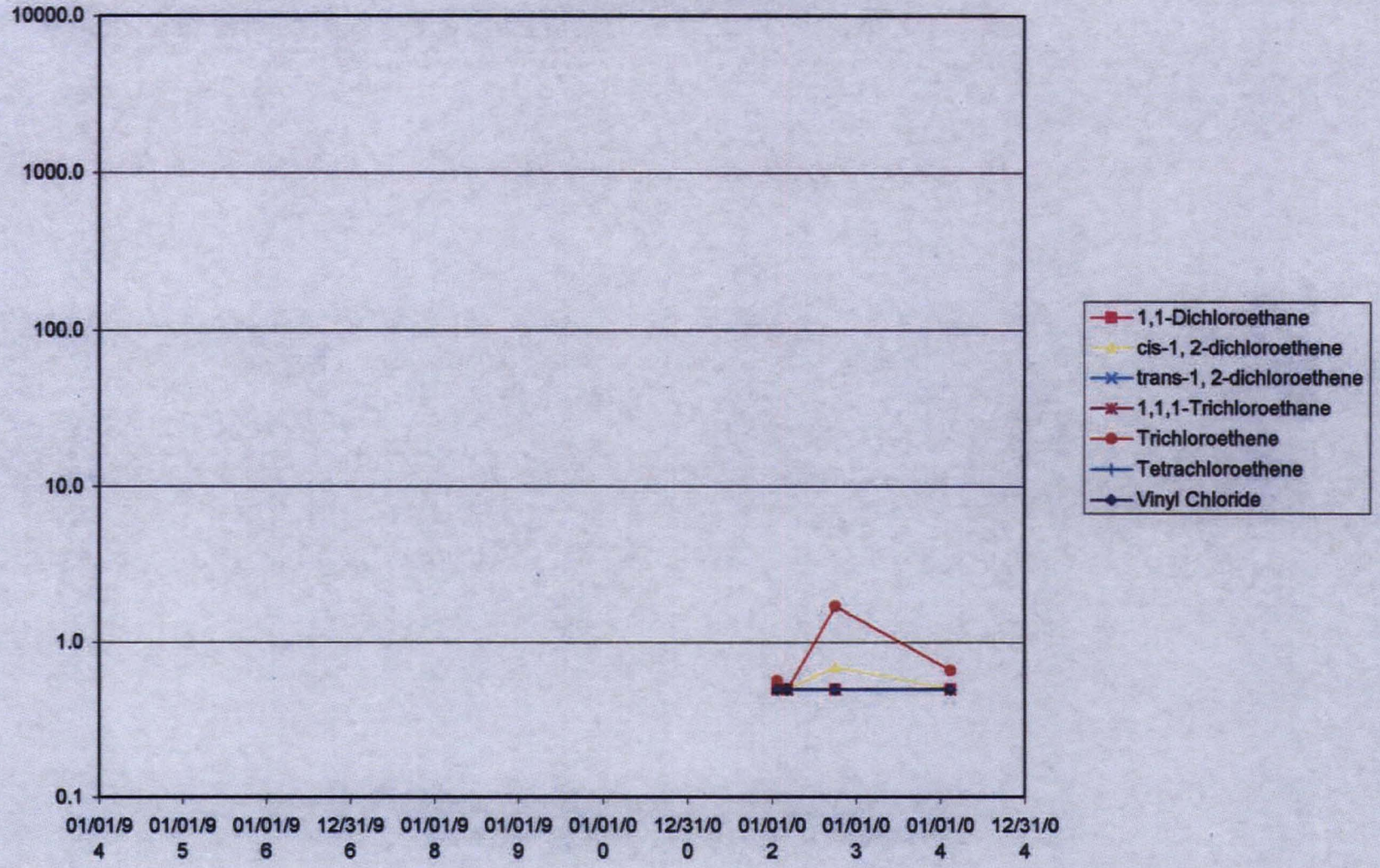
P:\Projects\McCall Portland\database\VOCs.XLS\MW-8

Time Series Concentration Plot - VOCs
MW-9
McCall Oil and Chemical Corporation
Portland, Oregon



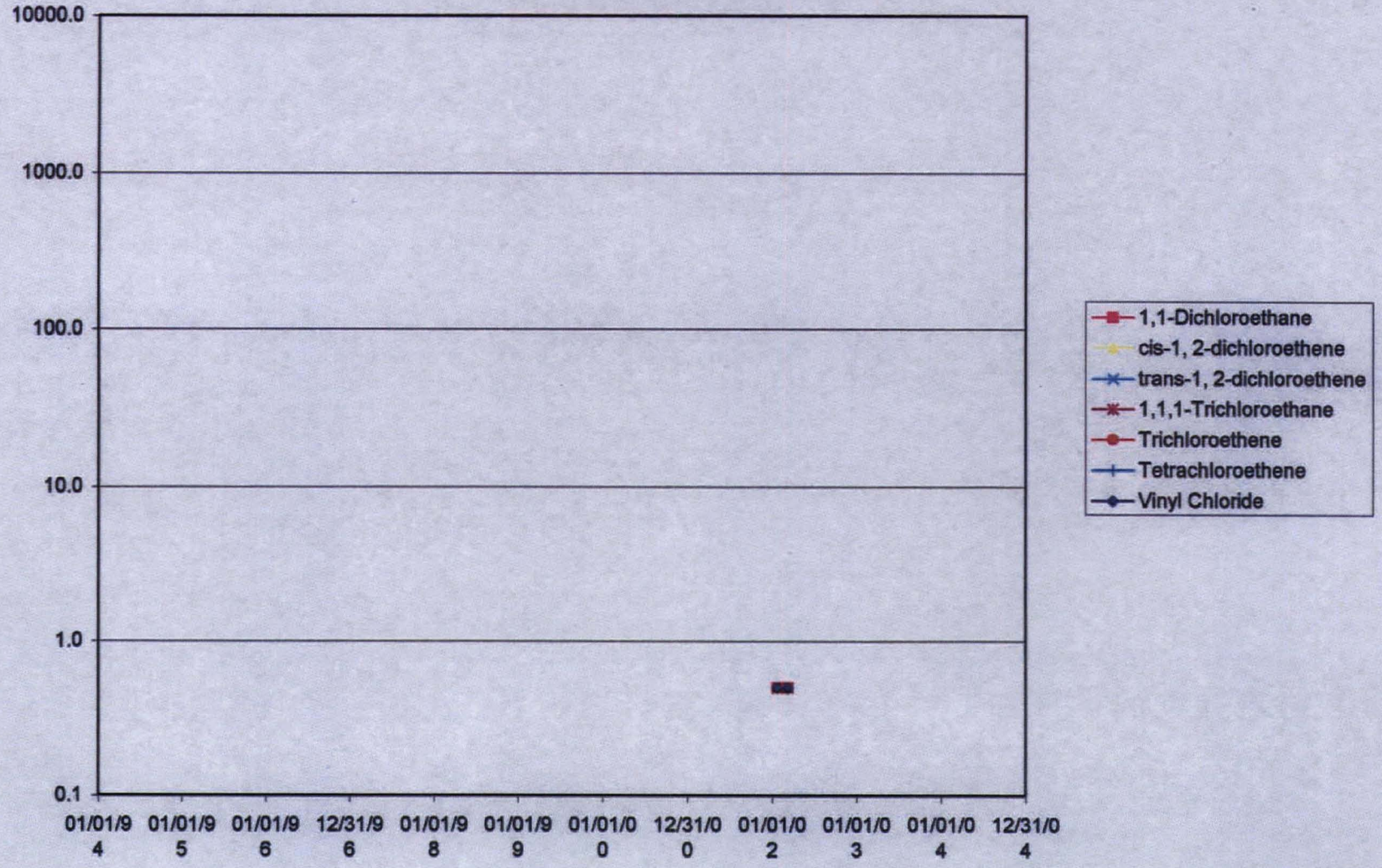
P:\Projects\McCall Portland\database\VOCs.XLS\MW-9

Time Series Concentration Plot - VOCs
MW-10
McCall Oil and Chemical Corporation
Portland, Oregon



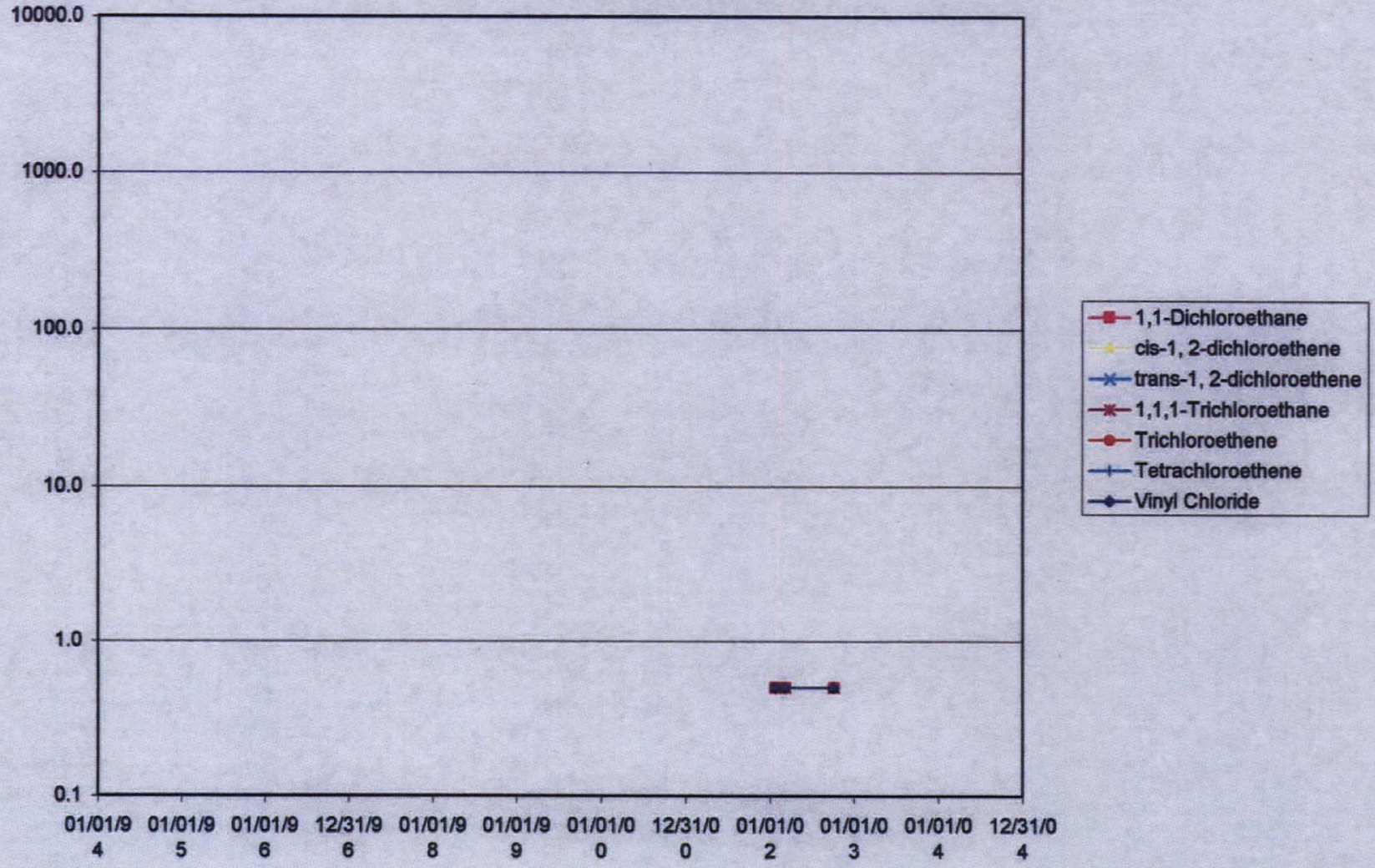
P:\Projects\McCall Portland\database\VOCs.XLS\MW-10

Time Series Concentration Plot - VOCs
MW-11
McCall Oil and Chemical Corporation
Portland, Oregon



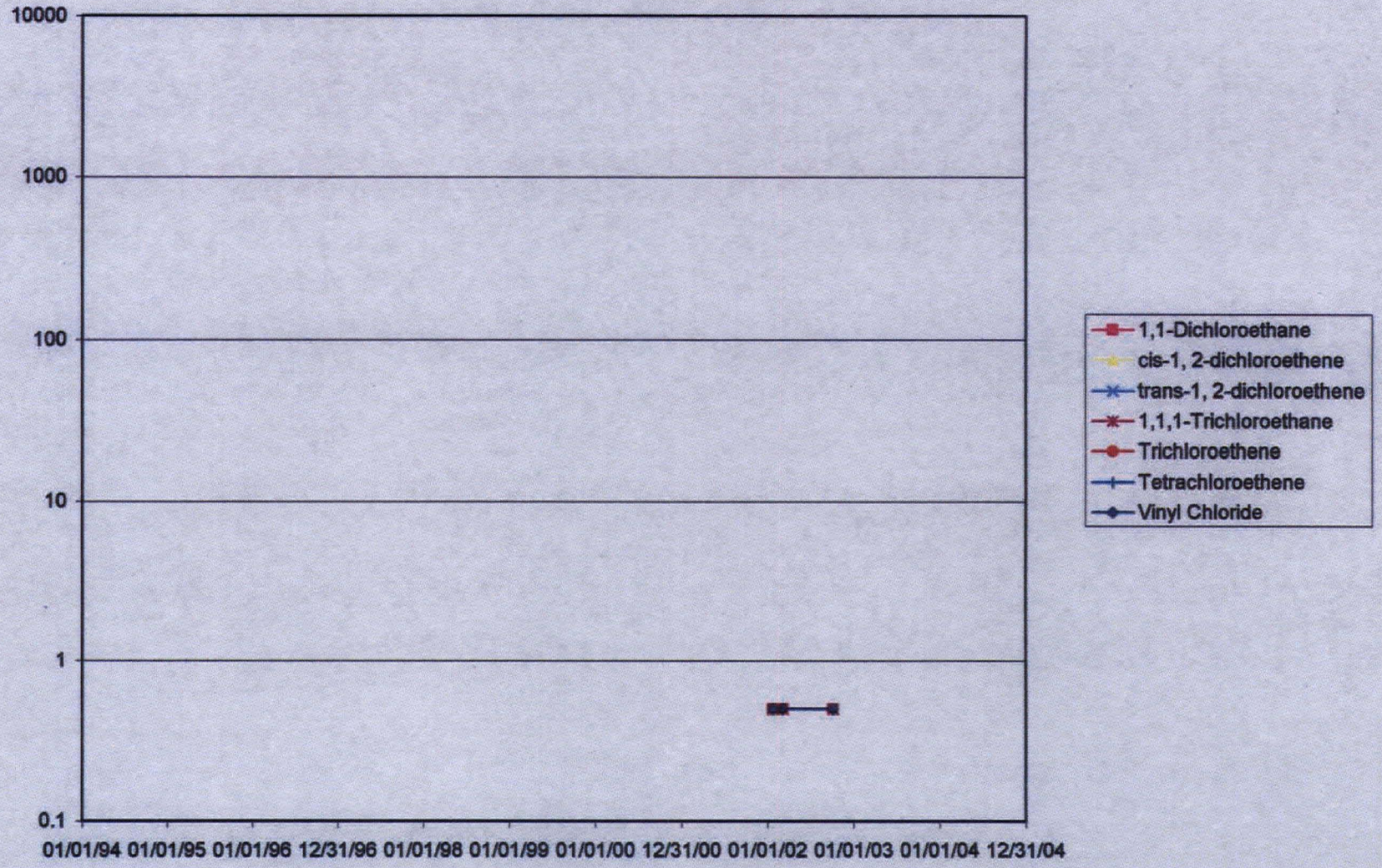
P:\Projects\McCall Portland\database\VOCs.XLS\MW-11

Time Series Concentration Plot - VOCs
MW-12
McCall Oil and Chemical Corporation
Portland, Oregon



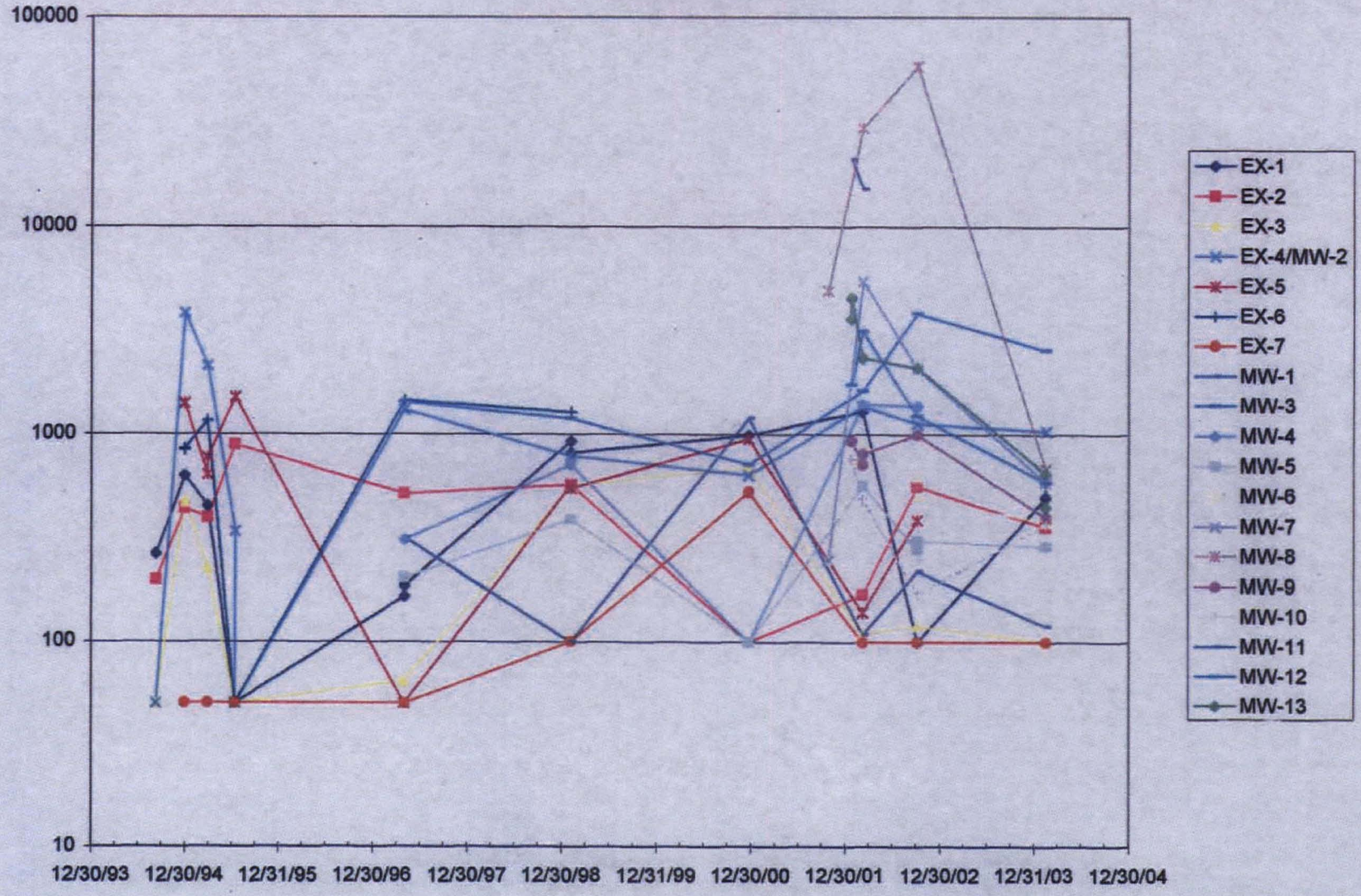
P:\Projects\McCall Portland\database\VOCs.XLS\MW-12

Time Series Concentration Plot - VOCs
MW-13
McCall Oil and Chemical Corporation
Portland, Oregon

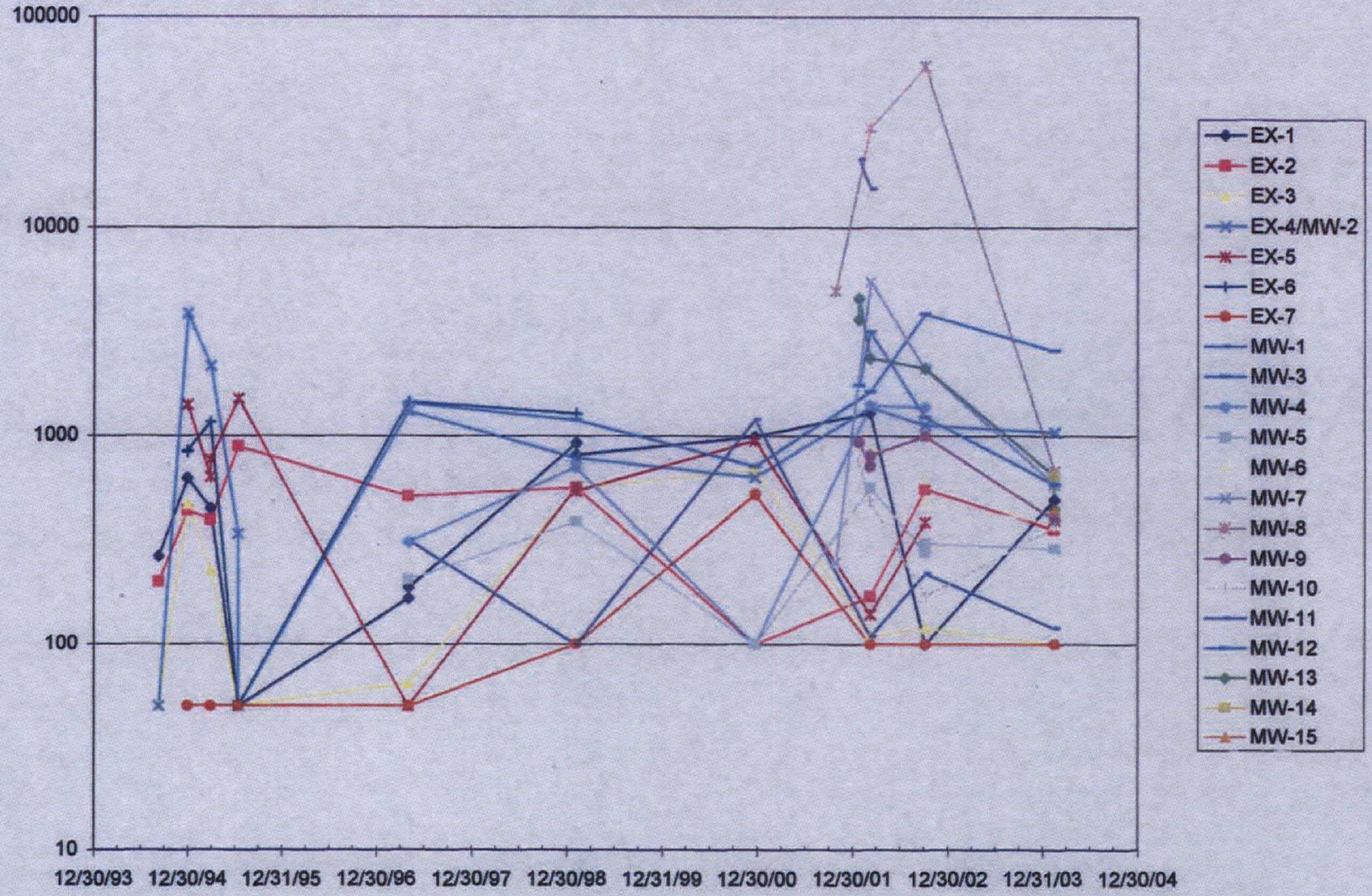


P:\Projects\McCall Portland\database\VOCs.XLS\MW-13

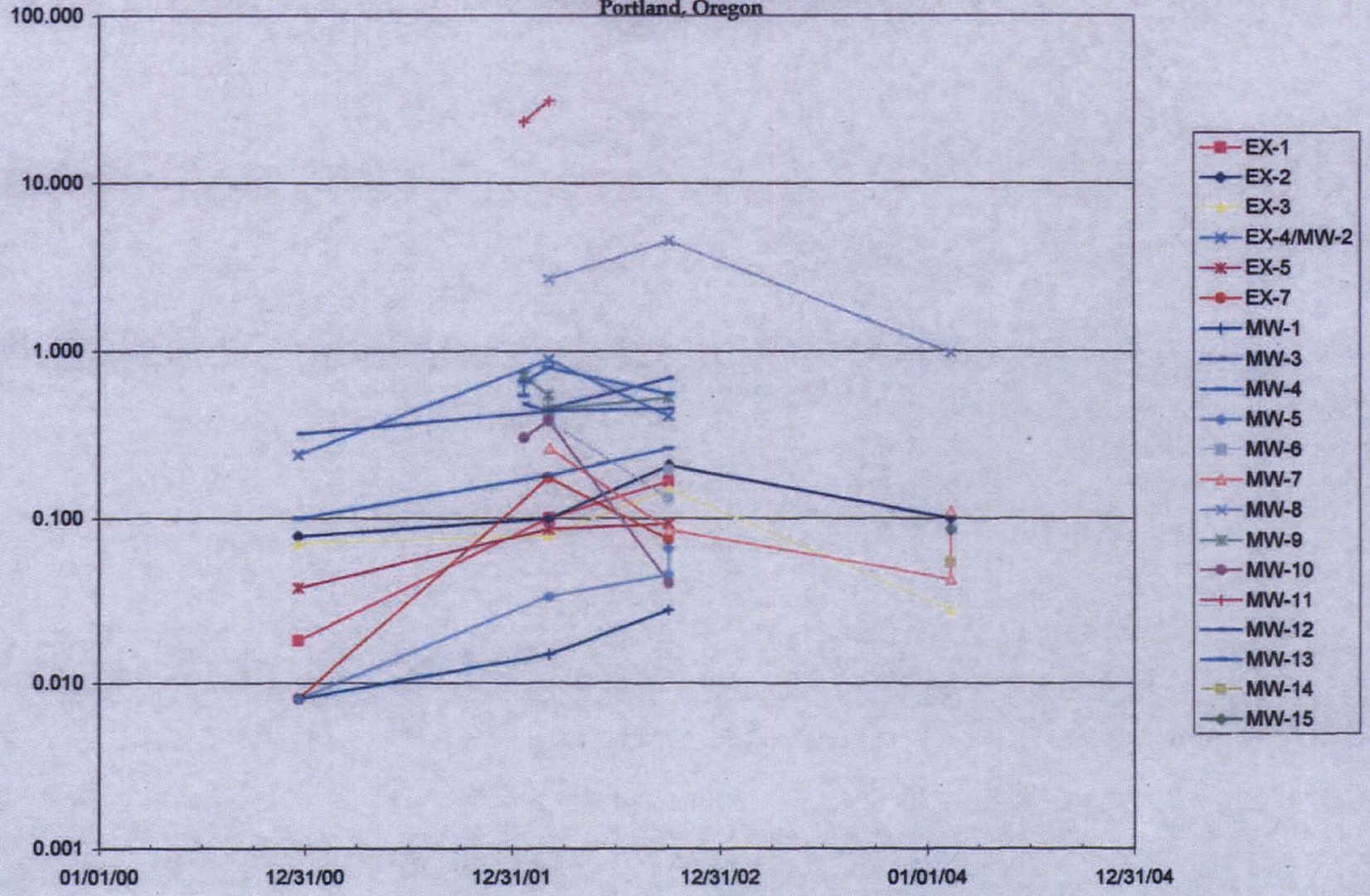
Time Series Concentration Plot - Total TPH
McCall Oil and Chemical Corporation
Portland, Oregon

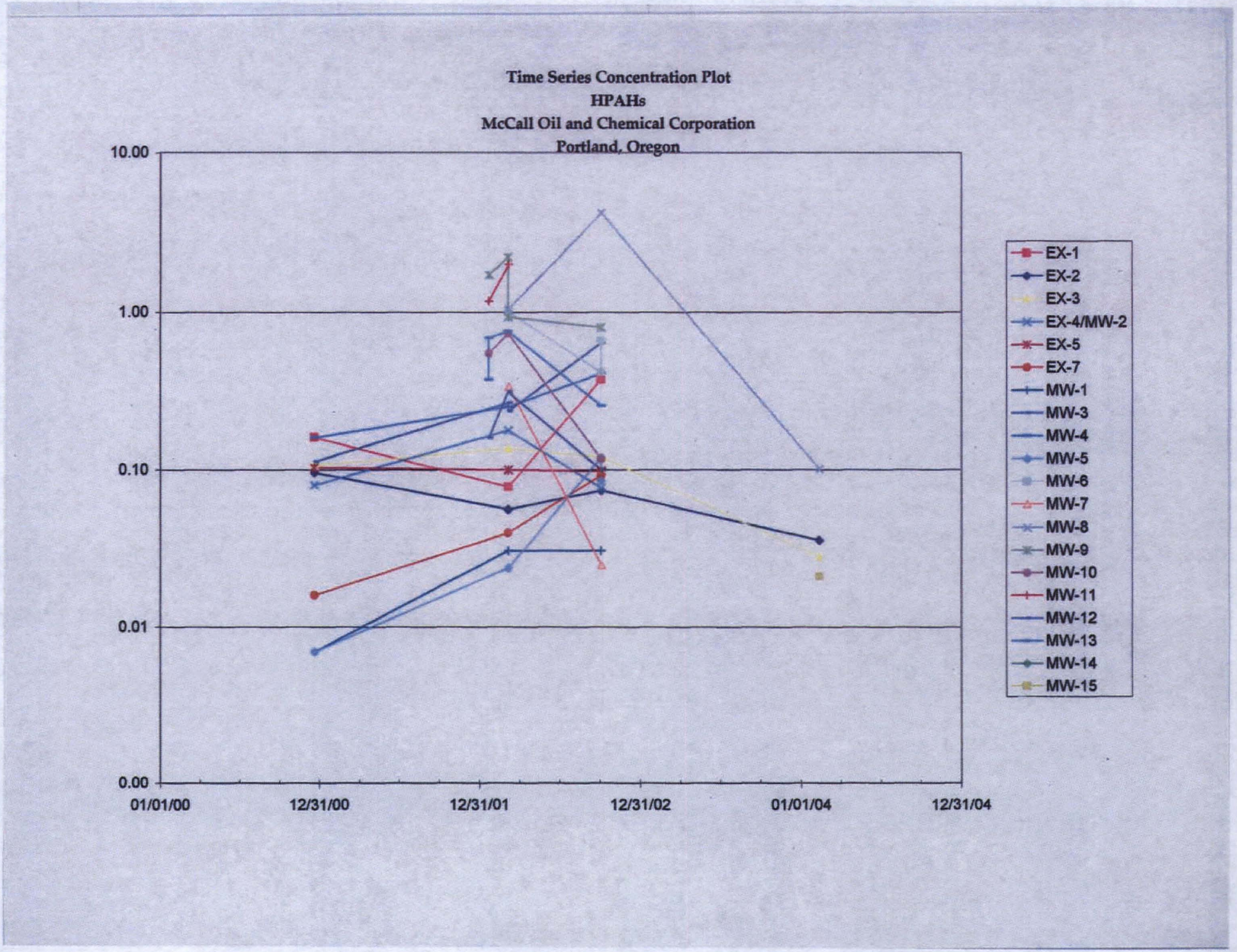


Time Series Concentration Plot - Total TPH
McCall Oil and Chemical Corporation
Portland, Oregon



Time Series Concentration Plot
LPAHs
McCall Oil and Chemical Corporation
Portland, Oregon




Time Series Concentration Plot
HPAHs
McCall Oil and Chemical Corporation
Portland, Oregon
10.00
1.00
0.10
0.01
0.00
01/01/00
12/31/00
12/31/01
12/31/02
01/01/04
12/31/04
EX-1
EX-2
EX-3
EX-4/MW-2
EX-5
EX-7
MW-1
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12
MW-13
MW-14
MW-15

APPENDIX E

FIELD SAMPLING DATA SHEETS

MEMORANDUM

TO: Project File 820910/01 DATE: December 20, 2000

FROM: Clayton Slominski

RE: December 2000 Sampling at McCall Oil and Chemical Corporation

On December 20, 2000, EMCON/OWT collected groundwater and storm water samples from, and measured static water levels in, groundwater monitoring wells and storm drains at McCall Oil and Chemical Corporation, located on NW Front Avenue in Portland, Oregon. All groundwater and storm water samples collected were sent to Columbia Analytical Services, Inc. (CAS), for analysis of the parameters requested on the chain-of-custody forms (attached).

Before sampling began, each groundwater monitoring well was purged of at least three casing volumes or until field parameter measurements (temperature, pH, specific conductance) stabilized. Temperature, pH, and specific conductance values were recorded after each casing volume was removed. The wells were purged using Voss™ disposable double check valve bailers. The Slope Indicator m-scope was decontaminated as follows:

- Commercially distilled water and Liquinox non-phosphatic soap rinse
- Commercially distilled water rinse
- 1:1 methanol (purge and trap grade) and laboratory deionized water rinse
- Five minute "air dry"
- A triple rinse with laboratory deionized water

Samples were transferred into sample bottles using a bottom-emptying device. Each dissolved metal sample was field-filtered by gravity directly from the bailer through a 0.45-micron filter. Volatile organic samples were transferred from the bailer to the sample containers via a variable flow bottom-emptying device.

Quality control included analyzing two sets of laboratory-supplied trip blanks, which accompanied the sample bottles to the field and back to the lab for analysis.

Samples were packed in iced shipping containers for preservation and delivered by courier using chain-of-custody procedures to CAS, in Kelso, Washington.

Attachments: Table
Task Sheet
Field Sampling Data Sheets
Chain of Custody Forms
Daily Calibration Records

Table
Sampling Field Parameters
Great Western Chemical Corporation

December 2000

Well	Blind Code	Date Sampled	Depth to Water (feet)	Casing Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C
Monitoring Wells								
EX-1	MCO-122000-9	12/20/2000	15.56	3	4.2	4.48	247	18.7
EX-2	MCO-122000-11	12/20/2000	18.63	3	3.0	6.65	591	18.4
EX-3	MCO-122000-12	12/20/2000	18.21	3	3.0	6.78	456	16.6
EX-4/MW-2	MCO-122000-7	12/20/2000	16.90	3	5.1	6.71	666	17.5
EX-5	MCO-122000-8	12/20/2000	19.45	3	2.1	6.91	445	14.9
EX-6	No sample	12/20/2000	NA	NA	NA	NA	NA	NA
EX-7	MCO-122000-3	12/20/2000	14.26	3	5.1	6.68	188	17.4
MW-1	MCO-122000-10	12/20/2000	17.22	3	1.5	6.70	1179	17.3
MW-3	MCO-122000-4	12/20/2000	16.66	3	5.1	6.76	736	17.3
MW-4	MCO-122000-5	12/20/2000	16.21	3	5.7	6.77	758	16.9
MW-5	MCO-122000-6	12/20/2000	19.61	3	7.8	6.79	1242	15.1
Storm Water								
S-1	MCO-122000-2	12/20/2000	NA	NA	NA	7.39	8	5.0
S-2	MCO-122000-1	12/20/2000	NA	NA	NA	7.87	131	5.0

NOTE: NA = not applicable.

McCall Oil Chemical Corporation
Task Sheet
December 2000

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
EX-1	14:24	24.10	15.56	MCO-122000-9	15:00	new lock/cap
EX-2	16:00	24.62	18.63	MCO-122000-11	16:30	new lock/cap
EX-3	16:35	23.95	18.21	MCO-122000-12	17:00	new lock/cap
EX-4 (MW-2)	12:20	27.30	16.90	MCO-122000-7	12:45	new lock/cap
EX-5	13:05	23.75	19.45	MCO-122000-8	13:40	new lock/cap
EX-6	14:00	0.33	0.00	no sample	/	monument flooded, well filled w/ sediment, casing rus
EX-7	10:00	24.62	14.26	MCO-122000-3	10:30	✓ new lock/tapped and cap/cleaned
MW-1	15:10	19.95	17.22	MCO-122000-10	15:45	new lock/cap
MW-3	10:35	26.91	16.66	MCO-122000-4	11:00	✓ new lock/cap retapped monument + bolt holes
MW-4	11:05	27.74	16.21	MCO-122000-5	11:40	✓ new lock/cap retapped monument + 2 new bolts
MW-5	11:45	35.20	19.61	MCO-122000-6	12:15	new lock/cap
S-1	9:00	N/A	N/A	MCO-122000-2	09:20	✓
S-2	9:30	N/A	N/A	MCO-122000-1	09:50	✓
QA\QC						
FB-1	:	.	.		:	
DUP	:	.	.		:	

Notes:

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME:	McCall Oil & Chemical Corporation	WELL ID:	S-1 (stormwater)
SITE ADDRESS:	826 SW 15th Avenue, Portland, OR 97205	BLIND ID:	1000-122000-2
		DUP ID:	MCO NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?					TEMPERATURE:	°F 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/20/00	09:00	N/A	.	N/A	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml	HCl	YES	NO		
Amber Glass	12/20/00	09:20	G	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, (500) 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (Include duplicate count): 3

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) GC/MS-SIM-TCL OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keidahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zr) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0	G	0.00	7.39	0.08	5.0		.	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** S-2

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** 122000-1

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	(RAIN)		?				**TEMPERATURE:**	°F 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	09:30	N.A	.	N.A	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml	HCl	YES	NO		
Amber Glass	12/20/00	09:50	G	2	250, 500, (1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250 (500) 1L	~~HNO_3~~	(YES)	(NO)		√
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (3)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (TPH-8015B) (CLMS-SIM-TCL) OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0	G	0.00	7.87	131	5.0		.	Clear/greyish

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-7

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-3

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)		(RAIN)		?			TEMPERATURE:	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	10:00	24.62		14.26		10.36	X 1	1.69
/ /	:	.	.	.	.		X 3	5.07

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	10:30	C	(3) (40 ml)	(HCl)	YES	NO		√
Amber Glass	12/20/00	10:30	C	2 250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (Include duplicate count): (5)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+4 SVOC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 10:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.1	6.68	188	17.4			slight cloudy / red
2	C	3.4	6.57	185	17.4		.	cloudy / red
1	C	1.7	6.47	181	17.1		.	cloudy / red
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* new lock / cap - tapped / cleaned monument bolt holes

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-3
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-4
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	(RAIN)		?		TEMPERATURE:	(°F) 40.	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	10:35	26.91	/	16.66	/	10.25	X 1	1.67
/ /	:	.	.	.	.		X 3	5.01

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: N (if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	11:00	C	(3) (40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	12/20/00	↓	C	2 250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	12/20/00	↓	C	1 250, 500, (1L)	(HNO_3)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+ 4 SVOC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) (method 200.8)

WATER QUALITY DATA Purge Start Time: 10:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.1	6.76	736	17.3		.	
2	C	3.4	6.70	740	17.2		.	
1	C	1.7	6.69	733	17.1		.	clear/pale tint
0		0.00	.	.	.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* new lock/cap - retapped monument bolts

SAMPLER: Tim STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-4
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: mco-122000-5
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 40. °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/20/00	11:05	27.74	/	16.21	/	11.53	X 1	1.88
/ /	:						X 3	5.64

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume ml	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	11:40	C	3	40 ml HCl	YES	NO		√
Amber Glass	12/20/00	:	C	2	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	12/20/00	:	C	1	250, 500 1L HNO_3	YES	YES		√
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (HSVOC) (TPH by 8015B) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) (method 200.8)

WATER QUALITY DATA

Purge Start Time: 11:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.			
3	C	5.7	6.77	758	16.9		.	
2	C	3.8	6.78	757	17.0		.	Slightly cloudy/grey
1	C	1.9	6.77	741	16.8		.	Cloudy/grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* Retapped monument / replaced 2-bolts. (New lock / cap)

SAMPLER: Tim STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-5
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-6
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	(RAIN)	?	TEMPERATURE:	(°F) 40. °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	11:45	35.20	.	19.61	.	15.59	X 1	2.54
/ /	:	.	.	.	.		X 3	7.62

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	12:15	C	(3)	(40 ml) HCl	(YES)	(NO)		√
Amber Glass	12/20/00	:	C	2	250, 500, (1L) (None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (5)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+ 4SUSC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	7.8	6.79	1242	15.1		.	↑
2	C	5.2	6.80	1240	15.1		.	
1	C	2.6	6.86	1226	15.3		.	cloudy/grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* new lock/cap

SAMPLER: TIM STONE (PRINTED NAME) TIM STONE (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Group
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-4 (MW-2)

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-7

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)		(RAIN)		?			TEMPERATURE:	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
12/20/00	12:20	27.30	.	16.90	.	10.40	X1	1.70
/ /	:	.	.	.	.		X3	5.09

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	12:45	C	3	40 ml	(HCl)	YES	NO		✓
Amber Glass	12/20/00		C	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /				250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /				250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /				250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /				250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	12/20/00		C	1	250, 500 (1L)	(HNO_3)	(YES)	(YES)		✓
	/ /				250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+ 4510C) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) (method 200.8)

WATER QUALITY DATA Purge Start Time: 12:28 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.1	6.71	666	17.5	/	.	Cloudy/grey
2	C	3.4	6.77	731	17.2	/	.	Cloudy/grey
1	C	1.7	7.22	862	17.2	/	.	Cloudy/brown
0		0.00	.		.	/	.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* New lock/cap.

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-5
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-8
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)		(RAIN)		?			TEMPERATURE:	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	13:05	23.75	/	19.45	/	4.30	X 1	0.70
/ /	:	.	.	.	.		X 3	2.10

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: N if used

Bottle Type	Date	Time	Method §	Amount	Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	12/20/00	13:40	C	3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	12/20/00	:	C	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+ 458 VOC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 13:10 Pump/Bailer Inlet Depth:

leas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	2.1	6.91	445	14.9		.	slight cloudy grey
2	C	1.4	6.87	444	14.9		.	slight cloudy grey
1	C	0.7	6.84	450	14.9		.	cloudy / grey
0		0.00	.		.		.	

sing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* New lock / cap.

SAMPLER: Tim STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-1
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-9
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)	(RAIN)		?		TEMPERATURE:	(F) 40.	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	14:24	24.10	~~15.56~~	15.56		8.54	X 1	1.39
/ /	:	.	.	.	.		X 3	4.13

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" =)	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	15:00	C	3	(40 ml)	(HCl)	(YES)	NO		✓
Amber Glass	12/20/00	"	C	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (5)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR [ ] WA [ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &G/ease) (+ 4 SVOC) (TPH by 8015B) OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(Ag) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 14:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	4.2	4.48	247	18.7		.	
2	C	2.8	4.45	248	18.6			slight cloudy/red tint
1	C	1.4	4.50	225	18.3		.	cloudy/red-brown
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

& New lock / cap.

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Group
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-1

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-10

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 40. °C						

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	15:10	19.95	.	17.22	.	2.73	X1	0.44
/ /	:	.	.	.	.		X3	1.33

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	15:45	C	3	40 ml HCl	YES	NO		✓
Amber Glass	/ /	:		2	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, (1L) HNO_3	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 6

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) Met Dy 8260 OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (1 5520C) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica) (200.8)

Number of Containers per Bottle Type

WATER QUALITY DATA Purge Start Time: 15:15 Pump/Bailer Inlet Depth:

as.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
		.	.		.	/	.	
	C	1.5	6.70	1179	17.3	/	.	4
	C	1.0	6.69	1194	17.1	/	.	
	C	0.5	6.73	1208	15.9	/	.	Clear - Suspended particles
		0.00	.		.	/	.	

g] [Select A-G] [Cumulative Totals] [Clarity, Color]

New lock/Cap.

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-2
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: MCO-122000-11
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY		(CLOUDY)		(RAIN)		?		TEMPERATURE:	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20/00	16:00	24.62	.	18.63	.	5.99	X 1	0.98
/ /	:	.	.	.	.		X 3	2.93

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/20/00	16:30	C	3	(40 ml)	(HCl)	(YES)	NO		√
Amber Glass	12/20/00	:	C	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (List by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (4 SVOC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 16:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.0	6.65	591	18.4			
2	C	2.0	6.66	592	18.3		.	
1	C	1.0	6.69	590	18.1		.	cloudy/grey
0		0.00	.		.		.	

[Purging] [Select A-G] [Cumulative Totals] [Clarity, Color]

* New lock / Cap.

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Q group
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** EX-3
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** MCO-122000-12
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
12/20/00	16:35	23.95	.	18.21	.	5.74	X1	0.94
/ /	:	.	.	.	.		X3	2.81

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	12/20/00	17:00	C	3	40 ml	HCl	YES	NO		√
Amber Glass	12/20/00	:	C	2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil & Grease) (+ 45VOC) (TPH by 8015B) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

per Bottle Type

ATER QUALITY DATA Purge Start Time: 16:40 Pump/Bailer Inlet Depth:

as.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
		.	.		.		.	
	C	3.0	6.78	456	16.6		.	
	C	2.0	6.80	456	16.7			
	C	1.0	6.82	459	16.2		.	Cloudy/grey
		0.00	.		.		.	

] [Select A-G] [Cumulative Totals] [Clarity, Color]

* New lock/cap

'LER: Tim Stone (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
15055 SW Sequoia Parkway, Suite 140
Portland, Oregon 97224-7712
Office: (503) 624-7200 Fax: (503) 620-7658

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-6
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: no sample
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY	(CLOUDY)		(RAIN)		?	TEMPERATURE:	(°F) 40.	°C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/20 60	14:00	0.33	.	0.00	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" = 0.163)	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	/ /	:		3	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 0

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) (list by 8260B) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (+ 4 SVOC) (TPH by 8015B) OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

No sample / Well filled in.

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

* ~~[illegible]~~ (monument flooded. Mon. well filled with Sediment. Casing crushed)

AMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

CHAIN OF CUSTODY

Analytical Services Inc. — An Employee-Owned Company

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: _____ PAGE 1 OF 1 COC # _____

PROJECT NAME: McCall Oil & Chemical Corporation
PROJECT NUMBER: 820910/01000000
PROJECT MANAGER: John Renda
COMPANY/ADDRESS: IT Corp. - PDX
PHONE #: (503) 624-7200 FAX #:
SAMPLER'S SIGNATURE: Clayton Slominski

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐	Volatile Organics 624 ☐ 8260 ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 413.1 ☐ 418.1 ☐ 1664 SGT ☐ 1664 HEM ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHs 8310 ☐ SIM ☐ (GC/MS-SIM - TIC) ** See note	PAH's / Phenol ☐ Phthalates ☐	Metals, Total or dissolved (See list below)	Cyanide ☐ Hex-Chrom ☐	pH; Cond., Cl, SO_4, PO_4, F, NO_2, NO_3; BOD, TSS; TDS (circle) NH_3-N, COD, Total P, TKN, TOC, DOC (circle)	TOC 9020 ☐ AOX 1650 ☐ 506 ☐	TPH (GC-FID) Method 8015B	8010 VOC's *** list by 8260B			REMARKS
MCO-122000-3	12/20	10:30		H_2O	5								X						X	X					
MCO-122000-4		11:00			6								X	X					X	X					
MCO-122000-5		11:40			6								X	X					X	X					
MCO-122000-6		12:15			5								X						X	X					
MCO-122000-7		12:45			6								X	X					X	X					
MCO-122000-8		13:40			5								X						X	X					
MCO-122000-9		15:00			5								X						X	X					
MCO-122000-10		15:45			6								X	X					X	X					
MCO-122000-11		16:30			5								X						X	X					
MCO-122000-12	*	17:00			5								X						X	X					

REPORT REQUIREMENTS

- ___ I. Routine Report: Method Blank, Surrogate, as required
- ___ II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

- ___ 24 hr. ___ 48 hr.
- ___ 5 Day
- X Standard (10-15 working days)
- ___ Provide FAX Results

Requested Report Date: _____

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* PAH's + 4-methylphenol; butylbenzylphthalates; Di-n-octylphthalate; Dibenzofuran

** As, Cu, Cr by method 200.8

*** 8010 VOC's; list by 8260B

NOTE: HOLD (2) TRIP BLANKS (12/29/00)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Clayton Slominski	Signature:	Signature:	Signature:
Date/Time: 12/29/00 9:30	Date/Time:	Date/Time:	Date/Time:
Printed Name: Clayton Slominski	Printed Name:	Printed Name:	
Firm: IT Corp - PDX	Firm:	Firm:	

Analytical Services INC.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 1 COC # _____

PROJECT NAME: McCall Oil & Chemical Corporation
PROJECT NUMBER: 820910 / 01000000
PROJECT MANAGER: John Renda
COMPANY/ADDRESS: IT Corp. - PDX
PHONE #: (503) 624-7200 FAX #:
SAMPLER'S SIGNATURE: Clayton Slominski

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 413.1☐ 418.1☐ 1664 SGT☐ 1664 HEM☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☐	GC/MS-SIM - TCL PAH ☒ Phenol☐ Phthalates☐ *SEE NOTE	Metals, Total or Dissolved ** (See list below)	Cyanide☐ Hex-Chrom☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOC 9020☐ AOX 1650☐ 506☐	TPH (GC-FID) method 8015B				REMARKS
~~MCO-122000-1~~	12/20	9:50		H_2O	3										X	X					X				
MCO-122000-2	12/20	9:20		H_2O	3										X	X					X				
temp. blank				H_2O	1																				

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
II.5 II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al (As) Sb Ba Be B Ca (Cd) Co (Cr) (Cu) Fe (Pb) Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V (Zn) Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* PAHs + 4-methylphenol; butylbenzylphthalate; Di-n-octylphthalate; Dibenzofuran
** As, Cu, Cr by method 200.8

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Clayton Slominski 12/21/00 9:30			
Signature / Date/Time	Signature / Date/Time	Signature / Date/Time	Signature / Date/Time
Clayton Slominski / IT Corp.			
Printed Name / Firm	Printed Name / Firm	Printed Name / Firm	

Daily Calibration Record

Date:	12/20/00
Meter:	ORION
Equipment#:	
Technician:	CTS

the group

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-sampling measurements	Time
pH	4.0	X	0720	4.0	0723		
	7.0	X	0725	7.0	0728		
	10.0						
Conductivity (micro siemens)	200						
	720						
	1413	X	0730	1413	0732		
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***						
	Barometric pressure: mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer
**standards based on YSI Zobell solution
***measured in saturation sleeve
Comments:

MEMORANDUM

TO: 832537/02000000 DATE: November 2, 2001

FROM: Clayton Slominski

RE: October Well Development and Sampling at McCall Oil and Chemical Corporation

On October 18, 2001, EMCON/OWT developed 3 monitoring wells and 1 piezometer (MW-6, MW-7, MW-8, and TPZ-2) at McCall Oil and Chemical Corporation, located on NW Front Avenue in Portland, OR.

Well development methods consisted of inserting tubing into the well and piezometer and using a peristaltic pump to remove accumulated sediment from the bottom. The wells and piezometer were then surged for 5 minutes using Voss™ disposable double check valve bailers. Tubing was reinserted and the wells and piezometer were purged until the water clarity and parameters stabilized, or the well went dry. Field parameters (pH, conductivity, and temperature) were recorded every 5 minutes.

On October 25, 2001, EMCON/OWT personnel returned to McCall Oil and Chemical Corporation and collected groundwater samples from monitoring wells MW-6, MW-7, and MW-8.

Quality control included collecting one duplicate sample from MW-6 and one field blank.

Samples were packed in iced shipping containers for preservation and delivered by courier using chain-of-custody procedures to North Creek Analytical in Beaverton, Or.

Attachments: Table
Task Sheet
Field Sampling Data Sheets
Chain of Custody Forms
Daily Calibration Records

Table
Sampling Field Parameters
Great Western Chemical

October 25, 2001

Well	Blind Code	Date Sampled	Depth to Water (feet)	Casing Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C
Monitoring Wells								
MW-6	GWC-102501-1	10/25/01	16.73	3	3.9	6.51	600	19.3
MW-7	GWC-102501-3	10/25/01	25.77	3	3.0	6.74	1367	14.5
MW-8	GWC-102501-4	10/25/01	25.64	3	3.0	6.70	789	14.0
QA/QC								
MW-6 (Dup)	GWC-102501-2	10/25/01	16.73	3	3.9	6.51	600	19.3

WATER LEVEL FORM
McCall Oil/Great Western Chemical
October 25, 2001

Well	Time	DTW	Comments
MW-6	10:50	16.73	
MW-7	12:10	25.77	
EX-1	1542	16.31	
EX-2	1506	19.18	
EX-3	1456	18.92	2 bolt holes stripped
EX-4 (MW-2)	1518	17.51	one bolt hole stripped
EX-5	1452	21.27	
EX-6	1555	NA	NA full of mud
EX-7	1514	15.01	
MW-1	1546	15.97	all bolt holes stripped
MW-3	1532	17.24	
MW-4	1527	16.74	
MW-5	1523	20.30	
WG-1	1500	31.38	
MW-8	1315	25.64	
TPZ-2	1445	16.65	

Notes:

PERSONNEL CTS

PROBE# 22311

McCall Oil Chemical Corporation
Task Sheet
October 2001

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
MW-6	10:50	24.55	16.73	GWC-102501-1	11:40	✓
MW-7	12:10	29.99	25.77	GWC-102501-3	12:50	✓
MW-8	13:15	29.85	25.64	GWC-102501-4	13:45	✓
	:	.	.		:	
QA\QC						
Field Blank	14:00	NA	NA	GWC-102501-5	14:15	✓
DUP (MW-6)	10:50	24.55	16.73	GWC-102501-2	11:45	✓

Notes:

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-6
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-102501-1
DUP ID: GWC-102501-2 NA (1145)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	SUNNY		(CLOUDY)		(RAIN)		?		TEMPERATURE:	(°F) 52.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/25/01	10 : 50	24.55	/	16.73	/	7.82	X 1	1.27
/ /	:	.	.	.	/		X 3	3.81

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/25/01	11 : 40	C	(3)	(40 ml) HCl	(YES)	(NO)		✓
Amber Glass	10/25/01	/ :	C	(1)	250, 500, (1L) (None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	10/25/01	/ :	C	(1)	250, 500, (1L) None	(YES)	(NO)	NA	✓
Yellow Poly	/ /	/ :			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	/ :			250, 500, 1L NaOH	YES	NO		
Red Total Poly	10/25/01	/ :	C	(1)	(250) 500, 1L HNO_3	(YES)	(NO)		✓
Red Diss. Poly	10/25/01	✓ :	C	(1)	(250) 500, 1L HNO_3	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (7) (7) = 14 total (includes dup)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH 8015M OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	amber	(8VOC's 45VOC's+PAH's)

WATER QUALITY DATA Purge Start Time: 11 : 05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	3.9	6.51	600	19.3		.	↑
2	C	2.6	6.50	595	19.4		.	
1	C	1.3	6.51	592	19.4		.	cloudy/dark grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

lots of suspended sediments

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-7

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-102501-3

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	**TEMPERATURE:**	°F (50).	°C				

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/25/01	12:10	29.99	.	25.77	.	4.22	X1	0.69
/ /	:	.	.	.	.		X3	2.07

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: N (if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/25/01	12:50	C	(3)	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	12:50	C	(1)	250, 500, (1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	12:50	C	(1)	250, 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	C	(1)	250, 500, 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:	C	(1)	250, 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH 8015M OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	SVOC's 45VOC's + PAH's

WATER QUALITY DATA

Purge Start Time: 12:25 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.0	6.74	1367	14.5		.	↑
2	C	2.0	6.73	237	14.5		.	
1	C	(1.0)	6.75	1109	14.6		.	cloudy/brown
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

lots of suspended sediments

Bailed dry @ 3 volumes

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-8
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-102501-4
DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN		?		TEMPERATURE:	(F) 60.	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	[Product Thickness] DTP-DTW	[Water Column] DTB-DTW		[Water Column x Gal/ft] Volume (gal)
10/25/01	13:15	29.85	.	25.64	.	4.21	X 1	0.70
/ /	:	.	.	.	.		X 3	2.10

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/25/01	13:45	C	(3) (40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:		(1) 250, 500, (1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:		(1) 250, 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		(1) 250, 500, 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:		(1) 250, 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH 8015M OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		SVOC's 45VOCs + PAHs

WATER QUALITY DATA Purge Start Time: 13:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.0	6.70	789	14.0		.	↑
2	C	3.0	6.73	786	14.1		.	
1	C	~~1.0~~ 3.0	6.76	773	14.2		.	cloudy/dark grey
0		~~0.00~~ 9.0	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

lots of suspended sediments
slight sheen

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** Field Blank

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-102501-5

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	°F 60.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/25/01	14:00	.	.	.	.	.	X1	.
/ /	:	.	.	.	.		X3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/25/01	14:15	C	(3)	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:		(1)	250, 500, (1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:		(1)	250, 500, (1L)	(None)	(YES)	(NO)	NA	✓
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		(1)	250, 500, 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:		(1)	250, 500, 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (Include duplicate count): (7)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (TPH 8015M) OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		SVOC's 45VOC's + PAH's

WATER QUALITY DATA

Purge Start Time: Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1	C	0.0	7.84	1.0	17.8		.	clear/colorless
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

nca™
North Creek Analytical, Inc.
Environmental Laboratory Network
www.ncalabs.com

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: IT Corp
REPORT TO: John Renda
ADDRESS: IT Corp. - Beaverton, OR
PHONE: (503) 626-0455 FAX: (503) 526-0775
PROJECT NAME: McCall Oil
PROJECT NUMBER: 832537/02000000
SAMPLED BY: Clayton Slominski

INVOICE TO: McCall Oil
P.O. NUMBER:

TURNAROUND REQUEST in Business Days*
Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Please Specify
*Turnaround Requests less than standard may incur Rush Charges.

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Dissolved metals (As, Cr, Cu)	Total metals (As, Cr, Cu)	VOC's by 8260	TPH 8015M HCID	SVOC's by 4SVOCs + PAHs									MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1.	GWC-102501-1	10/25/ 1140	X	X	X	X	X									W	7		
2.	- - 2	/ 1145	X	X	X	X	X										7		
3.	- - 3	/ 1250	X	X	X	X	X										7		
4.	- - 4	/ 1345	X	X	X	X	X										7		
5.	- - 5	/ 1415	X	X	X	X	X										7		
6.																			
7.																			
8.																			
9.																			
10.																			
11.																			
12.																			
13.																			
14.																			
15.																			

RELINQUISHED BY: Clayton Slominski DATE: 10/26/01
PRINT NAME: Clayton Slominski FIRM: IT Corp TIME: 0900am
RECEIVED BY: [signature] DATE: 10/26/01
PRINT NAME: Kim Davis FIRM: NCA TIME: 0900
RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: Bill to McCall Oil * SVOCs: 4 methylphenol butylbenzylphthalate diberzofuran
TEMP:

COC REV 3/99

Daily Calibration Record

Date:	10/25/01
Meter:	ORION 1230
Equipment#:	
Technician:	Clayton S.

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-samling measurements	Time
pH	4.0	X	1030	4.0			
	7.0	X	1035	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720						
	1413	X	1040	1413			
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***						
	Barometric pressure: mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer
**standards based on YSI Zobell solution
***measured in saturation sleeve
Comments:

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537/02000000	Date: 10/18/01	Well: MW-6	
Site Location: Portland, OR	Initial DTB: 24.52		Final DTB: 24.63
Name: McCall Oil/GWC	Initial DTW: 16.70		Final DTW: 16.73
Development Method: P-pump/bailer	Pore Volume: 1.3 gallons		
Total Water Removed: ~~[illegible]~~ 32 gallons	Casing Diameter: 2"		
Water Contained ? Yes	Meter #: 85367		
Estimate of specific capacity or recharge to wel[illegible] 1 g/min	PV=		

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1045	2.5	150	19.3	278	6.78	17.08	dark grey/cloudy
1055	5.0	100	19.5	291	6.84	17.33	grey/cloudy
	Stopped & surged w/ bailer						
~~1110~~							
1110	7.5	200	19.9	284	6.65	17.47	dark grey/cloudy
1120	9.0	30	20.1	278	6.56	17.18	dark grey/cloudy
1130	12.0	10	19.8	283	6.62	17.11	grey/cloudy
1145	17.0	<10	20.0	283	6.62	17.10	tan/cloudy
1155	~~[illegible]~~ 20.0	<1	19.4	292	6.67	17.14	tan/cloudy
	Surged w/ bailer (cont. parameters using a bailer)						
1210	22.5	15	19.9	278	6.55	16.83	dark grey/cloudy
1215	25.0	<10	20.0	280	6.61	16.87	dark grey/cloudy
1225	30.0	<10	20.3	288	6.55	16.91	dark tan/cloudy
1230	32	0	20.3	289	6.55	16.91	tan/cloudy

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537/0200000		Date: 10/18/01 Well: TPZ-2	
Site Location: Portland, OR		Initial DTB: 24.33	Final DTB: 24.55
Name: McCall Oil / GWC		Initial DTW: 16.63	Final DTW: 16.65
Development Method: 1-pump / bailer		Pore Volume: 1.3	
Total Water Removed: 22 gallons		Casing Diameter: 2"	
Water Contained ? Yes		Meter #: 85367	
Estimate of specific capacity or recharge to well: 1 g/min		PV=	

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp	EC	pH	DTW (TOC)	Appearance/Comments
1205	1.0	20	20.4	292	6.54	7.02	tan/cloudy
1210	2.5	<1	20.5	284	6.57	16.85	tan/cloudy
1217	5.0	0	20.7	297	6.58	16.85	clear/colorless
	Surged w/ a bailer						
1230	7.5	≈50	19.7	288	6.52	16.82	dark grey/cloudy
1240	10.0	<10	20.1	303	6.50	16.83	grey/cloudy
1250	12.5	<10	20.2	303	6.50	16.83	tan/cloudy
1300	15.0	0	20.3	305	6.52	16.85	colorless/cloudy
1310	18.0	0	20.4	304	6.53	16.85	colorless/slight cloudy
1320	20	0	20.3	338	6.53	16.83	colorless/clear
1330	22	0	20.3	308	6.52	16.85	colorless/clear

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537/02000000	Date: 10/18/00	Well: MW-7	
Site Location: Portland, OR	Initial DTB: 30.0		Final DTB: 30.05
Name: McCall Oil / GWC	Initial DTW: 25.60		Final DTW: 28.40
Development Method: p-pump / bailer	Pore Volume: 0.71		
Total Water Removed: 4 gallons	Casing Diameter: 2"		
Water Contained ? Yes	Meter #: 85367		
Estimate of specific capacity or recharge to well: ?	PV=		

Time	Cum. Vol Removed	Sand/Silt (ml/1000ml)	Temp	EC	pH	DTW (TOC)	Appearance/Comments
1340	Surged w/ a bailer						
1350	tried to use a p-pump, but was unable to pull water from that depth						
1400	1.0		14.6	574	6.66	27.67	dark grey / cloudy
1405	2.0		14.4	599	6.73	28.53	↓
1410	3.0		14.5	598	6.67	28.87	
1415	3.5		14.5	591	6.68	28.94	
	Well bailed Dry						

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537/02000000	Date: 10/18	Well: MW-8	
Site Location: Portland, OR	Initial DTB: 29.65	Final DTB: 29.80	
Name: McCall Oil - GWC	Initial DTW: 24.56	Final DTW: 25.69	
Development Method: bailer	Pore Volume: 0.83		
Total Water Removed:	Casing Diameter: 2"		
Water Contained? Yes	Meter #: 85367		
Estimate of specific capacity or recharge to well:	PV=		

Time	Cum. Vol Removed	Sand/Silt (ml/1000ml)	Temp	EC	pH	DTW (TOC)	Appearance/Comments
1425		Surged	w/	a	bailer		(too deep for a p-pump)
1435	1.0	100	14.3	399	6.58	25.42	dark grey/cloudy
1440	2.0		14.2	475	6.50	26.20	dark grey/cloudy
1445	3.0		14.1	411	6.50	26.32	
1450	4.0		14.2	421	6.53	26.54	
1455	5.0		14.2	410	6.57	26.66	
1500	6.0		14.2	408	6.56	26.75	
1505	7.0		14.3	389	6.60	26.79	
1510	8.0		14.3	420	6.52	26.68	
1515	9.0		14.3	411	6.53	26.77	
1520	10.0		14.3	396	6.53	26.34	

~~December 18, 2001~~
1/22/02

Well	Time	DTW	Comments
EX-1	1233	15.05	
EX-2	1258	17.83	
EX-3	1305	16.41	
EX-4 (MW-2)	1210	16.28	one bolt hole stripped
EX-5	1320	16.10	
EX-6	NA	NA	decommissioned
EX-7	1339	13.50	
MW-1	1228	16.68	all bolt holes stripped
MW-3	1224	16.09	all bolt holes stripped
MW-4	1219	15.65	
MW-5	1215	19.00	
MW-6	1332	15.46	
MW-7	1328	22.72	
MW-8	1324	22.44	
MW-9	1239	17.57	
MW-10	1245	14.97	
MW-11	1247	13.32	
MW-12	1253	17.88	
MW-13	1343	18.83	
WG-1	1312	27.80	

Notes:

PERSONNEL: Clayton S.

PROBE#: 23453

the Gigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-13

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-012202-1

DUP ID: GWC-012202-2 NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?		TEMPERATURE:	°F 45	°C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1/22/02	13:43	29.60	/	18.83	/	10.77	X1	1.76
/ /	:	.	/	.	/		X3	5.3

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: N (if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	1/22/02	14:20	C	3	40 mL	HCl	YES	NO		✓
Amber Glass	1/22/02	14:20	C	6	250 500 1L	None HCl H_2SO_4	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (Include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH/DRO OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	other	4-methylphenol, butylbenzylphthalate, dibenzofuran, di-n-octylphthalate

WATER QUALITY DATA

Purge Start Time: 14:00 Pump/Bailer Inlet Depth: '

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.4	6.33	710	15.5		.	↑
2	C	3.6	6.33	706	15.5		.	
1	C	1.8	6.33	703	15.3		.	cloudy/muddy
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

the Group
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-12
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-012202-3
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	~~LIGHT~~	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 42 °C					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1/22/02	14:50	24.82	.	17.88	.	6.94	X1	1.13
/ /	:	.	.	.	.		X3	3.40

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume ml		Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	1/22/02	15:30	C	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		3	250, 500, 1L	None, HCl, H_2SO_4	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH - FIO OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
amber	4-methylphenol, butylbenzylphthalate, dibenzofuran, di-n-octylphthalate

WATER QUALITY DATA

Purge Start Time: 15:00 | Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.6	6.74	513	16.6		.	
2	C	2.4	6.72	515	16.4		.	
1	C	1.2	6.73	496	16.4		.	
0		~~0.00~~	~~6.73~~	~~496~~	~~16.4~~		.	cloudy/muddy

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

the Qigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-9

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-012202-4

DUP ID: NA

WIND FROM: N | NE | E | SE | S | SW | (W) | NW | LIGHT | (MEDIUM) | HEAVY

WEATHER: SUNNY | CLOUDY | (RAIN) | ? **TEMPERATURE:** (°F) 40. °C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water	DTP-DTW	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1/22/02	15:45	25.03	/	17.57	/	7.46	X 1	1.22
/ /	:	.	/	.	/		X 3	3.66

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	1/22/02	16:20	C	(3)	(40 ml)	(HCl)	(YES)	NO		√
Amber Glass	/ /	:		(3)	250, (500), 1L	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIG OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
Other	4-methyl-2-hexanone bis(2-ethylhexyl)phthalate dibenzofuran di-n-octylphthalate

WATER QUALITY DATA

Purge Start Time: 15:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.9	6.63	418	17.1		/	↑
2	C	2.6	6.62	417	17.1		/	↑
1	C	1.3	6.64	408	16.9		/	clear/muddy
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slawinski (PRINTED NAME) Clayton Slawinski (SIGNATURE)

the Ci group
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-11
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-012202-5
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 40 . °C						

[Circle accorcoriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1 12 02	16:30	24.57	.	13.32	.	11.25	X1	1.83
/ /	:	.	.	.	.		X3	5.5

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	1 12 02	17:00	C	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		3	250, 500, 1L	None HCl (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIC OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
[illegible]	[illegible]

WATER QUALITY DATA Purge Start Time: 16 : 35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.7	6.67	404	14.9		.	
2	C	3.8	6.69	398	14.8		.	
1	C	1.9	6.74	383	14.5		.	cloudy/dark tan
0		0.00	.		.		.	

Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

Some odor, slight sheen.

AMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

the i group
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-10

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-012202-6

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?							

TEMPERATURE: °F 40 °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
1/22/02	17:10	19.85	.	14.97	.	4.88	X1	0.8
/ /	:	.	.	.	.		X3	2.4

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√ [√ if used]
VOA Glass	1/22/02	17:35	C	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:	C	3	250, 500, 1L	None HCl (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (TPH-FIG) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
amber	[illegible]

WATER QUALITY DATA

Purge Start Time: 17:15 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	2.4	6.76	326	17.9		.	
2	C	1.6	6.76	315	17.8		.	
1	C	0.8	6.76	313	17.5		.	Cloudy/muddy
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 83253.102	Date: 1/15/02	Well: MW-10	
Site Location: NW Portland	Initial DTB: 19.82		Final DTB: 19.85
Name: McCall Oil	Initial DTW: 15.15		Final DTW: 15.15
Development Method: grundfos / bailer	Pore Volume: 0.8		
Total Water Removed: 15 gallons	Casing Diameter: 2"		
Water Contained ? yes	Meter #: 85367		
Estimate of specific capacity or recharge to well: 0.5 gpm	PV=		

Time	Cum. Vol. Removed (gallons)	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
920	1	50	16.0	253	6.88	15.20	muddy Surged for 5 minutes
925	2	50	16.9	278	6.68	15.20	muddy
930	3	50	17.4	294	6.83	15.20	muddy
950	7	50	17.4	295	7.01	15.35	muddy
1000	8	~~50~~ 10	17.6	287	6.79	15.35	cloudy / tan Surged for
1010	10	0	17.8	290	6.75	15.37	cloudy / light tan 5 minutes
1015	13	0	17.9	294	6.75	15.36	cloudy / colorless
1020	15	0	18.0	301	6.77	15.36	cloudy / colorless

EMCON Northwest, Inc.

Project No. 832537/02		Date: 9/15/02 Well: MW-13	
Site Location: NW Portland		Initial DTB: 29.20	Final DTB: 29.60
Name: McCall Oil		Initial DTW: 19.15	Final DTW: 21.55
Development Method: bailer/grundfos		Pore Volume: 1.64	
Total Water Removed: 20 gallons		Casing Diameter: 2"	
Water Contained ? yes		Meter #: 85367	
Estimate of specific capacity or recharge to well: 0.3 gpm		PV=	

Time	Cum. Vol. Removed (gallons)	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1100	2	75	14.2	474	6.95	21.65	muddy Surged for
1110	5	60	15.6	523	6.65	21.90	muddy 5 minutes before
1115	7	40	15.7	551	6.61	24.95	muddy purging.
1120	8	10	15.4	565	6.58	24.09	cloudy/dark grey
1125	10	10	15.5	558	6.61	24.15	" / "
	Purged	for	7	minutes			
1130	12	50	15.4	543	6.60	22.40	muddy
1145	15	10	16.0	566	6.52	22.80	cloudy/dark tan
1150	17	~~10~~	16.6	602	6.59	23.20	cloudy/tan
1155	18	~~10~~	16.2	594	6.50	25.15	cloudy/tan
1200	20	~~10~~	16.4	590	6.49	25.35	" / "

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537/02		Date: 1/15/02 Well: MW-12	
Site Location: NW Portland		Initial DTB: 25.65	Final DTB: 24.82
Name: McCall Oil		Initial DTW: 17.90	Final DTW: 17.96
Development Method: bailer / grundfos		Pore Volume: 1.17	
Total Water Removed: 20		Casing Diameter: 2"	
Water Contained? YES		Meter #: 85367	
Estimate of specific capacity or recharge to well: 0.5 gpm		PV=	

Time	Cum. Vol Removed (gallons)	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1240	Surged for 7 minutes						
~~1250~~	~~3~~	~~0~~	~~13.4~~	~~60~~	~~8.45~~	~~18.15~~	~~clear/colorless~~
1300	5	20	15.7	445	7.06	18.36	muddy
1310	7	≤10	17.4	473	6.84	18.42	cloudy/dark tan
1315	10	0	17.7	480	6.81	18.45	cloudy/light tan
1320	12	0	17.7	485	6.83	18.46	cloudy/light tan
	Surged for 10 minutes						
1330	13	0	16.7	479	6.80	18.00	cloudy/yellow
1335	14	50	16.2	493	6.79	18.36	muddy
1340	15	10	17.0	487	6.76	18.37	cloudy/dark tan
1345	17	≤10	17.4	493	6.77	18.38	cloudy/tan
1350	18	0	17.6	499	6.78	18.39	cloudy/light tan

WELL DEVELOPMENT FORM
EMCON Northwest, Inc.

Project No. 832537	Date: 1/15/02	Well: MW-11	
Site Location: NW Portland	Initial DTB: 24.85		Final DTB: 24.57
Name: McCall Oil	Initial DTW: 13.40		Final DTW: 15.44
Development Method: bailer/grundfos	Pore Volume: 1.85		
Total Water Removed: 20 gallons	Casing Diameter: 2"		
Water Contained ? Yes	Meter #: 85367		
Estimate of specific capacity or recharge to well: 0.5 gpm	PV=		

Time	Cum. Vol. Removed (gallons)	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1430	4	50	11.5	289	7.00	14.90	muddy Purged 7 minutes
1435	6	10	14.3	370	6.80	15.19	cloudy/dark tan
1440	7	<10	14.6	339	6.74	15.85	cloudy/tan
1445	9	0	14.9	356	6.68	16.47	" / "
1450	10	0	15.0	375	6.70	16.60	" / "
1455	11	0	15.0	379	6.68	16.85	cloudy/dark tan
	Surged for 5 minutes						
1505	13	0	14.1	396	6.67	16.90	cloudy/tan
1510	15	0	14.4	392	6.68	16.67	cloudy/dark tan
1515	17	0	14.9	381	6.69	17.25	cloudy/tan
1520	19	0	14.9	391	6.67	17.70	cloudy/tan

Services INC.
An Employee-Owned Company

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

PAGE 1 OF 1 COC # _____

PROJECT NAME

PROJECT NUMBER

PROJECT MANAGER

COMPANY/ADDRESS

PHONE # FAX #

SAMPLER'S SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐	Volatile Organics 624 ☐ 8260 ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 413.1 ☐ 418.1 ☐ 1664 SGT ☐ 1664 HEM ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics Tri ☐ Tetra ☐ 8151M	PAHS 8310 ☐ SIM ☐	GC/MS-SIM PAH ☐ Phenol ☐	Metals, Total or Dissolved (See list below) Phthalates ☐	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOC 9020 ☐ AOX 1650 ☐ 506 ☐	~~Total Petroleum Hydrocarbons~~ TPH	dibenzofuran			REMARKS
														X							X	X					
														X							X	X					
														X							X	X					
														X							X	X					
														X							X	X					
														X							X	X					
														X							X	X					

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. Data Validation Report (includes all raw data)

___ IV. CLP Deliverable Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 Day

___ Standard (10-15 working days)

___ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

bis-2-ethylhexylphthalate, di-n-octylphthalate

for analysis questions.

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature / Date/Time	Signature / Date/Time	Signature / Date/Time	Signature / Date/Time
Printed Name / Firm	Printed Name / Firm	Printed Name / Firm	Printed Name / Firm

Date:	1/22/04
Meter:	YSI water Surveyor
Equipment#:	85367
Technician:	CTS

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-sampling measurements	Time
pH	4.0	X	1345	4.0			
	7.0	X	1350	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720	X	1355	720			
	1413						
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***						
	Barometric pressure:		mmHg				
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer

**standards based on YSI Zobell solution

***measured in saturation sleeve

Comments:

MEMORANDUM

TO: 832537/01000000 DATE: April 9, 2002

FROM: Clayton Slominski

RE: March 2002 Sampling at McCall Oil and Chemical Corporation

On March 6, 2002, IT Corp/EMCON measured static water levels in groundwater monitoring wells at McCall Oil and Chemical Corporation, located on NW Front Avenue in Portland, OR. On March 6-8, 2002, IT/EMCON personnel collected 18 groundwater samples and 3 storm water samples from the McCall Oil facility. All groundwater and storm water samples collected were sent to Columbia Analytical Services, Inc. (CAS), for analysis of the parameters requested on the chain-of-custody forms (attached).

Before sampling began, each groundwater monitoring well was purged of at least three casing volumes and until field parameter measurements (temperature, pH, specific conductance) stabilized. Temperature, pH, and specific conductance values were recorded after each casing volume was removed. The wells were purged using Voss™ disposable double check valve bailers. The Slope Indicator m-scope was decontaminated as follows:

- Commercially distilled water and Liquinox non-phosphatic soap rinse
- Commercially distilled water rinse
- 1:1 methanol (purge and trap grade) and laboratory deionized water rinse
- Five minute "air dry"
- A triple rinse with laboratory deionized water

Samples were transferred into sample bottles using a bottom-emptying device. Each dissolved metal sample was field-filtered by gravity directly from the bailer through a 0.45-micron filter. Volatile organic samples were transferred from the bailer to the sample containers via a variable flow bottom-emptying device.

Quality control included collecting two duplicate samples, from monitoring wells MW-9 and MW-3, and analyzing two sets of laboratory-supplied trip blanks, which accompanied the sample bottles to the field and back to the lab for analysis.

Samples were packed in iced shipping containers for preservation and delivered by courier using chain-of-custody procedures to CAS, in Kelso, Washington.

Attachments: Table
Task Sheet
Field Sampling Data Sheets
Chain of Custody Forms
Daily Calibration Records

Table
Sampling Field Parameters
Great Western Chemical

March 2002

Well	Blind Code	Date Sampled	Depth to Water (feet)	Casing Volumes Purged	Gallons Removed	pH	Specific Conductance µS	Temperature °C
Monitoring Wells								
EX-1	GWC-030702-16	3/7/2002	14.24	3	4.8	4.18	800	17.60
EX-2	GWC-030702-17	3/7/2002	17.57	3	3.6	6.51	543	17.40
EX-3	GWC-030702-18	3/7/2002	15.91	3	3.6	6.60	660	16.28
EX-4 (MW-2)	GWC-030702-15	3/7/2002	15.61	3	5.7	6.61	514	17.21
EX-5	GWC-030702-19	3/7/2002	16.04	3	3.9	6.82	602	14.25
EX-7	GWC-030602-7	3/6/2002	12.85	3	5.7	6.54	208	15.79
MW-1	GWC-030702-10	3/7/2002	16.08	4	2.8	6.63	565	14.91
MW-3	GWC-030702-11	3/7/2002	15.52	3	5.7	6.63	817	16.75
MW-4	GWC-030702-13	3/7/2002	15.40	3	6.0	6.59	749	16.66
MW-5	GWC-030702-14	3/7/2002	18.87	3	8.1	6.72	1199	15.11
MW-6	GWC-030802-22	3/8/2002	14.74	3	4.8	6.27	648	18.09
MW-7	GWC-030802-21	3/8/2002	23.36	3	3.3	6.28	586	14.10
MW-8	GWC-030702-20	3/7/2002	23.50	3	3.3	6.52	601	14.08
MW-9	GWC-030602-4	3/6/2002	17.02	3	3.9	6.48	364	15.53
MW-10	GWC-030602-6	3/6/2002	14.19	3	3.0	6.68	371	17.12
MW-11	GWC-030802-23	3/8/2002	12.82	3	6.0	6.38	459	13.83
MW-12	GWC-030602-9	3/6/2002	17.39	3	3.6	6.57	467	16.26
MW-13	GWC-030602-8	3/6/2002	17.54	3	6.0	6.32	641	15.17
Surface Water								
S-1	GWC-030602-1	3/6/2002	NA	NA	NA	6.64	5	6.86
S-2	GWC-030602-2	3/6/2002	NA	NA	NA	6.23	9	6.20
S-3	GWC-030602-3	3/6/2002	NA	NA	NA	5.59	13	6.52
QA/QC								
MW-9 (Dup)	GWC-030602-5	3/6/2002	17.02	3	3.9	6.48	364	15.53
MW-3 (Dup)	GWC-030702-12	3/7/2002	15.52	3	5.7	6.63	817	16.75

WATER LEVEL FORM
McCall Oil/Great Western Chemical
March 6, 2002

Well	Time	DTW	Comments
EX-1	0824	14.28	
EX-2	0908	17.45	
EX-3	0914	15.88	
EX-4 (MW-2)	0750	15.61	one bolt hole stripped
EX-5	0925	15.93	
EX-7	0840	12.86	
MW-1	0816	16.03	bolt holes stripped/gutter dus water on well
MW-3	0810	15.50	all bolt holes stripped
MW-4	0806	15.18	
MW-5	0801	18.95	
MW-6	0940	14.73	
MW-7	0935	23.33	
MW-8	0930	23.52	
MW-9	0756	17.02	
MW-10	0835	14.20	
MW-11	0852	12.76	
MW-12	0856	17.37	
MW-13	0902	17.57	
WG-1	0920	29.45	

Notes:
PERSONNEL CTS
PROBE# 23453

McCall Oil Chemical Corporation
Task Sheet
March 2002

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
EX-1	13:00	24.10	14.24	GWC-030702-16	13:40	✓
EX-2	13:50	24.62	17.57	GWC-030702-17	14:30	✓
EX-3	14:40	23.95	15.91	GWC-030702-18	15:10	✓
EX-4 (MW-2)	12:00	27.30	15.61	GWC-030702-15	12:45	✓
EX-5	15:20	23.75	16.04	GWC-030702-19	16:00	✓
EX-7	14:35	24.60	12.85	GWC-030602-7	15:20	✓
MW-1	7:45	19.95	16.08	GWC-030702-10	8:25	✓
MW-3	9:00	26.91	15.52	GWC-030702-11	9:45	✓
MW-4	10:10	27.74	15.40	GWC-030702-13	10:40	✓
MW-5	11:05	25.20	18.87	GWC-030702-14	11:50	✓
MW-6	8:40	24.50	14.~~74~~	GWC-030802-22	9:10	✓
MW-7	7:40	30.00	23.36	GWC-030802-21	8:30	✓
MW-8	16:10	29.83	23.50	GWC-030702-20	16:50	✓
MW-9	12:15	25.03	17.02	GWC-030602-4	13:00	✓
MW-10	13:25	19.85	14.19	GWC-030602-6	14:20	✓
MW-11	9:20	24.57	12.82	GWC-030902-23	10:00	✓
MW-12	16:15	24.82	17.39	GWC-030602-9	16:50	✓
MW-13	15:30	29.60	17.54	GWC-030602-8	16:00	✓
	:	.	.		:	
Surface Water						
S-1	10:00	/	/	GWC-030602-1	10:35	✓
S-2	10:50	/	/	" - " -2	11:10	✓
S-3	11:25	/	/	↓ - ↓ -3	11:40	✓
Oil-Water Separator						
S-4	NA	NA	NA	not sampled/Dry	/	/
QA\QC						
Dup (MW-9)	12:15	25.03	17.02	GWC-030602-5	13:10	✓
Dup (MW-3)	9:00	26.91	15.52	GWC-030702-12	9:50	✓

Notes:

N:\COMMON\Data\Projects\Geology\SAMPLING\McCall Oil\task.xls

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** EX-1

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-16

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 42.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	13:00	24.10	.	14.24	.	9.86	X 1	1.6
/ /	:	.	.	.	.		X 3	4.8

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/7/02	13:40	C	(3)	(40 ml) HCl	(YES)	NO		√
Amber Glass	3/7/02	13:40	C	(3)	250, 500, (1L) (None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIO OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	* 4oz (OC)

WATER QUALITY DATA Purge Start Time: 13:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	4.8	4.18	800	17.60	/	2.33	↑
2	C	3.2	4.20	791	17.45	/	2.37	↑
1	C	1.6	4.29	772	17.40	/	2.55	cloudy/tan
0	~~~	0.00	~~~	~~~	~~~	~	~~~	~~~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** EX-2

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** FWC-030702-12

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)			RAIN		(SNOW ?)		**TEMPERATURE:**	42.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	13:50	24.62	✓	17.57	✓	7.05	X 1	.15
/ /	:	.	✓	.	✓		X 3	3.45

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/7/02	14:30	C	(3)	(40 ml)	(HCl)	YES	NO		✓
Amber Glass	3/7/02	:	C	(3)	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (TPH-FIO) OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keidahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	(* See COC)

WATER QUALITY DATA Purge Start Time: 14:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	3.6	6.51	543	17.40	/	1.97	↑
2	C	2.4	6.47	545	17.46	/	1.92	
1	C	1.2	6.36	526	17.29	/	2.24	cloudy/grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski Clayton Slominski

(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** EX-3

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-18

DUP ID: (NA)

WIND FROM: N | NE | E | SE | S | SW | (W) | NW | LIGHT | (MEDIUM) | HEAVY

WEATHER: SUNNY | (CLOUDY) | RAIN | (hail ?) **TEMPERATURE:** (°F) 38 . °C
(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	14:40	23.95	/	15.91	/	8.04	X 1	1.31
/ /	:	.	/	.	/		X 3	3.93

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/7/02	15:10	C	(3) (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:	C	(3) 250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FTC OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	(*See COC)

WATER QUALITY DATA Purge Start Time: 14:45 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	3.6	6.60	640	16.28	/	1.42	↑
2	C	2.4	6.60	656	16.16	/	1.95	/
1	C	1.2	6.56	650	16.40	/	2.70	cloudy/grey
0	/	0.00	.	/	/	/	.	/

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** EX-4 (MW-2)

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-15

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN		?		**TEMPERATURE:**	(°F) 42 .	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	12:00	27.30	.	15.61	.	11.69	X 1	1.9
/ /	:	.	.	.	.		X 3	5.7

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/7/02	12:45	C	(3)	40 ml HCl	(YES)	(NO)		✓
Amber Glass	/ /	:	C	(3)	250, (500), 1L (None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:	C	(1)	250, 500, (1L) (HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:	C	(1)	250, 500, 1L (HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (8)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIQ OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		(*See COC)

WATER QUALITY DATA Purge Start Time: 12:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other/	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.7	6.61	514	17.21		1.77	↑
2	C	3.8	6.62	513	17.32		1.56	
1	C	1.9	6.70	522	16.99		2.08	cloudy/light grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-5

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030702-19

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN		?		TEMPERATURE:	(°F) 38 .	°C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3 17 02	15:20	23.75	.	16.04	.	7.71	X 1	1.26
/ /	:	.	.	.	.		X 3	3.78

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: (N if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3 17 02	16:00	C	(3)	(40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:	C	(3)	250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	* See COC

WATER QUALITY DATA

Purge Start Time: 15:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	3.9	6.52	602	14.25	/	2.40	↑
2	C	2.6	6.91	600	14.15	/	2.53	
1	C	1.3	6.75	604	14.21	/	2.95	cloudy/light grey
0	~	0.00	~	~	~	~	~	~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Gigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: EX-7
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030602-7
DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		(RAIN)		?		TEMPERATURE:	(°F) 42	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	14:35	24.60	/	12.85	/	11.75	X 1	1.90
/ /	:	.	/	.	/		X 3	5.7

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/6/02	15:70	C	(3) (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	√ / /	:	C	(3) 250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TAH-FIO OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	*see COC

WATER QUALITY DATA

Purge Start Time: 14:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	5.7	6.54	208	15.79	/	3.93	↑
2	C	3.8	6.56	207	15.70	/	3.96	
1	C	1.9	6.68	207	15.63	/	4.51	cloudy/tan
0	~	0.00	~	~	~	~	~	~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-1

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-10

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	**TEMPERATURE:**	(°F) 42. °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	07:45	19.95	/	16.08	/	3.87	X 1	9.63
/ /	:	.	.	.	.		X 3	9.90

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/7/02	08:25	C	(3) (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:	C	(3) 250 (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	C	(1) 250, 500 (1L)	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:	C	(1) 250, 500 (1L)	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (8)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		*See COC

WATER QUALITY DATA Purge Start Time: 08:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4	C	2.8	6.63	565	14.91	/	3.45	↑
3	C	2.1	6.61	556	14.90	/	3.81	↑
2	C	1.4	6.56	547	14.67	/	4.65	↑
1	C	0.7	6.45	516	14.03	/	7.47	clear/colorless
0	~	0.00	.	.	.	.	.	~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Profi group
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-3
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030702-11
DUP ID: GWC-030702-12 NA (0950)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE:	(°F) 42.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	09:00	26.91	.	15.52	.	11.39	X 1	1.86
/ /	:	.	.	.	.		X 3	5.57

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH.	√
VOA Glass	3/7/02	09:45	C	3/3 (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	3/7/02	:	C	3/3 (250, 500, 1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	C	1/1 (250, 500, 1L)	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:	C	1/1 (250, 500, 1L)	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (16)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) ~~(BTEX/TPH-G)~~ OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) (TPH-I-IQ) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	* see CC

WATER QUALITY DATA

Purge Start Time: 09:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.7	6.63	817	16.75		2.44	
2	C	3.8	6.63	818	16.80		2.47	
1	C	1.9	6.59	822	16.46		2.87	cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Sleminski (PRINTED NAME) Clayton Sleminski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-4

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-13

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	(Show) ?	**TEMPERATURE:**	(F) 42. °C					

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	10:10	27.74	.	15.40	/	12.34	X 1	2.0
/ /	:	.	.	.	.		X 3	6.0

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/7/02	10:40	C	(3) (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	3/7/02	:	C	(3) 250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	C	(1) 250, 500 (1L)	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:	C	(1) 250, 500 (1L)	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (8)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_2/NO_3)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		* See COC

WATER QUALITY DATA Purge Start Time: 10:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	6.0	6.59	749	16.66	/	2.38	↑
2	C	4.0	6.61	760	16.67	/	2.38	
1	C	2.0	6.63	788	16.47	/	2.90	cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-5

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030702-14

DUP ID: (NA)

WIND FROM:	N	NE	E	(SE)	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		**TEMPERATURE:**	(°F) 40 .	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	11:05	35.20	/	18.87	/	16.33	X 1	2.66
/ /	:	.	/	.	/		X 3	7.98

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/7/02	11:50	C	(3)	40 ml (HCl)	(YES)	(NO)		√
Amber Glass	/ /	:	C	(3)	250, 500, (1L) (None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) ((8260)) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	((PAH)) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	*See COC

WATER QUALITY DATA

Purge Start Time: 11:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.	/	.	
3	C	8.1	6.72	1199	15.11	/	1.88	↑
2	C	5.4	6.73	1197	15.17	/	1.79	↑
1	C	2.7	6.74	1180	15.32	/	2.09	cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-6
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030802-22
DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE: (°F) 35. °C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/18/02	8:40	24.50	/	14.74	/	9.76	X 1	1.6
/ /	:	.	.	.	.		X 3	4.8

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: (N if used)

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/18/02	9:10	C	(3) (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:	C	(3) 250 (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		(1) 250, 500 (1L)	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:		(1) 250, 500 (1L)	(HNO_3)	(YES)	(YES)		√
	/ /	:		(3) 250, 500, 1L		YES			

Total Bottles (include duplicate count): (8)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		* Lab CO₂

WATER QUALITY DATA Purge Start Time: 8:45 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.		.	
3	C	4.8	6.27	648	18.09	/	1.62	
2	C	3.2	6.26	648	18:25	/	1.51	
1	C	1.6	6.27	654	18.11	/	2.29	cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-7
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030808-21
DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE:	(°F) 35.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/8/02	07:40	30.00	/	23.36	/	6.64	X 1	1.08
/ /	:	.	.	.	.		X 3	3.3

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/8/02	08:30	C	3	40 mL	(HCl)	YES	NO		√
Amber Glass	/ /	:	C	3	250 (500) 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	C	(1)	250, 500, (1L)	(HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:	C	(1)	250, 500, (1L)	(HNO_3)	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (Include duplicate count): 8

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	*See COC

WATER QUALITY DATA Purge Start Time: 7 : 55 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.3	6.28	586	14.10	/	1.63	↑
2	C	2.2	6.31	546	14.12	/	1.64	
1	C	1.1	6.34	673	13.98	/	1.98	cloudy/muddy
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-8

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030702-20

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 40. °C		

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/7/02	16:10	29.83	.	23.50	.	6.33	X1	1.03
/ /	:	.	.	.	.		X3	3.09

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/7/02	16:50	C	3 40 ml	HCl	YES	NO		√
Amber Glass	3/7/02	:	C	3 250 500 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	3/7/02	:	C	1 250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	3/7/02	:	C	1 250, 500, 1L	HNO_3	YES	YES		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 8

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Be) (Ba) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		* See COC

WATER QUALITY DATA

Purge Start Time: 16:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.3	6.52	601	14.08		0.90	↑
2	C	2.2	6.52	590	13.95		0.74	
1	C	1.1	6.53	567	14.00		1.42	cloudy/dark grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

lots of susp. sed.

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-9
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030602-4
DUP ID: GWC-030602-5 NA (1310)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE:	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3 16 02	12:05	25.03	/	17.02	/	8.01	X 1	1.3
/ /	:	.	/	.	/		X 3	3.9

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = -

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3,6 02	13:00	C	(3/3)	40 ml (HCl)	(YES)	(NO)		√
Amber Glass	" / /	:	C	(6)	250, 500, 1L (None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (12)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-ETC OR [ ] WA [ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		(*see COC)

WATER QUALITY DATA Purge Start Time: 12:25 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.9	6.48	364	15.53		2.20	↑
2	C	2.6	6.48	367	15.35		2.60	
1	C	1.3	6.39	350	15.24		4.33	cloudy/dark tan
0	~	0.00	~	~	~		.	~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-10

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030602-6

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	**TEMPERATURE:**	(°F) 42.	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	13:25	19.85	.	14.19	.	5.66	X 1	0.92
/ /	:	.	.	.	.		X 3	2.76

Gal/ft = (dia./2)^2 x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/6/02	~~14:00~~	C	(3)	(40 ml)	HCl	YES	(NO)		√
Amber Glass	/ /	14:20	C	(3)	250 (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-EIO OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	~~(As) (Sb) (Ba) (Be) (Se) (Cd) (Co)~~ (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	(See COC)

WATER QUALITY DATA Purge Start Time: 13:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss.O_2 (mg/l)	Water Quality
4		.	.	.	.		.	
3	C	3.0	6.68	371	17.12		.	↑
2	C	2.0	6.70	329	17.09		1.88	↑
1	C	1.0	6.67	358	16.62		2.30	cloudy/dark grey
0	~	0.00	.	.	.		.	~

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

meter ran out of batteries; I had to go buy some more.

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Trigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation WELL ID: MW-11
SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 BLIND ID: GWC-030802-23
DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN		?		TEMPERATURE:	(°F) 35.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/18/02	09:20	24.57	.	12.82	.	11.75	X 1	1.92
/ /	:	.	.	.	.		X 3	5.76

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/18/02	10:00	C	(3) 40 ml	(HCl)	(YES)	(NO)		√
Amber Glass	3/18/02	10:00	C	(3) 250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIQ OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keidahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		*See COC

WATER QUALITY DATA Purge Start Time: 09:25 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/L)	Quality
4		.	.		.			
3	C	6.0	6.38	459	13.83		2.13	
2	C	4.0	6.38	420	13.46		1.86	
1	C	2.0	6.40	392	13.17		2.54	cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

Sheen & lots of free product on bailer

SAMPLER: Clayton Slominski
(PRINTED NAME) (SIGNATURE) Clayton Slominski

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-12

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030602-9

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	16:15	24.82	/	17.39	/	7.43	X 1	1.2
/ /	:	.	.	.	.		X 3	3.6

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/6/02	16:50	C	(3)	(40 ml) HCl	(YES)	(NO)		√
Amber Glass	3/6/02	16:50	C	(3)	250, 500, 1L (None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (Include duplicate count): (6)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		* Sep. C10.G

WATER QUALITY DATA

Purge Start Time: 16:25 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	3.6	6.57	467	16.26		2.11	↑
2	C	2.4	6.57	459	16.28		1.65	
1	C	1.2	6.55	474	16.10		2.29	cloudy/dark grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

Lots of susp. sed.

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Figroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** MW-13

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GW-032602-8

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(°F) 40.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	15:30	29.60	/	17.54	/	12.06	X 1	1.97
/ /	:	.	/	.	/		X 3	6.0

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/6/02	16:00	C	3	(40 ml)	(HCl)	YES	(NO)		✓
Amber Glass	3/6/02	16:00	C	3	250, (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (6)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_2/NO_3)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	*See C.O.C.

WATER QUALITY DATA Purge Start Time: 15:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	6.0	6.32	641	15.17		1.34	↑
2	C	4.0	6.28	639	15.17		1.24	|
1	C	2.0	6.29	635	15.10		1.40	cloudy/dark grey
0		0.00	.	.	.		.	

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

lots of susp. sed.

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Gigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** S-1

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030602-1

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(°F) 45.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	10:00	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.	.	X 3	.

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = grab

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	3/6/02	10:35	G	(3) 40 ml	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		(3) 250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		(1) 250, 500 (1L)	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH(FIO) OR[ ] WA[ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Be) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
	4-methylphenol butylbenzylphthalate di-n-octylphthalate dibenzofuran

WATER QUALITY DATA

Purge Start Time: 10:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0	G	0.00	6.64	5	6.86		.	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Tigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** S-2

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030602-2

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(F) 45.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/02	10 :50	.		.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = grab

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/6/02	11 :10	G	(3)	(40 ml) (HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		(3)	250, (500) (1L) (None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		(1)	250, 500 (1L) (HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:		(7)	250, 500, 1L	YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR [ ] WA [ ]
AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FIO OR [ ] WA [ ]
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zr) (Hg) (K) (Na) (Hardness) (Silica)
	See C.O.C

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0	G	0.00	6.23	9	6.20	.	.	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

FIELD SAMPLING DATA SHEET

the Pigroup
8405 SW Nimbus Avenue
Beaverton, Oregon 97008
Office: (503) 626-0455 Fax: (503) 526-0775

PROJECT NAME: McCall Oil & Chemical Corporation **WELL ID:** S-3

SITE ADDRESS: 826 SW 15th Avenue, Portland, OR 97205 **BLIND ID:** GWC-030602-3

DUP ID: (NA)

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		(RAIN)		?		**TEMPERATURE:**	(°F) 42.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
3/6/1	11:25	.	.	.	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other = grab

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	3/6/02	11:40	G	(3) (40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:		(3) 250, (500) (1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		(1) 250, 500, (1L)	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		(2) 250, 500, 1L		YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8010) (8010/8020) (8020) (8240) (8260) (BTEX) (TPH-G) (BTEX/TPH-G) OR[ ] WA[ ]
	AMBER - Glass	(PAH) (TPH-HCID) (TPH-D) (TPH-418.1) (Oil &Grease) TPH-FID OR[ ] WA[ ]
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)
		See C.O.C.

WATER QUALITY DATA

Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	5.59		.		.	
0	G	0.00	~~5.51~~	13	6.52		12.38	clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Clarity, Color]

SAMPLER: Clayton Slominski (PRINTED NAME) Clayton Slominski (SIGNATURE)

Daily Calibration Record

Date:	1/15/02
Meter:	YSI
Equipment#:	85367
Technician:	CTS

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-samling measurements	Time
pH	4.0	X	830	4.0			
	7.0	X	835	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720	X	840	720			
	1413						
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***						
	Barometric pressure: mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer

**standards based on YSI Zobell solution

***measured in saturation sleeve

Comments:

Columbia Analytical Services INC.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: _____

PAGE 1 OF 2 COC # _____

PROJECT NAME

PROJECT NUMBER

PROJECT MANAGER

COMPANY/ADDRESS

PHONE # FAX #

SAMPLER'S SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐	Hydrocarbons Gas☐ 8021☐ BTEX☐ Diesel☐ Oil☐ (*see below)	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 413.1☐ 418.1☐ 1664 SGT☐ 1664 HEM☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHs 8310☐ SIM☐	GC/MS-SIM PAH☐ Phenol☐ Phthalates☐	Metals - Total or Dissolved (See list below)	Cyanide☐ Hex-Chrom☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle) NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOX 9020☐ AOX 1650☐ 506☐					REMARKS
															X	X					X	X	X	X	X
															X	X					X	X	X	X	X
															X	X					X	X	X	X	X
							X								X						X	X	X	X	X
							X								X						X	X	X	X	X
							X								X						X	X	X	X	X
							X								X						X	X	X	X	X
							X								X						X	X	X	X	X
							X								X						X	X	X	X	X

TPH (FIQ)

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. Data Validation Report (includes all raw data)

___ IV. CLP Deliverable Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

_____

_____

TURNAROUND REQUIREMENTS

_____ 24 hr. _____ 48 hr.

_____ 5 Day

_____ Standard (10-15 working days)

_____ Provide FAX Results

_____

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature _____ Date/Time _____	Signature _____ Date/Time _____	Signature _____ Date/Time _____	Signature _____ Date/Time _____
Printed Name _____ Firm _____	Printed Name _____ Firm _____	Printed Name _____ Firm _____	Printed Name _____ Firm _____

RCOC #1 04/01

Columbia Analytical Services, Inc.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

PAGE 2 OF 3 SR#: _____ COC #: _____

PROJECT NAME

PROJECT NUMBER

PROJECT MANAGER

COMPANY/ADDRESS

PHONE # FAX #

SAMPLER'S SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ 8021☐ BTEX☐ Diesel☐ Oil☐	☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 413.1☐ 418.1☐ 1664 SGT☐ 1664 HEM☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☐	GC/MS-SIM PAH☐ Phenol☐	Metals, Total or Dissolved (See list below) Both	Phthalates☐	Cyanide☐	Hex-Chrom☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOX 9020☐ AOX 1650☐ 506☐	TPH-FIQ					REMARKS
					3		X								X	X							X						
					3		X								X	X							X						
					3		X								X	X							X						
					3		X								X	X							X						
					6		X								X								X						
					3		X								X		X						X						
					6		X								X								X						
					6		X								X								X						
					6		X								X								X						
					6		X								X								X						

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. Data Validation Report (includes all raw data)

___ IV. CLP Deliverable Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.

____ 5 Day

____ Standard (10-15 working days)

____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* 4-methylphenol, butylbenzylphthalate, Di-n-octylphthalate
Dibenzofuran

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

Columbia Analytical Services, Inc.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: _____

PAGE 2 OF 2 COC # _____

PROJECT NAME

PROJECT NUMBER

PROJECT MANAGER

COMPANY/ADDRESS

PHONE # FAX #

SAMPLER'S SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐	Hydrocarbons Gas☐ 8021☐ BTEX☐ Diesel☐ (see below) Oil☐ Fuel Fingerprint (FIQ)☐ NW-HCID☐	Oil & Grease/TRPH 413.1☐ 418.1☐ 1664 SGT☐ 1664 HEM☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics TH☐ Tetra☐ 8151M PCP☐	PAHs 8310☐ SIM☐ GC/MS-SIM☐	PAHs☐ Phenols☐ Phthalates☐ Metals, Total or Dissolved (See list below) Both	Cyanide☐ Hex-Chrom☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle) NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOX 9020☐ AOX 1650☐ 506☐	TPH (FIQ)					REMARKS
[illegible]	3/[illegible]	[illegible]		W	8		X								X	X					X				
[illegible]	3/[illegible]	[illegible]		W	8		X								X	X					X				
[illegible]	3/[illegible]	[illegible]		W	8		X								X	X					X				
[illegible]	3/[illegible]	[illegible]		W	6		X								X						X				

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

___ III. Data Validation Report (Includes all raw data)

___ IV. CLP Deliverable Report

___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

____ 24 hr. ____ 48 hr.

____ 5 Day

____ Standard (10-15 working days)

____ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* 4-methylphenol, butylbenzylphthalate, Di-n-octylphthalate, Dibenzofuran

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature [illegible] Date/Time [illegible]	Signature Date/Time	Signature Date/Time	Signature Date/Time
Printed Name [illegible] Firm [illegible]	Printed Name Firm	Printed Name Firm	Printed Name Firm

Date:	3/6/02
Meter:	YSI 650
Equipment#:	
Technician:	CTS

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-samling measurements	Time
pH	4.0	X	700	4.0			
	7.0	X	705	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720						
	1413	X	710	1413			
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***	X	715				
	Barometric pressure: 768 mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer

**standards based on YSI Zobell solution

***measured in saturation sleeve

Comments:

Date:	3/7/02
Meter:	YSI 650
Equipment#:	
Technician:	CTS

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-sampling measurements	Time
pH	4.0	X	700	4.0			
	7.0	X	705	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720						
	1413	X	710	1413			
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***	X	715				
	Barometric pressure: 768 mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer

**standards based on YSI Zobell solution

***measured in saturation sleeve

Comments:

Date:	3/8/02
Meter:	YSI 650
Equipment#:	
Technician:	CTS

Parameter	Standard	Calibration Sequence Completed (X)	Cal Time	Pre-sample measurement	Time	Post-samling measurements	Time
pH	4.0	X	700	4.0			
	7.0	X	705	7.0			
	10.0						
Conductivity (micro siemens)	200						
	720						
	1413	X	710	1413			
Temperature (degrees Celsius)	*						
Dissolved Oxygen (mg/L)	***	X	715				
	Barometric pressure: 768 mmHg						
ORP(Eh)							
@ 5°C	**257.0						
@ 10°C	250.5						
@ 15°C	244.0						
@ 20°C	237.5						
@ 25°C	231.0						
@ 30°C	224.5						
@ 35°C	218.0						

Dissolved Oxygen Confirmation			
Sample Location	Time	Meter Reading (mg/L)	Winkler titration (mg/L)

*measured by glass thermometer

**standards based on YSI Zobell solution

***measured in saturation sleeve

Comments:

McCall Oil Chemical Corporation
Task Sheet
October 2002

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
EX-1	14:08	24.10	15.10	MC-100302-6	14:35	✓
EX-2	10:25	24.62	18.24	MC-100402-17	11:00	✓
EX-3	09:45	23.95	17.63	MC-100402-16	10:20	✓
EX-4 (MW-2)	14:38	27.30	16.50	MC-100302-7	15:05	✓
EX-5	09:10	23.75	19.60	MC-100402-15	09:40	✓
~~EX-6~~	:	.	.		:	
EX-7	16:03	24.60	13.77	MC-100302-10	16:30	✓
MW-1	13:38	19.95	16.92	MC-100302-5	14:05	needs new lock
MW-3	13:08	26.91	16.36	MC-100302-4	13:35	✓
MW-4	12:48	27.74	15.97	MC-100302-3	13:05	✓
MW-5	11:45	35.20	19.91	MC-100302-1	12:40	✓
MW-6	16:35	24.50	15.58	MC-100302-11	17:00	✓
MW-7	08:05	30.00	24.99	MC-100402-13	08:30	✓
MW-8	08:35	29.83	24.41	MC-100402-14	09:05	✓
MW-9	15:08	25.03	17.86	MC-100302-8	15:35	✓
MW-10	15:38	19.85	15.18	MC-100302-9	16:00	✓
MW-11	No Sample of GROUNDWATER					*
MW-12	11:40	29.82	17.75	MC-100402-19	12:10	✓
MW-13	11:05	29.66	18.87	MC-100402-18	11:35	✓
Stormwater						
S-1	:	.	.		:	
S-2	:	.	.		:	
S-3	:	.	.		:	
S-4	:	.	.		:	
	:	.	.		:	
QA\QC						
FB-1	12:12	/	/	MC-100402-20	12:20	NA
DUP (MW-5)	11:45	35.20	19.91	MC-100302-2	12:45	✓
DUP (MW-6)	16:35	24.50	15.58	MC-100302-12	17:05	✓
DUP	:	.	.		:	

Notes:

• DRUM 1 - 10/3/02

* DRUM 2 - 10/4/02

* Collected sample of product: MW-11-108402 @ 12:50/10-4-02

\\Union\Portland\Projects\McCall Portland\Sampling\TASK sheet

WATER LEVEL FORM
McCall Oil/Great Western Chemical
October ~~1~~ 2, 2002

Well	Time	DTW	Comments
EX-1	@ 1245	15.39	lock Corroded
EX-2	1530	18.22	
EX-3	1500	17.59	
EX-4 (MW-2)	1300	16.49	
EX-5	1445	19.58	
~~EX-6~~			
EX-7	1345	13.76	
MW-1	1230	16.98	Lock Corroded *
MW-3	1215	16.36	Lock Corroded *
MW-4	12:00	15.96	LOCK CORRODED
MW-5	11:42	20.25	LOCK Corroded
MW-6	14:00	15.57	
MW-7	1410	25.08	
MW-8	1430	25.41	
MW-9	1315	17.85	
MW-10	1330	15.18	
MW-11	1620	NA	Thick black product **
MW-12	1558	17.65	
MW-13	1545	18.80	
WG-1	1515	32.60	

Notes:
PERSONNEL Tim Stone
PROBE# 23069

* retapped mon. bolts to 7/16".

** Approximately 1 foot of product (thick black oil) could not measure DTW.

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: EX-1
SITE ADDRESS: Portland, OR BLIND ID: MC-100302-6
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN		?				TEMPERATURE:	°F 60	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water [Water Column]	DTP-DTW	DTB-DTW		Volume (gal) [Water Column x Gal/ft]
10/3/02	14:08	24.10		15.10		9.60	X1	1.47
/ /	:						X3	4.40

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	10/3/02	14:35	C	(3)	40 ml HCl	(YES)	(NO)		✓
Amber Glass	/ /	:		2	250, (500), 1L (None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:		4	250, 500 ~~1L~~ ~~HNO_3~~	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 14:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	4.5	4.28	677	17.74		2.32	↑
2	C	3.0	4.26	685	17.65			Cloudy/tan
1	C	1.5	4.34	689	17.12			Slight Cloudy/tan
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil — WELL ID: EX-2
SITE ADDRESS: Portland, OR — BLIND ID: MC-100402-17
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN		?		TEMPERATURE:	°F 65.	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	10:25	24.62		18.24		6.38	X1	1.04
/ /	:						X3	3.12

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	10:00	C	3 (40 ml)	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		2 (250, 500, 1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 10:30 — Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp (°C)	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	3.3	6.37	615	18.74		1.29	↑
2	C	2.2	6.38	616	18.75			
1	C	1.1	6.42	612	18.80			Cloudy, Grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) — Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-3
SITE ADDRESS: Portland, OR
BLIND ID: MC-100402-16
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?						

TEMPERATURE: °F 62. °C [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/07	09:45	23.95		17.63		6.32	X1	1.03
/ /	:						X3	3.09

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N/if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/07	10:20	C	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	None HCl H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH 418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 09:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	3.3	6.46	593	17.31			
2	C	2.2	6.41	596	17.32			
1	C	1.1	6.41	601	17.16			cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) T. Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: EX-4 (MW-2)
SITE ADDRESS: Portland, OR BLIND ID: MC-100302-7
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDS)		RAIN			?		TEMPERATURE:	°F 60.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	14:38	27.30		16.50		10.80	X 1	1.76
/ /	:	.	.	.	.	.	X 3	5.28

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	15:05	C	3 (40 ml)	HCl	(YES)	(NO)		✓
Amber Glass	/ /	:	C	2 (250, 500, 1L)	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:	C	1 (250, 500, 1L)	(HNO_3)	(YES)	(YES)		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 14:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4	C	4.3	6.31	1201	17.84		.	Cloudy/brown
3	C	5.4	6.29	1494	17.79		.	Cloudy/brown
2	C	3.5	6.18	1667	17.69		.	Cloudy/brown
1	C	1.8	6.08	1734	17.86		.	Cloudy/brown, oily
0		0.00	.	.	.		.	

[Casing]	[Select A-G]	[Cumulative Totals]			[Circle units]			[Clarity, Color]
5	C	7.2	6.32	1117	17.93			Cloudy/brown
6	C	8.1	6.33	1042	17.93			Cloudy/brown
7	C	9.0	6.34	1063	17.91		1.65	Cloudy/brown

SAMPLER: [illegible] [illegible]
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-5
SITE ADDRESS: Portland, OR
BLIND ID: MC-100402-15
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE:	°F 62.	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	~~10:35~~	23.75		19.60		4.15	X1	0.68
/ /	09:10						X3	2.03

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	09:40	C	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: ~~1000~~ 0915 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	~~C~~ *	~~2.1~~						
2	~~C~~	~~1.4~~						
1	C	0.7	6.60	227	15.44		~~5.49~~ 1.23	slight cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* Dry at 1 volume, let Recharge

SAMPLER: JM JONES (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-7
SITE ADDRESS: Portland, OR
BLIND ID: MC-100302-10
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 60 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	16:03	24.60	.	13.77	.	10.83	X1	1.77
/ /	:	.	.	.	.		X3	5.30

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√ if used
VOA Glass	10/3/02	16:30	C	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) HCl H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keidahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 16:05

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	5.4	6.63	235	16.90		2.50	
2	C	3.6	6.74	226	16.85		.	
1	C	1.8	6.78	203	16.73		.	Cloudy/tan
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-1
SITE ADDRESS: Portland, OR | BLIND ID: MC-100302-5
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 60.	°C

[Circle appropriate value]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	13:38	19.95		16.92		3.03	X 1	0.50
/ /	:	.	.	.	.		X 3	1.50

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	14:05	C	3 40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		2 250, 500, 1L	None HCl H_2SO_4	YES	NO		✓
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 13:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.		.	
3	C	1.5	6.60	814	17.29		3.05	
2	C	1.0	6.63	830	17.23		.	
1	C	0.5	6.66	866	17.03		.	clear / colorless
0		0.00	.	.	.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-3
SITE ADDRESS: Portland, OR | BLIND ID: MC-100302-4
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?			TEMPERATURE:	°F 60 °C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	13:08	26.91		16.36		10.55	X1	1.72
/ /	:	.	.	.	.		X3	5.16

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	13:35	C	3	40 mL	HCl	YES	NO		✓
Amber Glass	/ /	:		2	500 mL	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 13:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	5.4	6.47	952	17.15		1.98	↑
2	C	3.6	6.48	944	17.10			
1	C	1.8	6.49	967	17.06			Slight Cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-4
SITE ADDRESS: Portland, OR | BLIND ID: MC-100302-3
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 60		°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	12:48	27.74		15.97		11.77	X1	1.92
/ /	:						X3	5.76

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	13:05	C	3 40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2 4 250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	YES		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 8

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH 418.1) (Oil &Grease) 44
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 12:50 | Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	6.0	6.55	754	17.23		1.76	
2	C	4.0	6.55	702	17.20			
1	C	2.0	6.58	643	17.10			Cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-5
SITE ADDRESS: Portland, OR
BLIND ID: MC-100302-1
DUP ID: MC-100302-2 NA 1245

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?		TEMPERATURE:	°F 60.	°C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	11:45	35.20		19.91		15.29	X1	2.49
/ /	:						X3	7.48

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	12:40	C	(3)	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5+0

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 12:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	7.5	6.60	1295	15.44		1.66	
2	C	5.0	6.65	1284	15.48			
1	C	2.5	6.62	1266	15.69			Cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-6
SITE ADDRESS: Portland, OR
BLIND ID: MC-100302-11
DUP ID: MC-100302-12 NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 60 . °C		

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	16:35	24.50	.	15.58	.	8.92	X1	1.45
/ /	:	.	.	.	.		X3	4.36

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	10/3/02	17:00	C	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		2	250/500/1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 12

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) 7-7
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kaldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	C	4.5	6.52	513	18.64		1.76	
2	C	3.0	6.50	530	18.56		.	
1	C	1.5	6.50	517	18.15		.	Cloudy/grey
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-7
SITE ADDRESS: Portland, OR BLIND ID#: MC-100402-13
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY		(CLOUDY)		RAIN			?	TEMPERATURE: (°F) 52		°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	08:05	30.00		24.99		5.01	X 1	0.82
/ /	:						X 3	2.45

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" =)	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	10/4/02	08:30	C	(3) (40 ml)	(HCl)	(YES)	NO		√
Amber Glass	/ /	:		2 (250, (500) mL)	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1 (250, 500, 1L)	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil & Grease) 14
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Kjeldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 08:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	2.7	6.63	1522	14.61		1.09	
2	C	1.8	6.59	1548	14.58			
1	C	0.9	6.39	1630	14.40			Cloudy, Gray
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

§ Slight sheen

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-8
SITE ADDRESS: Portland, OR BLIND ID: MC-100402-14
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE: °F 58		°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	08:35	29.83	/	24.41	/	5.42	X 1	0.88
/ /	:	.	.	.	.		X 3	2.65

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	09:05	C	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	None (HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (EPH-98.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 08:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp	°C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.			.	
3	C	2.7	6.45	666	14.21			1.54	
2	C	1.8	6.47	638	14.23			.	
1	C	0.9	6.49	635	14.28			.	Cloudy/grey/shee
0		0.00	.		.			.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-9
SITE ADDRESS: Portland, OR BLIND ID: MC-100302-B
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)		RAIN		?			TEMPERATURE:	(°F)	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	15:08	25.03		17.86		7.17	X1	1.17
/ /	:						X3	3.51

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/3/02	15:35	C	3	40 ml	HCl	(YES)	(NO)		√
Amber Glass	/ /	:		2	500 mL	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) 14
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 15:10 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	3.6	6.49	469	18.13		2.42	↑
2	C	2.4	6.51	458	18.06			
1	C	1.2	6.57	431	17.93			Cloudy/Brown
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-10
SITE ADDRESS: Portland, OR | BLIND ID: MC-100302-9
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE:	°F 60 .	°C

[Circle appropriate unit]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/3/02	15:38	19.85	.	15.18	.	4.67	X1	0.76
/ /	:	.	.	.	.		X3	2.28

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	10/3/02	16:00	C	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) 4-4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 15:40 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.		.	
3	C	2.4	6.65	384	18.06		1.24	
2	C	1.6	6.66	385	18.10		.	
1	C	0.8	6.69	419	17.09		.	Cloudy/grey-bro
0		0.00	.	.	.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-11

SITE ADDRESS: Portland, OR | BLIND ID: MW-11-100402

DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	TEMPERATURE:	°F	°C

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	12:35	24.57	2.	NA (PRODUCT IN WELL)			X 1	
/ /	:						X 3	

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	12:50	C	4	40 ml HCl NON	YES	NO		√
Amber Glass	/ /	:		3	250, 500 (1L) (None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 14

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (PCB-8082.1) (Oil & Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanids)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: : | Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp	°C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.			.	
3	C	.	.		.			.	
2	C	.	.		.			.	
1	C	.	.		.			.	
0		0.00	.		.			.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* No groundwater sample collected. Free product ~1" thick collected sample.

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.

6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-12
SITE ADDRESS: Portland, OR BLIND ID: MC-100402-19
DUP ID: NA

WIND FROM:	(N)	NE	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	TEMPERATURE:	°F 65	°C				

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	11:40	24.82		17.70		7.12	X1	1.16
/ /	:						X3	3.48

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	12:10	C	(3) 40 ml	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		2 250 (500) 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		250, 500, 1L	HNO_3	YES	YES		
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) 1,4
WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
GREEN - Poly	(Cyanide)
RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: 11:42 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4								
3	C	3.6	6.49	841	16.69		0.54	↑
2	C	2.4	6.36	831	16.64			
1	C	1.2	6.34	810	16.26			Cloudy/grey
0		0.00						

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil — WELL ID: MW-13
SITE ADDRESS: Portland, OR — BLIND ID: MC-100402-18
DUP ID: NA

WIND FROM:	N	(NE)	E	SE	S	SW	W	NW	(LIGHT)	MEDIUM	HEAVY
WEATHER:	SUNNY	(CLOUDY)	RAIN	?	TEMPERATURE:	(°F) 62 . °C					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	10:05	29.60	/	18.87	/	10.73	X1	1.75
/ /	:	.	.	.	.		X3	5.25

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	10/4/02	11:35	C	3	40 ml	(HCl)	(YES)	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease) +4
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA

Purge Start Time: 10:10 — Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp	°C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.			.	
3	C	5.4	6.11	734	15.57			1.09	
2	C	3.6	6.14	732	15.55			.	
1	C	1.8	6.16	734	15.82			.	Cloudy/grey
0		0.00	.		.			.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) — Tim Stone (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: FIELD BLANK
SITE ADDRESS: Portland, OR
BLIND ID: MC-100402-20
DUP ID: NA

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE:	°F 65 .	°C

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
10/4/02	12:12	NA		NA	.	.	X 1	.
/ /	:	.	.	.	.		X 3	.

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount	& Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	10/4/02	12:20	C	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:			250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:			250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:			250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8021) (8260B) (BTEX) (NWTPH-G)
	AMBER - Glass	(PAH) (TPH-HCID) (NWTPH-Dx) (TPH-418.1) (Oil &Grease)
	WHITE - Poly	(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO_3/CO_3) (Cl) (SO_4) (NO_3) (NO_2) (F)
	YELLOW - Poly	(COD) (TOC) (Total PO_4) (Total Keldahl Nitrogen) (NH_3) (NO_3/NO_2)
	GREEN - Poly	(Cyanide)
	RED TOTAL - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
	RED DISSOLVED - Poly	(As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica)

WATER QUALITY DATA Purge Start Time: : Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	°F Temp °C	Other	Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3		.	.		.		.	
2		.	.		.		.	
1		.	.		.		.	
0		0.00	6.77	0	6.74		4.20	Clear/colorless

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: TIM STONE (PRINTED NAME) Tim Stone (SIGNATURE)

Columbia Analytical Services, Inc.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

SR#: _____ PAGE 1 OF 2 COC # _____

PROJECT NAME: McCall Oil - Portland
PROJECT NUMBER:
PROJECT MANAGER: John Renda
COMPANY/ADDRESS: Anchor ENV, Portland, OR
PHONE # 503-670-1108 FAX # 503-670-1128
SAMPLER'S SIGNATURE: Tim Stone

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ Diesel☐ BTEX☐ 8021☐ Oil☐ ☐Fuel Fingerprint (FIQ) ☐NW-HCID Screen	Oil & Grease/TRPH 413.1☐ 418.1☐ 1664 SGT☐ 1664 HEM☐ TPH	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐ PAHS	GC/MS-SIM PAH☐ 8310☐ SIM☐	Metals, Total or Dissolved (See list below) Phenol☐ Phthalates☐	Cyanide☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle) Hex-Chrom☐	NH3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOC 9020☐ AOX 1650☐ 506☐	4-methylphenol	butylbenzylphthalate	Di-n-octylphthalate	Dibenzofuran	REMARKS
MC-100302-1	10/3/02	1240		H_2O	5		X		X				X							X	X	X	X	
-2		1245			5		X		X				X							X	X	X	X	
-3		1305			8*		X		X				X		X					X	X	X	X	
-4		1335			6		X		X				X		X					X	X	X	X	
-5		1405			6		X		X				X		X					X	X	X	X	
-6		1435			5		X		X				X							X	X	X	X	
-7		1505			6		X		X				X		X					X	X	X	X	
-8		1535			5		X		X				X							X	X	X	X	
-9		1600			5		X		X				X							X	X	X	X	
-10		1630			5		X		X				X							X	X	X	X	

REPORT REQUIREMENTS

- ___ I. Routine Report: Method Blank, Surrogate, as required
- ✓ II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
✓ Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* Additional volume for lab QA/QC

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Tim Stone	Signature:	Signature:	Signature:
Printed Name: Tim Stone	Printed Name: Tanna Payne	Printed Name:	Printed Name:
Firm: Anchor-PDX	Firm: CAS	Firm:	Firm:
Date/Time: 10/4/02 - 1600	Date/Time: 10/4/02 1600	Date/Time:	Date/Time:

Columbia Analytical Services, Inc.
An Employee-Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222 • FAX (360) 636-1068

PAGE 2 OF 2 SR#: _____ COC #: _____

PROJECT NAME: McCall Oil - PORTLAND
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENV., PORTLAND, OR
PHONE # 503-670-1108 FAX # 503-670-1128
SAMPLER'S SIGNATURE: Tim Stone

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	BTEX☐ 8021☐	Fuel Fingerprint (FIO)☐ NW-HCID Screen☐	Oil & Grease/TRPH 413.1☐ 418.1☐	TPH 1664 SGT☐ 1664 HEM☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHs 8310☐ SIM☐	GC/MS-SIM PAH☐ Phenol☐	Metals, Total or Dissolved (See list below)	Phthalates☐	Cyanide☐	Hex-Chrom☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle)	NH_3-N, COD, Total-P, TKN, TOC, DOC (circle)	TOC 9020☐	AOX 1650☐ 506☐	4-Methylphenol	butylbenzylphthalate	Di-N-octylphthalate	Dibenzofuran	REMARKS
MC-100302-11	10/3/02	1700		H_2O	6		X		X						X		X							X	X	X	X	
MC-100302-12	10/3/02	1705			6		X		X						X		X							X	X	X	X	
MC-100402-13	10/4/02	0830			6		X		X						X		X							X	X	X	X	
" - -14	"	0905			6		X		X						X		X							X	X	X	X	
" - -15	"	0940			5		X		X						X									X	X	X	X	
" - -16	"	1020			5		X		X						X									X	X	X	X	
" - -17	"	1100			5		X		X						X									X	X	X	X	
" - -18	"	1135			5		X		X						X									X	X	X	X	
" - -19	"	1210			5		X		X						X									X	X	X	X	
" - -20	"	1220			3		X																					

REPORT REQUIREMENTS

- ___ I. Routine Report: Method Blank, Surrogate, as required
- X II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date _____

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

NOTE: 1-TRIP Blank SET INCLUDED

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Tim Stone	Signature: [signature]	Signature	Signature
Date/Time: 10-4-02/1600	Date/Time: 10/4/02 1600	Date/Time	Date/Time
Printed Name: TIM STONE	Printed Name: TINA PAYNE	Printed Name	
Firm: ANCHOR-PDX	Firm: CAS	Firm	

McCall Oil Chemical Corporation
Task Sheet
February 2004

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
EX-1	12:45	24.10	13.74	MO-021104-4	16:05	✓
EX-2	10:20	24.62	17.54	MO-021204-6	10:00	✓
EX-3	10:00	23.95	15.99	MO-021204-10	12:30	✓
EX-4 (MW-2)	12:00	27.30	15.14	MO-021304-17	11:45	✓
EX-7	11:15	24.60	12.31	MO-02130445	10:15	✓
MW-1	12:39	19.95	15.63	MO-021104-3	15:30	✓
MW-3	12:20	26.95	15.12	MO-021104-1	13:30	✓
MW-5	12:25	35.20	18.96	MO-021104-2	14:30	✓
MW-6	09:08	24.50	14.17	MO-021204-12	14:00	✓
MW-7	09:28	30.00	22.66	MO-021204-8	11:30	✓
MW-8	09:35	29.83	21.64	MO-021204-11	13:15	✓
MW-9	11:45	25.03	16.63	MO-021304-18	12:30	✓
MW-10	11:30	19.85	13.64	MO-021304-16	11:00	✓
MW-12	10:30	24.82	17.22	MO-021304-14	09:15	✓
MW-14	09:22	37.45	22.57	MO-021204-7	10:45	✓
MW-15	11:02	24.40	11.23	MO-021204-13	15:05	✓
QA\QC						
DUP (EX-1)	12:45	24.10	13.74	MO-021104-5	16.10	✓
DUP (MW-7)	09:28	30.00	22.66	MO-021204-9	11:40	✓
DUP	:	.	.		:	

Notes:

WATER LEVEL FORM
McCall Oil/Great Western Chemical
February 2004

2/11/04

Well	Time	DTW	Comments
EX-1	1245	13.74	
EX-2	1020	17.54	
EX-3	1000	15.99	
EX-4 (MW-2)	1200	15.14	
EX-5	0945	15.70	
EX-7	1115	12.31	
MW-1	1239	15.63	
MW-3	1220	~~15.99~~ 15.12	
MW-4	1230	14.76	
MW-5	1225	18.96	
MW-6	0908	14.17	
MW-7	0928	22.66	
MW-8	0935	21.64	
MW-9	1145	16.63	
MW-10	1130	13.64	
MW-11	NM	NM	PRODUCT WELL
MW-12	1030	17.22	
MW-13	1048	18.17	
MW-14	0922	22.57	
MW-15	1102	11.23	
WG-1	1005	28.65	
TPZ-2	0916	14.11	

Notes: 2/11/04 - Sunny/light W wind/50°F
PERSONNEL Tim Jones
PROBE#

TPZ-1 0950 16.09

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-3
SITE ADDRESS: Portland, OR BLIND ID: MO-021104-1
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	TEMPERATURE:	(°F) 50.					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:20	26.95	.	15.12	.	11.83	X1	1.93
/ /	:	.	.	.	.		X3	5.78

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2") =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	13:30	R	(3) 40 ml	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		2* 250, (500), 1L	(HCl) H_2SO_4	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 250, (500), 1L	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:		1 250, (500), 1L	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 12:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C		Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	6.	6.36	961	16.81		1.94	↑
2	B	4.	6.30	977	16.80		.	
1	B	2	6.31	1016	16.77		.	Clear / yellowtint
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* EXTRA Bottle for MS/MSD

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-5
SITE ADDRESS: Portland, OR BLIND ID: MO-021104-2
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER	SUNNY	CLOUDY	RAIN	?	TEMPERATURE	°F 50					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:25	35.20	.	18.96	.	16.24	X1	2.65
/ /	:	.	.	.	.		X3	7.94

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	14:30	B	(3) 40 ml	(HCl)	YES	NO		✓
Amber Glass	/ /	:		4 (250) 500 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	1	250, 500, 1L	(HNO_3)	YES	NO		✓
Red Diss. Poly	/ /	:	1	250, 500, 1L	(HNO_3)	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 9

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-HCID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 13:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	8.1	6.61	1343	16.05	1.70	↑
2	B	5.4	6.61	1342	16.03	.	|
1	B	2.7	6.56	1331	15.96	.	Clear / yellow tint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

*EXTRA Bottles for MS/MSD

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-1
SITE ADDRESS: Portland, OR BLIND ID: MO-021104-3
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?		TEMPERATURE:	50	[Circle appropriate units]		

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:39	19.95		15.63		4.32	X1	0.70
/ /	:						X3	2.11

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	15:30	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 15:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	0.56	
3	B	2.4	6.80	570	16.44	~~2.56~~	↑
2	B	1.6	6.83	571	16.46	.	↑
1	B	0.8	6.89	564	16.45	.	Clear / Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-1
SITE ADDRESS: Portland, OR
BLIND ID: MO-021104-4
DUP ID: MO-021104-5 (1600)

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)	CLOUDY	RAIN		?				TEMPERATURE:	(°F) 50.	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:45	24.10	.	13.74	.	10.36	X1	1.69
/ /	:	.	.	.	.		X3	5.07

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/11/04	16:05	B	(3)	(40 ml)	HCl	(YES)	NO		√
Amber Glass	/ /	:		1	250, (500), 1L	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, (500), 1L	(HNO_3)	(YES)	NO		√
Red Diss. Poly	/ /	:		1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (12)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIO) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 15:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	5.1	4.88	598	17.23	0.83	↑
2	B	3.4	4.91	580	17.20	.	↑
1	B	1.7	5.02	535	17.08	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: EX-2
SITE ADDRESS: Portland, OR BLIND ID: MO- 021204-6
DUP ID:

WIND FROM: N | NE | (E) | SE | S | SW | W | NW | LIGHT | MEDIUM | (HEAVY)
WEATHER: (SUNNY) | CLOUDY | RAIN | ? | TEMPERATURE: °F 47.

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]	[Water Column x Gal/ft]	Volume (gal)
2/1/04	10:20	24.62		17.54		7.08	X1	1.15
/ /	:						X3	3.46

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/1/04		B	~~40 ml~~	(HCl)	YES	NO		√
Amber Glass	2/1/04	10:00	B	3* 250,500,1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1 250,500,1L	(HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:	B	1 250,500,1L	(HNO_3)	YES	YES		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (5)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-HCID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 09:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.6	6.43	673	18.43	0.29	↑
2	B	2.4	6.41	672	18.43	.	
1	B	1.2	6.39	673	18.43	.	Clear/yellow tint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* EXTRA PAH bottle for MS/MSD

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-14
SITE ADDRESS: Portland, OR
BLIND ID: MO- 021204-7
DUP ID:

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	(°F) 50	

[Circle appropriate unit(s)]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	09:22	37.45	.	22.57	.	14.88	X1	2.43
/ /	:	.	.	.	.		X3	7.28

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	10:45	B	(3)	(40 ml) (HCl)	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L (HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L (HNO_3)	YES	YES		√
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIO) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 10:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	7.5	6.38	597	16.74	0.20	
2	B	5.0	6.39	596	16.81	.	
1	B	2.5	6.38	596	16.75	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-7
SITE ADDRESS: Portland, OR BLIND ID: MO-021204-8
DUP ID: MO-021204-9 (1140)

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	°F (50)	

[Circle approximate value]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/12/04	09:28	30.00	/	22.66	/	7.34	X1	1.20
/ /	:	.	.	.	.		X3	3.59

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	11:30	B	(3) . 40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2 250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 250, 500, 1L	(HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:		1 250, 500, 1L	(HNO_3)	YES	YES		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 7X4

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 10:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.6	6.31	715	15.15	0.27	↑
2	B	2.4	6.30	716	15.16	.	↓
1	B	1.2	6.20	720	15.10	.	Clear / Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: EX-3
SITE ADDRESS: Portland, OR BLIND ID: MO-021204-10
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F	50.				

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Circle appropriate units] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/12/04	10:00	23.95		15.99		7.96	X1	1.30
/ /	:	.	.	.	.		X3	3.89

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]		Ice	Filter	pH	√
VOA Glass	2/12/04	:		3	40 ml	HCl		YES	NO		
Amber Glass	2/12/04	12:30	B	2	250, 500, 1L	(None)	(HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None		YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4		YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH		YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3		YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3		YES	YES		√
	/ /	:			250, 500, 1L			YES			
		Total Bottles (include duplicate count):		4							

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 11:45 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.9	6.39	681	17.90	0.44	↑
2	B	2.6	6.38	679	17.89	.	.
1	B	1.3	6.38	680	17.85	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** MW-8
SITE ADDRESS: Portland, OR **BLIND ID:** MO- 021204-11
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 50.					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/11/04	09:35	29.83	.	21.64	.	8.19	X1	1.33
/ /	:	.	.	.	.		X3	4.00

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used] √
VOA Glass	2/12/04	13:15	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 12:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	4.2	6.08	561	15.22	0.24	Slight cloudy white tint
2	B	2.8	6.01	558	15.30	.	
1	B	1.4	5.93	549	15.18	.	
0		0.00	.		.	.	Slight cloudy / grey tint

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-6
SITE ADDRESS: Portland, OR BLIND ID: MO-021204-12
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 53.	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	09:08	24.50	/	14.17	/	10.33	X 1	1.68
/ /	:	.	.	.	.		X 3	5.05

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	14:00	B	3	40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO	.	✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		✓
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 13:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	5.1	5.99	763	18.41	0.15	
2	B	3.4	5.95	757	18.41	.	
1	B	1.7	5.76	736	18.41	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-15
SITE ADDRESS: Portland, OR
BLIND ID: MO-021204-13
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 53	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:02	24.40		11.23		13.17	X1	2.15
/ /	:						X3	6.44

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	15:05	B	(3)	(40 ml) HCl	YES	NO		√
Amber Glass	/ /	:		2	250 (500) 1L (None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, 1L HNO_3	YES	YES		
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 14:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	6.6	5.38	488	15.80	0.18	
2	B	4.4	5.32	488	15.80		
1	B	2.2	5.27	490	15.76	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-12
SITE ADDRESS: Portland, OR
BLIND ID: MO-021304-14
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	10:30	24.82	.	17.22	.	7.60	X1	1.24
/ /	:	.	.	.	.		X3	3.72

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposible Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml	HCl	YES	NO		
Amber Glass	2/13/04	09:15	B	1	250/500/1L	(None) (HCl) H_2SO_4	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		✓
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 08:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.	.	
3	B	3.9	5.98	571	17.16	0.51	
2	B	2.6	5.84	565	17.14	.	
1	B	1.3	5.66	572	17.04	.	Clear / Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-7
SITE ADDRESS: Portland, OR
BLIND ID: MO- 021304-15
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 45°	

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/10/04	11:15	24.60	.	12.31	.	12.29	X1	2.00
/ /	:	.	.	.	.	.	X3	6.00

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [N/I used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml	HCl	YES	NO		
Amber Glass	2/13/04	10:15	B	1	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 09:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	6.	6.07	262	17.43	1.21	↑
2	B	4.	6.07	260	17.43	.	
1	B	2.	6.04	261	17.39	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-10
SITE ADDRESS: Portland, OR BLIND ID: MO-021304-16
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 45.					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:30	19.85	/	13.64	/	6.21	X1	1.01
/ /	:	.	.	.	.		X3	3.04

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: — [If used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/13/04	11:00	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	(HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	(HNO_3)	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-Dx) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 10:20 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.3	6.14	614	18.25	0.21	↑
2	B	2.2	6.11	620	18.22	.	
1	B	1.1	6.08	627	18.18	.	clear/colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** EX-4(MW-2)
SITE ADDRESS: Portland, OR **BLIND ID:** MO-021304-17
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 45.						

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW [Product Thickness]	DTB-DTW [Water Column]		Volume (gal) [Water Column x Gal/ft]
2/11/04	12:00	27.30		15.14		12.16	X1	1.98
/ /	:	.	.	.	.		X3	5.95

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth:

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	[√ if used]
VOA Glass	2/13/04	11:45	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIQ) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 11:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C		Diss O_2 (mg/l)	Water Quality
4		.	.		.		.	
3	B	6.0	6.02	702	17.69		0.29	↑
2	B	4.0	6.02	703	17.66		.	
1	B	2.0	6.04	687	17.64		.	Clear / ~~[illegible]~~ yellow tint
0		0.00	.		.		.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-9
SITE ADDRESS: Portland, OR BLIND ID: MO-021304-18
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY		RAIN		?			TEMPERATURE:	°F 46	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:45	25.03	.	16.63	.	8.40	X1	1.34
/ /	:	.	.	.	.		X3	4.11

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/13/04	:	A	3	40 ml	HCl	YES	NO		
Amber Glass	2/13/04	12:30	B	1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FIO) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 11:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.	.	
3	B	4.2	5.78	357	16.68	0.39	
2	B	2.8	5.80	356	16.67	.	
1	B	1.4	5.78	349	16.58	.	Clear / slight yellow tint
0		0.00	.		.	.	
[Casing]	[Select A-G]	[Cumulative Totals]			[Circle units]		[Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

APPENDIX F

WELL MW-11 LNAPL FORENSIC TEST REPORT

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

October 22, 2002

020162-02

John Renda, Project Manager
Anchor Environmental, LLC
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

Dear Mr. Renda:

Included are the results from the testing of material submitted on October 8, 2002 from your McCall Oil & Chemical, 020162-02 project. The product sample submitted for forensic evaluation arrived in good condition. Upon its arrival, the sample MW-11-100402 was assigned our laboratory project number 210067 and was placed in a refrigerator maintained at 4°C until removed for sample processing.

The sample MW-11-100402 was diluted and analyzed using a gas chromatograph with a flame ionization detector (GC/FID) and an electron capture detector (ECD). The data generated yielded information on the boiling range and general chemical composition of the material present. The GC/FID and GC/ECD traces are enclosed. A GC/FID trace of a standard consisting of normal alkanes is also provided for reference purposes.

In addition, the sample MW-11-100402 was analyzed for volatile organic compounds using a GC fitted with a mass spectrometer (MS). The results of this testing, including the associated quality assurance, are also enclosed.

Please contact us if additional consultation is needed by our firm in the interpretation of the analytical results provided. We appreciate this opportunity to be of service to you and hope you will call if you should have any questions. We will hold your samples for 30 days before disposal unless directed otherwise.

Sincerely,

FRIEDMAN & BRUYA, INC.

Yelena Aravkina
Chemist

Enclosures
NAA1022R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/22/02
Date Received: 10/08/02
Project: McCall Oil & Chemical, 020162-02
Date Extracted: 10/11/02
Date Analyzed: 10/11/02

RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE FOR FORENSIC EVALUATION BY CAPILLARY GAS CHROMATOGRAPHY USING A FLAME IONIZATION DETECTOR (FID) AND ELECTRON CAPTURE DETECTOR (ECD)

Sample ID	GC Characterization
MW-11-100402	The GC trace using the flame ionization detector (FID) showed the presence of medium to high boiling compounds. The majority of material present in this sample is indicative of a residual fuel such as diesel #4, diesel #6 or Bunker C. The medium to high boiling compounds appear as an irregular pattern of peaks on top of a broad hump or unresolved complex mixture (UCM). This material elutes from *n*-C_9 to *n*-C_{33} showing a maximum near *n*-C_{18}. This correlates with a temperature range of approximately 150°C to 470°C with a maximum near 320°C. Within this range, the dominant peaks present are indicative of isoprenoids including norpristane, pristane, and phytane. The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	MW-11-100402	Client:	Anchor Environmental
Date Received:	10/08/02	Project:	McCall Oil & Chemical, 020162-02
Date Extracted:	10/16/02	Lab ID:	210067-01
Date Analyzed:	10/16/02	Data File:	101620.D
Matrix:	Product	Instrument:	5972 -Ins
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	115	54	133
1,2-Dichloroethane-d4	79	48	140
Toluene-d8	109	47	145
4-Bromofluorobenzene	123	52	139

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<50	Chlorobenzene	<50
Chloromethane	<50	Ethylbenzene	<50
Vinyl chloride	<50	1,1,1,2-Tetrachloroethane	<50
Bromomethane	<50	m,p-Xylene	<50
Chloroethane	<50	o-Xylene	<50
Pentane	<500	Styrene	<50
Trichlorofluoromethane	<50	Isopropylbenzene	<50
Acetone	<500	Bromoform	<50
1,1-Dichloroethene	<50	n-Propylbenzene	<50
Methylene chloride	<500	Bromobenzene	<50
Methyl t-butyl ether (MTBE)	<50	1,3,5-Trimethylbenzene	<50
trans-1,2-Dichloroethene	<50	1-Methyl-2-ethylbenzene	87
Diisopropyl ether (DIPE)	<50	1,1,2,2-Tetrachloroethane	<50
1,1-Dichloroethane	<50	1,2,3-Trichloropropane	<50
Ethyl t-butyl ether (ETBE)	<50	2-Chlorotoluene	<50
2,2-Dichloropropane	<50	4-Chlorotoluene	<50
cis-1,2-Dichloroethene	<50	tert-Butylbenzene	<50
Chloroform	<50	1,2,4-Trimethylbenzene	51
2-Butanone (MEK)	<500	Isobutylbenzene	<50
t-Amyl methyl ether (TAME)	<50	sec-Butylbenzene	<50
1,2-Dichloroethane (EDC)	<50	p-Isopropyltoluene	<50
1,1,1-Trichloroethane	<50	o-Isopropyltoluene	<50
Isooctane	<50	1,3-Dichlorobenzene	<50
1,1-Dichloropropene	<50	1,4-Dichlorobenzene	<50
Carbon Tetrachloride	<50	1,2-Dichlorobenzene	<50
Benzene	<50	1-Methyl-3-n-propylbenzene	<50
Trichloroethene	<50	1-Methyl-4-n-propylbenzene	<50
1,2-Dichloropropane	<50	n-Butylbenzene	<50
Bromodichloromethane	<50	1,3-Dimethyl-5-ethylbenzene	<50
Dibromomethane	<50	1,2-Diethylbenzene	<50
4-Methyl-2-pentanone	<500	1-Methyl-2-n-propylbenzene	<50
cis-1,3-Dichloropropene	<50	1,4-Dimethyl-2-ethylbenzene	<50
Toluene	<50	1,2-Dimethyl-4-ethylbenzene	95
trans-1,3-Dichloropropene	<50	1,3-Dimethyl-2-ethylbenzene	81
1,1,2-Trichloroethane	<50	1,2-Dimethyl-3-ethylbenzene	<50
2-Hexanone	<500	1,2-Dibromo-3-chloropropane	<50
1,3-Dichloropropane	<50	1,2,4-Trichlorobenzene	<50
Tetrachloroethene	<50	Hexachlorobutadiene	<50
Dibromochloromethane	<50	Naphthalene	<50
1,2-Dibromoethane (EDB)	<50	1,2,3-Trichlorobenzene	<50
Butane	<500 L		

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Anchor Environmental
Date Received:	Not Applicable	Project:	McCall Oil & Chemical, 020162-02
Date Extracted:	10/16/02	Lab ID:	02-799 mb2
Date Analyzed:	10/16/02	Data File:	101619.D
Matrix:	Product	Instrument:	5972 -Ins
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	119	54	133
1,2-Dichloroethane-d4	87	48	140
Toluene-d8	115	47	145
4-Bromofluorobenzene	117	52	139

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<50	Chlorobenzene	<50
Chloromethane	<50	Ethylbenzene	<50
Vinyl chloride	<50	1,1,1,2-Tetrachloroethane	<50
Bromomethane	<50	m,p-Xylene	<50
Chloroethane	<50	o-Xylene	<50
Pentane	<500	Styrene	<50
Trichlorofluoromethane	<50	Isopropylbenzene	<50
Acetone	<500	Bromoform	<50
1,1-Dichloroethene	<50	n-Propylbenzene	<50
Methylene chloride	<500	Bromobenzene	<50
Methyl t-butyl ether (MTBE)	<50	1,3,5-Trimethylbenzene	<50
trans-1,2-Dichloroethene	<50	1-Methyl-2-ethylbenzene	<50
Diisopropyl ether (DIPE)	<50	1,1,2,2-Tetrachloroethane	<50
1,1-Dichloroethane	<50	1,2,3-Trichloropropane	<50
Ethyl t-butyl ether (ETBE)	<50	2-Chlorotoluene	<50
2,2-Dichloropropane	<50	4-Chlorotoluene	<50
cis-1,2-Dichloroethene	<50	tert-Butylbenzene	<50
Chloroform	<50	1,2,4-Trimethylbenzene	<50
2-Butanone (MEK)	<500	Isobutylbenzene	<50
t-Amyl methyl ether (TAME)	<50	sec-Butylbenzene	<50
1,2-Dichloroethane (EDC)	<50	p-Isopropyltoluene	<50
1,1,1-Trichloroethane	<50	o-Isopropyltoluene	<50
Isooctane	<50	1,3-Dichlorobenzene	<50
1,1-Dichloropropene	<50	1,4-Dichlorobenzene	<50
Carbon Tetrachloride	<50	1,2-Dichlorobenzene	<50
Benzene	<50	1-Methyl-3-n-propylbenzene	<50
Trichloroethene	<50	1-Methyl-4-n-propylbenzene	<50
1,2-Dichloropropane	<50	n-Butylbenzene	<50
Bromodichloromethane	<50	1,3-Dimethyl-5-ethylbenzene	<50
Dibromomethane	<50	1,2-Diethylbenzene	<50
4-Methyl-2-pentanone	<500	1-Methyl-2-n-propylbenzene	<50
cis-1,3-Dichloropropene	<50	1,4-Dimethyl-2-ethylbenzene	<50
Toluene	<50	1,2-Dimethyl-4-ethylbenzene	<50
trans-1,3-Dichloropropene	<50	1,3-Dimethyl-2-ethylbenzene	<50
1,1,2-Trichloroethane	<50	1,2-Dimethyl-3-ethylbenzene	<50
2-Hexanone	<500	1,2-Dibromo-3-chloropropane	<50
1,3-Dichloropropane	<50	1,2,4-Trichlorobenzene	<50
Tetrachloroethene	<50	Hexachlorobutadiene	<50
Dibromochloromethane	<50	Naphthalene	<50
1,2-Dibromoethane (EDB)	<50	1,2,3-Trichlorobenzene	<50
Butane	<500 L		

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/22/02
Date Received: 10/08/02
Project: McCall Oil & Chemical, 020162-02

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT SAMPLES FOR VOLATILES BY EPA METHOD 8260B

Laboratory Code: 210071-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	<50	<50	nm
Benzene	µg/g (ppm)	110	110	0
Trichloroethene	µg/g (ppm)	<50	<50	nm
Toluene	µg/g (ppm)	19,000	20,000	5
Chlorobenzene	µg/g (ppm)	<50	<50	nm

Laboratory Code: 210071-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
1,1-Dichloroethene	µg/g (ppm)	500	<50	91	51-159
Benzene	µg/g (ppm)	500	110	89	81-119
Trichloroethene	µg/g (ppm)	500	<50	91	61-125
Toluene	µg/g (ppm)	500	19,000	b	62-131
Chlorobenzene	µg/g (ppm)	500	<50	84	77-125

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	500	96	98	53-161	2
Benzene	µg/g (ppm)	500	94	97	74-129	3
Trichloroethene	µg/g (ppm)	500	93	95	68-125	2
Toluene	µg/g (ppm)	500	85	87	65-131	2
Chlorobenzene	µg/g (ppm)	500	89	90	81-119	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/22/02
Date Received: 10/08/02
Project: McCall Oil & Chemical, 020162-02

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT SAMPLES FOR ETHERS USING EPA METHOD 8260B

Laboratory Code: 210071-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Methyl t-butyl ether (MTBE)	µg/g (ppm)	<50	<50	nm
Diisopropyl ether (DIPE)	µg/g (ppm)	<50	<50	nm
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	<50	<50	nm
t-Amyl methyl ether (TAME)	µg/g (ppm)	<50	<50	nm

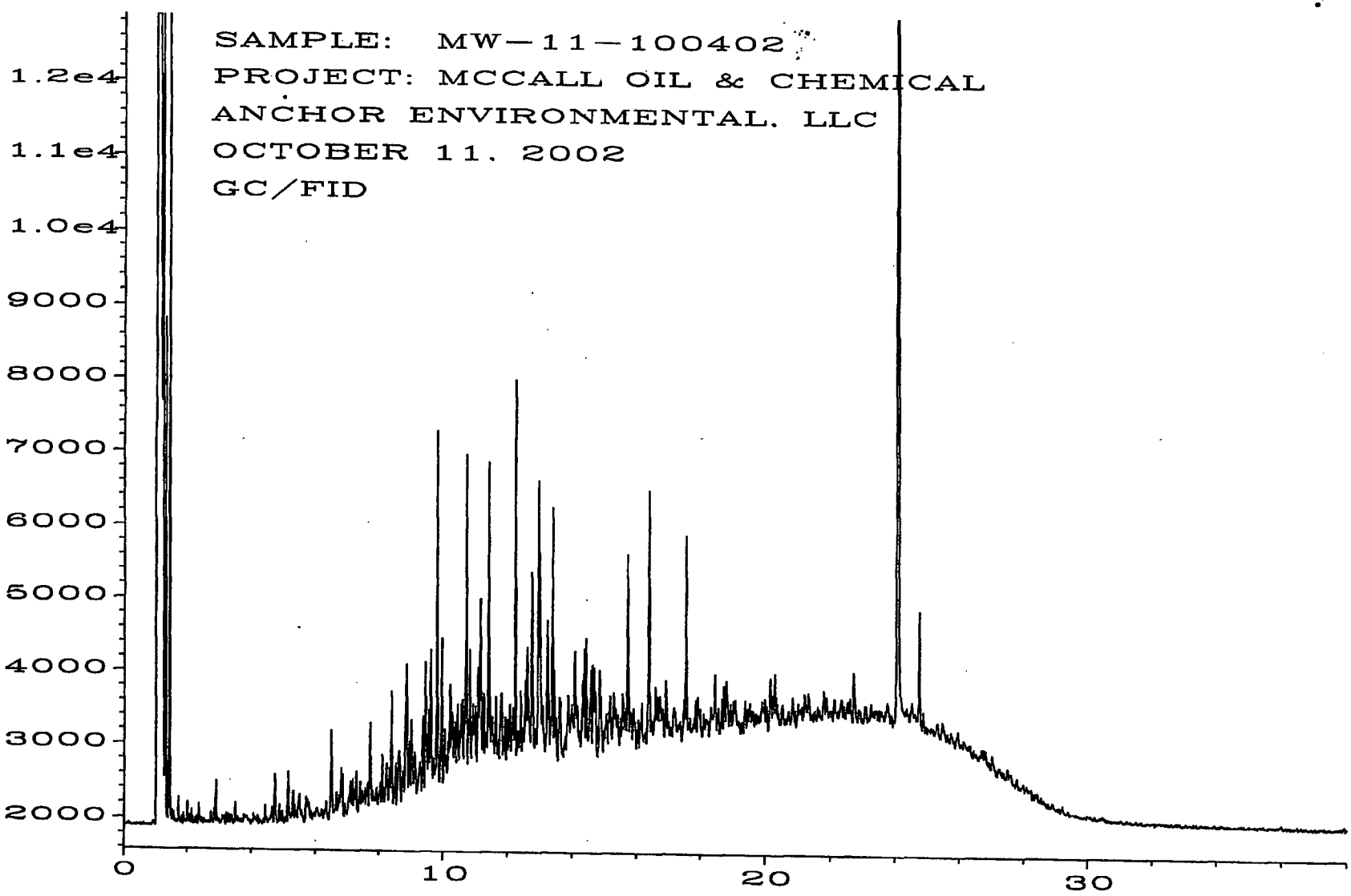
Laboratory Code: 210071-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	µg/g (ppm)	500	<50	97	65-135
Diisopropyl ether (DIPE)	µg/g (ppm)	500	<50	95	65-135
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	500	<50	86	65-135
t-Amyl methyl ether (TAME)	µg/g (ppm)	500	<50	87	65-135

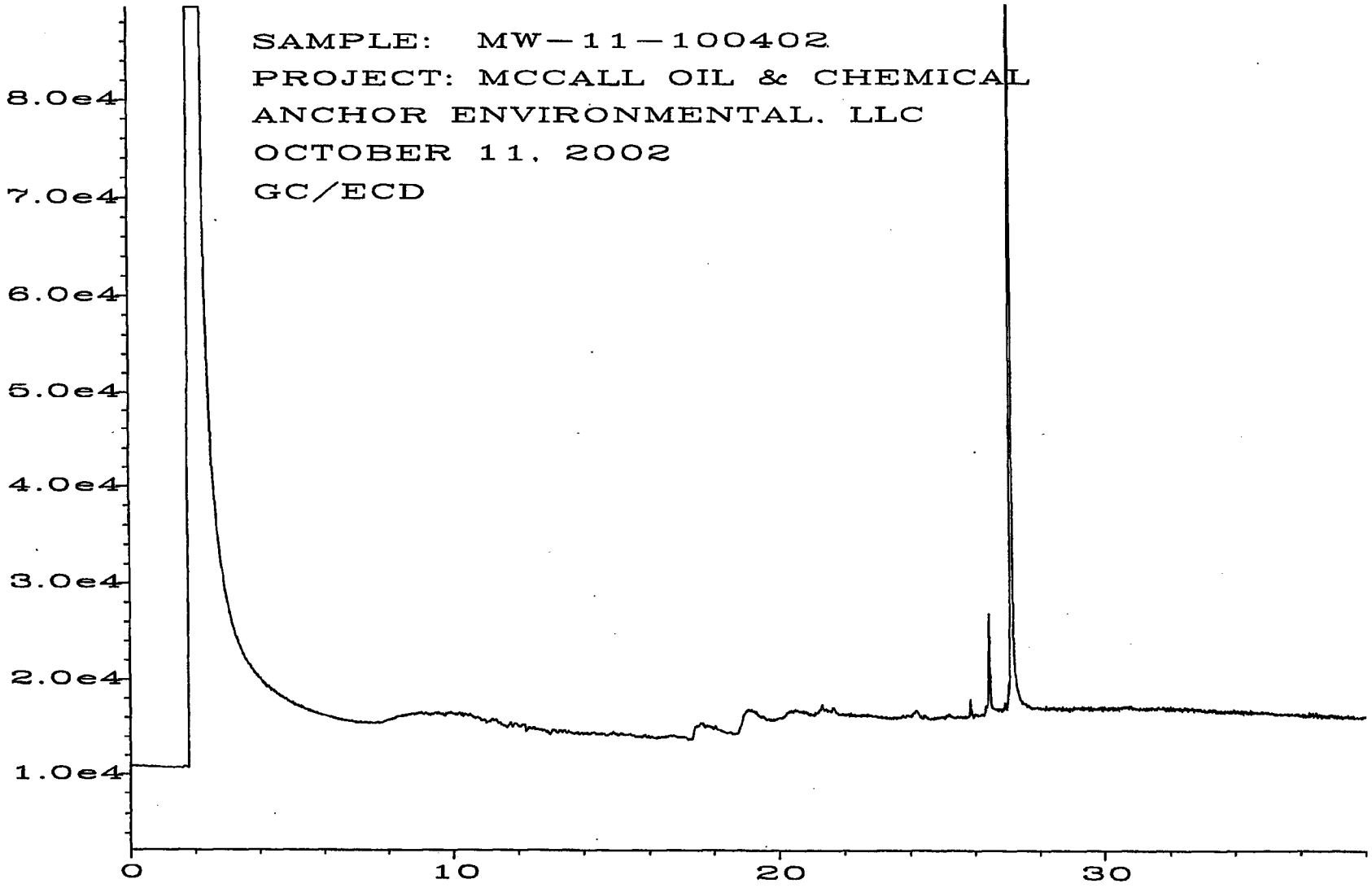
Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methyl t-butyl ether (MTBE)	µg/g (ppm)	500	94	95	65-135	1
Diisopropyl ether (DIPE)	µg/g (ppm)	500	98	101	65-135	3
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	500	97	99	65-135	2
t-Amyl methyl ether (TAME)	µg/g (ppm)	500	92	95	65-135	3

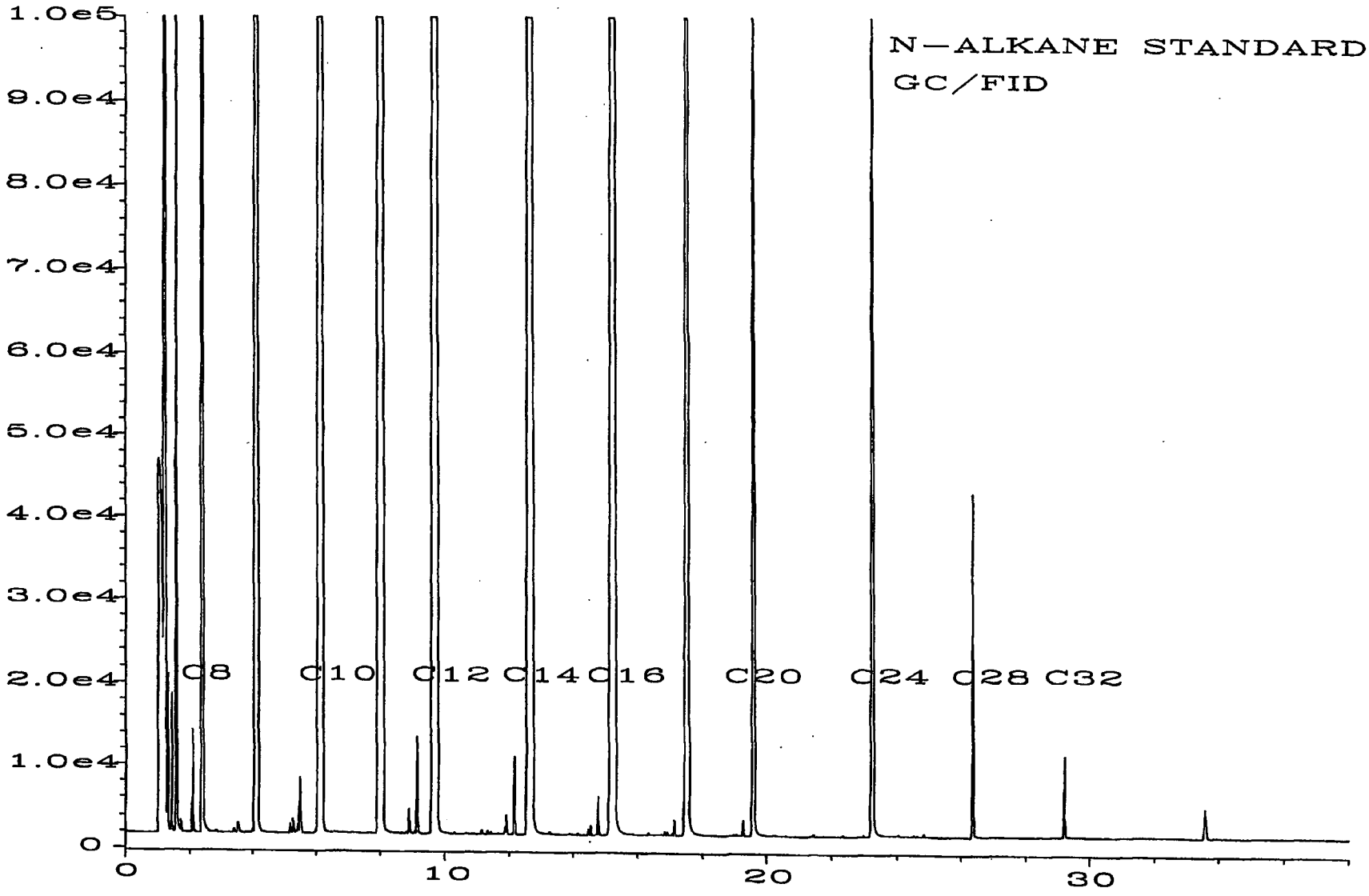
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.



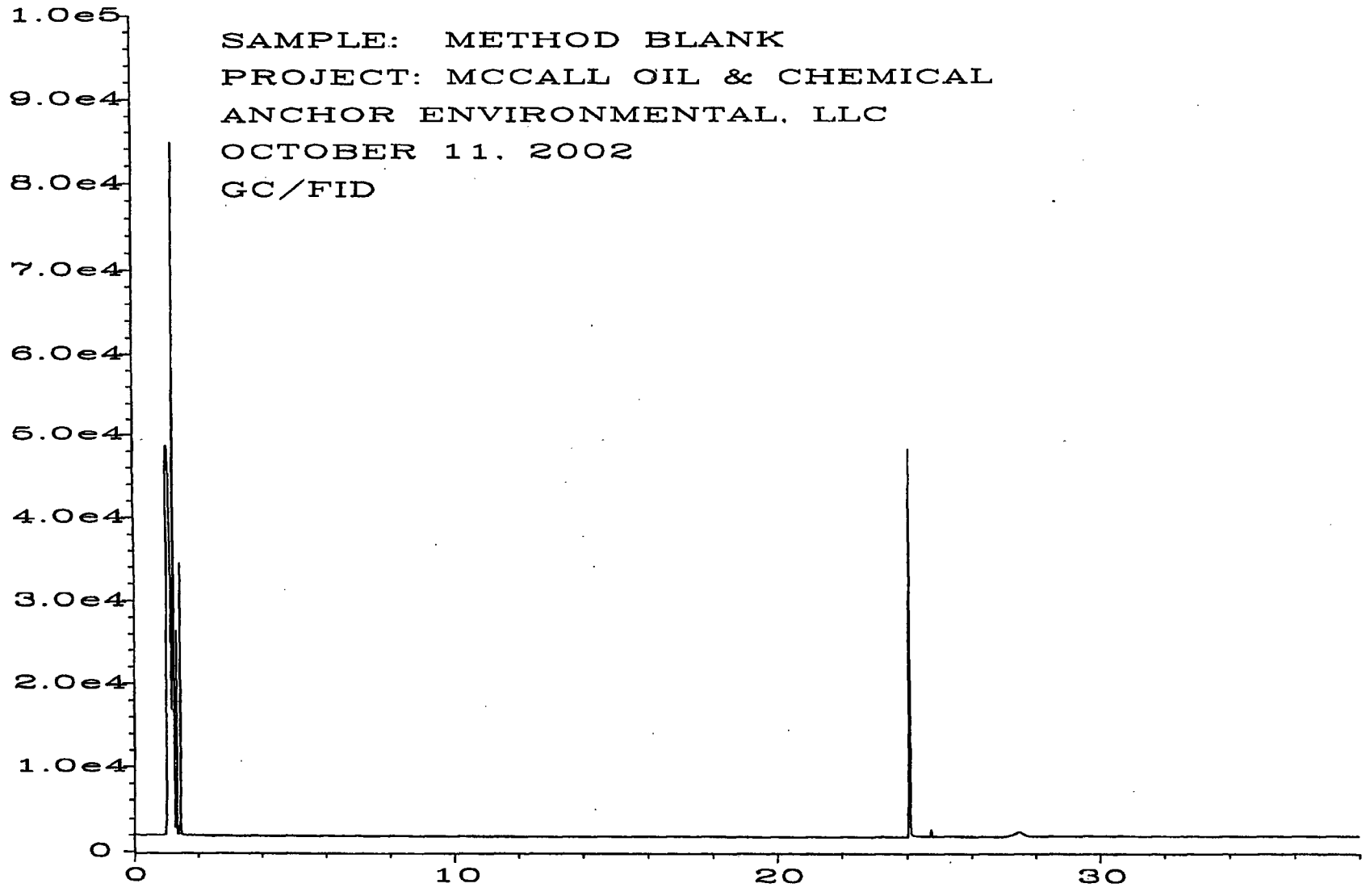
Sig. 1 in C:\HPCHEM\1\DATA\10-11-02\013F0201.D



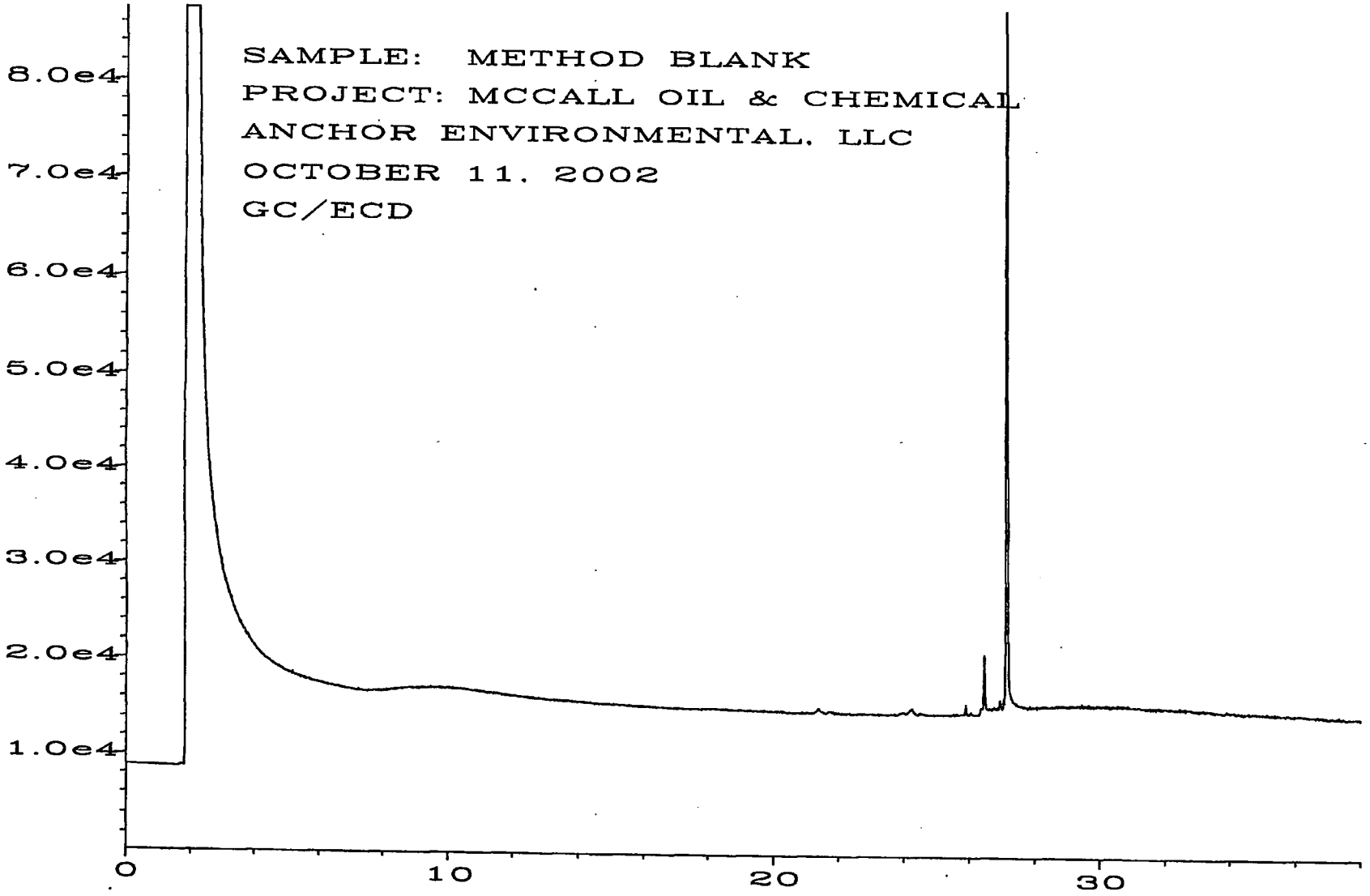
Sig. 2 in C:\HPCHEM\1\DATA\10-11-02\013R0201.D



Sig. 1 in C:\HPCHEM\1\DATA\10—11—02\100F0601.D



Sig. 1 in C:\HPCHEM\1\DATA\10-11-02\002F0201.D



Sig. 2 in C:\HPCHEM\1\DATA\10-11-02\002R0201.D

210067

KJ 10/8/02 CO1

SAMPLE CHAIN OF CUSTODY

Page # _____ of _____

Send Report To JOHN J RENDA
Company Anchor Environmental, L.L.C.
Address 6650 SW Redwood Lane
City, State, ZIP PORTLAND, OR, 97224
Phone # 503-670-1108 Fax # 503-670-1128

SAMPLERS (signature) [signature]
PROJECT NAME/NO. McCall Oil & Chemical 020162-02
PO #
REMARKS

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH _____
Rush charges authorized by: _____

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Fuel Fingerprint	Analysis 4					Notes
MW-11-100402	01	10/4/02	1250	01	1							X						

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044
FO: RMS\CHECKIN\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	TIM STONE	ANCHOR ENV.	10/7/02	0945
Received by: [signature]	JOHN J RENDA	Anchor Env.	10/7/02	0945
Relinquished by: [signature]	JOHN J RENDA	Anchor Env.	10/7/02	1300
Received by: [signature]	Laura Hoopes	FTB, Inc.	10/8/02	10:09 AM

FAX NO. : 2062835044 Sep. 06 2002 10:58AM P2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

November 7, 2002

020162-02

John Renda, Project Manager
Anchor Environmental, LLC
6650 SW Redwood Lane, Suite 110
Portland, OR 97224

Dear Mr. Renda:

Included are the results from the additional testing of material submitted on October 8, 2002 from your McCall & Chemical, 020162-02 project. The additional testing completed at Friedman and Bruya, Inc. (F&B) included characterization of the sample MW-11-100402 as a simulated distillation using GC/FID.

The boiling range distribution of the material present in the sample MW-11-100402 is consistent with crude oil or Bunker C. The general chemical composition of this fuel indicates that it has undergone substantial biological degradation. Assuming a moderate rate of weathering, we estimate that the extent of degradation in this fuel is consistent with releases that occurred 15 or more years ago.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Yelena Aravkina
Chemist

Enclosures
NAA1107R.DOC

FRIEDMAN & BRUYA, INC.

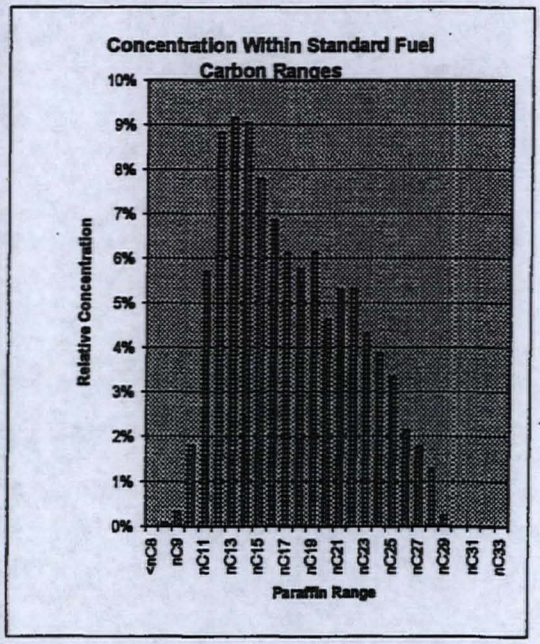
ENVIRONMENTAL CHEMISTS

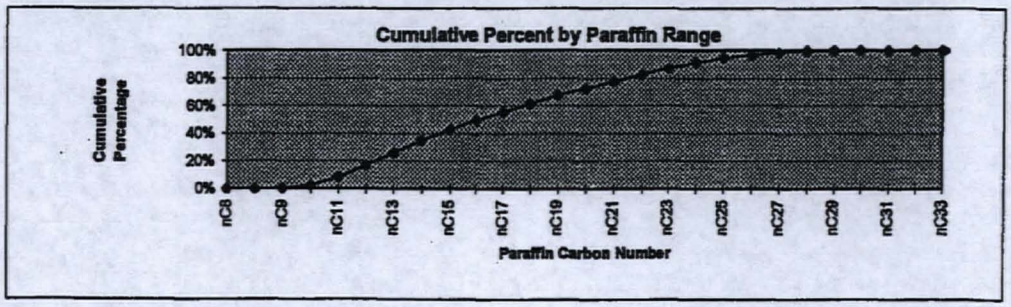
Date of Report: 11/07/02
Date Received: 10/08/02
Project: McCall Oil & Chemical, 020162-02
Date Analyzed: 10/11/02

RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE FOR PETROLEUM HYDROCARBONS USING GC/FID (Modified 8015-Simulated Distillation)

Laboratory ID: 210067-01
Client ID: MW-11-100402

Paraffin Range	Percent of Total	Cumulative Percent
<nC8	0%	0%
nC8 - <nC9	0%	0%
nC9 - <nC10	0%	0%
nC10 - <nC11	2%	2%
nC11 - <nC12	6%	8%
nC12 - <nC13	9%	17%
nC13 - <nC14	9%	26%
nC14 - <nC15	9%	35%
nC15 - <nC16	8%	43%
nC16 - <nC17	7%	50%
nC17 - <nC18	6%	56%
nC18 - <nC19	6%	62%
nC19 - <nC20	6%	68%
nC20 - <nC21	5%	72%
nC21 - <nC22	5%	78%
nC22 - <nC23	5%	83%
nC23 - <nC24	4%	87%
nC24 - <nC25	4%	91%
nC25 - <nC26	3%	94%
nC26 - <nC27	2%	97%
nC27 - <nC28	2%	98%
nC28 - <nC29	1%	100%
nC29 - <nC30	0%	100%
nC30 - <nC31	0%	100%
nC31 - <nC32	0%	100%
nC32 - <nC33	0%	100%
nC33 - <nC34	0%	100%





APPENDIX G

SOIL GRAIN SIZE AND TOTAL ORGANIC CARBON DATA

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/15/00
Sample Matrix:	Soil	**Date Received:**	12/16/00

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
S-1	K2009768-004	0.05	0.02	1	12/18/00	12/21/00	4.70	
S-2	K2009768-005	0.05	0.02	1	12/18/00	12/21/00	4.16	
S-3	K2009768-006	0.05	0.02	1	12/18/00	12/21/00	8.12	
S3-01C	K2009768-007	0.05	0.02	1	12/18/00	12/21/00	0.12	
GP-14 22-24	K2009768-008	0.05	0.02	1	12/18/00	12/21/00	0.22	
GP-16 20-22	K2009768-009	0.05	0.02	1	12/18/00	12/21/00	0.50	
GP-18 22-24	K2009768-010	0.05	0.02	1	12/18/00	12/21/00	0.05	
GP-19 18-20	K2009768-011	0.05	0.02	1	12/18/00	12/21/00	0.07	
GP-6 18-20	K2009768-012	0.05	0.02	1	12/18/00	12/21/00	0.27	
Method Blank	K2009768-MB	0.05	0.02	1	12/18/00	12/21/00	ND	

M Modified

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/13/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-14 22-24
Lab Code: K2009768-008

Sand Fraction: Weight (Grams)	81.0224
Sand Fraction: Weight Recovered (Grams)	80.7618
Sand Fraction: Percent Recovery	99.7

Weight as received (Grams)	118.0919
Percent Solids	80.6
Weight Oven-Dried (Grams)	95.1821

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0269	0.03
Very Coarse Sand	0.850 mm	20	0.1637	0.17
Coarse Sand	0.425 mm	40	4.7582	5.00
Medium Sand	0.250 mm	60	23.6697	24.9
Fine Sand	0.106 mm	140	43.8840	46.1
Very Fine Sand	0.075 mm	200	6.1264	6.44
Clay			1.6850	1.77
Silt			11.6300	12.2
		Total	91.9439	96.6

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/13/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-14 22-24
Lab Code: K2009768-008DUP

Sand Fraction: Weight (Grams)	77.7179
Sand Fraction: Weight Recovered (Grams)	77.5707
Sand Fraction: Percent Recovery	99.8

Weight as received (Grams)	118.6035
Percent Solids	77.1
Weight Oven-Dried (Grams)	91.4433

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0019	0.00
Very Coarse Sand	0.850 mm	20	0.0534	0.06
Coarse Sand	0.425 mm	40	1.9961	2.18
Medium Sand	0.250 mm	60	22.2506	24.3
Fine Sand	0.106 mm	140	43.6958	47.8
Very Fine Sand	0.075 mm	200	6.7020	7.33
Clay			1.6850	1.84
Silt			12.7350	13.9
		Total	89.1198	97.5

Approved By: _____ Date: 1/4/01

09768WET.SC1 - report (1D) 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/13/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-16 20-22
Lab Code: K2009768-009

Sand Fraction: Weight (Grams)	56.163
Sand Fraction: Weight Recovered (Grams)	55.5112
Sand Fraction: Percent Recovery	98.8

Weight as received (Grams)	106.4725
Percent Solids	72.5
Weight Oven-Dried (Grams)	77.1926

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.1519	0.20
Very Coarse Sand	0.850 mm	20	0.3248	0.42
Coarse Sand	0.425 mm	40	0.4636	0.60
Medium Sand	0.250 mm	60	1.2148	1.57
Fine Sand	0.106 mm	140	18.8502	24.4
Very Fine Sand	0.075 mm	200	17.1336	22.2
Clay			2.1650	2.80
Silt			35.0800	45.4
		Total	75.3839	97.7

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/14/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-18 22-24
Lab Code: K2009768-010

Sand Fraction: Weight (Grams)	86.0513
Sand Fraction: Weight Recovered (Grams)	86.0713
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	111.6438
Percent Solids	82.9
Weight Oven-Dried (Grams)	92.5527

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.3764	0.41
Coarse Sand	0.425 mm	40	24.2316	26.2
Medium Sand	0.250 mm	60	40.0326	43.3
Fine Sand	0.106 mm	140	19.1015	20.6
Very Fine Sand	0.075 mm	200	1.8449	1.99
Clay			0.6850	0.74
Silt			4.5450	4.91
		Total	90.8170	98.1

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/14/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-19 18-20
Lab Code: K2009768-011

Sand Fraction: Weight (Grams)	91.2253
Sand Fraction: Weight Recovered (Grams)	91.1614
Sand Fraction: Percent Recovery	99.9

Weight as received (Grams)	115.4174
Percent Solids	84.4
Weight Oven-Dried (Grams)	97.4123

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.2626	0.27
Very Coarse Sand	0.850 mm	20	2.8606	2.94
Coarse Sand	0.425 mm	40	37.4649	38.5
Medium Sand	0.250 mm	60	38.9491	40.0
Fine Sand	0.106 mm	140	10.3654	10.6
Very Fine Sand	0.075 mm	200	0.9446	0.97
Clay			0.6750	0.69
Silt			3.2850	3.37
		Total	94.8072	97.3

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009768
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/14/00
Sample Matrix:	Soil	**Date Received:**	12/16/00
		Date Analyzed:	1/3/01

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-6 18-20
Lab Code: K2009768-012

Sand Fraction: Weight (Grams)	79.7172
Sand Fraction: Weight Recovered (Grams)	79.9046
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	107.8978
Percent Solids	77.4
Weight Oven-Dried (Grams)	83.5129

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.0834	0.10
Coarse Sand	0.425 mm	40	53.9135	64.6
Medium Sand	0.250 mm	60	20.1324	24.1
Fine Sand	0.106 mm	140	5.3892	6.45
Very Fine Sand	0.075 mm	200	0.2866	0.34
Clay			0.3900	0.47
Silt			2.0700	2.48
		Total	82.2651	98.5

Approved By: _____ Date: 1/4/01

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/11/00
Sample Matrix:	Soil	**Date Received:**	12/13/00

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
GP-1 18-20	K2009639-014	0.05	0.02	1	NA	12/15/00	0.04	J
GP-4 18-20	K2009639-015	0.05	0.02	1	NA	12/15/00	0.04	J
GP-8 16-18	K2009639-016	0.05	0.02	1	NA	12/15/00	0.13	
GP-21 16-18	K2009639-017	0.05	0.02	1	NA	12/15/00	0.16	
GP-11 18-20	K2009639-018	0.05	0.02	1	NA	12/15/00	0.05	
GP-13 22-24	K2009639-019	0.05	0.02	1	NA	12/15/00	0.12	
Method Blank	K2009639-MB	0.05	0.02	1	NA	12/15/00	ND	

M Modified

Approved By: _____ Date: 12/26/00

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/11/00
Sample Matrix	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-1 18-20
Lab Code: K2009639-014

Sand Fraction: Weight (Grams)	81.5517
Sand Fraction: Weight Recovered (Grams)	81.6796
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	109.6197
Percent Solids	75.5
Weight Oven-Dried (Grams)	82.7629

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.0397	0.05
Coarse Sand	0.425 mm	40	6.0667	7.33
Medium Sand	0.250 mm	60	56.0000	67.7
Fine Sand	0.106 mm	140	18.8290	22.8
Very Fine Sand	0.075 mm	200	0.5196	0.63
Clay			0.2300	0.28
Silt			1.2900	1.56
		Total	82.9750	100

Approved By: _____ Date: 12/22/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/11/00
Sample Matrix:	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-1 18-20
Lab Code: K2009639-014DUP

Sand Fraction: Weight (Grams)	81.3718
Sand Fraction: Weight Recovered (Grams)	81.4394
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	109.2708
Percent Solids	75.7
Weight Oven-Dried (Grams)	82.7180

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.0378	0.05
Coarse Sand	0.425 mm	40	8.3083	10.0
Medium Sand	0.250 mm	60	50.5909	61.2
Fine Sand	0.106 mm	140	21.6649	26.2
Very Fine Sand	0.075 mm	200	0.6718	0.81
Clay			0.2700	0.33
Silt			1.4350	1.73
		Total	82.9787	100

Approved By: _____ Date: 12/26/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: IT Corporation
Project: McCall/GWCC/820910/02000000
Sample Matrix Soil

Service Request: K2009639
Date Collected: 12/11/00
Date Received: 12/13/00
Date Analyzed: 12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-4 18-20
Lab Code: K2009639-015

Sand Fraction: Weight (Grams)	77.3993
Sand Fraction: Weight Recovered (Grams)	77.5695
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	105.309
Percent Solids	75.8
Weight Oven-Dried (Grams)	79.8238

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.1919	0.24
Coarse Sand	0.425 mm	40	17.7683	22.3
Medium Sand	0.250 mm	60	44.4720	55.7
Fine Sand	0.106 mm	140	14.1139	17.7
Very Fine Sand	0.075 mm	200	0.8167	1.02
Clay			0.2750	0.34
Silt			1.9050	2.39
		Total	79.5428	99.6

Approved By: _____ Date: 12/26/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/12/00
Sample Matrix	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-8 16-18
Lab Code: K2009639-016

Sand Fraction: Weight (Grams)	76.9378
Sand Fraction: Weight Recovered (Grams)	76.9526
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	106.298
Percent Solids	74.5
Weight Oven-Dried (Grams)	79.1922

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0201	0.03
Very Coarse Sand	0.850 mm	20	0.2318	0.29
Coarse Sand	0.425 mm	40	14.4690	18.3
Medium Sand	0.250 mm	60	36.6702	46.3
Fine Sand	0.106 mm	140	23.4334	29.6
Very Fine Sand	0.075 mm	200	1.6521	2.09
Clay			0.2750	0.35
Silt			2.8300	3.57
		Total	79.5816	100

Approved By: _____ Date: 12/26/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/12/00
Sample Matrix	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-21 16-18
Lab Code: K2009639-017

Sand Fraction: Weight (Grams)	74.487
Sand Fraction: Weight Recovered (Grams)	74.662
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	103.8801
Percent Solids	75.5
Weight Oven-Dried (Grams)	78.4295

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0417	0.05
Fine Gravel	2.00 mm	10	0.1873	0.24
Very Coarse Sand	0.850 mm	20	0.6026	0.77
Coarse Sand	0.425 mm	40	15.9478	20.3
Medium Sand	0.250 mm	60	42.4181	54.1
Fine Sand	0.106 mm	140	14.6661	18.7
Very Fine Sand	0.075 mm	200	0.6420	0.82
Clay			0.2800	0.36
Silt			1.6350	2.08
		Total	76.4206	97.4

Approved By: _____ Date: 12/26/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/12/00
Sample Matrix	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-11 18-20
Lab Code: K2009639-018

Sand Fraction: Weight (Grams)	80.3521
Sand Fraction: Weight Recovered (Grams)	80.4884
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	109.384
Percent Solids	76.3
Weight Oven-Dried (Grams)	83.4598

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.0000	0.00
Very Coarse Sand	0.850 mm	20	0.2650	0.32
Coarse Sand	0.425 mm	40	16.0135	19.2
Medium Sand	0.250 mm	60	47.9145	57.4
Fine Sand	0.106 mm	140	15.4444	18.5
Very Fine Sand	0.075 mm	200	0.6341	0.76
Clay			0.2450	0.29
Silt			1.7900	2.14
		Total	82.3065	98.6

Approved By: _____ Date: 12/26/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	IT Corporation	**Service Request:**	K2009639
Project:	McCall/GWCC/820910/02000000	**Date Collected:**	12/12/00
Sample Matrix	Soil	**Date Received:**	12/13/00
		Date Analyzed:	12/22/00

Particle Size Determination
ASTM Method D422 Modified

Sample Name: GP-13 22-24
Lab Code: K2009639-019

Sand Fraction: Weight (Grams)	80.2168
Sand Fraction: Weight Recovered (Grams)	80.2898
Sand Fraction: Percent Recovery	100

Weight as received (Grams)	109.132
Percent Solids	79.3
Weight Oven-Dried (Grams)	86.5418

Description	Sieve Size	Sieve Number	Dry Weight (Grams)	Percent of Total Weight Recovered
Medium Gravel	4.75 mm	4	0.0000	0.00
Fine Gravel	2.00 mm	10	0.1841	0.21
Very Coarse Sand	0.850 mm	20	0.6822	0.79
Coarse Sand	0.425 mm	40	15.0772	17.4
Medium Sand	0.250 mm	60	42.9134	49.6
Fine Sand	0.106 mm	140	18.3424	21.2
Very Fine Sand	0.075 mm	200	1.8878	2.18
Clay			1.2350	1.43
Silt			6.0650	7.01
		Total	86.3871	99.8

Approved By: _____ Date: 12/26/00

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

July 13, 2004
030162-01

Mr. Tom Gainer, P.E.
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the second quarter 2004, and work planned for the third quarter 2004 for the McCall Oil and Chemical site in Portland, Oregon (Figure 1).

WORK COMPLETED SECOND QUARTER 2004

- data management and reporting
- revisions and edits to Remedial Investigation Report
- project management and meetings

PLANNED THIRD QUARTER 2004 RI TASKS

- data management and reporting
- Submit Remedial Investigation Report to DEQ by July 30, 2004
- project management and meetings

RESULTS

No new data was generated during second quarter 2004.

PROBLEMS ENCOUNTERED

No problems were encountered during second quarter 2004.

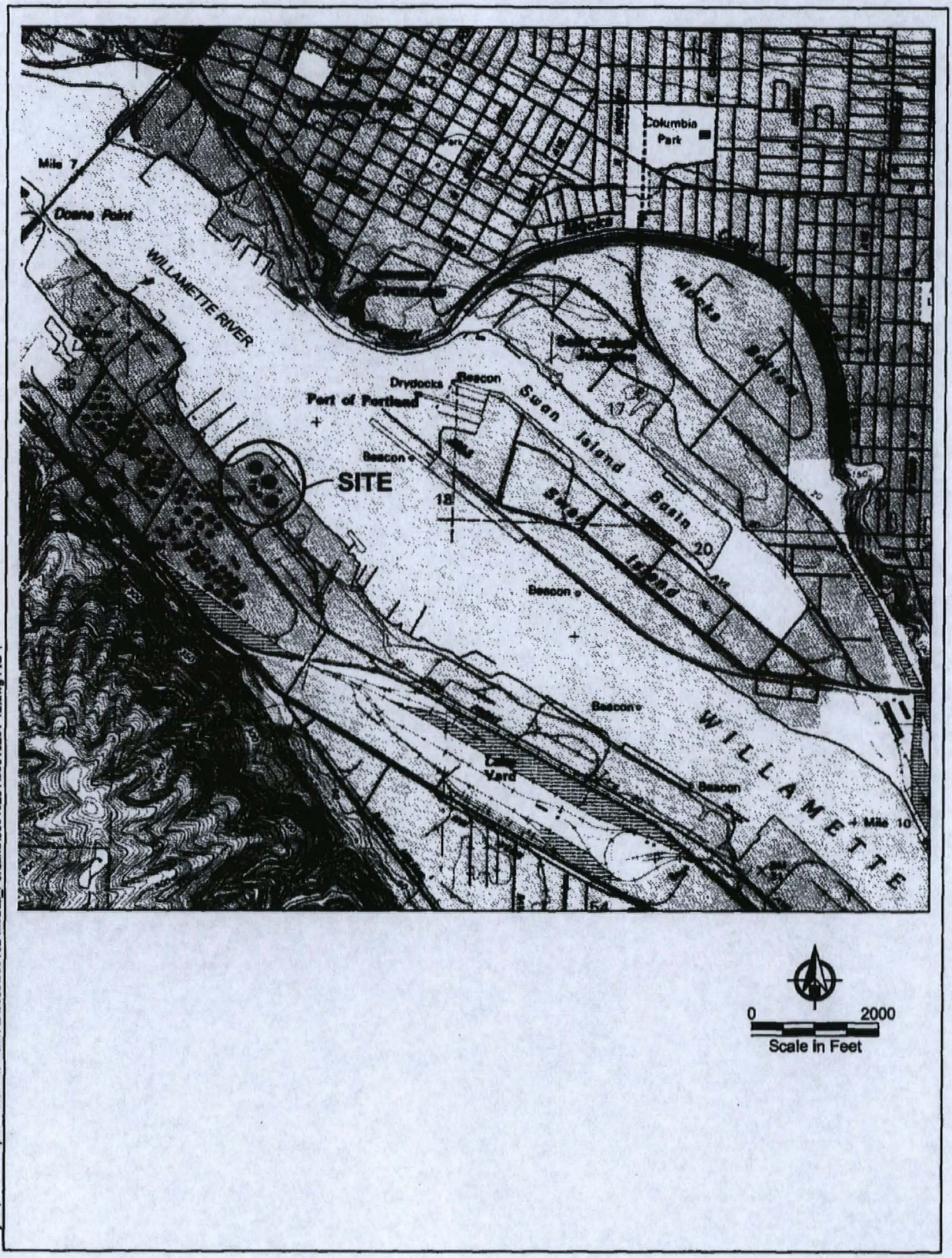
If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.
Anchor Environmental, L.L.C.

Cc: Ted McCall; McCall Oil and Chemical



May 09, 2003 2:16pm cdavidson I:\CAD\Jobs\030162-McCall_Portland\030162010300162201-12.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Vicinity Map
McCall Oil and Chemical

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

April 15, 2004
030162-01

Mr. Tom Gainer, P.E.
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the first quarter 2004, and work planned for the second quarter 2004 for the McCall Oil and Chemical site in Portland, Oregon (Figure 1).

WORK COMPLETED, FIRST QUARTER 2004

- data management and reporting
- developed monitoring wells MW-14 and MW-15
- measured water levels in all monitoring wells and at the Willamette River gauge
- sampled monitoring wells in accordance with sampling plan approved by DEQ in the letter dated November 13, 2003
- project management and meetings

PLANNED SECOND QUARTER 2004 RI TASKS

- data management and reporting
- submit work plan for shoreline assessment in the area of monitoring well MW-8
- project management and meetings

RESULTS

Monitoring wells MW-14 and MW-15 were installed on December 31, 2003. Boring logs and well installation details are provided in Attachment A.

On February 9 and 10, 2004, monitoring wells MW-14 and MW-15 were developed using a combination of surging, bailing, and pumping. The monitoring wells were developed until the groundwater was clear and colorless and field parameters (pH, conductivity, and temperature) stabilized. Copies of the well development forms are in Attachment B.

On February 11, 2004, groundwater elevations were measured in 20 monitoring wells and the Willamette River staff gauge. The water levels, converted to mean sea level, are plotted on Figure 2. Eighteen samples were collected on February 11-13, 2004 from 16 monitoring wells. Copies of the field sampling data sheets are in Attachment C. The samples were submitted for analysis in accordance with the sampling plan (Table 1). The laboratory report and chain of custody documentation are in Attachment D. Review of the sampling and laboratory records revealed that the data were judged to be acceptable for their intended use. Please refer to the data validation review in Attachment E.

The field and laboratory data are presented in Tables 2 through 6 as follows.

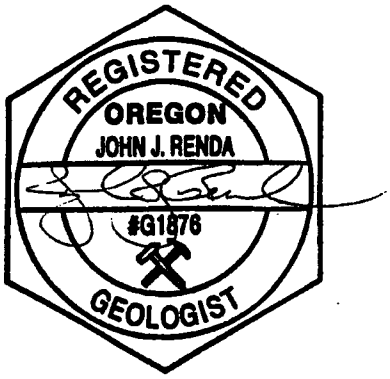
- Table 2 Monitoring Well and River Hydrology Measurements
- Table 3 Total Petroleum Hydrocarbons
- Table 4 PAHs and SVOCs
- Table 5 Volatile Organic Compounds
- Table 6 Metals

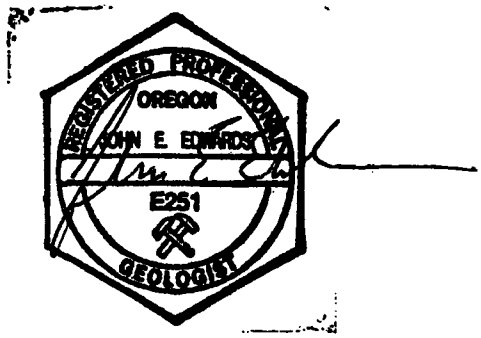
PROBLEMS ENCOUNTERED

No problems were encountered during first quarter 2004.

If you have any questions, please let us know.

Sincerely,





John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical

Table 1
Sampling Plan
McCall Oil and Chemical

Well	Chlorinated VOCs	PAHs	Total Petroleum Hydrocarbons	As (Total and Dissolved)	Cr, Cu (Total and Dissolved)
EX-1	X		X	X	
EX-2		X	X	X	
EX-3		X	X	X	
EX-4 (MW-2)	X		X	X	
EX-7			X	X	
MW-1	X		X	X	X
MW-3	X		X	X	X
MW-5	X	X	X	X	
MW-6	X		X	X	
MW-7	X	X	X	X	X
MW-8	X	X	X	X	X
MW-9			X	X	
MW-10	X		X	X	
MW-12			X	X	
MW-14	X	X	X	X	X
MW-15	X	X	X	X	

Note: Samples will be collected semiannually

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-1	36.12	09/08/94	15.35	20.77
EX-1	36.12	12/29/94	14.60	21.52
EX-1	36.12	03/29/95	13.06	23.06
EX-1	36.12	06/27/95	13.65	22.47
EX-1	36.12	07/14/95	13.82	22.30
EX-1	36.12	05/01/97	12.71	23.41
EX-1	36.12	02/03/99	13.21	22.91
EX-1	36.12	12/08/00	15.65	20.47
EX-1	36.12	01/19/01	15.46	20.66
EX-1	36.12	02/08/01	15.55	20.57
EX-1	36.12	03/08/01	15.65	20.47
EX-1	36.12	04/12/01	15.72	20.40
EX-1	36.12	05/15/01	15.68	20.44
EX-1	36.12	06/12/01	15.75	20.37
EX-1	36.12	07/16/01	15.84	20.28
EX-1	36.12	08/14/01	15.97	20.15
EX-1	36.12	09/13/01	16.07	20.05
EX-1	36.12	10/25/01	16.31	19.81
EX-1	36.12	11/16/01	16.27	19.85
EX-1	36.12	12/18/01	15.88	20.24
EX-1	36.12	01/22/02	15.05	21.07
EX-1	36.12	02/14/02	14.56	21.56
EX-1	36.12	03/06/02	14.28	21.84
EX-1	36.12	10/02/02	15.39	20.73
EX-1	36.12	02/11/04	13.74	22.38
EX-2	32.28	09/08/94	18.56	13.72
EX-2	32.28	12/29/94	17.87	14.41
EX-2	32.28	03/29/95	17.11	15.17
EX-2	32.28	06/27/95	17.27	15.01
EX-2	32.28	07/14/95	17.42	14.86
EX-2	32.28	05/01/97	13.08	19.20
EX-2	32.28	02/03/99	16.30	15.98
EX-2	32.28	12/08/00	18.66	13.62
EX-2	32.28	01/19/01	18.67	13.61
EX-2	32.28	02/08/01	18.70	13.58
EX-2	32.28	03/08/01	18.76	13.52
EX-2	32.28	04/12/01	18.10	14.18
EX-2	32.28	05/15/01	17.94	14.34
EX-2	32.28	06/12/01	17.94	14.34
EX-2	32.28	07/16/01	18.49	13.79
EX-2	32.28	08/14/01	18.73	13.55
EX-2	32.28	09/13/01	18.90	13.38
EX-2	32.28	10/25/01	19.18	13.10
EX-2	32.28	11/16/01	19.24	13.04
EX-2	32.28	12/18/01	18.50	13.78
EX-2	32.28	01/22/02	17.83	14.45
EX-2	32.28	02/14/02	17.49	14.79
EX-2	32.28	03/06/02	17.45	14.83
EX-2	32.28	10/02/02	18.22	14.06
EX-2	32.28	02/11/04	17.54	14.74

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-3	32.07	09/08/94	17.96	14.11
EX-3	32.07	12/29/94	16.72	15.35
EX-3	32.07	03/29/95	15.43	16.64
EX-3	32.07	06/27/95	15.91	16.16
EX-3	32.07	07/14/95	15.96	16.11
EX-3	32.07	05/01/97	12.84	19.23
EX-3	32.07	02/03/99	15.12	16.95
EX-3	32.07	12/08/00	18.27	13.80
EX-3	32.07	01/19/01	18.13	13.94
EX-3	32.07	02/08/01	18.10	13.97
EX-3	32.07	03/08/01	18.17	13.90
EX-3	32.07	04/12/01	17.44	14.63
EX-3	32.07	05/15/01	17.08	14.99
EX-3	32.07	06/12/01	17.04	15.03
EX-3	32.07	07/16/01	17.82	14.25
EX-3	32.07	08/14/01	18.25	13.82
EX-3	32.07	09/13/01	18.51	13.56
EX-3	32.07	10/25/01	18.92	13.15
EX-3	32.07	11/16/01	19.02	13.05
EX-3	32.07	12/18/01	17.91	14.16
EX-3	32.07	01/22/02	16.41	15.66
EX-3	32.07	02/14/02	15.95	16.12
EX-3	32.07	03/06/02	15.88	16.19
EX-3	32.07	10/02/02	17.59	14.48
EX-3	32.07	02/11/04	15.99	16.08
EX-4 (MW-2)	35.60	10/18/93	16.63	18.97
EX-4 (MW-2)	35.60	10/28/93	16.72	18.88
EX-4 (MW-2)	35.60	01/27/94	16.56	19.04
EX-4 (MW-2)	35.60	09/08/94	16.86	18.74
EX-4 (MW-2)	35.60	12/29/94	16.09	19.51
EX-4 (MW-2)	35.60	03/29/95	14.63	20.97
EX-4 (MW-2)	35.60	06/27/95	15.22	20.38
EX-4 (MW-2)	35.60	07/14/95	15.41	20.19
EX-4 (MW-2)	35.60	05/01/97	14.08	21.52
EX-4 (MW-2)	35.60	02/03/99	14.58	21.02
EX-4 (MW-2)	35.60	12/08/00	16.97	18.63
EX-4 (MW-2)	35.60	01/19/01	16.81	18.79
EX-4 (MW-2)	35.60	02/08/01	16.84	18.76
EX-4 (MW-2)	35.60	03/08/01	16.92	18.68
EX-4 (MW-2)	35.60	04/12/01	16.96	18.64
EX-4 (MW-2)	35.60	05/15/01	16.92	18.68
EX-4 (MW-2)	35.60	06/12/01	16.98	18.62
EX-4 (MW-2)	35.60	07/16/01	17.09	18.51
EX-4 (MW-2)	35.60	08/14/01	17.22	18.38
EX-4 (MW-2)	35.60	09/13/01	17.30	18.30
EX-4 (MW-2)	35.60	10/25/01	17.51	18.09
EX-4 (MW-2)	35.60	11/16/01	17.52	18.08
EX-4 (MW-2)	35.60	12/18/01	17.22	18.38
EX-4 (MW-2)	35.60	01/22/02	16.28	19.32
EX-4 (MW-2)	35.60	02/14/02	15.80	19.80
EX-4 (MW-2)	35.60	03/06/02	15.61	19.99
EX-4 (MW-2)	35.60	10/02/02	16.49	19.11
EX-4 (MW-2)	35.60	02/11/04	15.14	20.46

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-5	31.87	09/08/94	NM	
EX-5	31.87	12/29/94	15.85	16.02
EX-5	31.87	03/29/95	14.84	17.03
EX-5	31.87	06/27/95	16.32	15.55
EX-5	31.87	07/14/95	16.34	15.53
EX-5	31.87	05/01/97	12.06	19.81
EX-5	31.87	02/03/99	13.45	18.42
EX-5	31.87	12/08/00	19.72	12.15
EX-5	31.87	01/19/01	18.87	13.00
EX-5	31.87	02/08/01	18.98	12.89
EX-5	31.87	03/08/01	19.22	12.65
EX-5	31.87	04/12/01	18.96	12.91
EX-5	31.87	05/15/01	18.94	12.93
EX-5	31.87	06/12/01	19.05	12.82
EX-5	31.87	07/16/01	19.76	12.11
EX-5	31.87	08/14/01	20.32	11.55
EX-5	31.87	09/13/01	20.70	11.17
EX-5	31.87	10/25/01	21.27	10.60
EX-5	31.87	11/16/01	21.04	10.83
EX-5	31.87	12/18/01	16.64	15.23
EX-5	31.87	01/22/02	16.10	15.77
EX-5	31.87	02/14/02	15.35	16.52
EX-5	31.87	03/06/02	15.93	15.94
EX-5	31.87	10/02/02	19.58	12.29
EX-5	31.87	02/11/04	15.70	16.17
EX-6	34.38	09/08/94	NM	
EX-6	34.38	12/29/94	13.98	20.40
EX-6	34.38	03/29/95	12.51	21.87
EX-6	34.38	06/27/95	13.04	21.34
EX-6	34.38	07/14/95	13.17	21.21
EX-6	34.38	05/01/97	11.93	22.45
EX-6	34.38	02/03/99	12.71	21.67
EX-6	34.38	12/08/00	Well casing filled with silt	
EX-6	34.38	11/16/01	Decommissioned	
EX-7	35.29	09/08/94	NM	
EX-7	35.29	12/29/94	13.21	22.08
EX-7	35.29	03/29/95	11.69	23.60
EX-7	35.29	06/27/95	12.34	22.95
EX-7	35.29	07/14/95	12.38	22.91
EX-7	35.29	05/01/97	11.44	23.85
EX-7	35.29	02/03/99	11.81	23.48
EX-7	35.29	12/08/00	14.32	20.97
EX-7	35.29	01/19/01	14.15	21.14
EX-7	35.29	02/08/01	14.18	21.11
EX-7	35.29	03/08/01	14.30	20.99
EX-7	35.29	04/12/01	14.37	20.92
EX-7	35.29	05/15/01	14.33	20.96
EX-7	35.29	06/12/01	14.41	20.88
EX-7	35.29	07/16/01	14.51	20.78
EX-7	35.29	08/14/01	14.65	20.64
EX-7	35.29	09/13/01	14.75	20.54
EX-7	35.29	10/25/01	15.01	20.28
EX-7	35.29	11/16/01	14.98	20.31
EX-7	35.29	12/18/01	14.42	20.87
EX-7	35.29	01/22/02	13.50	21.79
EX-7	35.29	02/14/02	13.15	22.14
EX-7	35.29	03/06/02	12.86	22.43
EX-7	35.29	10/02/02	13.76	21.53
EX-7	35.29	02/11/04	12.31	22.98

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-1	35.48	05/11/93	15.56	19.92
MW-1	35.48	10/18/93	17.04	18.44
MW-1	35.48	10/28/93	17.16	18.32
MW-1	35.48	01/27/94	16.99	18.49
MW-1	35.48	09/08/94	NM	
MW-1	35.48	12/29/94	16.43	19.05
MW-1	35.48	03/29/95	NM	
MW-1	35.48	06/27/95	NM	
MW-1	35.48	07/14/95	NM	
MW-1	35.48	05/01/97	14.12	21.36
MW-1	35.48	02/03/99	14.83	20.65
MW-1	35.48	12/08/00	17.40	18.08
MW-1	35.48	01/19/01	17.23	18.25
MW-1	35.48	02/08/01	17.32	18.16
MW-1	35.48	03/08/01	17.42	18.06
MW-1	35.48	04/12/01	17.41	18.07
MW-1	35.48	05/15/01	17.37	18.11
MW-1	35.48	06/12/01	NM	
MW-1	35.48	07/16/01	17.59	17.89
MW-1	35.48	08/14/01	17.70	17.78
MW-1	35.48	09/13/01	17.78	17.70
MW-1	35.48	10/25/01	17.97	17.51
MW-1	35.48	11/16/01	17.88	17.60
MW-1	35.48	12/18/01	17.44	18.04
MW-1	35.48	01/22/02	16.68	18.80
MW-1	35.48	02/14/02	16.38	19.10
MW-1	35.48	03/06/02	16.03	19.45
MW-1	35.48	10/02/02	16.98	18.50
MW-1	35.48	02/11/04	15.63	19.85
MW-3	34.56	10/18/93	16.47	18.09
MW-3	34.56	10/28/93	16.60	17.96
MW-3	34.56	01/27/94	16.40	18.16
MW-3	34.56	09/08/94	NM	
MW-3	34.56	12/29/94	15.90	18.66
MW-3	34.56	03/29/95	NM	
MW-3	34.56	06/27/95	NM	
MW-3	34.56	07/14/95	NM	
MW-3	34.56	05/01/97	13.73	20.83
MW-3	34.56	02/03/99	14.36	20.20
MW-3	34.56	12/08/00	16.73	17.83
MW-3	34.56	01/19/01	16.60	17.96
MW-3	34.56	02/08/01	16.64	17.92
MW-3	34.56	03/08/01	16.73	17.83
MW-3	34.56	04/12/01	16.73	17.83
MW-3	34.56	05/15/01	16.71	17.85
MW-3	34.56	06/12/01	16.76	17.80
MW-3	34.56	07/16/01	16.91	17.65
MW-3	34.56	08/14/01	16.97	17.59
MW-3	34.56	09/13/01	17.09	17.47
MW-3	34.56	10/25/01	17.24	17.32
MW-3	34.56	11/16/01	17.16	17.40
MW-3	34.56	12/18/01	16.82	17.74
MW-3	34.56	01/22/02	16.09	18.47
MW-3	34.56	02/14/02	15.65	18.91
MW-3	34.56	03/06/02	15.50	19.06
MW-3	34.56	10/02/02	16.36	18.20
MW-3	34.56	02/11/04	15.12	19.44

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-4	33.61	10/18/93	16.21	17.40
MW-4	33.61	10/28/93	16.26	17.35
MW-4	33.61	01/27/94	16.06	17.55
MW-4	33.61	09/08/94	NM	
MW-4	33.61	12/29/94	15.55	18.06
MW-4	33.61	03/29/95	NM	
MW-4	33.61	06/27/95	NM	
MW-4	33.61	07/14/95	NM	
MW-4	33.61	05/01/97	13.32	20.29
MW-4	33.61	02/03/99	14.04	19.57
MW-4	33.61	12/08/00	16.25	17.36
MW-4	33.61	01/19/01	16.17	17.44
MW-4	33.61	02/08/01	16.21	17.40
MW-4	33.61	03/08/01	16.29	17.32
MW-4	33.61	04/12/01	16.28	17.33
MW-4	33.61	05/15/01	16.28	17.33
MW-4	33.61	06/12/01	16.32	17.29
MW-4	33.61	07/16/01	16.43	17.18
MW-4	33.61	08/14/01	16.53	17.08
MW-4	33.61	09/13/01	16.60	17.01
MW-4	33.61	10/25/01	16.74	16.87
MW-4	33.61	11/16/01	16.63	16.98
MW-4	33.61	12/18/01	16.20	17.41
MW-4	33.61	01/22/02	15.65	17.96
MW-4	33.61	02/14/02	15.26	18.35
MW-4	33.61	03/06/02	15.18	18.43
MW-4	33.61	10/02/02	15.96	17.65
MW-4	33.61	02/11/04	14.76	18.85
MW-5	34.66	10/18/93	20.13	14.53
MW-5	34.66	10/28/93	20.48	14.18
MW-5	34.66	01/27/94	19.89	14.77
MW-5	34.66	09/08/94	NM	
MW-5	34.66	12/29/94	19.25	15.41
MW-5	34.66	03/29/95	NM	
MW-5	34.66	06/27/95	NM	
MW-5	34.66	07/14/95	NM	
MW-5	34.66	05/01/97	15.91	18.75
MW-5	34.66	02/03/99	18.15	16.51
MW-5	34.66	12/08/00	19.80	14.86
MW-5	34.66	01/19/01	19.69	14.97
MW-5	34.66	02/08/01	19.67	14.99
MW-5	34.66	03/08/01	19.75	14.91
MW-5	34.66	04/12/01	19.80	14.86
MW-5	34.66	05/15/01	20.00	14.66
MW-5	34.66	06/12/01	20.01	14.65
MW-5	34.66	07/16/01	20.32	14.34
MW-5	34.66	08/14/01	20.39	14.27
MW-5	34.66	09/13/01	20.47	14.19
MW-5	34.66	10/25/01	20.30	14.36
MW-5	34.66	11/16/01	20.19	14.47
MW-5	34.66	12/18/01	19.18	15.48
MW-5	34.66	01/22/02	19.00	15.66
MW-5	34.66	02/14/02	18.79	15.87
MW-5	34.66	03/06/02	18.95	15.71
MW-5	34.66	10/02/02	20.25	14.41
MW-5	34.66	02/11/04	18.96	15.70

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-6	34.83	10/25/01	16.73	18.10
MW-6	34.83	11/16/01	16.67	18.16
MW-6	34.83	12/18/01	16.35	18.48
MW-6	34.83	01/22/02	15.46	19.37
MW-6	34.83	02/14/02	15.94	18.89
MW-6	34.83	03/06/02	14.73	20.10
MW-6	34.83	10/02/02	15.57	19.26
MW-6	34.83	02/11/04	14.17	20.66
MW-7	34.74	10/25/01	25.77	8.97
MW-7	34.74	11/16/01	24.94	9.80
MW-7	34.74	12/18/01	21.26	13.48
MW-7	34.74	01/22/02	22.72	12.02
MW-7	34.74	02/14/02	22.61	12.13
MW-7	34.74	03/06/02	23.33	11.41
MW-7	34.74	10/02/02	25.08	9.66
MW-7	34.74	02/11/04	22.66	12.08
MW-8	32.24	10/25/01	25.64	6.60
MW-8	32.24	11/16/01	23.85	8.39
MW-8	32.24	12/18/01	19.55	12.69
MW-8	32.24	01/22/02	22.44	9.80
MW-8	32.24	02/14/02	22.54	9.70
MW-8	32.24	03/06/02	23.52	8.72
MW-8	32.24	10/02/02	25.41	6.83
MW-8	32.24	02/11/04	21.64	10.60
MW-9	36.00	01/22/02	17.57	18.43
MW-9	36.00	02/14/02	17.21	18.79
MW-9	36.00	03/06/02	17.02	18.98
MW-9	36.00	10/02/02	17.85	18.15
MW-9	36.00	02/11/04	16.63	19.37
MW-10	35.06	01/22/02	14.97	20.09
MW-10	35.06	02/14/02	14.46	20.60
MW-10	35.06	03/06/02	14.20	20.86
MW-10	35.06	10/02/02	15.81	19.25
MW-10	35.06	02/11/04	13.64	21.42
MW-11	34.41	01/22/02	13.32	21.09
MW-11	34.41	02/14/02	12.94	21.47
MW-11	34.41	03/06/02	12.76	21.65
MW-11	34.41	10/02/02	Free product, unable to measure	
MW-11	34.41	02/11/04	Free product, unable to measure	
MW-12	32.79	01/22/02	17.88	14.91
MW-12	32.79	02/14/02	17.46	15.33
MW-12	32.79	03/06/02	17.37	15.42
MW-12	32.79	10/02/02	17.65	15.14
MW-12	32.79	02/11/04	17.22	15.57
MW-13	34.94	01/22/02	18.83	16.11
MW-13	34.94	02/14/02	17.95	16.99
MW-13	34.94	03/06/02	17.57	17.37
MW-13	34.94	10/02/02	18.80	16.14
MW-13	34.94	02/11/04	18.17	16.77
MW-14	40.17	02/11/04	22.57	17.60
MW-15	33.56	02/11/04	11.23	22.33

Table 2

Monitoring Well and River Hydrology Measurements
McCall Oil and Chemical

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
WG-1	37.28	10/28/93	32.82	4.46
WG-1	37.28	01/27/94	30.04	7.24
WG-1	37.28	09/08/94	NM	
WG-1	37.28	12/29/94	NM	
WG-1	37.28	03/29/95	NM	
WG-1	37.28	06/27/95	NM	
WG-1	37.28	07/14/95	NM	
WG-1	37.28	05/01/97	17.80	19.48
WG-1	37.28	02/03/99	23.02	14.26
WG-1	37.28	12/08/00	31.60	5.68
WG-1	37.28	01/19/01	31.74	5.54
WG-1	37.28	02/08/01	30.78	6.50
WG-1	37.28	03/08/01	31.80	5.48
WG-1	37.28	04/12/01	29.15	8.13
WG-1	37.28	05/15/01	29.95	7.33
WG-1	37.28	06/12/01	31.02	6.26
WG-1	37.28	07/16/01	34.23	3.05
WG-1	37.28	08/14/01	33.27	4.01
WG-1	37.28	09/13/01	31.15	6.13
WG-1	37.28	10/25/01	31.38	5.90
WG-1	37.28	11/16/01	30.77	6.51
WG-1	37.28	12/18/01	25.45	11.83
WG-1	37.28	01/22/02	27.80	9.48
WG-1	37.28	02/14/02	29.27	8.01
WG-1	37.28	03/06/02	29.46	7.82
WG-1	37.28	10/02/02	32.60	4.68
WG-1	37.28	02/11/04	28.65	8.63

Note: Reference point elevations for EX-1 to EX-7, MW-1 to MW-5 and WG-1 surveyed by W&H Pacific on 9/19/00. MW-6 to MW-13 surveyed by W&H Pacific on 1/30/02. MW-14 and MW-15 surveyed by W&H Pacific on 4/5/04.

Table 3
Total Petroleum Hydrocarbons
Groundwater
McCall Oil and Chemical

Location	Matrix	Date Sampled	TPH - FIQ					
			Gasoline		Diesel		Heavy Fuel Oil	
Monitoring Wells - Water µg/L (ppb)								
EX-1	Water	09/08/94	50	U	50	U	266	
EX-1 Duplicate	Water	09/08/94	5	U				
EX-1	Water	12/30/94	50	U	50	U	632	
EX-1	Water	03/29/95	50	U	50	U	454	
EX-1	Water	07/14/95	50	U	50	U	200	U
EX-1	Water	05/02/97	167	Y	50	U	200	U
EX-1 Duplicate	Water	05/02/97	188	Y	50	U	200	U
EX-1	Water	02/04/99	100	U	100	U	924	
EX-1 Duplicate	Water	02/04/99	100	U	100	U	814	
EX-1	Water	12/20/00	990	Z	100	U	250	U
EX-1	Water	03/07/02	460	H	280	Y	550	O
EX-1	Water	10/03/02	100	U	100	U	250	U
EX-1	Water	02/11/04	500	Z	120	Y	250	U
EX-1 Duplicate	Water	02/11/04	450	Z	120	Y	250	U
EX-2	Water	09/08/94	50	U	50	U	200	
EX-2	Water	12/30/94	50	U	50	U	441	
EX-2	Water	03/29/95	50	U	50	U	398	
EX-2	Water	07/14/95	50	U	50	U	885	
EX-2	Water	05/01/97	50	U	519	Y	200	U
EX-2	Water	02/04/99	10	U	10	U	569	
EX-2	Water	12/20/00	100	U	100	U	250	U
EX-2	Water	03/07/02	110	U	170	Y	270	U
EX-2	Water	10/04/02	100	U	270	Y	290	O
EX-2	Water	02/12/04	100	U	110	Y	250	U
EX-3	Water	09/08/94	50	U	50	U	200	
EX-3 Duplicate	Water	09/08/94	50	U	50	U	200	
EX-3	Water	12/30/94	50	U	50	U	474	
EX-3	Water	03/29/95	50	U	50	U	226	
EX-3	Water	07/14/95	50	U	50	U	200	U
EX-3	Water	05/01/97	50	U	64	Y	200	U
EX-3	Water	02/04/99	100	U	100	U	564	
EX-3	Water	12/20/00	690	Z	100	U	250	U
EX-3	Water	03/07/02	110	U	110	Y	270	U
EX-3	Water	10/04/02	100	U	120	Y	250	U
EX-3	Water	02/12/04	100	U	100	U	250	U
EX-4/MW-2	Water	09/08/94	50	U	50	U	200	
EX-4/MW-2	Water	12/30/94	50	U	1000	U	3840	
EX-4/MW-2	Water	03/29/95	50	U	2140		200	U
EX-4/MW-2	Water	07/14/95	50	U	343		200	U
EX-4/MW-2 Duplicate	Water	07/14/95	50	U	50	U	200	U
EX-4/MW-2	Water	05/01/97	50	U	1310	Y	200	U
EX-4/MW-2	Water	02/03/99	100	U	787	Y	250	U
EX-4/MW-2	Water	12/20/00	640	Z	100	U	250	U
EX-4/MW-2	Water	03/07/02	160	H	920	Y	290	O
EX-4/MW-2	Water	10/03/02	150	H	980	Y	250	U
EX-4/MW-2	Water	02/13/04	120	H	920	Y	280	O

Table 3
Total Petroleum Hydrocarbons
Groundwater
McCall Oil and Chemical

Location	Matrix	Date Sampled	TPH - FIQ		
			Gasoline	Diesel	Heavy Fuel Oil
EX-5	Water	12/30/94	50 U	50 U	1400
EX-5	Water	03/29/95	50 U	50 U	639
EX-5 Duplicate	Water	03/29/95	50 U	50 U	767
EX-5	Water	07/14/95	50 U	1500	200 U
EX-5	Water	05/01/97	50 U	50 U	200 U
EX-5 Duplicate	Water	05/01/97	50 U	50 U	200 U
EX-5	Water	02/04/99	100 U	573 Y	250 U
EX-5 Duplicate	Water	02/04/99	100 U	550 Y	250 U
EX-5	Water	12/20/00	950 Z	100 U	250 U
EX-5	Water	03/07/02	100 U	140 Y	250 U
EX-5	Water	10/04/02	100 U	120 Y	270 O
EX-6	Water	12/30/94	50 U	50 U	842
EX-6 Duplicate	Water	12/30/94	50 U	50 U	851
EX-6	Water	03/29/95	50 U	50 U	1160
EX-6	Water	07/14/95	50 U	50 U	200 U
EX-6	Water	05/02/97	50 U	50 U	1450
EX-6	Water	02/04/99	100 U	1280 Y	250 U
EX-7	Water	12/30/94	50 U	50 U	200 U
EX-7	Water	03/29/95	50 U	50 U	200 U
EX-7	Water	07/14/95	50 U	50 U	200 U
EX-7	Water	05/02/97	50 U	50 U	200 U
EX-7	Water	02/03/99	100 U	250 U	250 U
EX-7	Water	12/20/00	530 Z	100 U	250 U
EX-7	Water	03/06/02	100 U	100 U	250 U
EX-7	Water	10/03/02	100 U	100 U	250 U
EX-7	Water	02/13/04	100 U	100 U	250 U
MW-1	Water	05/01/97	50 U	319 Y	200 U
MW-1	Water	02/03/99	100 U	250 U	250 U
MW-1	Water	12/20/00	1200 Z	100 U	250 U
MW-1	Water	03/07/02	100 U	110 Y	250 U
MW-1	Water	10/03/02	100 U	220 Y	250 U
MW-1	Water	02/11/04	100 U	120 Y	250 U
MW-3	Water	05/01/97	50 U	1430 Y	200 U
MW-3	Water	02/03/99	100 U	1190 Y	250 U
MW-3	Water	12/20/00	720 Z	100 U	250 U
MW-3 Duplicate	Water	03/07/02	240 H	1000 Y	390 O
MW-3	Water	03/07/02	220 H	1000 Y	410 O
MW-3	Water	10/03/02	320 H	3000 Y	520 L
MW-3	Water	02/11/04	300 H	2000 Y	250 U
MW-4	Water	05/01/97	50 U	312 Y	200 U
MW-4	Water	02/03/99	100 U	716 Y	250 U
MW-4	Water	12/20/00	100 U	100 U	250 U
MW-4	Water	03/07/02	180 H	870 Y	350 O
MW-4	Water	10/03/02	170 H	1200 Y	250 U

Table 3
Total Petroleum Hydrocarbons
Groundwater
McCall Oil and Chemical

Location	Matrix	Date Sampled	TPH - FIQ					
			Gasoline		Diesel		Heavy Fuel Oil	
MW-5	Water	05/01/97	50	U	204	Y	200	U
MW-5	Water	02/03/99	100	U	391	Y	250	U
MW-5	Water	12/20/00	100	U	100	U	250	U
MW-5	Water	03/07/02	100	U	310	Y	260	O
MW-5	Water	10/03/02	100	U	280	Y	250	U
MW-5 Duplicate	Water	10/03/02	100	U	310	Y	250	U
MW-5	Water	02/11/04	100	U	290	Y	250	U
MW-6	Water	10/25/01	250	U	630	U	630	U
MW-6 Duplicate	Water	10/25/01	250	U	630	U	630	U
MW-6	Water	03/08/02	160	Z	240	Y	500	O
MW-6	Water	10/03/02	100	U	280	Y	350	L
MW-6 Duplicate	Water	10/03/02	100	U	230	Y	270	L
MW-6	Water	02/12/04	100	U	130	Y	250	U
MW-7	Water	10/25/01	250	U	630	U	630	U
MW-7	Water	03/08/02	110	U	1500	Y	4000	O
MW-7	Water	10/04/02	160	H	1100	Y	820	O
MW-7	Water	02/12/04	100	U	240	Y	250	U
MW-7 Duplictate	Water	02/12/04	100	U	240	Y	250	U
MW-8	Water	10/25/01	250	U	3090		1840	
MW-8	Water	03/07/02	650	H	20000	Y	9200	O
MW-8	Water	10/04/02	1100	H	35000	DY	23000	DO
MW-8	Water	02/12/04	100	U	330	Y	250	U
MW-9	Water	01/22/02	140	H	480	Y	310	O
MW-9	Water	03/06/02	200	H	520	Y	300	U
MW-9 Duplicate	Water	03/06/02	210	H	600	Y	290	U
MW-9	Water	10/03/02	150	H	850	Y	250	U
MW-9	Water	02/13/04	100	U	300	Y	250	U
MW-10	Water	01/22/02	100	U	250	Y	510	O
MW-10	Water	03/06/02	110	U	170	Y	320	O
MW-10	Water	10/03/02	100	U	170	Y	250	U
MW-10	Water	02/13/04	100	U	370	Y	250	U
MW-11	Water	01/22/02	1900	H	15000	Y	4300	O
MW-11	Water	03/08/02	1700	H	11000	Y	2600	O
MW-12	Water	01/22/02	110	H	630	Y	1000	O
MW-12	Water	03/06/02	150	H	1100	Y	1900	O
MW-12	Water	10/04/02	100	U	570	Y	660	O
MW-12	Water	02/13/04	100	U	340	Y	250	U
MW-13	Water	01/22/02	300	H	1000	Y	2300	O
MW-13 Duplicate	Water	01/22/02	360	H	1300	Y	2900	O
MW-13	Water	03/06/02	150	H	710	Y	1500	O
MW-13	Water	10/04/02	150	Z	650	Y	1300	O
MW-14	Water	02/12/04	100	U	300	Y	250	U
MW-15	Water	02/12/04	100	U	100	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.
DET= Detected above method reporting limit (method reporting limit shown)
D = The reported result is from a dilution.

TABLE 4
PAHs and SVOCs (µg/L)
Groundwater
McCall Oil and Chemical

Sample Designation	EX-1		EX-1		EX-1		EX-2		EX-2		EX-2		EX-2		EX-3		EX-3		EX-3		EX-3		EX-4/MW-2		EX-4/MW-2		EX-4/MW-2		EX-5		EX-5		EX-5	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		10/04/02		02/12/04		12/20/00		03/07/02		10/04/02		02/12/04		12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		10/04/02	
LPAHs																																		
Naphthalene	0.008	U	0.013	U	**0.028**	U	**0.01**	J	0.013	U	**0.022**	J	**0.023**	J	**0.02**	J	0.013	U	**0.038**	J	0.012	U	0.008	U	0.014	U	0.012	U	**0.009**	J	**0.028**	J	**0.022**	J
Acenaphthylene	0.006	U	0.011	U	0.011	U	0.006	U	0.011	U	0.011	U	0.011	U	0.006	U	0.011	U	0.011	U	0.011	U	0.006	U	0.012	U	0.011	U	0.006	U	0.011	U	0.011	U
Acenaphthene	0.007	U	0.0094	U	0.0088	U	**0.02**	J	**0.041**	J	**0.110**	J	**0.025**	J	**0.01**	J	0.0093	U	**0.023**	J	0.0088	U	**0.14**		**0.30**		**0.19**	J	**0.009**	J	**0.024**	J	**0.015**	J
Fluorene	0.006	U	0.013	U	0.012	U	0.006	U	0.013	U	0.012	U	0.012	U	0.006	U	0.013	U	0.012	U	0.012	U	0.006	U	0.014	U	0.012	U	0.006	U	0.013	U	0.012	U
Phenanthrene	**0.01**	J	**0.038**	J	**0.028**	J	**0.04**	J	**0.047**	J	**0.057**	J	**0.039**	J	**0.04**	J	**0.06**	J	**0.06**	J	**0.028**	J	**0.10**		**0.52**		**0.16**	J	**0.02**	J	**0.034**	J	**0.039**	J
Anthracene	**0.008**	J	**0.063**	J	**0.110**	J	0.006	U	0.016	U	0.015	U	0.015	U	0.006	U	**0.019**	J	**0.016**	J	0.015	U	0.006	U	**0.071**	J	**0.060**	J	0.006	U	0.016	U	**0.017**	J
2-Methylnaphthalene	0.008	U	0.013	U	0.012	U	**0.008**	J	**0.012**	J	**0.017**	J	**0.013**	J	0.008	U	0.012	U	**0.015**	J	0.012	U	0.008	U	0.013	U	0.012	U	0.008	U	0.012	U	0.012	U
Total LPAH	**0.018**		**0.101**		**0.166**		**0.078**		**0.100**		**0.206**		**0.100**		**0.07**		**0.08**		**0.15**		**0.028**		**0.24**		**0.89**		**0.41**		**0.038**		**0.086**		**0.093**	
HPAHs																																		
Fluoranthene	**0.02**	J	0.014	U	**0.053**	J	**0.009**	J	**0.017**	J	0.013	U	0.013	U	**0.01**	J	**0.038**	J	**0.034**	J	0.013	U	**0.01**	J	**0.048**	J	**0.028**	J	**0.009**	J	0.013	U	0.013	U
Pyrene	**0.03**	J	**0.039**	J	**0.068**	J	**0.03**	J	**0.039**	J	**0.074**	J	**0.036**	J	**0.03**	J	**0.064**	J	**0.061**	J	**0.028**	J	**0.02**	J	**0.13**	J	**0.049**	J	**0.040**	J	**0.046**	J	**0.067**	J
Benz(a)anthracene	**0.01**	J	0.013	U	**0.024**	J	**0.007**	J	0.013	U	0.012	U	0.012	U	**0.008**	J	0.013	U	0.012	U	0.012	U	**0.007**	J	0.013	U	0.012	U	**0.006**	J	0.013	U	0.012	U
Chrysene	**0.02**	J	0.015	U	**0.033**	J	**0.007**	J	0.015	U	0.014	U	0.014	U	**0.01**	J	0.015	U	0.014	U	0.014	U	**0.008**	J	0.016	U	0.014	U	**0.008**	J	0.015	U	0.014	U
Benzo(b)fluoranthene	**0.01**	J	0.021	U	**0.033**	J	**0.006**	J	0.021	U	0.020	U	0.020	U	**0.006**	J	0.021	U	0.020	U	0.020	U	**0.006**	J	0.021	U	0.020	U	0.005	U	0.021	U	0.020	U
Benzo(k)fluoranthene	**0.01**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	0.020	U	**0.006**	J	0.021	U	0.020	U	0.020	U	**0.006**	J	0.021	U	0.020	U	**0.003**	J	0.021	U	0.020	U
Benzo(a)pyrene	**0.02**	J	0.018	U	**0.051**	J	**0.007**	J	0.017	U	0.016	U	0.016	U	**0.007**	J	0.017	U	0.016	U	0.016	U	**0.007**	J	0.018	U	0.016	U	0.006	U	0.017	U	0.016	U
Indeno(1,2,3-cd)pyrene	**0.02**	J	0.026	U	**0.050**	J	**0.009**	J	0.026	U	0.024	U	0.024	U	**0.009**	J	0.026	U	0.024	U	0.024	U	**0.007**	J	0.027	U	0.024	U	**0.007**	J	0.026	U	0.024	U
Dibenz(a,h)anthracene	0.004	U	0.03	U	0.031	U	**0.005**	J	0.033	U	0.031	U	0.031	U	0.004	U	0.033	U	0.031	U	0.031	U	0.004	U	0.034	U	0.031	U	0.004	U	0.033	U	0.031	U
Benzo(g,h,i)perylene	**0.02**	J	**0.039**	J	**0.061**	J	**0.01**	J	0.018	U	0.017	U	0.017	U	**0.02**	J	**0.034**	J	**0.025**	J	0.017	U	**0.009**	J	0.019	U	0.017	U	**0.03**	J	**0.054**	J	**0.031**	J
Total HPAHs	**0.16**		**0.08**		**0.37**		**0.10**		**0.06**		**0.07**		**0.04**		**0.106**		**0.136**		**0.120**		**0.028**		**0.080**		**0.178**		**0.077**		**0.103**		**0.100**		**0.098**	
SVOCs																																		
3- and 4-Methylphenol Coelution	0.003	U	0.055	U	0.051	U	**0.02**	J	0.055	U	0.051	U	0.051	U	**0.05**	J	**0.087**	J	**0.090**	J	0.051	U	0.003	U	0.056	U	0.051	U	**0.007**	J	0.055	U	0.051	U
Dibenzofuran	0.007	U	0.015	U	0.014	U	0.007	U	0.014	U	0.014	U	0.014	U	0.007	U	0.014	U	0.014	U	0.014	U	0.007	U	0.015	U	0.014	U	0.007	U	0.014	U	0.014	U
Butyl Benzyl Phthalate	0.02	U	0.028	U	0.026	U	0.02	U	0.028	U	0.026	U	0.026	U	0.02	U	0.028	U	0.026	U	0.026	U	0.02	U	0.028	U	0.026	U	0.02	U	0.028	U	0.026	U
Di-n-octyl Phthalate	0.003	U	0.035	U	0.032	U	0.003	U	0.035	U	0.032	U	0.032	U	0.003	U	0.035	U	0.032	U	0.032	U	0.003	U	0.036	U	0.032	U	0.003	U	0.035	U	0.032	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. D = reported result is from a dilution.

TABLE 4
PAHs and SVOCs (µg/L)
Groundwater
McCall Oil and Chemical

Sample Designation	EX-7	EX-7	EX-7	MW-1	MW-1	MW-1	MW-3	MW-3	MW-3 Dup	MW-3	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5 Dup	MW-5
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date Sampled	12/20/00	03/06/02	10/03/02	12/20/00	03/07/02	10/03/02	12/20/00	03/07/02	03/07/02	10/03/02	12/20/00	03/07/02	10/03/02	12/20/00	03/07/02	10/03/02	10/03/02	02/11/04
Groundwater																		
LPAHs																		
Naphthalene	0.008 U	**0.14** J	**0.022** J	0.008 U	0.012 U	0.012 U	0.008 U	0.012 U	0.012 U	0.012 U	0.008 U	0.014 U	0.012 U	0.008 U	**0.034** J	0.012 U	**0.023**	**0.025** J
Acenaphthylene	0.006 U	0.011 U	0.011 U	0.006 U	0.011 U	0.011 U	0.006 U	0.011 U	0.011 U	0.011 U	0.006 U	0.012 U	0.011 U	0.006 U	0.011 U	0.011 U	0.011 U	0.011 U
Acenaphthene	0.007 U	0.0089 U	0.0088 U	0.007 U	0.0088 U	0.0088 U	**0.17**	**0.21**	**0.23**	**0.33**	**0.03** J	**0.064** J	**0.130** J	0.007 U	0.0094 U	0.0088 U	0.0088 U	0.0088 U
Fluorene	0.006 U	0.013 U	0.012 U	0.006 U	0.012 U	0.014 U	0.006 U	0.012 U	0.012 U	0.012 U	0.006 U	0.014 U	0.012 U	0.006 U	0.013 U	0.012 U	0.012 U	0.012 U
Phenanthrene	0.007 U	**0.016** J	**0.015** J	0.007 U	0.011 U	0.012 U	**0.13**	**0.18** J	**0.17** J	**0.27**	**0.06** J	**0.082** J	**0.086** J	0.007 U	0.011 U	**0.021** J	**0.021** J	0.011 U
Anthracene	0.006 U	**0.019** J	**0.038** J	0.006 U	0.015 U	**0.028** J	**0.02** J	**0.049** J	**0.055** J	**0.092** J	**0.01** J	**0.035** J	**0.046** J	0.006 U	0.016 U	**0.025** J	**0.022** J	0.015 U
2-Methylnaphthalene	0.008 U	0.012 U	0.012 U	0.008 U	0.012 U	0.012 U	0.008 U	0.012 U	0.012 U	0.012 U	0.008 U	0.013 U	0.012 U	0.008 U	0.013 U	0.012 U	0.012 U	0.012 U
Total LPAH	0.008	**0.18**	**0.08**	0.008	0.015	**0.03**	**0.32**	**0.44**	**0.46**	**0.69**	**0.10**	**0.18**	**0.26**	0.008	**0.03**	**0.05**	**0.07**	**0.025**
HPAHs																		
Fluoranthene	0.007 U	**0.018** J	**0.024** J	0.007 U	0.013 U	0.013 U	**0.01** J	**0.065** J	**0.071** J	**0.087** J	**0.02** J	**0.04** J	0.013 U	0.007 U	0.014 U	**0.031** J	**0.026** J	0.013 U
Pyrene	0.007 U	**0.022** J	**0.028** J	0.007 U	0.015 U	0.015 U	**0.05** J	**0.13** J	**0.11** J	**0.19** J	**0.05** J	**0.11** J	**0.15** J	0.007 U	**0.024** J	**0.037** J	**0.034** J	0.015 U
Benz(a)anthracene	0.005 U	0.012 U	0.012 U	0.005 U	0.012 U	0.012 U	**0.008** J	0.012 U	**0.024** J	**0.048** J	**0.01** J	**0.053** J	**0.038** J	0.005 U	0.013 U	**0.030** J	0.012 U	0.012 U
Chrysene	0.006 U	0.015 U	0.014 U	0.006 U	0.014 U	0.014 U	**0.009** J	**0.033** J	**0.030** J	**0.062** J	**0.02** J	**0.048** J	**0.054** J	0.006 U	0.015 U	**0.022** J	0.014 U	0.014 U
Benzo(b)fluoranthene	0.005 U	0.020 U	0.020 U	0.005 U	0.020 U	0.020 U	**0.006** J	0.020 U	0.020 U	**0.055** J	**0.01** J	0.021 U	**0.044** J	0.005 U	0.021 U	0.020 U	0.020 U	0.020 U
Benzo(k)fluoranthene	**0.004** J	0.020 U	0.020 U	0.003 U	0.020 U	0.020 U	**0.006** J	0.020 U	0.020 U	0.020 U	**0.01** J	0.021 U	0.020 U	0.003 U	0.021 U	0.020 U	0.020 U	0.020 U
Benzo(a)pyrene	0.006 U	0.017 U	**0.019** J	0.006 U	0.016 U	0.016 U	**0.007** J	0.016 U	0.016 U	**0.077** J	**0.01** J	0.018 U	**0.043** J	0.006 U	0.018 U	0.016 U	0.016 U	0.016 U
Indeno(1,2,3-cd)pyrene	**0.005** J	0.025 U	0.024 U	0.004 U	0.024 U	0.024 U	**0.008** J	0.024 U	0.024 U	**0.053** J	**0.01** J	0.026 U	**0.032** J	0.004 U	0.026 U	0.024 U	0.024 U	0.024 U
Dibenz(a,h)anthracene	0.004 U	0.031 U	0.031 U	0.004 U	0.031 U	0.031 U	0.004 U	0.031 U	0.031 U	0.031 U	0.004 U	0.033 U	0.031 U	0.004 U	0.033 U	0.031 U	0.031 U	0.031 U
Benzo(g,h,i)perylene	**0.007** J	0.017 U	**0.021** J	0.005 U	0.017 U	0.017 U	**0.009** J	**0.039** J	0.017 U	**0.066** J	**0.02** J	0.018 U	**0.048** J	0.005 U	0.018 U	0.017 U	0.017 U	0.017 U
Total HPAHs	**0.016**	**0.040**	**0.092**	0.007	0.031	0.031	**0.113**	**0.267**	**0.235**	**0.638**	**0.160**	**0.251**	**0.409**	0.007	**0.02**	**0.12**	**0.09**	
SVOCs																		
3- and 4-Methylphenol Coelution	0.003 U	0.052 U	0.051 U	0.003 U	0.051 U	0.051 U	0.003 U	0.051 U	0.051 U	0.051 U	0.003 U	0.056 U	0.051 U	0.003 U	0.055 U	0.051 U	0.051 U	0.051 U
Dibenzofuran	0.007 U	0.014 U	0.014 U	0.007 U	0.014 U	0.014 U	0.007 U	0.014 U	0.014 U	0.014 U	0.095 U	0.015 U	0.014 U	0.007 U	0.015 U	0.200 U	0.014 U	0.014 U
Butyl Benzyl Phthalate	0.02 U	**0.041** J	0.026 U	0.02 U	**0.052** J	0.026 J	0.02 U	0.026 U	0.026 U	0.026 U	0.02 U	0.028 U	0.026 U	0.02 U	0.028 U	**0.048** J	0.026 U	0.026 U
Di-n-octyl Phthalate	0.003 U	0.033 U	0.032 U	0.003 U	0.032 U	0.032 U	0.003 U	0.032 U	0.032 U	0.032 U	0.003 U	0.035 U	0.032 U	0.003 U	0.035 U	0.014 U	0.014 U	0.032 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. D = reported result is from a dilution.

TABLE 4
PAHs and SVOCs (µg/L)
Groundwater
McCall Oil and Chemical

Sample Designation	MW-6	MW-6 Dup	MW-6	MW-6	MW-6 Dup	MW-7	MW-7	MW-7	MW-7	MW-7 Dup	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9 Dup	MW-9
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date Sampled	10/25/01	10/25/01	03/08/02	10/03/02	10/03/02	10/25/01	03/08/02	10/04/02	02/12/04	02/12/04	10/25/01	03/07/02	10/04/02	02/12/04	01/22/02	03/06/02	03/06/02	10/03/02
Groundwater																		
LPAHs																		
Naphthalene	5.00 U	5.00 U	**0.12** J	**0.048** J	**0.066** J	5.00 U	**0.086** J	**0.020** J	0.012 U	0.012 U	5.00 U	**0.16** J	**0.38**	**0.031** J	**0.17** J	0.013 U	0.012 U	0.012 U
Acenaphthylene	5.00 U	5.00 U	**0.038** J	0.011 U	0.011 U	5.00 U	**0.025** J	0.011 U	0.011 U	0.011 U	5.00 U	0.011 U	**0.210**	0.011 U	**0.054** J	**0.11** J	**0.069** J	0.011 U
Acenaphthene	5.00 U	5.00 U	0.0095 U	0.0088 U	**0.020** J	5.00 U	0.0092 U	0.0088 U	0.0088 U	**0.045** J	5.00 U	**0.58**	**0.78**	**0.34**	**0.120** J	**0.12** J	**0.15** J	**0.25**
Fluorene	5.00 U	5.00 U	**0.02** J	0.012 U	0.012 U	5.00 U	0.013 U	0.012 U	0.012 U	0.012 U	5.00 U	**0.56**	**0.91**	**0.36**	0.012 U	0.01 U	0.012 U	0.012 U
Phenanthrene	5.00 U	5.00 U	**0.13** J	**0.039** J	**0.059** J	5.00 U	**0.077** J	**0.034** J	**0.024** J	**0.036** J	5.00 U	**1.2**	**1.7**	**0.22**	**0.26**	**0.22**	**0.16** J	**0.20** J
Anthracene	5.00 U	5.00 U	**0.047** J	**0.045** J	**0.049** J	5.00 U	**0.039** J	**0.031** J	**0.019** J	**0.029** J	5.00 U	**0.097** J	**0.380**	**0.028** J	**0.090** J	**0.098** J	**0.067** J	**0.079** J
2-Methylnaphthalene	5.00 U	5.00 U	**0.025** J	0.012 U	0.012 U	5.00 U	**0.034** J	0.012 U	0.012 U	0.012 U	5.00 U	**0.081** J	**0.160** J	0.012 U	**0.020** J	0.012 U	0.012 U	0.012 U
Total LPAH			**0.38**	**0.13**	**0.19**		**0.26**	**0.09**	**0.043**	**0.11**		**2.68**	**4.52**	**0.98**	**0.71**	**0.55**	**0.45**	**0.53**
HPAHs																		
Fluoranthene	5.00 U	5.00 U	**0.18** J	**0.08** J	**0.12** J	5.00 U	**0.061** J	0.013 U	0.013 U	0.013 U	5.00 U	**0.22**	**0.73**	**0.035** J	**0.25**	**0.33**	**0.13** J	**0.11** J
Pyrene	5.00 U	5.00 U	**0.25**	**0.12** J	**0.20**	5.00 U	**0.089** J	**0.025** J	0.015 U	0.015 U	5.00 U	**0.34**	**1.10**	**0.066** J	**0.41**	**0.48**	**0.26**	**0.24**
Benz(a)anthracene	5.00 U	5.00 U	**0.077** J	**0.033** J	**0.042** J	5.00 U	**0.044** J	0.012 U	0.012 U	0.012 U	5.00 U	**0.071** J	**0.390**	0.012 U	**0.18** J	**0.23**	**0.096** J	**0.075** J
Chrysene	5.00 U	5.00 U	**0.087** J	**0.038** J	**0.052** J	5.00 U	**0.045** J	0.014 U	0.014 U	0.014 U	5.00 U	**0.16** J	**0.56**	0.014 U	**0.18** J	**0.24**	**0.10** J	**0.07** J
Benzo(b)fluoranthene	5.00 U	5.00 U	**0.088** J	**0.037** J	**0.057** J	5.00 U	0.021 U	0.020 U	0.020 U	0.020 U	5.00 U	**0.064** J	**0.350**	0.020 U	**0.18** J	**0.28**	**0.098** J	**0.074** J
Benzo(k)fluoranthene	5.00 U	5.00 U	**0.045** J	0.020 U	0.020 U	5.00 U	0.021 U	0.020 U	0.020 U	0.020 U	5.00 U	0.02 U	**0.13** J	0.02 U	**0.078** J	**0.096** J	**0.027** J	**0.033** J
Benzo(a)pyrene	5.00 U	5.00 U	**0.096** J	**0.028** J	**0.057** J	5.00 U	0.017 U	0.016 U	0.016 U	0.016 U	5.00 U	**0.089** J	**0.360**	0.016 U	**0.19** J	**0.26**	**0.094** J	**0.077** J
Indeno(1,2,3-cd)pyrene	5.00 U	5.00 U	**0.088** J	**0.037** J	**0.057** J	5.00 U	0.026 U	0.024 U	0.024 U	0.024 U	5.00 U	**0.04** J	**0.25**	0.02 U	**0.12** J	**0.15** J	**0.062** J	**0.053** J
Dibenz(a,h)anthracene	5.00 U	5.00 U	0.033 U	0.031 U	0.031 U	5.00 U	0.032 U	0.031 U	0.031 U	0.031 U	5.00 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U
Benzo(g,h,i)perylene	5.00 U	5.00 U	**0.09** J	**0.048** J	**0.071** J	5.00 U	**0.099** J	0.017 U	0.017 U	0.017 U	5.00 U	**0.057** J	**0.310**	0.017 U	**0.130** J	**0.16** J	**0.065** J	**0.071** J
Total HPAHs			**1.00**	**0.42**	**0.66**		**0.34**	**0.03**				**1.04**	**4.18**	**0.101**	**1.72**	**2.23**	**0.93**	**0.81**
SVOCs																		
3- and 4-Methylphenol Coelution	5.00 U	5.00 U	**0.073** J	0.051 U	0.051 U	5.00 U	**1.1**	0.05 U	0.051 U	0.051 U	5.00 U	**0.22** J	**1.60**	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U
Dibenzofuran	5.00 U	5.00 U	0.015 U	0.014 U	0.014 U	5.00 U	0.014 U	0.014 U	0.014 U	0.014 U	5.00 U	**0.18** J	0.014 U	**0.092** J	0.014 U	0.014 U	0.014 U	0.014 U
Butyl Benzyl Phthalate	5.00 U	5.00 U	0.028 U	0.026 U	0.026 U	5.00 U	0.027 U	0.026 U	0.026 U	0.026 U	5.00 U	**0.13** J	0.026 U	0.026 U	0.026 U	**0.050** J	**0.074** J	0.026 U
Di-n-octyl Phthalate	5.00 U	5.00 U	0.035 U	0.032 U	0.032 U	5.00 U	0.034 U	0.032 U	0.032 U	0.032 U	5.00 U	0.032 U	0.032 U	0.032 U	0.032 U	0.033 U	0.032 U	0.032 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. D = reported result is from a dilution.

TABLE 4
PAHs and SVOCs (µg/L)
Groundwater
McCall Oil and Chemical

Sample Designation	MW-10		MW-10		MW-10		MW-11		MW-11		MW-12		MW-12		MW-12		MW-13		MW-13 Dup		MW-13		MW-13		MW-14		MW-15	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	01/22/02		03/06/02		10/03/02		01/22/02		03/08/02		01/22/02		03/06/02		10/04/02		01/22/02		01/22/02		03/06/02		10/04/02		02/11/04		02/12/04	
LPAHs																												
Naphthalene	**0.058**	J	**0.24**		0.012	U	0.012	U	0.12	U	**0.11**	J	**0.12**	J	0.012	U	**0.190**	J	**0.25**		**0.24**		**0.10**	J	**0.023**	J	**0.016**	J
Acenaphthylene	**0.019**	J	**0.022**	J	0.011	U	0.011	U	0.110	U	**0.017**	J	**0.028**	J	0.011	U	**0.031**	J	**0.042**	J	**0.054**	J	**0.022**	J	0.011	U	0.011	U
Acenaphthene	**0.120**	J	0.009	U	0.0088	U	**0.43**		**1.6**	JD	**0.190**	J	**0.15**	J	**0.25**		**0.087**	J	**0.093**	J	**0.18**	J	**0.25**		**0.0310**	J	0.0088	U
Fluorene	0.012	U	0.013	U	0.012	U	**0.86**		**2.0**	D	0.012	U	0.013	U	0.012	U	**0.041**	J	**0.033**	J	**0.037**	J	0.012	U	0.012	U	0.012	U
Phenanthrene	**0.073**	J	**0.08**	J	**0.012**	J	**1.80**		**3.0**	D	**0.11**	J	**0.11**	J	**0.15**	J	**0.11**	J	**0.13**	J	**0.19**	J	**0.14**	J	0.011	U	0.011	U
Anthracene	**0.032**	J	**0.029**	J	**0.029**	J	**0.41**		**0.660**	JD	**0.019**	J	0.016	U	**0.054**	J	**0.025**	J	**0.033**	J	**0.041**	J	**0.019**	J	0.015	U	**0.070**	J
2-Methylnaphthalene	0.012	U	**0.015**	J	0.012	U	**20**	D	**24**	D	**0.036**	J	**0.034**	J	0.012	U	**0.058**	J	**0.073**	J	**0.056**	J	**0.026**	J	0.012	U	0.012	U
Total LPAH	**0.30**		**0.39**		**0.04**		**23.50**		**31.26**		**0.48**		**0.44**		**0.45**		**0.54**		**0.65**		**0.80**		**0.56**		**0.054**		**0.086**	
HPAHs																												
Fluoranthene	**0.081**	J	**0.10**	J	**0.016**	J	**0.43**		**0.38**	JD	**0.036**	J	**0.058**	J	0.013	U	**0.10**	J	**0.12**	J	**0.14**	J	**0.058**	J	0.013	U	0.013	U
Pyrene	**0.130**	J	**0.15**	J	**0.059**	J	**0.61**		**0.89**	JD	**0.076**	J	**0.11**	J	**0.10**	J	**0.14**	J	**0.19**	J	**0.19**	J	**0.11**	J	0.015	U	**0.021**	J
Benz(a)anthracene	**0.078**	J	**0.081**	J	**0.026**	J	0.012	U	**0.23**	JD	0.012	U	**0.052**	J	0.012	U	**0.038**	J	**0.053**	J	**0.063**	J	0.012	U	0.012	U	0.012	U
Chrysene	**0.084**	J	**0.094**	J	**0.017**	J	**0.13**	J	**0.50**	JD	**0.047**	J	**0.046**	J	0.014	U	**0.052**	J	**0.056**	J	**0.075**	J	0.014	U	0.014	U	0.014	U
Benzo(b)fluoranthene	**0.056**	J	**0.070**	J	0.020	U	0.02	U	0.20	U	0.020	U	0.021	U	0.020	U	0.020	U	**0.072**	J	0.020	U	0.020	U	0.020	U	0.020	U
Benzo(k)fluoranthene	0.020	U	**0.037**	J	0.020	U	0.02	U	0.20	U	0.020	U	0.021	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U
Benzo(a)pyrene	**0.071**	J	**0.090**	J	0.016	U	0.016	U	0.16	U	0.016	U	0.018	U	0.016	U	**0.044**	J	**0.072**	J	**0.098**	J	0.016	U	0.016	U	0.016	U
Indeno(1,2,3-cd)pyrene	0.024	U	**0.052**	J	0.024	U	0.024	U	0.24	U	0.024	U	0.026	U	0.024	U	0.024	U	**0.053**	J	**0.082**	J	0.024	U	0.024	U	0.024	U
Dibenz(a,h)anthracene	0.031	U	0.031	U	0.031	U	0.031	U	0.31	U	0.031	U	0.033	U	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U
Benzo(g,h,i)perylene	**0.047**	J	**0.061**	J	0.017	U	0.017	U	0.17	U	0.017	U	**0.047**	J	0.017	U	0.017	U	**0.072**	J	**0.110**	J	**0.021**	J	0.017	U	0.017	U
Total HPAHs	**0.55**		**0.74**		**0.12**		**1.17**		**2.00**		**0.16**		**0.31**		**0.10**		**0.37**		**0.69**		**0.76**		**0.26**				**0.021**	
SVOCs																												
3- and 4-Methylphenol Coelution	0.051	U	0.053	U	0.051	U	0.051	U	0.510	U	**1.9**		**0.41**	J	**0.07**	J	**28**	D	**31**	D	**1.5**		**0.4**	J	0.051	U	0.051	U
Dibenzofuran	0.014	U	0.014	U	0.014	U	0.014	U	**0.81**	JD	0.20	U	0.015	U	0.014	U	**0.018**	J	**0.021**	J	**0.021**	J	0.014	U	0.014	U	0.014	U
Butyl Benzyl Phthalate	**0.045**	J	**0.040**	J	0.026	U	0.026	U	0.26	U	0.20	U	0.028	U	0.026	U	0.026	U	0.026	U	0.027	U	0.026	U	0.026	U	0.026	U
Di-n-octyl Phthalate	0.032	U	0.033	U	0.032	U	0.032	U	0.32	U	0.20	U	0.035	U	0.032	U	0.032	U	0.032	U	0.034	U	0.032	U	0.032	U	0.032	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. D = reported result is from a dilution.

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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 (MEK)	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
EX-1	Water	05/02/97		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	**1.8**		0.5 U	2.0 U	0.5 U	**4.4**	20 U	0.5 U	**9.9**	**5.9**	0.5 U	**240**	0.5 U	0.5 U
EX-1	Water	05/02/97		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	**1.7**		0.5 U	2.0 U	0.5 U	**3.9**	20 U	0.5 U	**8.3**	**5.2**	0.5 U	**270**	0.5 U	0.5 U
EX-1	Water	02/04/99		50 U	50 U	50 U	50 U	50 U	50 U	2000 U	50 U		50 U	200 U	50 U	50 U	2000 U	50 U	50 U	50 U	50 U	**120**	50 U	50 U
EX-1	Water	02/04/99		50 U	50 U	50 U	50 U	50 U	50 U	2000 U	50 U		50 U	200 U	50 U	50 U	2000 U	50 U	50 U	50 U	50 U	**130**	50 U	50 U
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
EX-1	Water	03/07/02		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	**3.2** D	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**13** D	2.5 U	2.5 U
EX-1	Water	10/03/02		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	0.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**11**	2.5 U	2.5 U
EX-1	Water	02/11/04		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	0.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**22** D	2.5 U	2.5 U
EX-1 Duplicate	Water	02/11/04		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	0.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**24** D	2.5 U	2.5 U
EX-2	Water	05/01/97		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	2.0 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
EX-2	Water	02/04/99		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	1.0 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
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
EX-2	Water	10/04/02		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	2.0 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
EX-2	Water	03/07/02		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	2.0 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
EX-3	Water	05/01/97		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	2.0 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
EX-3	Water	02/04/99		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	1.0 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
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
EX-3	Water	03/07/02		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	2.0 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
EX-3	Water	10/03/02		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	2.0 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
EX-4/MW-2	Water	05/01/97		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	2.0 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
EX-4/MW-2	Water	02/03/99		0.5 U	0.5 U	**0.8**	0.5 U	0.5 U	0.5 U	20 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
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
EX-4/MW-2	Water	03/07/02		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	2.0 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
EX-4/MW-2	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U
EX-4/MW-2	Water	02/13/04		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	2.0 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
EX-5	Water	05/01/97		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	2.0 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
EX-5	Water	05/01/97		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	2.0 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
EX-5	Water	02/04/99		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	1.0 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
EX-5	Water	02/04/99		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	1.0 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
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
EX-5	Water	03/07/02		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	2.0 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
EX-5	Water	10/04/02		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U		**1.4**	2.0 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
EX-6	Water	05/02/97		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	2.0 U	0.5 U	**1.0**	20 U	0.5 U	**2.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EX-6	Water	02/04/99		0.5 U	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	1.0 U	0.5 U	**0.8**	20 U	0.5 U	**3.8**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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
EX-1	Water	05/02/97	0.5 U	0.5 U	**410**	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	**3300**	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
EX-1	Water	05/02/97	0.5 U	0.5 U	**470**	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	**3600**	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
EX-1	Water	02/04/99	50 U	50 U	**220**	50 U	50 U	50 U	2000 U	50 U	50 U	50 U	50 U	2000 U	50 U	**2600**	50 U	200 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
EX-1	Water	02/04/99	50 U	50 U	**250**	50 U	50 U	50 U	2000 U	50 U	50 U	50 U	50 U	2000 U	50 U	**3000**	50 U	200 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
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
EX-1	Water	03/07/02	2.5 U	2.5 U	**32** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**480** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
EX-1	Water	10/03/02	2.5 U	2.5 U	**25**	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**340** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
EX-1	Water	02/11/04	2.5 U	2.5 U	**82** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**1700** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
EX-1 Duplicate	Water	02/11/04	2.5 U	2.5 U	**89** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**1700** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
EX-2	Water	05/01/97	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
EX-2	Water	02/04/99	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
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
EX-2	Water	10/04/02	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
EX-2	Water	03/07/02	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
EX-3	Water	05/01/97	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
EX-3	Water	02/04/99	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
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
EX-3	Water	03/07/02	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
EX-3	Water	10/03/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.3**	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
EX-4/MW-2	Water	05/01/97	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
EX-4/MW-2	Water	02/03/99	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
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
EX-4/MW-2	Water	03/07/02	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
EX-4/MW-2	Water	10/03/02	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	**1.3**	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
EX-4/MW-2	Water	02/13/04	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
EX-5	Water	05/01/97	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
EX-5	Water	05/01/97	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
EX-5	Water	02/04/99	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
EX-5	Water	02/04/99	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
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
EX-5	Water	03/07/02	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
EX-5	Water	10/04/02	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
EX-6	Water	05/02/97	0.5 U	0.5 U	**2.6**	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	**0.7**	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
EX-6	Water	02/04/99	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

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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
EX-1	Water	05/02/97	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-1	Water	05/02/97	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-1	Water	02/04/99	200 U	50 U	50 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	50 U	200 U	50 U	200 U	50 U	200 U	200 U	200 U	200 U	200 U
EX-1	Water	02/04/99	200 U	50 U	50 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	50 U	200 U	50 U	200 U	50 U	200 U	200 U	200 U	200 U	200 U
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-1	Water	03/07/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
EX-1	Water	10/03/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
EX-1	Water	02/11/04	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
EX-1 Duplicate	Water	02/11/04	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
EX-2	Water	05/01/97	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	02/04/99	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-2	Water	10/04/02	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	03/07/02	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	05/01/97	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	02/04/99	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-3	Water	03/07/02	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	10/03/02	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	05/01/97	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	02/03/99	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-4/MW-2	Water	03/07/02	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	10/03/02	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	02/13/04	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	05/01/97	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	05/01/97	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	02/04/99	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	02/04/99	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-5	Water	03/07/02	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	10/04/02	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-6	Water	05/02/97	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-6	Water	02/04/99	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 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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 (MEK)	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
EX-7	Water	05/02/97		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	2.0 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
EX-7	Water	02/03/99		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	1.0 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
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
EX-7	Water	03/06/02		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	2.0 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
EX-7	Water	10/03/02		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	2.0 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
MW-1	Water	05/01/97		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	**0.9**		0.5 U	2.0 U	0.5 U	**7.4**	20 U	0.5 U	**0.7**	**12.0**	0.5 U	**8.0**	0.5 U	0.5 U
MW-1	Water	02/03/99		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	1.0 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
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
MW-1	Water	03/06/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**9.7**	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**3.6**	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	02/11/04		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	2.0 U	0.5 U	**0.58**	20 U	0.5 U	**2.2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	05/01/97		0.5 U	0.5 U	**5.9**	0.5 U	**0.5**	0.5 U	20 U	0.5 U		0.5 U	2.0 U	0.5 U	**0.6**	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-3	Water	02/04/99		0.5 U	0.5 U	**2.6**	0.5 U	0.5 U	0.5 U	20 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
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
MW-3	Water	03/07/02		0.5 U	0.5 U	**2.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
MW-3 Duplicate	Water	03/07/02		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	2.0 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
MW-3	Water	10/03/02		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	2.0 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
MW-3	Water	02/11/04		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	2.0 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
MW-4	Water	05/01/97		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	2.0 U	0.5 U	**3.5**	20 U	0.5 U	**4.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-4	Water	02/03/99		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	1.0 U	0.5 U	**0.8**	20 U	0.5 U	**4.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
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
MW-4	Water	03/07/02		0.5 U	0.5 U	**2.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
MW-4	Water	10/03/02		0.5 U	0.5 U	**0.69**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.59**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-5	Water	05/01/97		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	2.0 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
MW-5	Water	02/03/99		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	1.0 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
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
MW-5	Water	03/07/02		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	2.0 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
MW-5	Water	10/03/02		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	2.0 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
MW-5 Duplicate	Water	10/03/02		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	2.0 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
MW-5	Water	02/11/04		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	2.0 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
MW-6	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.8**	**6.4**	50 U	2.5 U	**422**	2.5 U	2.5 U	**7.45**	2.5 U	2.5 U
MW-6 Duplicate	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.6**	**6.9**	50 U	2.5 U	**411**	2.5 U	2.5 U	**7.65**	2.5 U	2.5 U
MW-6	Water	03/08/02		2.5 U	2.5 U	**5.6** D	2.5 U	2.5 U	2.5 U	100 U	**3.8** D		2.5 U	10.0 U	**4.0** D	**11.0** D	100 U	2.5 U	**700** D	2.5 U	2.5 U	**22** D	2.5 U	2.5 U
MW-6	Water	10/03/02		1.3 U	1.3 UJ	**11.0** D	1.3 U	1.3 U	1.3 U	50 U	**2.9** D		1.3 U	5.0 U	**3.8** D	**7.5** D	50 U	1.3 U	**770** D	1.3 U	1.3 U	**7.7** D	1.3 U	1.3 U
MW-6 Duplicate	Water	10/03/02		1.3 U	1.3 UJ	**12.0** D	1.3 U	1.3 U	1.3 U	50 U	**3.0** D		1.3 U	5.0 U	**3.9** D	**7.8** D	50 U	1.3 U	**740** D	1.3 U	1.3 U	**8.0** D	1.3 U	1.3 U

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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
EX-7	Water	05/02/97	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
EX-7	Water	02/03/99	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
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
EX-7	Water	03/06/02	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
EX-7	Water	10/03/02	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
MW-1	Water	05/01/97	0.5 U	0.5 U	**28.0**	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	**110**	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
MW-1	Water	02/03/99	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	**1.7**	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
MW-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
MW-1	Water	03/06/02	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	**3.2**	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
MW-1	Water	10/03/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**0.9**	0.5 U	0.5 U	20 U	0.5 U	**1.4**	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
MW-1	Water	02/11/04	0.5 U	0.5 U	**5.2**	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	**2.3**	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
MW-3	Water	05/01/97	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	0.7 Total	0.5 U	0.5 U	0.5 U
MW-3	Water	02/04/99	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
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
MW-3	Water	03/07/02	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
MW-3 Duplicate	Water	03/07/02	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
MW-3	Water	10/03/02	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
MW-3	Water	02/11/04	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
MW-4	Water	05/01/97	0.5 U	0.5 U	**8.1**	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	**11.0**	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
MW-4	Water	02/03/99	0.5 U	0.5 U	**2.0**	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	**2.5**	**1.9**	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
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
MW-4	Water	03/07/02	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
MW-4	Water	10/03/02	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
MW-5	Water	05/01/97	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
MW-5	Water	02/03/99	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
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
MW-5	Water	03/07/02	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
MW-5	Water	10/03/02	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
MW-5 Duplicate	Water	10/03/02	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
MW-5	Water	02/11/04	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
MW-6	Water	10/25/01	2.5 U	5 U	**20.5**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**23**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6 Duplicate	Water	10/25/01	2.5 U	5 U	**20.6**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**21.2**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6	Water	03/08/02	2.5 U	2.5 U	**200** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**360** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-6	Water	10/03/02	1.3 U	1.3 U	**33** D	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	**40** D	1.3 U	5.0 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-6 Duplicate	Water	10/03/02	1.3 U	1.3 U	**36** D	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	**43** D	1.3 U	5.0 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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
EX-7	Water	05/02/97	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	02/03/99	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
EX-7	Water	03/06/02	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	10/03/02	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	05/01/97	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	02/03/99	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-1	Water	03/06/02	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	10/03/02	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	02/11/04	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	05/01/97	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	02/04/99	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-3	Water	03/07/02	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 Duplicate	Water	03/07/02	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	10/03/02	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	02/11/04	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	05/01/97	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	02/03/99	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-4	Water	03/07/02	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	10/03/02	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	05/01/97	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	02/03/99	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
MW-5	Water	03/07/02	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	10/03/02	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 Duplicate	Water	10/03/02	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	02/11/04	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-6	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6 Duplicate	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6	Water	03/08/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
MW-6	Water	10/03/02	5.0 U	1.3 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-6 Duplicate	Water	10/03/02	5.0 U	1.3 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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 (MEK)	2,2-Dichloropropane	*cis*-1, 2-dichloroethene	Chloroform	Bromochloromethane	1,1,1-Trichloroethane	1,1-Dichloropropene	Carbon Tetrachloride
MW-6	Water	02/12/04		1.3 U	1.3 U	**11.0** D	1.3 U	1.3 U	1.3 U	50 U	**2.5** D		1.3 U	5.0 U	**3.6** D	**4.5** D	50 U	1.3 U	**630** D	1.3 U	1.3 U	**7.6** D	1.3 U	1.3 U
MW-7	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	**2.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	03/08/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**2.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/04/02		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	2.0 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
MW-7	Water	02/12/04		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**5.2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7 Duplicate	Water	02/12/04		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**5.3**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	**1.21**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	03/07/02		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	2.0 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
MW-8	Water	10/04/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	02/12/04		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	2.0 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
MW-9	Water	01/22/02		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	2.0 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
MW-9	Water	03/06/02		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	2.0 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
MW-9 Duplicate	Water	03/06/02		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	2.0 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
MW-9	Water	10/03/02		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	2.0 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
MW-9	Water	10/03/02		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	2.0 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
MW-10	Water	01/22/02		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	2.0 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
MW-10	Water	03/06/02		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	2.0 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
MW-10	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.69**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-10	Water	02/13/04		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	2.0 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
MW-11	Water	01/22/02		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	2.0 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
MW-11	Water	03/08/02		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	2.0 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
MW-12	Water	01/22/02		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	2.0 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
MW-12	Water	03/06/02		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	2.0 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
MW-12	Water	10/04/02		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	2.0 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
MW-13	Water	01/22/02		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	2.0 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
MW-13	Water	03/06/02		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	2.0 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
MW-13 Duplicate	Water	03/06/02		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	2.0 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
MW-13	Water	10/04/02		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	2.0 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
MW-14	Water	02/12/04		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	2.0 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
MW-15	Water	02/12/04		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	2.0 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 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

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
MW-6	Water	02/12/04	1.3 U	1.3 U	**71** D	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	**70** D	1.3 U	5.0 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**3.4**	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
MW-7	Water	10/04/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**2.4**	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
MW-7	Water	02/12/04	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
MW-7 Duplicate	Water	02/12/04	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
MW-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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
MW-8	Water	10/04/02	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
MW-8	Water	02/12/04	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
MW-9	Water	01/22/02	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
MW-9	Water	03/06/02	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
MW-9 Duplicate	Water	03/06/02	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
MW-9	Water	10/03/02	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
MW-10	Water	01/22/02	0.5 U	0.5 U	**0.57**	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
MW-10	Water	03/06/02	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
MW-10	Water	10/03/02	0.5 U	0.5 U	**1.7**	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
MW-10	Water	02/13/04	0.5 U	0.5 U	**0.66**	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
MW-11	Water	01/22/02	0.5 U	**2.0**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.6**	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	**4.7**	**3.1**	**8.2**	0.5 U	0.5 U
MW-11	Water	03/08/02	0.5 U	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.1**	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	**2.9**	**2.3**	**5.2**	0.5 U	0.5 U
MW-12	Water	01/22/02	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
MW-12	Water	03/06/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**0.52**	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
MW-12	Water	10/04/02	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
MW-13	Water	01/22/02	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
MW-13	Water	03/06/02	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
MW-13 Duplicate	Water	03/06/02	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
MW-13	Water	10/04/02	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
MW-14	Water	02/12/04	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
MW-15	Water	02/12/04	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 5
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall Oil and Chemical

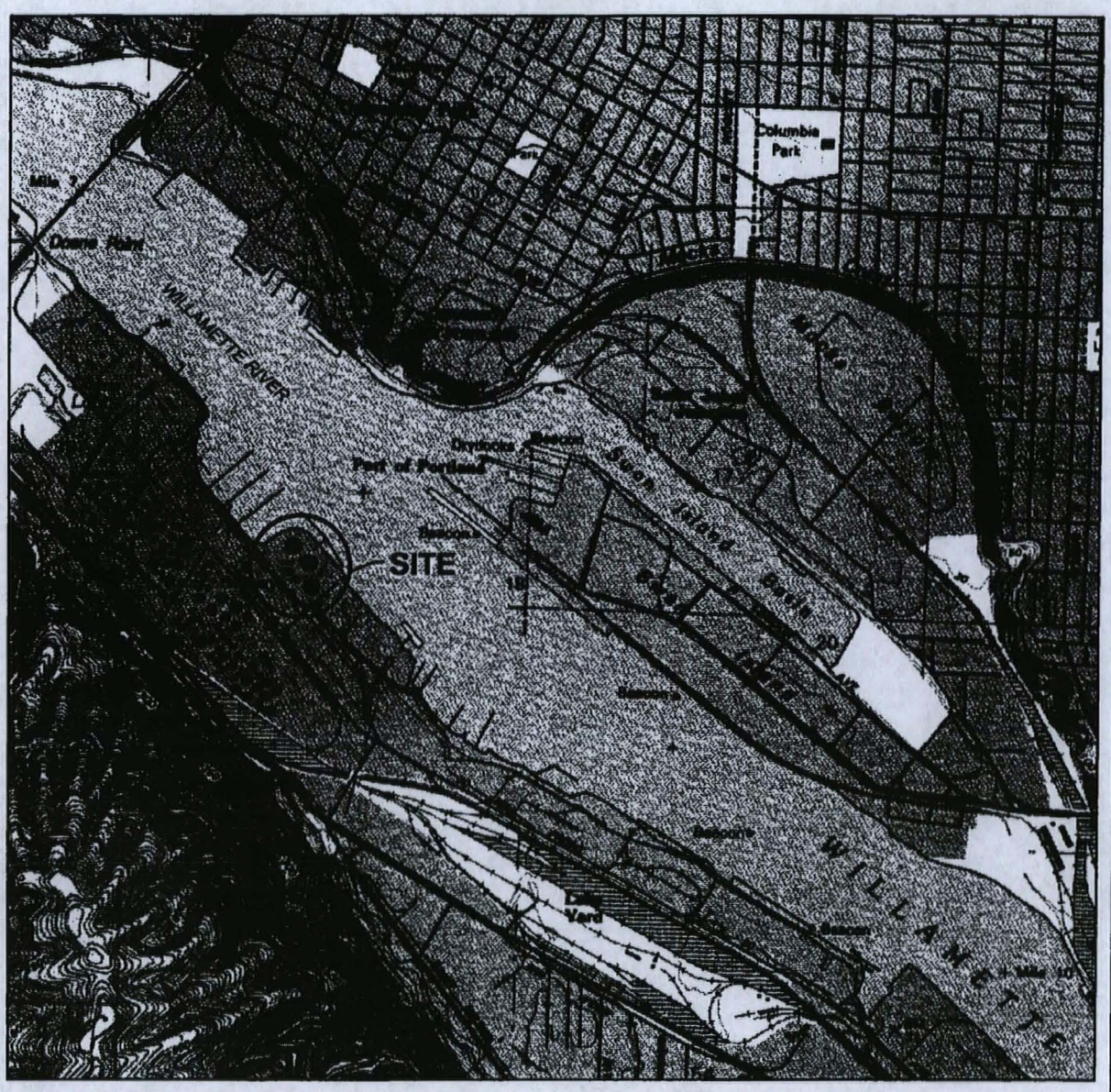
Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-6	Water	02/12/04	5.0 U	1.3 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	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-7	Water	10/04/02	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-7	Water	02/12/04	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-7 Duplicate	Water	02/12/04	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-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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-8	Water	10/04/02	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-8	Water	02/12/04	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-9	Water	01/22/02	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-9	Water	03/06/02	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-9 Duplicate	Water	03/06/02	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-9	Water	10/03/02	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-10	Water	01/22/02	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-10	Water	03/06/02	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-10	Water	10/03/02	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-10	Water	02/13/04	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-11	Water	01/22/02	**4.2**	0.5 U	0.5 U	2.0 U	**6.1**	2.0 U	2.0 U	2.0 U	2.0 U	**4.5**	2.0 U	0.5 U	2.0 U	0.5 U	**2.4**	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-11	Water	03/08/02	**3.6**	0.5 U	0.5 U	2.0 U	**5.2**	2.0 U	2.0 U	2.0 U	2.0 U	**3.3**	2.0 U	0.5 U	2.0 U	0.5 U	**2.3**	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-12	Water	01/22/02	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-12	Water	03/06/02	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-12	Water	10/04/02	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-13	Water	01/22/02	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	**4.8**	2.0 U
MW-13	Water	03/06/02	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-13 Duplicate	Water	03/06/02	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-13	Water	10/04/02	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-14	Water	02/12/04	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-15	Water	02/12/04	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

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 6
Metals
Groundwater
McCall Oil and Chemical

Location		Matrix	Date Sampled	Arsenic	Chromium	Copper
MW-6	Total	Water	10/25/01	29.8	67.8	98.8
MW-6 Duplicate	Total	Water	10/25/01	27.3	35.0	48.6
MW-6	Dissolved	Water	10/25/01	18.2	1.00 U	2.00 U
MW-6 Duplicate	Dissolved	Water	10/25/01	19.0	1.00 U	2.00 U
MW-6	Total	Water	03/08/02	6.8	9.6	18.3
MW-6	Dissolved	Water	03/08/02	20.4	0.80	2.5
MW-6	Dissolved	Water	10/03/02	23.5	0.20	0.6
MW-6 Duplicate	Dissolved	Water	10/03/02	23.3	0.30	0.9
MW-6	Total	Water	02/12/04	22.6		
MW-6	Dissolved	Water	02/12/04	22.6		
MW-7	Total	Water	10/25/01	18.1	127	164
MW-7	Dissolved	Water	10/25/01	3.04	1.00 U	2.00 U
MW-7	Total	Water	03/08/02	4.4	9.1	19.1
MW-7	Dissolved	Water	03/08/02	3.5	2.3	1.3
MW-7	Dissolved	Water	10/04/02	9.1	2.1	0.7
MW-7	Total	Water	02/12/04	5	0.7	0.5
MW-7 Duplicate	Total	Water	02/12/04	5	0.8	0.4
MW-7	Dissolved	Water	02/12/04	5.1	2.0	0.3
MW-7 Duplicate	Dissolved	Water	02/12/04	5.1	0.7	0.3
MW-8	Total	Water	10/25/01	43.9	225	394
MW-8	Dissolved	Water	10/25/01	2.33	1.00 U	2.00 U
MW-8	Total	Water	03/07/02	4.3	14.7	36.1
MW-8	Dissolved	Water	03/07/02	8.6	2.9	1.3
MW-8	Dissolved	Water	10/04/02	9.6	1.4	0.3
MW-8	Total	Water	02/12/04	5.4	1.7	2.0
MW-8	Dissolved	Water	02/12/04	5.6	0.8	0.2
MW-9	Total	Water	02/13/04	18.3		
MW-9	Dissolved	Water	02/13/04	19.0		
MW-10	Total	Water	02/13/04	30.9		
MW-10	Dissolved	Water	02/13/04	28.9		
MW-12	Total	Water	02/13/04	23.3		
MW-12	Dissolved	Water	02/13/04	23.7		
MW-14	Total	Water	02/12/04	1.5	1.3	1.7
MW-14	Dissolved	Water	02/12/04	1.5	2.6	1.3
MW-15	Total	Water	02/12/04	3.5		
MW-15	Dissolved	Water	02/12/04	3.4		

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

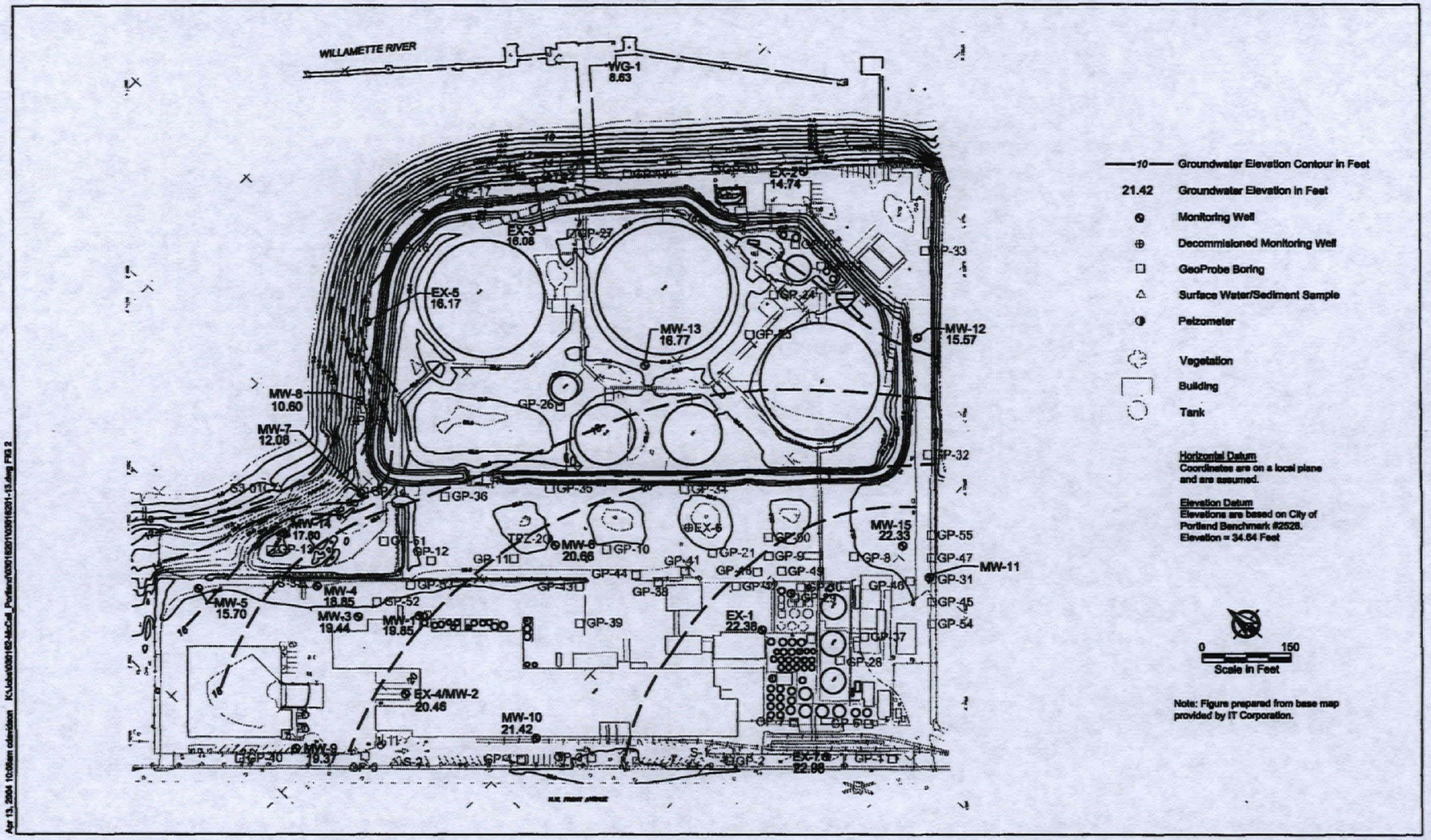


0 2000
Scale in Feet

May 09, 2003 2:19pm cdavidson I:\CAD\Jobs\030162-McCall_Portland\030162\01\030162201-12.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Vicinity Map
McCall Oil and Chemical



Apr 13, 2004 10:08am cdavidson K:\Jobs\030162-McCall_Portland\03016201\03016201-13.dwg FIG 2

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Groundwater Potentiometric Surface Contour Map
February 11, 2004
McCall Oil and Chemical

ATTACHMENT A

BORING LOGS
AND
WELL INSTALLATION DETAILS

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	1 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	40.17
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (In feet)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
SS	1.1	5 11 22		5				**5.0 to 6.5 feet: SAND (SP)**; medium to dark brown; fine to medium sand; trace silt; moist.
SS	0.3	50		10				**10.0 to 10.5 feet: SANDY GRAVEL WITH SILT (GW-GM)**; medium brown; fine to medium; angular to subrounded gravel; fine to coarse sand; nonplastic to low plasticity fines; dense; moist.
SS	1.3	30 5 10		15				**15.0 to 16.5 feet: SILTY SAND (SM)**; medium brown; fine sand; 15 to 25 percent nonplastic fines; medium density; moist.
				20				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	2 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	40.17
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (In feet)	BLOWS PER 6 INCHES	LITHOLOGIC DESCRIPTION
SS	1.5	3 4 8	**20.0 to 21.5 feet: SILT (ML)**; dark gray; low plasticity fines; trace fine sand; trace wood debris and glass; stiff; moist to wet.
SS	1.5	4 5 8	**25.0 to 26.5 feet: SILTY SAND (SP)**; dark gray; fine sand interbedded with nonplastic to low plasticity fines; wet.
SS	1.3	3 4 6	**30.0 to 31.5 feet: SILT (ML)**; dark gray; low plasticity fines; 5 to 10 percent fine sand; trace roots and wood fragments; wet.
SS	1.5	3 4 8	**35.0 to 36.5 feet: SILT (ML)**; same as above.
			Boring terminated at 35.0 feet. Split-spoon advanced to 36.5 feet.
			See Page 3 for Well Completion Details

GROUND WATER LEVEL | DEPTH IN FEET | SAMPLES | WELL DETAILS | LITHOLOGIC COLUMN

25
30
35
40

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-14
LOCATION		PAGE	3 of 3
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	40.17
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	35.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163329 L68690

SAMPLE METHOD	RECOVERY (in feet)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
				45				**WELL COMPLETION DETAILS** 0 to 20.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 20.8 to 34.8 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots. 34.8 to 35.3 feet: 2-inch-diameter threaded end cap. 0 to 2.0 feet: Concrete. 2.0 to 18.0 feet: Pure Gold bentonite chips hydrated with potable water. 18.0 to 35.3 feet: 20-40 Colorado silica sand.
				50				
				55				
				60				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-15
LOCATION		PAGE	1 of 2
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	33.56
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163328 L64734

SAMPLE METHOD	RECOVERY (In feet)	BLOWS PER 6 INCHES	SAMPLES	LITHOLOGIC DESCRIPTION
				0 to 5.5 feet: SANDY GRAVEL WITH SILT (GW-GM); medium brown; fine to coarse; angular to subrounded gravel; fine to coarse sand; 10 to 20 percent nonplastic to low plasticity fines; moist.
SS	1.0	20 11 12	5	**5.5 to 6.0 feet: SILT (ML);** medium brown; nonplastic to low plasticity fines; trace brick and wood fragments; moist.
SS	0.6	30 21 11	10	**10.0 to 11.5 feet: SILTY SAND (SM);** dark brown to black; fine to medium sand; nonplastic to low plasticity fines; trace wood; wire; and brick fragments; moist.
SS	1.5	7 8 10	15	**15.0 to 16.0 feet: SAND (SP);** dark gray; fine sand; loose; wet.
				16.0 to 16.5 feet: SILT (SM); dark gray to black; low plasticity fines with wood and root fragments; 5 to 10 percent fine sand; wet.
			20	

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF EXPLORATORY BORING

PROJECT NAME	McCall Oil and Chemical	BORING NO.	MW-15
LOCATION		PAGE	2 of 2
DRILLED BY	Cascade Drilling, Inc.	REFERENCE ELEVATION	33.56
DRILL METHOD	Hollow-stem Auger	TOTAL DEPTH	25.0'
LOGGED BY	Craig Wells	DATE COMPLETED	12/31/03
BOREHOLE DIAMETER	10.25-inch	PERMIT/STARTCARD NO.	163328 L64734

SAMPLE METHOD	RECOVERY (In feet)	BLOWS PER 6 INCHES	GROUND WATER LEVEL	DEPTH IN FEET	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
SS	0.4	8 10 11						**20.0 to 21.5 feet: SAND (SP)**; grayish brown; fine sand; 5 to 15 percent nonplastic fines; wet.
SS	1.4	3 7 13		25				**25.0 to 25.5 feet: SAND (SP)**; same as above. **25.5 to 26.5 feet: SILT (ML)**; tan; medium plasticity fines; trace orange streaks; stiff; moist. Boring terminated at 25.0 feet. Split-spoon advanced to 36.5 feet. **WELL COMPLETION DETAILS** 0 to 9.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC blank riser pipe. 9.5 to 24.5 feet: 2-inch-diameter, flush-threaded, Schedule 40 PVC well screen with 0.010-inch machined slots. 24.5 to 25.0 feet: 2-inch-diameter threaded end cap. 0 to 2.0 feet: Concrete. 2.0 to 8.0 feet: Pure Gold bentonite chips hydrated with potable water. 8.0 to 25.0 feet: 20-40 Colorado silica sand.
				30				
				35				
				40				

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

ATTACHMENT B

WELL DEVELOPMENT FORMS

WELL DEVELOPMENT FORM

ANCHOR ENVIRONMENTAL, L.L.C.

Project No.	Date: 2/9/04 Well: MW-14	
Site Location: McCall Portland, Oregon	Initial DTB: 36.50	Final DTB: 37.45
Name: Tim Stone	Initial DTW: 22.54	Final DTW: 22.66
Development Method: surge/bail/pump	Pore Volume: 2.28 gallons	
Total Water Removed: 40 gallons	Casing Diameter: (2")	
Water Contained ? Yes	Meter #: 16903	
Estimate of specific capacity or recharge to well:		

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
1415	—	—	—	—	—	22.54	Begin surging w/ Bailer
1430	2.0	600	NM	NM	NM	22.58	INSTALL Submersible pump
1435	4.6	300	16.83	634	6.03	25.2	Cloudy / grey-brown
1440	6.9	100	16.85	635	6.06	25.2	Cloudy / grey-brown - Surged w/ pump
1445	9.2	200	16.73	622	6.15	25.8	~~slight~~ Cloudy - tan/grey
1450	11.5	<50	16.94	644	6.31	26.2	slight cloudy - tan. Moved pump to bottom
1455	13.8	~~≤~~ 300	16.97	645	6.31	26.2	~~slight~~ Cloudy - tan/grey
1500	16.1	<1	16.90	650	6.38	26.2	slight cloudy - tan
1505	18.4	<1	16.93	651	6.34	26.3	clear / colorless
1510	20.7	<1	17.01	649	6.33	26.3	clear / colorless
1515	23.0	<1	17.01	649	6.33	26.3	clear / colorless
1530	40.0	<1	17.04	648	6.32	26.3	clear / colorless
1545	40	—	—	—	—	22.66	

WELL DEVELOPMENT FORM

ANCHOR ENVIRONMENTAL, L.L.C.

Project No.	Date: 2/10/04 Well: MW-15	
Site Location: McCall Portland, Oregon	Initial DTB: 24.35	Final DTB: 24.40
Name: Tim Stone	Initial DTW: 11.23	Final DTW: 11.25
Development Method: surge/bail/pump	Pore Volume: 2.14	
Total Water Removed:	Casing Diameter: 2"	
Water Contained? Yes	Meter #: 16903	
Estimate of specific capacity or recharge to well:		

Time	Cum. Vol. Removed	Sand/Silt (ml/1000ml)	Temp.	EC	pH	DTW (TOC)	Appearance/Comments
0930	0	—	—	—	—	11.23	Begin surging with bailer
0945	2.0	—	—	—	—	11.25	INSTALLED PUMP & TUBING
0953	2.0	—	—	—	—	11.25	Begin pumping w/ peristaltic pump
1000	4.5	600	14.81	518	5.79	11.38	Cloudy - Brown
1006	7.0	400	13.29	645	6.50	11.30	Cloudy - Brown/Tan
1011	9.5	100	15.04	571	6.23	11.34	slight cloudy/Tan
1016	12.0	5	15.11	566	6.28	11.36	slight cloudy/Tan surged with bailer
1021	14.5	10	15.04	560	6.28	11.34	slight cloudy/Tan
1027	17.0	2	14.66	541	6.13	11.35	slight tan tint
1033	19.5	<1	15.48	505	6.23	11.30	Clear/Colorless
1040	22.0	<1	15.45	504	6.36	11.29	Clear/Colorless
1048	24.5	<1	15.52	504	6.29	11.31	Clear/Colorless
1058	27.0	<1	15.54	504	6.30	11.28	Clear/colorless
1100	28.0	<1	15.54	505	6.29	11.30	Clear/colorless
1100	28.0	—	—	—	—	11.30	END PUMPING
1115	28.0	—	—	—	—	11.25	

ATTACHMENT C

FIELD SAMPLING DATA SHEETS

McCall Oil Chemical Corporation
Task Sheet
February 2004

Site	Time	DTB	DTW	Blind Code	Sample Time	Well Integrity
Monitoring Wells						
EX-1	12:45	24.10	13.74	MO-021104-4	16:05	✓
EX-2	10:20	24.62	17.54	MO-021204-6	10:00	✓
EX-3	10:00	23.95	15.99	MO-021204-10	12:30	✓
EX-4 (MW-2)	12:00	27.30	15.14	MO-021304-17	11:45	✓
EX-7	11:15	24.60	12.31	MO-02130445	10:15	✓
MW-1	12:39	19.95	15.63	MO-021104-3	15:30	✓
MW-3	12:20	26.95	15.12	MO-021104-1	13:30	✓
MW-5	12:25	35.20	18.96	MO-021104-2	14:30	✓
MW-6	09:08	24.50	14.17	MO-021204-12	14:00	✓
MW-7	09:28	30.00	22.66	MO-021204-8	11:30	✓
MW-8	09:35	29.83	21.64	MO-021204-11	13:15	✓
MW-9	11:45	25.03	16.63	MO-021304-18	12:30	✓
MW-10	11:30	19.85	13.64	MO-021304-16	11:00	✓
MW-12	10:30	24.82	17.22	MO-021304-14	09:15	✓
MW-14	09:22	37.45	22.57	MO-021204-7	10:45	✓
MW-15	11:02	24.40	11.23	MO-021204-13	15:05	✓
QA\QC						
DUP (EX-1)	12:45	24.10	13.74	MO-021104-5	16.10	✓
DUP (MW-7)	09:28	30.00	22.66	MO-021204-9	11:40	✓
DUP	:	.	.		:	

Notes:

WATER LEVEL FORM
McCall Oil/Great Western Chemical
February 2004

2/11/04

Well	Time	DTW	Comments
EX-1	1245	13.74	
EX-2	1020	17.52	
EX-3	1000	15.99	
EX-4 (MW-2)	1200	15.14	
EX-5	0945	15.70	
EX-7	1115	12.31	
MW-1	1239	15.63	
MW-3	1220	~~15.99~~ 15.12	
MW-4	1230	14.76	
MW-5	1225	18.96	
MW-6	0908	14.17	
MW-7	0928	22.66	
MW-8	0935	21.64	
MW-9	1145	16.63	
MW-10	1130	13.64	
MW-11	NM	NM	PRODUCT WELL
MW-12	1030	17.22	
MW-13	1048	18.17	
MW-14	0922	22.57	
MW-15	1102	11.23	
WG-1	1005	28.65	
TPZ-2	0916	14.11	

Notes: 2/11/04 - Sunny/light W wind/50°F
PERSONNEL Tim Fone
PROBE#

TPZ-1 0950 16.09

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-3
SITE ADDRESS: Portland, OR
BLIND ID: MO-021104-1
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	(W)	NW	LIGHT	(MEDIUM)	HEAVY
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	TEMPERATURE:	(°F) 50.					

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:20	26.95	.	15.12	.	11.83	X1	1.93
/ /	:	.	.	.	.		X3	5.78

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2") = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	13:30	B	(3) 40 ml	(HCl)	(YES)	(NO)		√
Amber Glass	/ /	:		2* 250, 500, 1L	(HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	1	250, (500), 1L	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:	1	250, (500), 1L	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 7

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 12:50
Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.	.	
3	B	6.	6.36	961	16.81	-1.94	↑
2	B	4.	6.30	977	16.80	.	↑
1	B	2	6.31	1016	16.77	.	Clear/gellowtint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

* EXTRA Bottle for MS/MSD

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: MW-5
SITE ADDRESS: Portland, OR BLIND ID: MO- 021104-2
DUP ID: ( )

WIND FROM: N | NE | E | SE | S | SW | (W) | NW | LIGHT | MEDIUM | (HEAVY)
WEATHER: (SUNNY) | CLOUDY | RAIN | ? TEMPERATURE: °F 50 [Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water	DTP-DTW [Water Column]	DTB-DTW		Volume (gal) [Water Column x Gal/ft]
2/11/04	12:25	35.20	.	18.96	.	16.24	X1	2.65
/ /	:	.	.	.	.		X3	7.94

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | (2" = 0.163) | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	14:30	B	3	40 ml	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:		4	(250) 500 1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, (500) 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:		1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 9

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIO) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 13:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	8.1	6.61	1343	16.05	1.70	↑
2	B	5.4	6.61	1342	16.03	.	
1	B	2.7	6.56	1331	15.96	.	Clear / yellow tint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

*EXTRA Bottles for ms/msd

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** MW-1

SITE ADDRESS: Portland, OR **BLIND ID:** MO- 021104-3

DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 50

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [(Circle appropriate units) Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:59	19.95	.	15.63	.	4.32	X1	0.70
/ /	:	.	.	.	.		X3	2.11

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/11/04	15:30	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(Ag) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 15:00 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	0.56	
3	B	2.4	6.80	570	16.44	[illegible]	↑
2	B	1.6	6.83	571	16.46	.	/
1	B	0.8	6.89	564	16.45	.	Clear / Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone

(PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil WELL ID: EX-1
SITE ADDRESS: Portland, OR BLIND ID: MO-021104-4
DUP ID: MO-021104-5 (1610)

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	TEMPERATURE:	(°F) 50.					

(Circle appropriate units)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	12:45	24.10	.	13.74	.	10.36	X1	1.69
/ /	:	.	.	.	.		X3	5.07

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/11/04	16:05	B	(3) 40 ml	HCl	(YES)	NO		√
Amber Glass	/ /	:		1 250/500/1L	(None) (HCl) (H_2SO_4)	(YES)	(NO)		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 250/500/1L	(HNO_3)	(YES)	(NO)		√
Red Diss. Poly	/ /	:		1 250/500/1L	(HNO_3)	(YES)	(YES)		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (12)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 15:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	5.1	4.88	598	17.23	0.83	↑
2	B	3.4	4.91	580	17.20	.	
1	B	1.7	5.02	535	17.08	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-2
SITE ADDRESS: Portland, OR
BLIND ID: MO- 021204-6
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	TEMPERATURE:	°F 47	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/12/04	10:20	24.62		17.54		7.08	X1	1.15
/ /	:	.	.	.	.		X3	3.46

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/12/04		B	3	40 mL (HCl)	YES	NO		✓
Amber Glass	2/12/04	10:00	B	3*	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L HNO_3	YES	NO		✓
Red Diss. Poly	/ /	:	B	1	250, 500, 1L HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): 5

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FIG) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 09:20

Pump/Bailer Inlet Depth:

Meas. [Casing]	Method § [Select A-G]	Purged (gal) [Cumulative Totals]	pH	E Cond (µS)	Temp °C [Circle units]	Diss O_2 (mg/l)	Water Quality [Clarity, Color]
4		.	.		.	.	
3	B	3.6	6.43	673	18.43	0.29	
2	B	2.4	6.41	672	18.43	.	
1	B	1.2	6.39	673	18.43	.	Clear/yellowish tint
0		0.00	.		.	.	

* EXTRA PAH bottle for MS/MSD

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-14
SITE ADDRESS: Portland, OR
BLIND ID: MO-021204-7
DUP ID:

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)	CLOUDY	RAIN	?	TEMPERATURE:	(°F) 50					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	09:22	37.45	/	22.57	/	14.88	X 1	2.43
/ /	:	.	.	.	.		X 3	7.28

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N/if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/12/04	10:45	B	(3)	40 ml (HCl)	YES	NO		✓
Amber Glass	/ /	:		2	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L (HNO_3)	YES	NO		✓
Red Diss. Poly	/ /	:		1	250, (500), 1L (HNO_3)	YES	YES		✓
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIO) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 10:05

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	7.5	6.38	597	16.74	0.20	↑
2	B	5.0	6.39	596	16.81	.	↑
1	B	2.5	6.38	596	16.75	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-7
SITE ADDRESS: Portland, OR
BLIND ID: MO-021204-8
DUP ID: MO-021204-9 (1140)

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	°F (50).	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

Date	Time	DT-Bottom	DT-Product [Product Thickness]	DT-Water [Water Column]	DTP-DTW	DTB-DTW		Volume (gal) [Water Column x Gal/ft]
2/12/04	09:28	30.00	.	22.66	.	7.34	X1	1.20
/ /	:	.	.	.	.		X3	3.59

Gal/ft = (dia./2)² x 0.163	1" =	0.041	(2" =	0.163)	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	11:30	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		2	250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): X14

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-HCID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 10:50

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.6	6.31	715	15.15	0.27	↑
2	B	2.4	6.30	716	15.16	.	
1	B	1.2	6.20	720	15.10	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-3
SITE ADDRESS: Portland, OR
BLIND ID: MO-021204-10
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE: °F 50.						

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal) [Water Column x Gal/ft]
2/12/04	10:00	23.95	-	15.99	-	7.96	X1	1.30
/ /	:	.	.	.	.		X3	3.89

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/12/04	:		3	40 ml HCl	YES	NO		
Amber Glass	2/12/04	12:30	B	2	250, 500, 1L (None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L (HNO_3)	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L (HNO_3)	YES	YES		√
	/ /	:			250, 500, 1L	YES			
	Total Bottles (include duplicate count):			4					

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 11:45 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.9	6.29	681	17.90	0.44	↑
2	B	2.6	6.28	679	17.89	.	
1	B	1.3	6.39	680	17.85	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil | WELL ID: MW-8
SITE ADDRESS: Portland, OR | BLIND ID: MO-021204-11
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 50.					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	09:35	29.83	.	21.64	.	8.19	X1	1.33
/ /	:	.	.	.	.		X3	4.00

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	13:15	B	(3) 40 ml	HCl	YES	NO		✓
Amber Glass	/ /	:		2 250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	NO		✓
Red Diss. Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	YES		✓
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 12:35 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	4.2	6.08	561	15.22	0.24	Slight cloudy white Heavy
2	B	2.8	6.01	558	15.30	.	
1	B	1.4	5.93	549	15.18	.	Heavy
0		0.00	.		.	.	Slight cloudy / grey tint

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-6
SITE ADDRESS: Portland, OR
BLIND ID: MO-121204-12
DUP ID:

WIND FROM:	N	NE	(E)	SE	S	SW	W	NW	LIGHT	MEDIUM	(HEAVY)
WEATHER:	(SUNNY)		CLOUDY		RAIN		?		TEMPERATURE:	(°F) 53.	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
12/11/04	09:08	24.50	/	14.17	/	10.33	X 1	1.68
/ /	:	.	.	.	.		X 3	5.05

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	12/12/04	14:00	B	(3)	(40 ml)	(HCl)	(YES)	(NO)		✓
Amber Glass	/ /	:		1	250, (500) 1L	(None) (HCl) H_2SO_4	(YES)	(NO)		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, (500) 1L	(HNO_3)	(YES)	(NO)		✓
Red Diss. Poly	/ /	:		1	250, (500) 1L	(HNO_3)	(YES)	(YES)		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(BTEX)
AMBER - Glass	(TPH-FIO) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 13:20

Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	5.1	5.99	763	18.41	0.15	
2	B	3.4	5.95	757	18.41	.	
1	B	1.7	5.76	736	18.41	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** MW-15
SITE ADDRESS: Portland, OR **BLIND ID:** MO-021204-13
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN			?	**TEMPERATURE:** °F 53.		

(Circle appropriate value)

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:02	24.40	.	11.23	.	13.17	X 1	2.15
/ /	:	.	.	.	.		X 3	6.44

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative [circle]	Ice	Filter	pH	√
VOA Glass	2/12/04	15:05	B	(3)	(40 ml)	HCl	(YES)	NO		√
Amber Glass	/ /	:		2	250, 500, (1L)	(None) (HCl) (H_2SO_4)	(YES)	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): (7)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-Dx) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 14:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	6.6	5.38	488	15.80	0.18	
2	B	4.4	5.32	488	15.80		
1	B	2.2	5.27	490	15.76	.	Clear/colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: MW-12
SITE ADDRESS: Portland, OR
BLIND ID: MO-021304-14
DUP ID: ( )

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft)

[Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	10:30	24.82	.	17.22	.	7.60	X 1	1.24
/ /	:	.	.	.	.		X 3	3.72

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample)

Sample Depth: [N if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml	HCl	YES	NO		
Amber Glass	2/13/04	09:15	B	1	250/500/1L	(None) (HCl) (H_2SO_4)	YES	NO		✓
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250/500/1L	HNO_3	YES	NO		✓
Red Diss. Poly	/ /	:		1	250/500/1L	HNO_3	YES	YES		✓
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIQ) PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA

Purge Start Time: 08:30
Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.9	5.98	571	17.16	0.51	↑
2	B	2.6	5.84	565	17.14	.	
1	B	1.3	5.66	572	17.04	.	Clear / Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil
WELL ID: EX-7
SITE ADDRESS: Portland, OR
BLIND ID: MO-021304-MS15
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY		CLOUDY		RAIN		?		TEMPERATURE:	°F 45°	

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/10/04	11:15	24.60	.	12.31	.	12.29	X 1	2.00
/ /	:	.	.	.	.		X 3	6.00

Gal/ft = (dia./2)² x 0.163	1" = 0.041	2" = 0.163	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative [circle]	Ice	Filter	pH	√
VOA Glass	/ /	:		3	40 ml HCl	YES	NO		
Amber Glass	2/13/04	10:15	B	1	250, (500), 1L (None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:			250, 500, 1L None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, (500), 1L HNO_3	(YES)	(NO)		√
Red Diss. Poly	/ /	:		1	250, (500), 1L HNO_3	(YES)	(YES)		√
	/ /	:			250, 500, 1L	YES			

Total Bottles (include duplicate count): (3)

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIQ) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 09:30 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	6.	6.07	262	17.43	1.21	
2	B	4.	6.07	260	17.43	.	
1	B	2.	6.04	261	17.39	.	Clear, Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME)

Tim Stone
(SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil — WELL ID: MW-10
SITE ADDRESS: Portland, OR — BLIND ID: MO-021304-16
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN	?	TEMPERATURE:	°F 45					

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:30	19.85	.	13.64	.	6.21	X1	1.01
/ /	:	.	.	.	.		X3	3.04

Gal/ft = (dia./2)² x 0.163	1" =	0.041	2" =	0.163	3" =	0.367	4" =	0.653	6" =	1.469	10" =	4.080	12" =	5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (If product is detected, do NOT sample) Sample Depth: — [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/13/04	11:00	B	3	40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO		√
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FIQ) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA — Purge Start Time: 10:20 — Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	3.3	6.14	614	18.25	0.21	↑
2	B	2.2	6.11	620	18.22	.	↑
1	B	1.1	6.08	627	18.18	.	Clear/Colorless
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE) Tim Stone

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** EX-4 (MW-2)
SITE ADDRESS: Portland, OR **BLIND ID:** MO-021304-17
DUP ID:

WIND FROM:	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
WEATHER:	SUNNY	CLOUDY	RAIN		?				TEMPERATURE	°F 45.	

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Circle appropriate units] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/13/04	12:00	27.30	.	15.14	/	12.16	X 1	1.98
/ /	:	.	.	.	.		X 3	5.95

Gal/ft = (dia./2)² x 0.163 | 1" = 0.041 | 2" = 0.163 | 3" = 0.367 | 4" = 0.653 | 6" = 1.469 | 10" = 4.080 | 12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL	Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/13/04	11:45	B	3 40 ml	HCl	YES	NO		√
Amber Glass	/ /	:		1 250, 500, 1L	(None) (HCl) (H_2SO_4)	YES	NO		√
White Poly	/ /	:		250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:		250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:		250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:		1 250, 500, 1L	HNO_3	YES	YES		√
	/ /	:		250, 500, 1L		YES			

Total Bottles (include duplicate count): 6

Analysis Allowed per Bottle Type	BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
	VOA - Glass	(8260B)
	AMBER - Glass	(TPH-FID) (PAH)
	WHITE - Poly	
	YELLOW - Poly	
	GREEN - Poly	
	RED TOTAL - Poly	(As) (Cr) (Cu)
	RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 11:05 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.		.	.	
3	B	6.0	6.02	702	17.69	0.29	↑
2	B	4.0	6.02	703	17.66	.	
1	B	2.0	6.04	687	17.64	.	Clear / ~~Colorless~~ yellow tint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone
(PRINTED NAME) (SIGNATURE)

FIELD SAMPLING DATA SHEET

ANCHOR ENVIRONMENTAL, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Office: (503) 670-1108 Fax: (503) 670-1128

PROJECT NAME: McCall Oil **WELL ID:** MW-9

SITE ADDRESS: Portland, OR **BLIND ID:** MO-021304-18

DUP ID: ( )

WIND FROM: N NE (E) SE S SW W NW LIGHT MEDIUM (HEAVY)

WEATHER: SUNNY (CLOUDY) RAIN ? **TEMPERATURE:** (F) 46

[Circle appropriate units]

HYDROLOGY/LEVEL MEASUREMENTS (Nearest 0.01 ft) [Product Thickness] [Water Column] [Water Column x Gal/ft]

Date	Time	DT-Bottom	DT-Product	DT-Water	DTP-DTW	DTB-DTW		Volume (gal)
2/11/04	11:45	25.03	.	16.63	.	8.40	X 1	1.34
/ /	:	.	.	.	.		X 3	4.11

Gal/ft = (dia./2)² x 0.163	1" = 0.041	(2" = 0.163)	3" = 0.367	4" = 0.653	6" = 1.469	10" = 4.080	12" = 5.875

§ METHODS: (A) Submersible Pump (B) Peristaltic Pump (C) Disposable Bailer (D) PVC/Teflon Bailer (E) Dedicated Bailer (F) Dedicated Pump (G) Other =

GROUNDWATER SAMPLING DATA (if product is detected, do NOT sample) Sample Depth: [√ if used]

Bottle Type	Date	Time	Method §	Amount & Volume mL		Preservative (circle)	Ice	Filter	pH	√
VOA Glass	2/13/04	:	~~B~~	~~3~~	40 ml	HCl	YES	NO		√
Amber Glass	2/13/04	12:30	B	1	250, 500, 1L	(None) (HCl) H_2SO_4	YES	NO		
White Poly	/ /	:			250, 500, 1L	None	YES	NO	NA	
Yellow Poly	/ /	:			250, 500, 1L	H_2SO_4	YES	NO		
Green Poly	/ /	:			250, 500, 1L	NaOH	YES	NO		
Red Total Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	NO		√
Red Diss. Poly	/ /	:	B	1	250, 500, 1L	HNO_3	YES	YES		√
	/ /	:			250, 500, 1L		YES			

Total Bottles (include duplicate count): 3

Analysis Allowed per Bottle Type

BOTTLE TYPE	TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA - Glass	(8260B)
AMBER - Glass	(TPH-FID) (PAH)
WHITE - Poly	
YELLOW - Poly	
GREEN - Poly	
RED TOTAL - Poly	(As) (Cr) (Cu)
RED DISSOLVED - Poly	(As) (Cr) (Cu)

WATER QUALITY DATA Purge Start Time: 11:50 Pump/Bailer Inlet Depth:

Meas.	Method §	Purged (gal)	pH	E Cond (µS)	Temp °C	Diss O_2 (mg/l)	Water Quality
4		.	.	.	.	.	
3	B	4.2	5.78	357	16.68	0.39	
2	B	2.8	5.80	356	16.67	.	
1	B	1.4	5.78	349	16.58	.	Clear / slight yellow tint
0		0.00	.		.	.	

[Casing] [Select A-G] [Cumulative Totals] [Circle units] [Clarity, Color]

SAMPLER: Tim Stone (PRINTED NAME) (SIGNATURE) Tim Stone

ATTACHMENT D

LABORATORY REPORT
AND
CHAIN OF CUSTODY DOCUMENTATION

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services, Inc.
An Employee - Owned Company

March 4, 2004 Service Request No: K2401076

John Renda
Anchor Environmental
6650 SW Redwood Lane Suite 110
Portland, OR 97224

RE: McCall Oil-Portland, Oregon

Dear John:

Enclosed are the results of the sample(s) submitted to our laboratory on February 14, 2004. For your reference, these analyses have been assigned our service request number K2401076.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281.

Respectfully submitted,

Columbia Analytical Services, Inc.

Abbie Spielman
Project Chemist

AS/jeb

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Anchor Environmental	**Service Request No.:**	K2401076
Project:	McCall Oil	**Date Received:**	2/14/04
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

Seventeen water samples were received for analysis at Columbia Analytical Services on 2/14/04. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total and Dissolved Metals

No anomalies associated with the analysis of these samples were observed.

Fuel Identification and Quantification by EPA Method 8015B

Sample Notes and Discussion:
Hydrocarbon patterns in samples did not match standard fuel fingerprints. Results were reported for each standard hydrocarbon range with applicable footnotes.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Elevated Method Reporting Limits:
Sample(s) MO-021104-4, MO-021104-5, and MO-021204-12 required dilution due to the presence of elevated levels of target analyte. The reporting limits are adjusted to reflect the dilution.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for the following analytes in Laboratory Control Samples (LCS) KWG0402339-3, KWG0402500-3 and KWG0402417-3: Dibromochloromethane and/or Bromoform. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL3200: cis-1, 3-Dichloropropene, trans-1, 3-Dichloropropene, 2-Hexanone, Dibromochloromethane, 1,1,1,2-Tetrachloroethane, Styrene, Bromoform, and 1,2-Dibromo-3-chloropropane. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean

Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.8%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Semivolatile Organic Compounds by EPA Method 8270C

Sample Notes and Discussion
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Matrix Spike (MS) and Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) were analyzed and reported in lieu of the MS/MSD for these samples.

Surrogate Exceptions:
The control criteria were exceeded for the Nitrobenzene-d5 surrogate in DLCS KWG0402094-3. The associated matrix spike recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outlier is flagged accordingly. No further corrective action was appropriate.

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL3324: Phenanthrene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 6.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 3/5/04

CHAIN OF CUSTODY

Columbia Analytical Services INC.
An Employee - Owned Company

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 638-1068

SR#: K2401076

PAGE 1 OF 2 COC # 00018

PROJECT NAME: McCall Oil - PORTLAND, OREGON
PROJECT NUMBER:
PROJECT MANAGER: JOHN RENDA
COMPANY/ADDRESS: ANCHOR ENV.; PORTLAND, OR
CITY/STATE/ZIP:
E-MAIL ADDRESS: JRENDA@ANCHORENV.COM
PHONE # 503-670-1108 FAX# 503-670-1128
SAMPLER'S SIGNATURE: Tim Stone

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GCMS 625 ☐ 8270 ☐	Volatile Organics 624 ☐ 8270LL ☐ (8260 ☐)	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐ ☐ Fuel Fingerprint (FIQ)-TPH ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☐ Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics Tri ☐ Tetra ☐ - 8151M PCP ☐	PAHS 8310 ☐ SIM ☐	Metals (Total & Dissolved) (See list below) + Chloride	Cyanide ☐	Hex-Chrom ☐	pH, Cond., Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle) NH_3-N, COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐	TOTAL + DISSOLVED AS				REMARKS
MD-021104-1	2/11/04	1330	1	H_2O	7*		X		X							X									
MD-021104-2		1430	2		9*		X		X						X							X				
MD-021104-3		1530	3		6		X		X							X										
MD-021104-4		1605	4		6		X		X													X				
MD-021104-5		1610	5		6		X		X													X				
MD-021204-6	2/12/04	1000	6		5*				X						X							X				
-	-7	1045	7		7		X		X						X	X						X				
-	-8	1130	8		7		X		X						X	X										
-	-9	1140	9		7		X		X						X	X										
-	-10	1230	10		4				X						X							X				

REPORT REQUIREMENTS

- ___ I. Routine Report: Method Blank, Surrogate, as required
- X II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (Includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____
Bill To: _____

TURNAROUND REQUIREMENTS

- ___ 24 hr. ___ 48 hr.
- ___ 5 Day
- X Standard (10-15 working days)
- ___ Provide FAX Results

Requested Report Date: _____

Circle which metals are to be analyzed:

Total Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al (As) Sb Ba Be B Ca Cd Co (Cr) (Cu) Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* EXTRA BOTTLE FOR MS/msd

* project specific list 8270-LL X 2/17/04

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Tim Stone	Signature: [illegible]	Signature:	Signature:
Date/Time: 2/13/04 - 1330	Date/Time: 2/14/04 0800	Date/Time:	Date/Time:
Printed Name: TIM STONE	Printed Name: [illegible]	Printed Name:	Printed Name:
Firm: ANCHOR - PDX	Firm: ACL CAS	Firm:	Firm:

RCOC #1 08/03

Columbia Analytical Services INC.
An Employee - Owned Company

CHAIN OF CUSTODY

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

SR#: K2401076

PAGE 2 OF 2 COC #

PROJECT NAME: McCall Oil - Portland
PROJECT NUMBER:
PROJECT MANAGER: John Renda
COMPANY/ADDRESS: Portland, OR
CITY/STATE/ZIP:
E-MAIL ADDRESS:
PHONE #: 503-670-1108 FAX#: 670-1128
SAMPLER'S SIGNATURE: Tim Stone

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ (8260☒) 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐	☒ Fuel Fingerprint (FIQ+PH) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☒ + pH reduced	Metals (Total or Dissolved) (See list below)	Cyanide☐ Hex-Chrom☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020☐ AOX 1650☐ 506☐	TOTAL + DISSOLVED As				REMARKS
MO-021204-11	2/12/04	1315	11	H_2O	7		X		X					X	X										
-12		1400	12		6		X		X											X					
-13		1505	13		7		X		X					X						X					
MO-021304-14	2/13/04	0915	14		3				X											X					
-15		1015	15		3				X											X					
-16		1100	16		6		X		X											X					
-17		1145	17		6		X		X											X					
-18		1230	18		3				X											X					
TRIP BLANK			19	H_2O	2		X																		

00009

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
X II. Report Dup., MS, MSD as required
___ III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To:

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

* project specific list
8270-LL
A 2/17/04

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Tim Stone 2-13-04/1330	[signature] 2/14/04 0800		
Signature / Date/Time	Signature / Date/Time	Signature / Date/Time	Signature / Date/Time
Tim Stone ANCHOR-PDX	Brian Adair CAS		
Printed Name / Firm	Printed Name / Firm	Printed Name / Firm	Printed Name / Firm

RCOC #1 06/03

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

Project/Client Anchor Work Order K240

Cooler received on 2/14/04 and opened on 2/14/04 by TBlack

1.	Were custody seals on outside of coolers?				Y	(N)
	If yes, how many and where?					
2.	Were seals intact and signature & date correct?				Y	(N)
3.	Is the shipper's airbill available and filed? If no, record airbill number: CAS				Y	(N)
4.	COC#					
	Temperature of cooler(s) upon receipt:	0.9	0.2	1.0	1.2	
	Temperature Blank:	0.0	0.1	n/a	0.9	
5.	Were custody papers properly filled out (ink, signed, etc.)?				(Y)	N
6.	Type of packing material present: loose ice - bmap - bags					
7.	Did all bottles arrive in good condition (unbroken)?				(Y)	N
8.	Were all bottle labels complete (i.e analysis, preservation, etc.)?				(Y)	N
9.	Did all bottle labels and tags agree with custody papers?				(Y)	N
10.	Were the correct types of bottles used for the tests indicated?				(Y)	N
11.	Were all of the preserved bottles received at the lab with the appropriate pH?				(Y)	N
12.	Were VOA vials checked for absence of air bubbles, and if present, noted below?				(Y)	N
13.	Did the bottles originate from CAS/K or a branch laboratory?				(Y)	N
14.	Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?				~~Y~~	~~N~~
15.	Was C12/Res negative?				(Y)	N

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00010

Total and Dissolved Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: McCall Oil

Service Request: K2401076

Project No.: 021062-02

Project Name: McCall Oil-Portland, Oregon

	Sample No.	Lab Sample ID.
MW-3	MO-021104-1	K2401076-001
MW-3	MO-021104-1	K2401076-001 DISS
MW-3	MO-021104-1D	K2401076-001D
MW-3	MO-021104-1S	K2401076-001S
MW-5	MO-021104-2	K2401076-002
MW-5	MO-021104-2 DISS	K2401076-002 DISS
MW-5	MO-021104-2D	K2401076-002D
MW-5	MO-021104-2 DISSD	K2401076-002D DISS
MW-5	MO-021104-2S	K2401076-002S
MW-5	MO-021104-2 DISSS	K2401076-002S DISS
MW-1	MO-021104-3	K2401076-003
MW-1	MO-021104-3	K2401076-003 DISS
EX-1	MO-021104-4	K2401076-004
EX-1	MO-021104-4	K2401076-004 DISS
EX-1dup	MO-021104-5	K2401076-005
EX-1dup	MO-021104-5	K2401076-005 DISS
EX-2	MO-021204-6	K2401076-006
EX-2	MO-021204-6	K2401076-006 DISS
MW-14	MO-021204-7	K2401076-007
MW-14	MO-021204-7	K2401076-007 DISS

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Total and Dissolved Metals

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Date: 3/3/04

Columbia Analytical Services

METALS

- Cover Page -

INORGANIC ANALYSIS DATA PACKAGE

Client: McCall Oil

Service Request: K2401076

Project No.: 021062-02

Project Name: McCall Oil-Portland, Oregon

	Sample No.	Lab Sample ID.
MW-7	MO-021204-8	K2401076-008
MW-7	MO-021204-8	K2401076-008 DISS
MW-7dup	MO-021204-9	K2401076-009
MW-7dup	MO-021204-9	K2401076-009 DISS
Ex-3	MO-021204-10	K2401076-010
Ex-3	MO-021204-10 DISS	K2401076-010 DISS
Ex-3	MO-021204-10D	K2401076-010D
Ex-3	MO-021204-10 DISSD	K2401076-010D DISS
Ex-3	MO-021204-10S	K2401076-010S
Ex-3	MO-021204-10 DISSS	K2401076-010S DISS
MW-8	MO-021204-11	K2401076-011
MW-8	MO-021204-11	K2401076-011 DISS
MW-8	MO-021204-11D	K2401076-011D
MW-8	MO-021204-11S	K2401076-011S
MW-6	MO-021204-12	K2401076-012
MW-6	MO-021204-12	K2401076-012 DISS
MW-5	MO-021204-13	K2401076-013
MW-5	MO-021204-13	K2401076-013 DISS
MW-12	MO-021304-14	K2401076-014
MW-12	MO-021304-14	K2401076-014 DISS

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Total and Dissolved Metals

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Date: 3/3/04

Columbia Analytical Services

METALS

- Cover Page -

INORGANIC ANALYSIS DATA PACKAGE

Client: McCall Oil

Service Request: K2401076

Project No.: 021062-02

Project Name: McCall Oil-Portland, Oregon

	Sample No.	Lab Sample ID.
Ex-7	MO-021304-15	K2401076-015
Ex-7	MO-021304-15	K2401076-015 DISS
mw-10	MO-021304-16	K2401076-016
mw-10	MO-021304-16	K2401076-016 DISS
Ex-4/mw-2	MO-021304-17	K2401076-017
Ex-4/mw-2	MO-021304-17	K2401076-017 DISS
mw-9	MO-021304-18	K2401076-018
mw-9	MO-021304-18	K2401076-018 DISS
	Method Blank 1	K2401076-MB1
	Method Blank 2	K2401076-MB2

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Total and Dissolved Metals

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Date: 3/3/04

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-1 MW-3 Lab Code: K2401076-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	46.9		
Chromium	6020	0.2	1	3/2/04	3/2/04	2.5		
Copper	6020	0.1	1	2/20/04	3/1/04	1.8		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-1 MW-3 Lab Code: K2401076-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	46.1		
Chromium	6020	0.2	1	3/2/04	3/2/04	2.4		
Copper	6020	0.1	1	2/20/04	3/1/04	0.4		

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-2 MW-5 Lab Code: K2401076-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	15.7		

% Solids: 0.0

Comments:

00017

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	**Service Request:**	K2401076
Project No.:	021062-02	**Date Collected:**	02/11/04
Project Name:	McCall Oil-Portland, Oregon	**Date Received:**	02/14/04
Matrix:	WATER	**Units:**	µG/L
		Basis:	NA

Sample Name: MO-021104-2 DISS MW-5 **Lab Code:** K2401076-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	15.4		

% Solids: 0.0

Comments: Dissolved Metals

00018

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	**Service Request:**	K2401076
Project No.:	021062-02	**Date Collected:**	02/11/04
Project Name:	McCall Oil-Portland, Oregon	**Date Received:**	02/14/04
Matrix:	WATER	**Units:**	µG/L
		Basis:	NA

Sample Name: MO-021104-3 MW-1 **Lab Code:** K2401076-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.6		
Chromium	6020	0.2	1	3/2/04	3/2/04	1.2		
Copper	6020	0.1	1	2/20/04	3/1/04	82.8		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-3 MW-1 Lab Code: K2401076-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.6		
Chromium	6020	0.2	1	3/2/04	3/2/04	0.7		
Copper	6020	0.1	1	2/20/04	3/1/04	70.8		

% Solids: 0.0

Comments: Dissolved Metals

00020

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Date Collected: 02/11/04
Date Received: 02/14/04
Units: µG/L
Basis: NA

Sample Name: MO-021104-4 Ex-1
Lab Code: K2401076-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	3.0		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-4 EX-1 Lab Code: K2401076-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	1.6		

% Solids: 0.0

Comments: Dissolved Metals

00022

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-5 EX-1 dup Lab Code: K2401076-005

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	2.6		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/11/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021104-5 EX-1 dup Lab Code: K2401076-005 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	1.4		

% Solids: 0.0

Comments: Dissolved Metals

00024

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-6 EX-2 Lab Code: K2401076-006

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	57.1		

% Solids: 0.0

Comments:

00025

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-6 EX-2 Lab Code: K2401076-006 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	65.8		

% Solids: 0.0

Comments: Dissolved Metals

00026

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-7 MW-14 Lab Code: K2401076-007

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	1.5		
Chromium	6020	0.2	1	3/2/04	3/2/04	1.3		
Copper	6020	0.1	1	2/20/04	3/1/04	1.7		

% Solids: 0.0

Comments:

00027

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-7 MW-14 Lab Code: K2401076-007 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	1.5		
Chromium	6020	0.2	1	3/2/04	3/2/04	2.6		
Copper	6020	0.1	1	2/20/04	3/1/04	1.3		

% Solids: 0.0

Comments: Dissolved Metals

00028

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-8 MW-7 Lab Code: K2401076-008

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.0		
Chromium	6020	0.2	1	3/2/04	3/2/04	0.7		
Copper	6020	0.1	1	2/20/04	3/1/04	0.5		

% Solids: 0.0

Comments:

00029

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-8 mw-7 Lab Code: K2401076-008 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.1		
Chromium	6020	0.2	1	3/2/04	3/2/04	2.0		
Copper	6020	0.1	1	2/20/04	3/1/04	0.3		

% Solids: 0.0

Comments: Dissolved Metals

00030

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-9 MW-7 dup Lab Code: K2401076-009

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.0		
Chromium	6020	0.2	1	3/2/04	3/2/04	0.8		
Copper	6020	0.1	1	2/20/04	3/1/04	0.4		

% Solids: 0.0

Comments:

00031

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-9 MW-7 Dup Lab Code: K2401076-009 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.1		
Chromium	6020	0.2	1	3/2/04	3/2/04	0.7		
Copper	6020	0.1	1	2/20/04	3/1/04	0.3		

% Solids: 0.0

Comments: Dissolved Metals

00032

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-10 EX-3 Lab Code: K2401076-010

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	87.2		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-10 DISS EX-3 Lab Code: K2401076-010 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	86.1		

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-11 MW-8 Lab Code: K2401076-011

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.4		
Chromium	6020	0.2	1	3/2/04	3/2/04	1.7		
Copper	6020	0.1	1	2/20/04	3/1/04	2.0		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-11 MW-8 Lab Code: K2401076-011 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	5.6		
Chromium	6020	0.2	1	3/2/04	3/2/04	0.8		
Copper	6020	0.1	1	2/20/04	3/1/04	0.2		

% Solids: 0.0

Comments: Dissolved Metals

00036

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Date Collected: 02/12/04
Date Received: 02/14/04
Units: pG/L
Basis: NA

Sample Name: MO-021204-12 MW-6
Lab Code: K2401076-012

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	22.6		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-12 MW-6 Lab Code: K2401076-012 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	22.6		

% Solids: 0.0

Comments: Dissolved Metals

00038

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	pG/L
		Basis:	NA

Sample Name: MO-021204-13 MW-15 Lab Code: K2401076-013

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	3.5		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/12/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021204-13 MW-15 Lab Code: K2401076-013 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	3.4		

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Date Collected: 02/13/04
Date Received: 02/14/04
Units: µG/L
Basis: NA

Sample Name: MO-021304-14 MW-12
Lab Code: K2401076-014

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	23.3		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-14 MW-12 Lab Code: K2401076-014 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	23.7		

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-15 EX-7 Lab Code: K2401076-015

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.5		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-15 EX-7 Lab Code: K2401076-015 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.5	U	

% Solids: 0.0

Comments: Dissolved Metals

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-16 MW-10 Lab Code: K2401076-016

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	30.9		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-16 MW-10 Lab Code: K2401076-016 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	28.9		

% Solids: 0.0

Comments: Dissolved Metals

00046

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	pG/L
		Basis:	NA

Sample Name: MO-021304-17 EX-4 MW-2 Lab Code: K2401076-017

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	53.1		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-17 EX-4 / MW-2 Lab Code: K2401076-017 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	55.2		

% Solids: 0.0

Comments: Dissolved Metals

00048

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Date Collected:	02/13/04
Project Name:	McCall Oil-Portland, Oregon	Date Received:	02/14/04
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: MO-021304-18 MW-9 Lab Code: K2401076-018

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	18.3		

% Solids: 0.0

Comments:

00049

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	McCall Oil	**Service Request:**	K2401076
Project No.:	021062-02	**Date Collected:**	02/13/04
Project Name:	McCall Oil-Portland, Oregon	**Date Received:**	02/14/04
Matrix:	WATER	**Units:**	µG/L
		Basis:	NA

Sample Name: MO-021304-18 MW9 **Lab Code:** K2401076-018 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	19.0		

% Solids: 0.0

Comments: Dissolved Metals

00050

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank 1
Lab Code: K2401076-MB1

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.5	U	
Chromium	6020	0.2	1	3/2/04	3/2/04	0.2	U	
Copper	6020	0.1	1	2/20/04	3/1/04	0.1	U	

% Solids: 0.0

Comments:

00051

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank 2
Lab Code: K2401076-MB2

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6020	0.5	1	2/20/04	3/1/04	0.5	U	
Copper	6020	0.1	1	2/20/04	3/1/04	0.1	U	

% Solids: 0.0

Comments:

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: MO-021104-1S
Lab Code: K2401076-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Chromium	70 - 130	17.7		2.5		20.0	76		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: MO-021104-2 DISSS
Lab Code: K2401076-002S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	70 - 130	32.1		15.4		20.0	83		6020
Copper	70 - 130	17.7		0.8		20.0	85		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client: McCall Oil
Project No.: 021062-02
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Service Request: K2401076
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: MO-021104-2S
Lab Code: K2401076-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	70 - 130	32.7		15.7		20.0	85		6020
Copper	70 - 130	17.7		0.9		20.0	84		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name: MO-021204-10 DISSS Lab Code: K2401076-010S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic		102		86.1		20.0	80		6020
Copper	70 - 130	18.2		0.3		20.0	89		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client:	McCall Oil	**Service Request:**	K2401076
Project No.:	021062-02	**Units:**	µg/L
Project Name:	McCall Oil-Portland, Oregon	**Basis:**	NA
Matrix:	WATER	**% Solids:**	0.0

Sample Name: MO-021204-10S **Lab Code:** K2401076-010S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic		101		87.2		20.0	69		6020
Copper	70 - 130	18.4		0.3		20.0	91		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-5a-
SPIKE SAMPLE RECOVERY

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name: MO-021204-11S Lab Code: K2401076-011S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Chromium	70 - 130	18.4		1.7		20.0	84		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: McCall Oil
Service Request: K2401076
Project No.: 021062-02
Units: ug/L
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Sample Name: MO-021104-1A
Lab Code: K2401076-001A

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Chromium		19.0		2.50		20.0	83		MS

mments:

METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: McCall Oil
Service Request: K2401076
Project No.: 021062-02
Units: ug/L
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Sample Name: MO-021104-2A
Lab Code: K2401076-002A

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic		34.2		15.7		20.0	93		MS
Copper		18.4		0.9		20.0	87		MS

Comments: _____

METALS
-5b-
POST DIGEST SPIKE SAMPLE RECOVERY

Client: McCall Oil
Service Request: K2401076
Project No.: 021062-02
Units: ug/L
Project Name: McCall Oil-Portland, Oregon
Matrix: WATER

Sample Name: MO-021104-2A DISS
Lab Code: K2401076-002A DISS

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic		32.7		15.4		20.0	87		MS
Copper		18.4		0.8		20.0	88		MS

mments: _____

METALS
-6-
DUPLICATES

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name:MO-021104-1D Lab Code: K2401076-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Chromium	20	2.5		3.0		19		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name: MO-021104-2D Lab Code: K2401076-002D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	20	15.7		15.9		1		6020
Copper	20	0.9		0.9		4		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client:	McCall Oil	**Service Request:**	K2401076
Project No.:	021062-02	**Units:**	µg/L
Project Name:	McCall Oil-Portland, Oregon	**Basis:**	NA
Matrix:	WATER	**% Solids:**	0.0

Sample Name: MO-021204-10 DISSD **Lab Code:** K2401076-010D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	20	86.1		85.1		1		6020
Copper		0.3		0.3		9		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name:MO-021204-10D Lab Code: K2401076-010D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	20	87.2		86.0		1		6020
Copper		0.3		0.3		1		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client:	McCall Oil	Service Request:	K2401076
Project No.:	021062-02	Units:	µg/L
Project Name:	McCall Oil-Portland, Oregon	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name:MO-021204-11D Lab Code: K2401076-011D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Chromium	20	1.7		1.5		8		6020

An empty field in the Control Limit column indicates the control limit is not applicable.

00067

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: McCall Oil

Service Request: K2401076

Project No.: 021062-02

Project Name: McCall Oil-Portland, Oregon

Aqueous LCS Source: Inorganic Ventures

Solid LCS Source:

Analyte	Aqueous ug/L True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Arsenic	20.0	20.2	101						
Chromium	20.0	20.9	104						
Copper	20.0	20.4	102						

00068

METALS

-7-

LABORATORY CONTROL SAMPLE

Client: McCall Oil

Service Request: K2401076

Project No.: 021062-02

Project Name: McCall Oil-Portland, Oregon

Aqueous LCS Source: Inorganic Ventures

Solid LCS Source:

Analyte	Aqueous ug/L			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	20.0	19.9	100					
Copper	20.0	20.7	104					

00069

Fuel Identification Quantification
EPA Method 8015

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/11/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021104-1 MW-3	**Units:**	ug/L
Lab Code:	K2401076-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	**300**	H	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**2000**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	78	42-124	02/20/04	Acceptable
o-Terphenyl	87	37-141	02/20/04	Acceptable
n-Triacontane	85	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/11/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021104-2 MW-5	**Units:**	ug/L
Lab Code:	K2401076-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**290**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	77	42-124	02/20/04	Acceptable
o-Terphenyl	87	37-141	02/20/04	Acceptable
n-Triacontane	85	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/11/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021104-3 MW-1	**Units:**	ug/L
Lab Code:	K2401076-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**120**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	82	42-124	02/20/04	Acceptable
o-Terphenyl	90	37-141	02/20/04	Acceptable
n-Triacontane	84	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/11/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021104-4 EX-1	**Units:**	ug/L
Lab Code:	K2401076-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	500	Z	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	120	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	82	42-124	02/20/04	Acceptable
o-Terphenyl	89	37-141	02/20/04	Acceptable
n-Triacontane	86	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/11/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021104-5 Ex-1 Dup	**Units:**	ug/L
Lab Code:	K2401076-005	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	**450**	Z	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**120**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	79	42-124	02/20/04	Acceptable
o-Terphenyl	88	37-141	02/20/04	Acceptable
n-Triacontane	84	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-6 EX-2	**Units:**	ug/L
Lab Code:	K2401076-006	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	110	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	85	42-124	02/20/04	Acceptable
o-Terphenyl	90	37-141	02/20/04	Acceptable
n-Triacontane	85	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-7 MW-14	**Units:**	ug/L
Lab Code:	K2401076-007	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	300	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	84	42-124	02/20/04	Acceptable
o-Terphenyl	90	37-141	02/20/04	Acceptable
n-Triacontane	86	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-8 MW-1	**Units:**	ug/L
Lab Code:	K2401076-008	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**240**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	83	42-124	02/20/04	Acceptable
o-Terphenyl	93	37-141	02/20/04	Acceptable
n-Triacontane	90	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-9 MW-7 dup	**Units:**	ug/L
Lab Code:	K2401076-009	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**240**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	81	42-124	02/20/04	Acceptable
o-Terphenyl	93	37-141	02/20/04	Acceptable
n-Triacontane	90	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-10 EX-3	**Units:**	ug/L
Lab Code:	K2401076-010	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	81	42-124	02/20/04	Acceptable
o-Terphenyl	88	37-141	02/20/04	Acceptable
n-Triacontane	83	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-11 MW-8	**Units:**	ug/L
Lab Code:	K2401076-011	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**330**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	83	42-124	02/20/04	Acceptable
o-Terphenyl	90	37-141	02/20/04	Acceptable
n-Triacontane	87	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-12 MW-6	**Units:**	ug/L
Lab Code:	K2401076-012	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**130**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	85	42-124	02/20/04	Acceptable
o-Terphenyl	93	37-141	02/20/04	Acceptable
n-Triacontane	88	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/12/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021204-13 MW-15	**Units:**	ug/L
Lab Code:	K2401076-013	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	84	42-124	02/20/04	Acceptable
o-Terphenyl	90	37-141	02/20/04	Acceptable
n-Triacontane	89	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/13/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021304-14 MW-12	**Units:**	ug/L
Lab Code:	K2401076-014	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**340**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	90	42-124	02/20/04	Acceptable
o-Terphenyl	91	37-141	02/20/04	Acceptable
n-Triacontane	91	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/13/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021304-15 EX-1	**Units:**	ug/L
Lab Code:	K2401076-015	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	90	42-124	02/20/04	Acceptable
o-Terphenyl	93	37-141	02/20/04	Acceptable
n-Triacontane	90	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/13/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021304-16 MW-1D	**Units:**	ug/L
Lab Code:	K2401076-016	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/20/04	KWG0402081	
Diesel Range Organics (DRO)	**370**	Y	100	1	02/18/04	02/20/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/20/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	92	42-124	02/20/04	Acceptable
o-Terphenyl	97	37-141	02/20/04	Acceptable
n-Triacontane	95	50-150	02/20/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/13/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021304-17 EX-4/MW-2	**Units:**	ug/L
Lab Code:	K2401076-017	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	120	H	100	1	02/18/04	02/21/04	KWG0402081	
Diesel Range Organics (DRO)	920	Y	100	1	02/18/04	02/21/04	KWG0402081	
Residual Range Organics (RRO)	280	O	250	1	02/18/04	02/21/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	80	42-124	02/21/04	Acceptable
o-Terphenyl	83	37-141	02/21/04	Acceptable
n-Triacontane	83	50-150	02/21/04	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	McCall Oil	**Service Request:**	K2401076
Project:	McCall Oil-Portland, Oregon/021062-02	**Date Collected:**	02/13/2004
Sample Matrix:	Water	**Date Received:**	02/14/2004

Fuel Identification and Quantitation (FIQ) Hydrocarbon Scan

Sample Name:	MO-021304-18 MW-9	**Units:**	ug/L
Lab Code:	K2401076-018	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015M		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Gasoline Range Organics (GRO)	ND	U	100	1	02/18/04	02/21/04	KWG0402081	
Diesel Range Organics (DRO)	**300**	Y	100	1	02/18/04	02/21/04	KWG0402081	
Residual Range Organics (RRO)	ND	U	250	1	02/18/04	02/21/04	KWG0402081	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	85	42-124	02/21/04	Acceptable
o-Terphenyl	88	37-141	02/21/04	Acceptable
n-Triacontane	87	50-150	02/21/04	Acceptable

Comments:

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

January 15, 2004
030162-01

Mr. Tom Gainer, P.E.
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the fourth quarter 2003, and work planned for the first quarter 2004.

WORK COMPLETED, FOURTH QUARTER 2003

- data management and reporting
- investigation of extent and source of free product at well MW-11
- installation of two monitoring wells (MW-14 and MW-15)
- preparation of response to DEQ's July 30, 2003 comment letter on the remedial investigation report (submitted to DEQ on October 16, 2003)
- project management and meetings

PLANNED FIRST QUARTER 2004 RI TASKS

- data management and reporting
- develop newly installed monitoring wells MW-14 and MW-15
- sample monitoring wells in accordance with sampling plan approved by DEQ in the letter dated November 13, 2003 (currently scheduled for the week of February 9, 2004)
- project management and meetings

RESULTS

On October 6, 2003, eight soil borings (GP-56 through GP-63) were advanced to determine the extent and source of the LNAPL along the southeast border of the site. The results of the soil

borings and extent of the LNAPL plume were discussed in the third quarter 2003 report (October 15, 2003).

Monitoring wells MW-14 and MW-15 were installed on December 31, 2003. Boring logs and well installation details will be provided in the first quarter 2004 report.

PROBLEMS ENCOUNTERED

No problems were encountered during the fourth quarter.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

October 15, 2003
030162-01

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the third quarter 2003, and work planned for the fourth quarter 2003.

WORK COMPLETED, THIRD QUARTER 2003

- data management and reporting
- project management and meetings

PLANNED FOURTH QUARTER 2003 RI TASKS

- investigate extent and source of free product at well MW-11 (GeoProbe borings completed October 6, 2003)
- data management and reporting
- project management and meetings
- Anchor is currently preparing a letter to DEQ that discusses the issues covered in the September 4, 2003 meeting and provides a schedule for supplemental RI tasks. We anticipate that the letter will be sent to DEQ by October 20, 2003.

RESULTS

No new data was generated during third quarter 2003.

P:\Projects\McCall Portland\Reports\QtlyReport-3Q2003.doc

PROBLEMS ENCOUNTERED

Investigation of the extent and source of free product at monitoring well MW-11 was scheduled for September 2003. Anchor met with a representative from NW Natural to discuss soil borings in the area of the gas line. Northwest Natural required that the gas line be exposed in all areas where borings were to be within 10 feet of the gas line. Vacuum excavation is the most appropriate method of excavating around a gas line without causing damage. A vacuum excavator was not available until October 6, 2003 and, therefore, the investigation was postponed until that date.

FREE PRODUCT INVESTIGATION

A light non aqueous phase liquid (LNAPL) was detected in Geoprobe boring GP-31 on 2/13/01. Additional soil borings (GP-45, GP-46, GP-47, GP-54, and GP-55) were advanced November 14 and 15, 2001. Monitoring well MW-11 was installed on 1/7/02. LNAPL was detected in each of these borings.

On October 6, 2003, eight additional borings (GP-56 through GP-63) were advanced to determine the extent and source of the LNAPL. LNAPL was detected in two of the eight soil borings. In GP-56, located approximately 43 feet northeast of GP-55 (parallel to the fence line), LNAPL was detected at a depth of 12.2 to 12.5 feet below ground surface (bgs) and in GP-59, located approximately 24 feet northwest of GP-55 (perpendicular to the fence line), LNAPL was detected at a depth of 15.0 to 15.2 feet bgs. No visual observations of LNAPL were encountered in the remaining soil borings advanced to the northwest or southwest of the previous borings.

The attached map shows the locations of soil borings and indicates the estimated extent of the LNAPL based on the October 6 borings. The full extent of the LNAPL cannot be determined until investigations are carried out on the Tube Forgings property.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical

P:\Projects\McCall Portland\Reports\QtlyReport-3Q2003.doc

WILLAMETTE RIVER

SD-120 WG-1 SD-123 SD-115 SD-118 SD-117 SD-114

TPZ-1 GP-18 GP-19 EX-2 GP-20 GP-17 AS-4 EX-3 GP-27 GP-16 GP-23 GP-33 GP-22 EX-5 GP-24 MW-13 GP-25 MW-12 MW-8 GP-15 GP-26 GP-32

S3-01C GP-14 MW-7 GP-36 GP-35 GP-34 Extent of LNAPL Plume GP-56 GP-59 GP-55 GP-47 GP-31 GP-45 GP-54 GP-60 GP-57 GP-58

GP-51 GP-12 GP-13 TPZ-2 MW-6 GP-10 GP-11 GP-41 GP-21 GP-9 EX-6 GP-50 MW-11 GP-8 GP-62 GP-46 GP-63 GP-61 GP-37 GP-28 GP-7 GP-6

MW-5 S-3 MW-4 GP-53 GP-43 GP-44 GP-38 GP-42 GP-30 GP-29 EX-1 GP-52 MW-3 MW-1 GP-39 EX-4/MW-2 MW-10 MW-9 S-2 S-1 EX-7

GP-40 GP-5 GP-4 GP-3 GP-2 GP-1

N.W. FRONT AVENUE

- Monitoring Well
- Decommisioned Monitoring Well
- GeoProbe Boring
- Surface Water/Sediment Sample
- EPA Sediment Sample Location
- Peizometer
- Vegetation
- Building
- Tank

0 150
Scale in Feet

Note: Figure prepared from base map provided by IT Corporation.

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

Oct 13, 2003 3:15pm cdavidson K:\Jobs\030162-McCall_Portland\030162030301620303016203-01.dwg FIG 1

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Extent of LNAPL Plume
McCall Oil and Chemical

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

July 14, 2003
030162-01

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the second quarter 2003, and work planned for the third quarter 2003.

WORK COMPLETED, SECOND QUARTER 2003

- data management and reporting
- project management and meetings
- submitted Remedial Investigation Report, McCall Oil and Chemical Corporation, June, 2003, Portland, Oregon

PLANNED THIRD QUARTER 2003 RI TASKS

- data management and reporting
- project management and meetings
- investigate extent and source of free product at well MW-11

RESULTS

No new data was generated during second quarter 2003.

PROBLEMS ENCOUNTERED

No problems were encountered during the second quarter 2003.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

ANCHOR ENVIRONMENTAL, L.L.C.

6650 SW Redwood Lane, #110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128
www.anchorenv.com

April 15, 2003
030162-01

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the first quarter 2003, and work planned for the second quarter 2003.

WORK COMPLETED, FIRST QUARTER 2003

- data management and reporting
- project management and meetings
- met with DEQ to discuss supplemental RI work scope and schedule on January 21, 2003

PLANNED SECOND QUARTER 2003 RI TASKS

- data management and reporting
- project management and meetings
- preparation of RI report

RESULTS

No new data was generated during first quarter 2003.

PROBLEMS ENCOUNTERED

No problems were encountered during the first quarter 2003.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

January 15, 2003
020162-02

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the fourth quarter 2002, and work planned for the first quarter 2003.

WORK COMPLETED, FOURTH QUARTER 2002

- Water levels were measured in all monitoring wells, piezometers, and the staff gauge on October 2, 2002.
- Monitoring wells EX-1 through EX-5, EX-7, and MW-1 through MW-13 were sampled on October 3-4, 2002.
- A sample of free phase petroleum hydrocarbon at MW-11 was collected and submitted for analysis on October 4, 2002.
- The conceptual supplemental RI work plan was sent to DEQ for review on November 4, 2002.

PLANNED FIRST QUARTER 2003 RI TASKS

- data management and reporting
- project management and meetings
- meet with DEQ to discuss supplemental RI work scope and schedule

RESULTS

On October 2, 2002 Anchor Environmental, L.L.C.(Anchor), measured groundwater elevations in 18 monitoring wells and the Willamette River staff gauge at McCall Oil and Chemical Corporation, Portland, Oregon (McCall). Groundwater samples were collected on October 3-4, 2002 from 17 monitoring wells and a sample of free product was collected for analysis from MW-11. All groundwater samples were analyzed for volatile organic compounds (VOCs) by EPA method 8260B, polycyclic aromatic hydrocarbons (PAHs), four semi-volatile organic compounds (SVOCs) by EPA method 8270-LL, and total petroleum hydrocarbon identification and quantification (TPH) by EPA method 8015M. Samples from monitoring wells MW-1, EX-4 (MW-2), MW-3, MW-4, MW-6, MW-7, and MW-8 were additionally analyzed for dissolved metal (arsenic, chromium, and copper). The free product sample from MW-11 was analyzed by Friedman & Bruya, Inc. of Seattle, WA using a gas chromatograph with flame ionization detector (GC/FID) and an electron capture detector (ECD). The sample was also tested for VOCs by EPA method 8260B. The results of the free product testing results were forwarded to DEQ on December 16, 2002.

The field and laboratory data are presented in Tables 1 through 5 as follows.

Table 1 Monitoring Well and River Hydrology Measurements
Table 2 Total Petroleum Hydrocarbons
Table 3 PAHs and SVOCs
Table 4 Volatile Organic Compounds
Table 5 Metals

Figure 1, a site boring and well location map, is attached for your reference.

PROBLEMS ENCOUNTERED

No problems were encountered during the fourth quarter 2002.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

P:\Projects\McCall Portland\QtlyReport-4Q2002.doc

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-1	10085.543	4249.628	36.12	09/08/94	15.35	20.77
EX-1	10085.543	4249.628	36.12	12/29/94	14.60	21.52
EX-1	10085.543	4249.628	36.12	03/29/95	13.06	23.06
EX-1	10085.543	4249.628	36.12	06/27/95	13.65	22.47
EX-1	10085.543	4249.628	36.12	07/14/95	13.82	22.30
EX-1	10085.543	4249.628	36.12	05/01/97	12.71	23.41
EX-1	10085.543	4249.628	36.12	02/03/99	13.21	22.91
EX-1	10085.543	4249.628	36.12	12/08/00	15.65	20.47
EX-1	10085.543	4249.628	36.12	01/19/01	15.46	20.66
EX-1	10085.543	4249.628	36.12	02/08/01	15.55	20.57
EX-1	10085.543	4249.628	36.12	03/08/01	15.65	20.47
EX-1	10085.543	4249.628	36.12	04/12/01	15.72	20.40
EX-1	10085.543	4249.628	36.12	05/15/01	15.68	20.44
EX-1	10085.543	4249.628	36.12	06/12/01	15.75	20.37
EX-1	10085.543	4249.628	36.12	07/16/01	15.84	20.28
EX-1	10085.543	4249.628	36.12	08/14/01	15.97	20.15
EX-1	10085.543	4249.628	36.12	09/13/01	16.07	20.05
EX-1	10085.543	4249.628	36.12	10/25/01	16.31	19.81
EX-1	10085.543	4249.628	36.12	11/16/01	16.27	19.85
EX-1	10085.543	4249.628	36.12	12/18/01	15.88	20.24
EX-1	10085.543	4249.628	36.12	01/22/02	15.05	21.07
EX-1	10085.543	4249.628	36.12	02/14/02	14.56	21.56
EX-1	10085.543	4249.628	36.12	03/06/02	14.28	21.84
EX-1	10085.543	4249.628	36.12	10/02/02	15.39	20.73
EX-2	10558.448	4883.507	32.28	09/08/94	18.56	13.72
EX-2	10558.448	4883.507	32.28	12/29/94	17.87	14.41
EX-2	10558.448	4883.507	32.28	03/29/95	17.11	15.17
EX-2	10558.448	4883.507	32.28	06/27/95	17.27	15.01
EX-2	10558.448	4883.507	32.28	07/14/95	17.42	14.86
EX-2	10558.448	4883.507	32.28	05/01/97	13.08	19.20
EX-2	10558.448	4883.507	32.28	02/03/99	16.30	15.98
EX-2	10558.448	4883.507	32.28	12/08/00	18.66	13.62
EX-2	10558.448	4883.507	32.28	01/19/01	18.67	13.61
EX-2	10558.448	4883.507	32.28	02/08/01	18.70	13.58
EX-2	10558.448	4883.507	32.28	03/08/01	18.76	13.52
EX-2	10558.448	4883.507	32.28	04/12/01	18.10	14.18
EX-2	10558.448	4883.507	32.28	05/15/01	17.94	14.34
EX-2	10558.448	4883.507	32.28	06/12/01	17.94	14.34
EX-2	10558.448	4883.507	32.28	07/16/01	18.49	13.79
EX-2	10558.448	4883.507	32.28	08/14/01	18.73	13.55
EX-2	10558.448	4883.507	32.28	09/13/01	18.90	13.38
EX-2	10558.448	4883.507	32.28	10/25/01	19.18	13.10
EX-2	10558.448	4883.507	32.28	11/16/01	19.24	13.04
EX-2	10558.448	4883.507	32.28	12/18/01	18.50	13.78
EX-2	10558.448	4883.507	32.28	01/22/02	17.83	14.45
EX-2	10558.448	4883.507	32.28	02/14/02	17.49	14.79
EX-2	10558.448	4883.507	32.28	03/06/02	17.45	14.83
EX-2	10558.448	4883.507	32.28	10/02/02	18.22	14.06
EX-3	10884.027	4568.183	32.07	09/08/94	17.96	14.11
EX-3	10884.027	4568.183	32.07	12/29/94	16.72	15.35
EX-3	10884.027	4568.183	32.07	03/29/95	15.43	16.64
EX-3	10884.027	4568.183	32.07	06/27/95	15.91	16.16

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-3	10884.027	4568.183	32.07	07/14/95	15.96	16.11
EX-3	10884.027	4568.183	32.07	05/01/97	12.84	19.23
EX-3	10884.027	4568.183	32.07	02/03/99	15.12	16.95
EX-3	10884.027	4568.183	32.07	12/08/00	18.27	13.80
EX-3	10884.027	4568.183	32.07	01/19/01	18.13	13.94
EX-3	10884.027	4568.183	32.07	02/08/01	18.10	13.97
EX-3	10884.027	4568.183	32.07	03/08/01	18.17	13.90
EX-3	10884.027	4568.183	32.07	04/12/01	17.44	14.63
EX-3	10884.027	4568.183	32.07	05/15/01	17.08	14.99
EX-3	10884.027	4568.183	32.07	06/12/01	17.04	15.03
EX-3	10884.027	4568.183	32.07	07/16/01	17.82	14.25
EX-3	10884.027	4568.183	32.07	08/14/01	18.25	13.82
EX-3	10884.027	4568.183	32.07	09/13/01	18.51	13.56
EX-3	10884.027	4568.183	32.07	10/25/01	18.92	13.15
EX-3	10884.027	4568.183	32.07	11/16/01	19.02	13.05
EX-3	10884.027	4568.183	32.07	12/18/01	17.91	14.16
EX-3	10884.027	4568.183	32.07	01/22/02	16.41	15.66
EX-3	10884.027	4568.183	32.07	02/14/02	15.95	16.12
EX-3	10884.027	4568.183	32.07	03/06/02	15.88	16.19
EX-3	10884.027	4568.183	32.07	10/02/02	17.59	14.48
EX-4 (MW-2)	10459.152	3767.039	35.60	10/18/93	16.63	18.97
EX-4 (MW-2)	10459.152	3767.039	35.60	10/28/93	16.72	18.88
EX-4 (MW-2)	10459.152	3767.039	35.60	01/27/94	16.56	19.04
EX-4 (MW-2)	10459.152	3767.039	35.60	09/08/94	16.86	18.74
EX-4 (MW-2)	10459.152	3767.039	35.60	12/29/94	16.09	19.51
EX-4 (MW-2)	10459.152	3767.039	35.60	03/29/95	14.63	20.97
EX-4 (MW-2)	10459.152	3767.039	35.60	06/27/95	15.22	20.38
EX-4 (MW-2)	10459.152	3767.039	35.60	07/14/95	15.41	20.19
EX-4 (MW-2)	10459.152	3767.039	35.60	05/01/97	14.08	21.52
EX-4 (MW-2)	10459.152	3767.039	35.60	02/03/99	14.58	21.02
EX-4 (MW-2)	10459.152	3767.039	35.60	12/08/00	16.97	18.63
EX-4 (MW-2)	10459.152	3767.039	35.60	01/19/01	16.81	18.79
EX-4 (MW-2)	10459.152	3767.039	35.60	02/08/01	16.84	18.76
EX-4 (MW-2)	10459.152	3767.039	35.60	03/08/01	16.92	18.68
EX-4 (MW-2)	10459.152	3767.039	35.60	04/12/01	16.96	18.64
EX-4 (MW-2)	10459.152	3767.039	35.60	05/15/01	16.92	18.68
EX-4 (MW-2)	10459.152	3767.039	35.60	06/12/01	16.98	18.62
EX-4 (MW-2)	10459.152	3767.039	35.60	07/16/01	17.09	18.51
EX-4 (MW-2)	10459.152	3767.039	35.60	08/14/01	17.22	18.38
EX-4 (MW-2)	10459.152	3767.039	35.60	09/13/01	17.30	18.30
EX-4 (MW-2)	10459.152	3767.039	35.60	10/25/01	17.51	18.09
EX-4 (MW-2)	10459.152	3767.039	35.60	11/16/01	17.52	18.08
EX-4 (MW-2)	10459.152	3767.039	35.60	12/18/01	17.22	18.38
EX-4 (MW-2)	10459.152	3767.039	35.60	01/22/02	16.28	19.32
EX-4 (MW-2)	10459.152	3767.039	35.60	02/14/02	15.80	19.80
EX-4 (MW-2)	10459.152	3767.039	35.60	03/06/02	15.61	19.99
EX-4 (MW-2)	10459.152	3767.039	35.60	10/02/02	16.49	19.11
EX-5	10932.866	4201.793	31.87	09/08/94	NM	
EX-5	10932.866	4201.793	31.87	12/29/94	15.85	16.02
EX-5	10932.866	4201.793	31.87	03/29/95	14.84	17.03
EX-5	10932.866	4201.793	31.87	06/27/95	16.32	15.55
EX-5	10932.866	4201.793	31.87	07/14/95	16.34	15.53

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
EX-5	10932.866	4201.793	31.87	05/01/97	12.06	19.81
EX-5	10932.866	4201.793	31.87	02/03/99	13.45	18.42
EX-5	10932.866	4201.793	31.87	12/08/00	19.72	12.15
EX-5	10932.866	4201.793	31.87	01/19/01	18.87	13.00
EX-5	10932.866	4201.793	31.87	02/08/01	18.98	12.89
EX-5	10932.866	4201.793	31.87	03/08/01	19.22	12.65
EX-5	10932.866	4201.793	31.87	04/12/01	18.96	12.91
EX-5	10932.866	4201.793	31.87	05/15/01	18.94	12.93
EX-5	10932.866	4201.793	31.87	06/12/01	19.05	12.82
EX-5	10932.866	4201.793	31.87	07/16/01	19.76	12.11
EX-5	10932.866	4201.793	31.87	08/14/01	20.32	11.55
EX-5	10932.866	4201.793	31.87	09/13/01	20.70	11.17
EX-5	10932.866	4201.793	31.87	10/25/01	21.27	10.60
EX-5	10932.866	4201.793	31.87	11/16/01	21.04	10.83
EX-5	10932.866	4201.793	31.87	12/18/01	16.64	15.23
EX-5	10932.866	4201.793	31.87	01/22/02	16.10	15.77
EX-5	10932.866	4201.793	31.87	02/14/02	15.35	16.52
EX-5	10932.866	4201.793	31.87	03/06/02	15.93	15.94
EX-5	10932.866	4201.793	31.87	10/02/02	19.58	12.29
EX-6	10295.278	4299.654	34.38	09/08/94	NM	
EX-6	10295.278	4299.654	34.38	12/29/94	13.98	20.40
EX-6	10295.278	4299.654	34.38	03/29/95	12.51	21.87
EX-6	10295.278	4299.654	34.38	06/27/95	13.04	21.34
EX-6	10295.278	4299.654	34.38	07/14/95	13.17	21.21
EX-6	10295.278	4299.654	34.38	05/01/97	11.93	22.45
EX-6	10295.278	4299.654	34.38	02/03/99	12.71	21.67
EX-6	10295.278	4299.654	34.38	12/08/00	Well casing filled with silt	
EX-6	10295.278	4299.654	34.38	11/16/01	Decommissioned	
EX-7	9860.733	4158.265	35.29	09/08/94	NM	
EX-7	9860.733	4158.265	35.29	12/29/94	13.21	22.08
EX-7	9860.733	4158.265	35.29	03/29/95	11.69	23.60
EX-7	9860.733	4158.265	35.29	06/27/95	12.34	22.95
EX-7	9860.733	4158.265	35.29	07/14/95	12.38	22.91
EX-7	9860.733	4158.265	35.29	05/01/97	11.44	23.85
EX-7	9860.733	4158.265	35.29	02/03/99	11.81	23.48
EX-7	9860.733	4158.265	35.29	12/08/00	14.32	20.97
EX-7	9860.733	4158.265	35.29	01/19/01	14.15	21.14
EX-7	9860.733	4158.265	35.29	02/08/01	14.18	21.11
EX-7	9860.733	4158.265	35.29	03/08/01	14.30	20.99
EX-7	9860.733	4158.265	35.29	04/12/01	14.37	20.92
EX-7	9860.733	4158.265	35.29	05/15/01	14.33	20.96
EX-7	9860.733	4158.265	35.29	06/12/01	14.41	20.88
EX-7	9860.733	4158.265	35.29	07/16/01	14.51	20.78
EX-7	9860.733	4158.265	35.29	08/14/01	14.65	20.64
EX-7	9860.733	4158.265	35.29	09/13/01	14.75	20.54
EX-7	9860.733	4158.265	35.29	10/25/01	15.01	20.28
EX-7	9860.733	4158.265	35.29	11/16/01	14.98	20.31
EX-7	9860.733	4158.265	35.29	12/18/01	14.42	20.87
EX-7	9860.733	4158.265	35.29	01/22/02	13.50	21.79
EX-7	9860.733	4158.265	35.29	02/14/02	13.15	22.14
EX-7	9860.733	4158.265	35.29	03/06/02	12.86	22.43
EX-7	9860.733	4158.265	35.29	10/02/02	13.76	21.53

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-1	10531.66	3883.202	35.48	05/11/93	15.56	19.92
MW-1	10531.66	3883.202	35.48	10/18/93	17.04	18.44
MW-1	10531.66	3883.202	35.48	10/28/93	17.16	18.32
MW-1	10531.66	3883.202	35.48	01/27/94	16.99	18.49
MW-1	10531.66	3883.202	35.48	09/08/94	NM	
MW-1	10531.66	3883.202	35.48	12/29/94	16.43	19.05
MW-1	10531.66	3883.202	35.48	03/29/95	NM	
MW-1	10531.66	3883.202	35.48	06/27/95	NM	
MW-1	10531.66	3883.202	35.48	07/14/95	NM	
MW-1	10531.66	3883.202	35.48	05/01/97	14.12	21.36
MW-1	10531.66	3883.202	35.48	02/03/99	14.83	20.65
MW-1	10531.66	3883.202	35.48	12/08/00	17.40	18.08
MW-1	10531.66	3883.202	35.48	01/19/01	17.23	18.25
MW-1	10531.66	3883.202	35.48	02/08/01	17.32	18.16
MW-1	10531.66	3883.202	35.48	03/08/01	17.42	18.06
MW-1	10531.66	3883.202	35.48	04/12/01	17.41	18.07
MW-1	10531.66	3883.202	35.48	05/15/01	17.37	18.11
MW-1	10531.66	3883.202	35.48	06/12/01	NM	
MW-1	10531.66	3883.202	35.48	07/16/01	17.59	17.89
MW-1	10531.66	3883.202	35.48	08/14/01	17.70	17.78
MW-1	10531.66	3883.202	35.48	09/13/01	17.78	17.70
MW-1	10531.66	3883.202	35.48	10/25/01	17.97	17.51
MW-1	10531.66	3883.202	35.48	11/16/01	17.88	17.60
MW-1	10531.66	3883.202	35.48	12/18/01	17.44	18.04
MW-1	10531.66	3883.202	35.48	01/22/02	16.68	18.80
MW-1	10531.66	3883.202	35.48	02/14/02	16.38	19.10
MW-1	10531.66	3883.202	35.48	03/06/02	16.03	19.45
MW-1	10531.66	3883.202	35.48	10/02/02	16.98	18.50
MW-3	10606.911	3812.937	34.56	10/18/93	16.47	18.09
MW-3	10606.911	3812.937	34.56	10/28/93	16.60	17.96
MW-3	10606.911	3812.937	34.56	01/27/94	16.40	18.16
MW-3	10606.911	3812.937	34.56	09/08/94	NM	
MW-3	10606.911	3812.937	34.56	12/29/94	15.90	18.66
MW-3	10606.911	3812.937	34.56	03/29/95	NM	
MW-3	10606.911	3812.937	34.56	06/27/95	NM	
MW-3	10606.911	3812.937	34.56	07/14/95	NM	
MW-3	10606.911	3812.937	34.56	05/01/97	13.73	20.83
MW-3	10606.911	3812.937	34.56	02/03/99	14.36	20.20
MW-3	10606.911	3812.937	34.56	12/08/00	16.73	17.83
MW-3	10606.911	3812.937	34.56	01/19/01	16.60	17.96
MW-3	10606.911	3812.937	34.56	02/08/01	16.64	17.92
MW-3	10606.911	3812.937	34.56	03/08/01	16.73	17.83
MW-3	10606.911	3812.937	34.56	04/12/01	16.73	17.83
MW-3	10606.911	3812.937	34.56	05/15/01	16.71	17.85
MW-3	10606.911	3812.937	34.56	06/12/01	16.76	17.80
MW-3	10606.911	3812.937	34.56	07/16/01	16.91	17.65
MW-3	10606.911	3812.937	34.56	08/14/01	16.97	17.59
MW-3	10606.911	3812.937	34.56	09/13/01	17.09	17.47
MW-3	10606.911	3812.937	34.56	10/25/01	17.24	17.32
MW-3	10606.911	3812.937	34.56	11/16/01	17.16	17.40
MW-3	10606.911	3812.937	34.56	12/18/01	16.82	17.74
MW-3	10606.911	3812.937	34.56	01/22/02	16.09	18.47
MW-3	10606.911	3812.937	34.56	02/14/02	15.65	18.91

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-3	10606.911	3812.937	34.56	03/06/02	15.50	19.06
MW-3	10606.911	3812.937	34.56	10/02/02	16.36	18.20
MW-4	10694.292	3806.683	33.61	10/18/93	16.21	17.40
MW-4	10694.292	3806.683	33.61	10/28/93	16.26	17.35
MW-4	10694.292	3806.683	33.61	01/27/94	16.06	17.55
MW-4	10694.292	3806.683	33.61	09/08/94	NM	
MW-4	10694.292	3806.683	33.61	12/29/94	15.55	18.06
MW-4	10694.292	3806.683	33.61	03/29/95	NM	
MW-4	10694.292	3806.683	33.61	06/27/95	NM	
MW-4	10694.292	3806.683	33.61	07/14/95	NM	
MW-4	10694.292	3806.683	33.61	05/01/97	13.32	20.29
MW-4	10694.292	3806.683	33.61	02/03/99	14.04	19.57
MW-4	10694.292	3806.683	33.61	12/08/00	16.25	17.36
MW-4	10694.292	3806.683	33.61	01/19/01	16.17	17.44
MW-4	10694.292	3806.683	33.61	02/08/01	16.21	17.40
MW-4	10694.292	3806.683	33.61	03/08/01	16.29	17.32
MW-4	10694.292	3806.683	33.61	04/12/01	16.28	17.33
MW-4	10694.292	3806.683	33.61	05/15/01	16.28	17.33
MW-4	10694.292	3806.683	33.61	06/12/01	16.32	17.29
MW-4	10694.292	3806.683	33.61	07/16/01	16.43	17.18
MW-4	10694.292	3806.683	33.61	08/14/01	16.53	17.08
MW-4	10694.292	3806.683	33.61	09/13/01	16.60	17.01
MW-4	10694.292	3806.683	33.61	10/25/01	16.74	16.87
MW-4	10694.292	3806.683	33.61	11/16/01	16.63	16.98
MW-4	10694.292	3806.683	33.61	12/18/01	16.20	17.41
MW-4	10694.292	3806.683	33.61	01/22/02	15.65	17.96
MW-4	10694.292	3806.683	33.61	02/14/02	15.26	18.35
MW-4	10694.292	3806.683	33.61	03/06/02	15.18	18.43
MW-4	10694.292	3806.683	33.61	10/02/02	15.96	17.65
MW-5	10840.045	3669.241	34.66	10/18/93	20.13	14.53
MW-5	10840.045	3669.241	34.66	10/28/93	20.48	14.18
MW-5	10840.045	3669.241	34.66	01/27/94	19.89	14.77
MW-5	10840.045	3669.241	34.66	09/08/94	NM	
MW-5	10840.045	3669.241	34.66	12/29/94	19.25	15.41
MW-5	10840.045	3669.241	34.66	03/29/95	NM	
MW-5	10840.045	3669.241	34.66	06/27/95	NM	
MW-5	10840.045	3669.241	34.66	07/14/95	NM	
MW-5	10840.045	3669.241	34.66	05/01/97	15.91	18.75
MW-5	10840.045	3669.241	34.66	02/03/99	18.15	16.51
MW-5	10840.045	3669.241	34.66	12/08/00	19.80	14.86
MW-5	10840.045	3669.241	34.66	01/19/01	19.69	14.97
MW-5	10840.045	3669.241	34.66	02/08/01	19.67	14.99
MW-5	10840.045	3669.241	34.66	03/08/01	19.75	14.91
MW-5	10840.045	3669.241	34.66	04/12/01	19.80	14.86
MW-5	10840.045	3669.241	34.66	05/15/01	20.00	14.66
MW-5	10840.045	3669.241	34.66	06/12/01	20.01	14.65
MW-5	10840.045	3669.241	34.66	07/16/01	20.32	14.34
MW-5	10840.045	3669.241	34.66	08/14/01	20.39	14.27
MW-5	10840.045	3669.241	34.66	09/13/01	20.47	14.19
MW-5	10840.045	3669.241	34.66	10/25/01	20.30	14.36
MW-5	10840.045	3669.241	34.66	11/16/01	20.19	14.47
MW-5	10840.045	3669.241	34.66	12/18/01	19.18	15.48

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-5	10840.045	3669.241	34.66	01/22/02	19.00	15.66
MW-5	10840.045	3669.241	34.66	02/14/02	18.79	15.87
MW-5	10840.045	3669.241	34.66	03/06/02	18.95	15.71
MW-5	10840.045	3669.241	34.66	10/02/02	20.25	14.41
MW-6	10441.876	4127.999	34.83	10/25/01	16.73	18.10
MW-6	10441.876	4127.999	34.83	11/16/01	16.67	18.16
MW-6	10441.876	4127.999	34.83	12/18/01	16.35	18.48
MW-6	10441.876	4127.999	34.83	01/22/02	15.46	19.37
MW-6	10441.876	4127.999	34.83	02/14/02	15.94	18.89
MW-6	10441.876	4127.999	34.83	03/06/02	14.73	20.10
MW-6	10441.876	4127.999	34.83	10/02/02	15.57	19.26
MW-7	10746.817	3975.831	34.74	10/25/01	25.77	8.97
MW-7	10746.817	3975.831	34.74	11/16/01	24.94	9.80
MW-7	10746.817	3975.831	34.74	12/18/01	21.26	13.48
MW-7	10746.817	3975.831	34.74	01/22/02	22.72	12.02
MW-7	10746.817	3975.831	34.74	02/14/02	22.61	12.13
MW-7	10746.817	3975.831	34.74	03/06/02	23.33	11.41
MW-7	10746.817	3975.831	34.74	10/02/02	25.08	9.66
MW-8	10850.356	4091.319	32.24	10/25/01	25.64	6.60
MW-8	10850.356	4091.319	32.24	11/16/01	23.85	8.39
MW-8	10850.356	4091.319	32.24	12/18/01	19.55	12.69
MW-8	10850.356	4091.319	32.24	01/22/02	22.44	9.80
MW-8	10850.356	4091.319	32.24	02/14/02	22.54	9.70
MW-8	10850.356	4091.319	32.24	03/06/02	23.52	8.72
MW-8	10850.356	4091.319	32.24	10/02/02	25.41	6.83
MW-9	10533.922	3573.223	36.00	01/22/02	17.57	18.43
MW-9	10533.922	3573.223	36.00	02/14/02	17.21	18.79
MW-9	10533.922	3573.223	36.00	03/06/02	17.02	18.98
MW-9	10533.922	3573.223	36.00	10/02/02	17.85	18.15
MW-10	10244.374	3856.751	35.06	01/22/02	14.97	20.09
MW-10	10244.374	3856.751	35.06	02/14/02	14.46	20.60
MW-10	10244.374	3856.751	35.06	03/06/02	14.20	20.86
MW-10	10244.374	3856.751	35.06	10/02/02	15.81	19.25
MW-11	9936.308	4506.014	34.41	01/22/02	13.32	21.09
MW-11	9936.308	4506.014	34.41	02/14/02	12.94	21.47
MW-11	9936.308	4506.014	34.41	03/06/02	12.76	21.65
MW-11	9936.308	4506.014	34.41	10/02/02	Free product, unable to measure	
MW-12	10224.87	4799.258	32.79	01/22/02	17.88	14.91
MW-12	10224.87	4799.258	32.79	02/14/02	17.46	15.33
MW-12	10224.87	4799.258	32.79	03/06/02	17.37	15.42
MW-12	10224.87	4799.258	32.79	10/02/02	17.65	15.14
MW-13	10534.855	4458.115	34.94	01/22/02	18.83	16.11
MW-13	10534.855	4458.115	34.94	02/14/02	17.95	16.99
MW-13	10534.855	4458.115	34.94	03/06/02	17.57	17.37
MW-13	10534.855	4458.115	34.94	10/02/02	18.80	16.14
WG-1	11177	4800	37.28	10/28/93	32.82	4.46
WG-1	11177	4800	37.28	01/27/94	30.04	7.24
WG-1	11177	4800	37.28	09/08/94	NM	
WG-1	11177	4800	37.28	12/29/94	NM	

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Northing (lacal plane)	Easting (local Plane)	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
WG-1	11177	4800	37.28	03/29/95	NM	
WG-1	11177	4800	37.28	06/27/95	NM	
WG-1	11177	4800	37.28	07/14/95	NM	
WG-1	11177	4800	37.28	05/01/97	17.80	19.48
WG-1	11177	4800	37.28	02/03/99	23.02	14.26
WG-1	11177	4800	37.28	12/08/00	31.60	5.68
WG-1	11177	4800	37.28	01/19/01	31.74	5.54
WG-1	11177	4800	37.28	02/08/01	30.78	6.50
WG-1	11177	4800	37.28	03/08/01	31.80	5.48
WG-1	11177	4800	37.28	04/12/01	29.15	8.13
WG-1	11177	4800	37.28	05/15/01	29.95	7.33
WG-1	11177	4800	37.28	06/12/01	31.02	6.26
WG-1	11177	4800	37.28	07/16/01	34.23	3.05
WG-1	11177	4800	37.28	08/14/01	33.27	4.01
WG-1	11177	4800	37.28	09/13/01	31.15	6.13
WG-1	11177	4800	37.28	10/25/01	31.38	5.90
WG-1	11177	4800	37.28	11/16/01	30.77	6.51
WG-1	11177	4800	37.28	12/18/01	25.45	11.83
WG-1	11177	4800	37.28	01/22/02	27.80	9.48
WG-1	11177	4800	37.28	02/14/02	29.27	8.01
WG-1	11177	4800	37.28	03/06/02	29.46	7.82
WG-1	11177	4800	37.28	10/02/02	32.60	4.68

Note: Reference point elevations for EX-1 to EX-7, MW-1 to MW-5 and WG-1 surveyed by WH&P on September 19, 2000.
MW-6 to MW-13 surveyed by WH&P on January 30, 2002

Table 2
Total Petroleum Hydrocarbons
Groundwater and Storm Water
McCall/GWCC
Portland, Oregon

Location	Matrix	Date Sampled	TPH - FIQ							
			Gasoline		Diesel		Heavy Fuel Oil		Lube Oil	
Monitoring Wells - Water µg/L (ppb)										
EX-1	Water	12/20/00	**990**	Z	100	U	250	U	250	U
EX-1	Water	03/07/02	**460**	H	**280**	Y	**550**	O		
EX-1	Water	10/03/02	100	U	100	U	250	U		
EX-2	Water	12/20/00	100	U	100	U	250	U	250	U
EX-2	Water	03/07/02	110	U	**170**	Y	270	U		
EX-2	Water	10/04/02	100	U	**270**	Y	**290**	O		
EX-3	Water	12/20/00	**690**	Z	100	U	250	U	250	U
EX-3	Water	03/07/02	110	U	**110**	Y	270	U		
EX-3	Water	10/04/02	100	U	**120**	Y	250	U		
EX-4/MW-2	Water	12/20/00	**640**	Z	100	U	250	U	250	U
EX-4/MW-2	Water	03/07/02	**160**	H	**920**	Y	**290**	O		
EX-4/MW-2	Water	10/03/02	**150**	H	**980**	Y	250	U		
EX-5	Water	12/20/00	**950**	Z	100	U	250	U	250	U
EX-5	Water	03/07/02	100	U	**140**	Y	250	U		
EX-5	Water	10/04/02	100	U	**120**	Y	**270**	O		
EX-7	Water	12/20/00	**530**	Z	100	U	250	U	250	U
EX-7	Water	03/06/02	100	U	100	U	250	U		
EX-7	Water	10/03/02	100	U	100	U	250	U		
MW-1	Water	12/20/00	**1200**	Z	100	U	250	U	250	U
MW-1	Water	03/07/02	100	U	**110**	Y	250	U		
MW-1	Water	10/03/02	100	U	**220**	Y	250	U		
MW-3	Water	12/20/00	**720**	Z	100	U	250	U	250	U
MW-3 Duplicate	Water	03/07/02	**240**	H	**1000**	Y	**390**	O		
MW-3	Water	03/07/02	**220**	H	**1000**	Y	**410**	O		
MW-3	Water	10/03/02	**320**	H	**3000**	Y	**520**	L		
MW-4	Water	12/20/00	100	U	100	U	250	U	250	U
MW-4	Water	03/07/02	**180**	H	**870**	Y	**350**	O		
MW-4	Water	10/03/02	**170**	H	**1200**	Y	250	U		
MW-5	Water	12/20/00	100	U	100	U	250	U	250	U
MW-5	Water	03/07/02	100	U	**310**	Y	**260**	O		
MW-5	Water	10/03/02	100	U	**280**	Y	250	U		
MW-5 Duplicate	Water	10/03/02	100	U	**310**	Y	250	U		
MW-6	Water	10/25/01	250	U	630	U	630	U		
MW-6 Duplicate	Water	10/25/01	250	U	630	U	630	U		
MW-6	Water	03/08/02	**160**	Z	**240**	Y	**500**	O		
MW-6	Water	10/03/02	100	U	**280**	Y	**350**	L		
MW-6 Duplicate	Water	10/03/02	100	U	**230**	Y	**270**	L		
MW-7	Water	10/25/01	250	U	630	U	630	U		
MW-7	Water	03/08/02	110	U	**1500**	Y	**4000**	O		
MW-7	Water	10/04/02	**160**	H	**1100**	Y	**820**	O		
MW-8	Water	10/25/01	250	U	**3090**		**1840**			
MW-8	Water	03/07/02	**650**	H	**20000**	Y	**9200**	O		
MW-8	Water	10/04/02	**1100**	H	**35000**	DY	**23000**	DO		

Table 2
Total Petroleum Hydrocarbons
Groundwater and Storm Water
McCall/GWCC
Portland, Oregon

Location	Matrix	Date Sampled	TPH - FIQ							
			Gasoline		Diesel		Heavy Fuel Oil		Lube Oil	
MW-9	Water	01/22/02	**140**	H	**480**	Y	**310**	O		
MW-9	Water	03/06/02	**200**	H	**520**	Y	300	U		
MW-9 Duplicate	Water	03/06/02	**210**	H	**600**	Y	290	U		
MW-9	Water	10/03/02	**150**	H	**850**	Y	250	U		
MW-10	Water	01/22/02	100	U	**250**	Y	**510**	O		
MW-10	Water	03/06/02	110	U	**170**	Y	**320**	O		
MW-10	Water	10/03/02	100	U	**170**	Y	250	U		
MW-11	Water	01/22/02	**1900**	H	**15000**	Y	**4300**	O		
MW-11	Water	03/08/02	**1700**	H	**11000**	Y	**2600**	O		
MW-12	Water	01/22/02	**110**	H	**630**	Y	**1000**	O		
MW-12	Water	03/06/02	**150**	H	**1100**	Y	**1900**	O		
MW-12	Water	10/04/02	100	U	**570**	Y	**660**	O		
MW-13	Water	01/22/02	**300**	H	**1000**	Y	**2300**	O		
MW-13 Duplicate	Water	01/22/02	**360**	H	**1300**	Y	**2900**	O		
MW-13	Water	03/06/02	**150**	H	**710**	Y	**1500**	O		
MW-13	Water	10/04/02	**150**	Z	**650**	Y	**1300**	O		
Catch Basins - Storm Water µg/L (ppb)										
S-1W	Water	12/20/00	**1100**	Z	100	U	250	U	250	U
S-1W	Water	03/06/02	110	U	110	U	270	U		
S-2W	Water	12/20/00	100	U	100	U	250	U	250	U
S-2W	Water	03/06/02	**130**	Z	110	U	260	U		
S-3W	Water	02/15/01	**1300**	Z	**510**	Z	250	U	**700**	Z
S-3W	Water	03/06/02	110	U	**110**	Z	260	U		
Oil/Water Separator - Storm Water µg/L (ppb)										
S-4W	Water	02/15/01	**270**	Z	**280**	Z	250	U	250	U
S-4W Duplicate	Water	02/15/01	**260**	Z	**300**	Z	250	U	250	U
S-4W	Water	04/09/02	**220**	H	**1300**	F	**550**	O		

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.
DET= Detected above method reporting limit (method reporting limit shown)
D = The reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

	Groundwater																																			
Sample Designation	EX-1		EX-1		EX-1		EX-2		EX-2		EX-2		EX-3		EX-3		EX-3		EX-4/MW-2		EX-4/MW-2		EX-4/MW-2		EX-5		EX-5		EX-5		EX-7		EX-7		EX-7	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		10/04/02		12/20/00		03/07/02		10/04/02		12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		10/04/02		12/20/00		03/06/02		10/03/02	
LPAHs																																				
Naphthalene	0.095	U	0.013	U	**0.028**	U	**0.01**	J	0.013	U	**0.022**	J	**0.02**	J	0.013	U	**0.038**	J	0.095	U	0.014	U	0.012	U	**0.009**	J	**0.028**	J	**0.022**	J	0.095	U	**0.14**	J	**0.022**	J
Acenaphthylene	0.095	U	0.011	U	0.011	U	0.095	U	0.011	U	0.011	U	0.095	U	0.011	U	0.011	U	0.095	U	0.012	U	0.011	U	0.095	U	0.011	U	0.011	U	0.095	U	0.011	U	0.011	U
Acenaphthene	0.095	U	0.0094	U	0.01	U	**0.02**	J	**0.041**	J	**0.110**	J	**0.01**	J	0.0093	U	**0.0230**	J	**0.14**		**0.30**		**0.19**	J	**0.009**	J	**0.024**	J	**0.015**	J	0.095	U	0.0089	U	0.01	U
Fluorene	0.095	U	0.013	U	0.012	U	0.095	U	0.013	U	0.012	U	0.095	U	0.013	U	0.012	U	0.095	U	0.014	U	0.012	U	0.095	U	0.013	U	0.012	U	0.095	U	0.013	U	0.012	U
Phenanthrene	**0.01**	J	**0.038**	J	**0.028**	J	**0.04**	J	**0.047**	J	**0.057**	J	**0.04**	J	**0.06**	J	**0.06**	J	**0.10**		**0.52**		**0.16**	J	**0.02**	J	**0.034**	J	**0.039**	J	0.095	U	**0.016**	J	**0.015**	J
Anthracene	**0.008**	J	**0.063**	J	**0.110**	J	0.095	U	0.016	U	0.015	U	0.095	U	**0.019**	J	**0.016**	J	0.095	U	**0.071**	J	**0.060**	J	0.095	U	0.016	U	**0.017**	J	0.095	U	**0.019**	J	**0.038**	J
2-Methylnaphthalene	0.095	U	0.013	U	0.012	U	**0.008**	J	**0.012**	J	**0.017**	J	0.095	U	0.012	U	**0.015**	J	0.095	U	0.013	U	0.012	U	0.095	U	0.012	U	0.012	U	0.095	U	0.012	U	0.012	U
Total LPAH	**0.018**		**0.101**		**0.166**		**0.078**		**0.100**		**0.206**		**0.07**		**0.08**		**0.15**		**0.24**		**0.89**		**0.41**		**0.038**		**0.086**		**0.093**				**0.18**		**0.08**	
HPAHs																																				
Fluoranthene	**0.02**	J	0.014	U	**0.053**	J	**0.009**	J	**0.017**	J	0.013	U	**0.01**	J	**0.038**	J	**0.034**	J	**0.01**	J	**0.048**	J	**0.028**	J	**0.009**	J	0.013	U	0.013	U	0.095	U	**0.018**	J	**0.024**	J
Pyrene	**0.03**	J	**0.039**	J	**0.068**	J	**0.03**	J	**0.039**	J	**0.074**	J	**0.03**	J	**0.064**	J	**0.061**	J	**0.02**	J	**0.13**	J	**0.049**	J	**0.040**	J	**0.046**	J	**0.067**	J	0.095	U	**0.022**	J	**0.028**	J
Benz(a)anthracene	**0.01**	J	0.013	U	**0.024**	J	**0.007**	J	0.013	U	0.012	U	**0.008**	J	0.013	U	0.012	U	**0.007**	J	0.013	U	0.012	U	**0.006**	J	0.013	U	0.012	U	0.095	U	0.012	U	0.012	U
Chrysene	**0.02**	J	0.015	U	**0.033**	J	**0.007**	J	0.015	U	0.014	U	**0.01**	J	0.015	U	0.014	U	**0.008**	J	0.016	U	0.014	U	**0.008**	J	0.015	U	0.014	U	0.095	U	0.015	U	0.014	U
Benzo(b)fluoranthene	**0.01**	J	0.021	U	**0.033**	J	**0.006**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	0.095	U	0.021	U	0.020	U	0.095	U	0.020	U	0.020	U
Benzo(k)fluoranthene	**0.01**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	**0.006**	J	0.021	U	0.020	U	**0.003**	J	0.021	U	0.020	U	**0.004**	J	0.020	U	0.020	U
Benzo(a)pyrene	**0.02**	J	0.018	U	**0.051**	J	**0.007**	J	0.017	U	0.016	U	**0.007**	J	0.017	U	0.016	U	**0.007**	J	0.018	U	0.016	U	0.095	U	0.017	U	0.016	U	0.095	U	0.017	U	**0.019**	J
Indeno(1,2,3-cd)pyrene	**0.02**	J	0.026	U	**0.050**	J	**0.009**	J	0.026	U	0.024	U	**0.009**	J	0.026	U	0.024	U	**0.007**	J	0.027	U	0.024	U	**0.007**	J	0.026	U	0.024	U	**0.005**	J	0.025	U	0.024	U
Dibenz(a,h)anthracene	0.19	U	0.03	U	0.031	U	**0.005**	J	0.033	U	0.031	U	0.19	U	0.033	U	0.031	U	0.19	U	0.034	U	0.031	U	0.19	U	0.033	U	0.031	U	0.19	U	0.031	U	0.031	U
Benzo(g,h,i)perylene	**0.02**	J	**0.039**	J	**0.061**	J	**0.01**	J	0.018	U	0.017	U	**0.02**	J	**0.034**	J	**0.025**	J	**0.009**	J	0.019	U	0.017	U	**0.03**	J	**0.054**	J	**0.031**	J	**0.007**	J	0.017	U	**0.021**	J
Total HPAHs	**0.16**		**0.08**		**0.37**		**0.10**		**0.06**		**0.07**		**0.106**		**0.136**		**0.120**		**0.080**		**0.178**		**0.077**		**0.103**		**0.100**		**0.098**		**0.016**		**0.040**		**0.092**	
SVOCs																																				
3- and 4-Methylphenol Coelution	0.48	U	0.055	U	0.051	U	**0.02**	J	0.055	U	0.051	U	**0.05**	J	**0.087**	J	**0.090**	J	0.48	U	0.056	U	0.051	U	**0.007**	J	0.055	U	0.051	U	0.48	U	0.052	U	0.051	U
Dibenzofuran	0.095	U	0.015	U	0.014	U	0.095	U	0.014	U	0.014	U	0.095	U	0.014	U	0.014	U	0.095	U	0.015	U	0.014	U	0.095	U	0.014	U	0.014	U	0.095	U	0.014	U	0.014	U
Butyl Benzyl Phthalate	0.19	U	0.028	U	0.026	U	0.19	U	0.028	U	0.026	U	0.19	U	0.028	U	0.026	U	0.19	U	0.028	U	0.026	U	0.19	U	0.028	U	0.026	U	0.19	U	**0.041**	J	0.026	U
Di-n-octyl Phthalate	0.95	U	0.035	U	0.032	U	0.95	U	0.035	U	0.032	U	0.95	U	0.035	U	0.032	U	0.95	U	0.036	U	0.032	U	0.95	U	0.035	U	0.032	U	0.95	U	0.033	U	0.032	U

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	MW-1		MW-1		MW-1		MW-3		MW-3		MW-3 Dup		MW-3		MW-4		MW-4		MW-4		MW-5		MW-5		MW-5 Dup		MW-6		MW-6 Dup		MW-6		MW-6		MW-6 Dup	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		03/07/02		10/03/02		12/20/00		03/07/02		10/03/02		12/20/00		03/07/02		10/03/02		10/03/02		10/25/01		10/25/01		03/08/02		10/03/02		10/03/02	
Groundwater																																				
LPAHs																																				
Naphthalene	0.095	U	0.012	U	0.012	U	0.095	U	0.012	U	0.012	U	0.012	U	0.095	U	0.014	U	0.012	U	0.095	U	**0.034**	J	0.012	U	**0.023**		5.00	U	5.00	U	**0.12**	J	**0.048**	J	**0.066**	J
Acenaphthylene	0.095	U	0.011	U	0.011	U	0.095	U	0.011	U	0.011	U	0.011	U	0.095	U	0.012	U	0.011	U	0.095	U	0.011	U	0.011	U	0.011	U	5.00	U	5.00	U	**0.038**	J	0.011	U	0.011	U
Acenaphthene	0.095	U	0.0088	U	0.01	U	**0.17**		**0.21**		**0.23**		**0.33**		**0.03**	J	**0.064**	J	**0.130**	J	0.095	U	0.0094	U	0.0088	U	0.0088	U	5.00	U	5.00	U	0.0095	U	0.0088	U	**0.020**	J
Fluorene	0.095	U	0.012	U	0.012	U	0.095	U	0.012	U	0.012	U	0.012	U	0.095	U	0.014	U	0.012	U	0.095	U	0.013	U	0.012	U	0.012	U	5.00	U	5.00	U	**0.02**	J	0.012	U	0.012	U
Phenanthrene	0.095	U	0.011	U	0.01	U	**0.13**		**0.18**	J	**0.17**	J	**0.27**		**0.06**	J	**0.082**	J	**0.086**	J	0.095	U	0.011	U	**0.021**	J	**0.021**	J	5.00	U	5.00	U	**0.13**	J	**0.039**	J	**0.059**	J
Anthracene	0.095	U	0.015	U	**0.028**	J	**0.02**	J	**0.049**	J	**0.055**	J	**0.092**	J	**0.01**	J	**0.035**	J	**0.046**	J	0.095	U	0.016	U	**0.025**	J	**0.022**	J	5.00	U	5.00	U	**0.047**	J	**0.045**	J	**0.049**	J
2-Methylnaphthalene	0.095	U	0.012	U	0.012	U	0.095	U	0.012	U	0.012	U	0.012	U	0.095	U	0.013	U	0.012	U	0.095	U	0.013	U	0.012	U	0.012	U	5.00	U	5.00	U	**0.025**	J	0.012	U	0.012	U
Total LPAH					**0.03**		**0.32**		**0.44**		**0.46**		**0.69**		**0.10**		**0.18**		**0.26**				**0.03**		**0.05**		**0.07**						**0.38**		**0.13**		**0.19**	
HPAHs																																				
Fluoranthene	0.095	U	0.013	U	0.013	U	**0.01**	J	**0.065**	J	**0.071**	J	**0.087**	J	**0.02**	J	**0.04**	J	0.013	U	0.095	U	0.014	U	**0.031**	J	**0.026**	J	5.00	U	5.00	U	**0.18**	J	**0.08**	J	**0.12**	J
Pyrene	0.095	U	0.015	U	0.015	U	**0.05**	J	**0.13**	J	**0.11**	J	**0.19**	J	**0.05**	J	**0.11**	J	**0.15**	J	0.095	U	**0.024**	J	**0.037**	J	**0.034**	J	5.00	U	5.00	U	**0.25**		**0.12**	J	**0.20**	
Benz(a)anthracene	0.095	U	0.012	U	0.012	U	**0.008**	J	0.012	U	**0.024**	J	**0.048**	J	**0.01**	J	**0.053**	J	**0.038**	J	0.095	U	0.013	U	**0.030**	J	0.012	U	5.00	U	5.00	U	**0.077**	J	**0.033**	J	**0.042**	J
Chrysene	0.095	U	0.014	U	0.014	U	**0.009**	J	**0.033**	J	**0.030**	J	**0.062**	J	**0.02**	J	**0.048**	J	**0.054**	J	0.095	U	0.015	U	**0.022**	J	0.014	U	5.00	U	5.00	U	**0.087**	J	**0.038**	J	**0.052**	J
Benzo(b)fluoranthene	0.095	U	0.020	U	0.020	U	**0.006**	J	0.020	U	0.020	U	**0.055**	J	**0.01**	J	0.021	U	**0.044**	J	0.095	U	0.021	U	0.020	U	0.020	U	5.00	U	5.00	U	**0.088**	J	**0.037**	J	**0.057**	J
Benzo(k)fluoranthene	0.095	U	0.020	U	0.020	U	**0.006**	J	0.020	U	0.020	U	0.020	U	**0.01**	J	0.021	U	0.020	U	0.095	U	0.021	U	0.020	U	0.020	U	5.00	U	5.00	U	**0.045**	J	0.020	U	0.020	U
Benzo(a)pyrene	0.095	U	0.016	U	0.016	U	**0.007**	J	0.016	U	0.016	U	**0.077**	J	**0.01**	J	0.018	U	**0.043**	J	0.095	U	0.018	U	0.016	U	0.016	U	5.00	U	5.00	U	**0.096**	J	**0.028**	J	**0.057**	J
Indeno(1,2,3-cd)pyrene	0.19	U	0.024	U	0.024	U	**0.008**	J	0.024	U	0.024	U	**0.053**	J	**0.01**	J	0.026	U	**0.032**	J	0.19	U	0.026	U	0.024	U	0.024	U	5.00	U	5.00	U	**0.088**	J	**0.037**	J	**0.057**	J
Dibenz(a,h)anthracene	0.19	U	0.031	U	0.031	U	0.19	U	0.031	U	0.031	U	0.031	U	0.19	U	0.033	U	0.031	U	0.19	U	0.033	U	0.031	U	0.031	U	5.00	U	5.00	U	0.033	U	0.031	U	0.031	U
Benzo(g,h,i)perylene	0.19	U	0.017	U	0.017	U	**0.009**	J	**0.039**	J	0.017	U	**0.066**	J	**0.02**	J	0.018	U	**0.048**	J	0.19	U	0.018	U	0.017	U	0.017	U	5.00	U	5.00	U	**0.09**	J	**0.048**	J	**0.071**	J
Total HPAHs							**0.113**		**0.267**		**0.235**		**0.638**		**0.160**		**0.251**		**0.409**				**0.02**		**0.12**		**0.09**						**1.00**		**0.42**		**0.66**	
SVOCs																																				
3- and 4-Methylphenol Coelution	0.48	U	0.051	U	0.051	U	0.48	U	0.051	U	0.051	U	0.051	U	0.48	U	0.056	U	0.051	U	0.48	U	0.055	U	0.051	U	0.051	U	5.00	U	5.00	U	**0.073**	J	0.051	U	0.051	U
Dibenzofuran	0.095	U	0.014	U	0.014	U	0.095	U	0.014	U	0.014	U	0.014	U	0.095	U	0.015	U	0.014	U	0.095	U	0.015	U	0.014	U	0.014	U	5.00	U	5.00	U	0.015	U	0.014	U	0.014	U
Butyl Benzyl Phthalate	0.19	U	**0.052**	J	0.026	J	0.19	U	0.026	U	0.026	U	0.026	U	0.19	U	0.028	U	0.026	U	0.19	U	0.028	U	**0.048**	J	0.026	U	5.00	U	5.00	U	0.028	U	0.026	U	0.026	U
Di-n-octyl Phthalate	0.95	U	0.032	U	0.032	U	0.95	U	0.032	U	0.032	U	0.032	U	0.95	U	0.035	U	0.032	U	0.95	U	0.035	U	0.032	U	0.032	U	5.00	U	5.00	U	0.035	U	0.032	U	0.032	U

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Groundwater

Sample Designation / Matrix / Date Sampled	MW-7 Water 10/25/01	MW-7 Water 03/08/02	MW-7 Water 10/04/02	MW-8 Water 10/25/01	MW-8 Water 03/07/02	MW-8 Water 10/04/02	MW-9 Water 01/22/02	MW-9 Water 03/06/02	MW-9 Dup Water 03/06/02	MW-9 Water 10/03/02	MW-10 Water 01/22/02
LPAHs											
Naphthalene	5.00 U	0.086 J	0.020 J	5.00 U	0.16 J	0.38 J	0.20 U	0.013 U	0.012 U	0.012 U	0.20 U
Acenaphthylene	5.00 U	0.025 J	0.011 U	5.00 U	0.011 U	0.210 J	0.20 U	0.11 J	0.069 J	0.011 U	0.20 U
Acenaphthene	5.00 U	0.0092 U	0.0088 U	5.00 U	0.58	0.78 J	0.20 U	0.12 J	0.15 J	0.25	0.20 U
Fluorene	5.00 U	0.013 U	0.012 U	5.00 U	0.56	0.91 J	0.20 U	0.01 U	0.012 U	0.012 U	0.20 U
Phenanthrene	5.00 U	0.077 J	0.034 J	5.00 U	1.2	1.7 J	0.26	0.22	0.16 J	0.20 J	0.20 U
Anthracene	5.00 U	0.039 J	0.031 J	5.00 U	0.097 J	0.380 J	0.20 U	0.098 J	0.067 J	0.079 J	0.20 U
2-Methylnaphthalene	5.00 U	0.034 J	0.012 U	5.00 U	0.081 J	0.160 J	0.20 U	0.012 U	0.012 U	0.012 U	0.20 U
Total LPAH		0.26	0.09		2.68	4.52	0.26	0.55	0.45	0.53	
HPAHs											
Fluoranthene	5.00 U	0.061 J	0.013 U	5.00 U	0.22	0.73 J	0.25	0.33	0.13 J	0.11 J	0.20 U
Pyrene	5.00 U	0.089 J	0.025 J	5.00 U	0.34	1.10 J	0.41	0.48	0.26	0.24	0.20 U
Benz(a)anthracene	5.00 U	0.044 J	0.012 U	5.00 U	0.071 J	0.390 J	0.20 U	0.23	0.096 J	0.075 J	0.20 U
Chrysene	5.00 U	0.045 J	0.014 U	5.00 U	0.16 J	0.56 J	0.20 U	0.24	0.10 J	0.07 J	0.20 U
Benzo(b)fluoranthene	5.00 U	0.021 U	0.020 U	5.00 U	0.064 J	0.350 J	0.20 U	0.28	0.098 J	0.074 J	0.20 U
Benzo(k)fluoranthene	5.00 U	0.021 U	0.020 U	5.00 U	0.02 U	0.13 J	0.20 U	0.096 J	0.027 J	0.033 J	0.20 U
Benzo(a)pyrene	5.00 U	0.017 U	0.016 U	5.00 U	0.089 J	0.360 J	0.20 U	0.26	0.094 J	0.077 J	0.20 U
Indeno(1,2,3-cd)pyrene	5.00 U	0.026 U	0.024 U	5.00 U	0.04 J	0.25 J	0.20 U	0.15 J	0.062 J	0.053 J	0.20 U
Dibenz(a,h)anthracene	5.00 U	0.032 U	0.031 U	5.00 U	0.031 U	0.031 UJ	0.20 U	0.031 U	0.031 U	0.031 U	0.20 U
Benzo(g,h,i)perylene	5.00 U	0.099 J	0.017 U	5.00 U	0.057 J	0.310 J	0.20 U	0.16 J	0.065 J	0.071 J	0.20 U
Total HPAHs		0.34	0.03		1.04	4.18	0.66	2.23	0.93	0.81	
SVOCs											
3- and 4-Methylphenol Coelution	5.00 U	1.1	0.051 U	5.00 U	0.22 J	1.60 J	0.480 U	0.052 U	0.051 U	0.051 U	0.48 U
Dibenzofuran	5.00 U	0.014 U	0.014 U	5.00 U	0.18 J	0.014 UJ	0.20 U	0.014 U	0.014 U	0.014 U	0.20 U
Butyl Benzyl Phthalate	5.00 U	0.027 U	0.026 U	5.00 U	0.13 J	0.026 UJ	0.20 U	0.050 J	0.074 J	0.026 U	0.20 U
Di-n-octyl Phthalate	5.00 U	0.034 U	0.032 U	5.00 U	0.032 U	0.032 UJ	0.20 U	0.033 U	0.032 U	0.032 U	0.20 U

Sample Designation / Matrix / Date Sampled	MW-10 Water 03/06/02	MW-10 Water 10/03/02	MW-11 Water 01/22/02	MW-11 Water 03/08/02	MW-12 Water 01/22/02	MW-12 Water 03/06/02	MW-12 Water 10/04/02	MW-13 Water 01/22/02	MW-13 Dup Water 01/22/02	MW-13 Water 03/06/02	MW-13 Water 10/04/02
LPAHs											
Naphthalene	0.24	0.012 U	0.20 U	0.12 U	0.20 U	0.12 J	0.012 U	0.20 U	0.25	0.24	0.10 J
Acenaphthylene	0.022 J	0.011 U	0.20 U	0.110 U	0.20 U	0.028 J	0.011 U	0.20 U	0.20 U	0.054 J	0.022 J
Acenaphthene	0.009 U	0.0088 U	0.43	1.6 JD	0.20 U	0.15 J	0.25	0.20 U	0.20 U	0.18 J	0.25
Fluorene	0.013 U	0.012 U	0.86	2.0 D	0.20 U	0.013 U	0.012 U	0.20 U	0.20 U	0.037 J	0.012 U
Phenanthrene	0.08 J	0.012 J	1.80	3.0 D	0.20 U	0.11 J	0.15 J	0.20 U	0.20 U	0.19 J	0.14 J
Anthracene	0.029 J	0.029 J	0.41	0.660 JD	0.20 U	0.016 U	0.054 J	0.20 U	0.20 U	0.041 J	0.019 J
2-Methylnaphthalene	0.015 J	0.012 U	20.00 D	24 D	0.20 U	0.034 J	0.012 U	0.20 U	0.20 U	0.056 J	0.026 J
Total LPAH	0.39	0.04	23.50	31.26		0.44	0.45			0.80	0.56
HPAHs											
Fluoranthene	0.10 J	0.016 J	0.43	0.38 JD	0.20 U	0.058 J	0.013 U	0.20 U	0.20 U	0.14 J	0.058 J
Pyrene	0.15 J	0.059 J	0.61	0.89 JD	0.20 U	0.11 J	0.10 J	0.20 U	0.20 U	0.19 J	0.11 J
Benz(a)anthracene	0.081 J	0.026 J	0.20 U	0.23 JD	0.20 U	0.052 J	0.012 U	0.20 U	0.20 U	0.063 J	0.012 U
Chrysene	0.094 J	0.017 J	0.20 U	0.50 JD	0.20 U	0.046 J	0.014 U	0.20 U	0.20 U	0.075 J	0.014 U
Benzo(b)fluoranthene	0.070 J	0.020 U	0.20 U	0.20 U	0.20 U	0.021 U	0.020 U	0.20 U	0.20 U	0.020 U	0.020 U
Benzo(k)fluoranthene	0.037 J	0.020 U	0.20 U	0.20 U	0.20 U	0.021 U	0.020 U	0.20 U	0.20 U	0.020 U	0.020 U
Benzo(a)pyrene	0.090 J	0.016 U	0.20 U	0.16 U	0.20 U	0.018 U	0.016 U	0.20 U	0.20 U	0.098 J	0.016 U
Indeno(1,2,3-cd)pyrene	0.052 J	0.024 U	0.20 U	0.24 U	0.20 U	0.026 U	0.024 U	0.20 U	0.20 U	0.082 J	0.024 U
Dibenz(a,h)anthracene	0.031 U	0.031 U	0.20 U	0.31 U	0.20 U	0.033 U	0.031 U	0.20 U	0.20 U	0.031 U	0.031 U
Benzo(g,h,i)perylene	0.061 J	0.017 U	0.20 U	0.17 U	0.20 U	0.047 J	0.017 U	0.20 U	0.20 U	0.110 J	0.021 J
Total HPAHs	0.74	0.12	1.04	2.00		0.31	0.10			0.76	0.26
SVOCs											
3- and 4-Methylphenol Coelution	0.053 U	0.051 U	0.49 U	0.510 U	1.9	0.41 J	0.07 J	28 D	31 D	1.5	0.4 J
Dibenzofuran	0.014 U	0.014 U	0.20 U	0.81 JD	0.20 U	0.015 U	0.014 U	0.20 U	0.20 U	0.021 J	0.014 U
Butyl Benzyl Phthalate	0.040 J	0.026 U	0.20 U	0.26 U	0.20 U	0.028 U	0.026 U	0.20 U	0.20 U	0.027 U	0.026 U
Di-n-octyl Phthalate	0.033 U	0.032 U	0.20 U	0.32 U	0.20 U	0.035 U	0.032 U	0.20 U	0.20 U	0.034 U	0.032 U

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

	Storm Water																			
Sample Designation	S-1		S-1		S-2		S-2		S-3		S-3		S-4		S-4 Duplicate		S-4	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	12/20/00		03/06/02		12/20/00		03/06/02		12/20/00		03/06/02		12/20/00		12/20/00		04/09/02	
	LPAHs																	
Naphthalene	**0.03**	J	**0.03**	J	**0.07**	J	**0.025**	J	**0.07**	J	**0.025**	J	**0.04**	J	**0.04**	J	0.012	U
Acenaphthylene	**0.006**	J	0.011	U	**0.02**	J	0.011	U	0.095	U	0.011	U	0.095	U	0.096	U	0.011	U
Acenaphthene	**0.02**	J	0.0088	U	**0.02**	J	0.0092	U	0.095	U	0.0089	U	**0.14**		**0.12**		**0.085**	J
Fluorene	**0.02**	J	0.012	U	**0.04**	J	0.013	U	**0.02**	J	0.013	U	**0.36**		**0.34**		**0.17**	J
Phenanthrene	**0.07**	J	**0.032**	J	**0.25**		**0.043**	J	**0.20**		**0.054**	J	**0.46**		**0.35**		**0.073**	J
Anthracene	0.095	U	0.015	U	**0.02**	J	0.016	U	0.095	U	0.015	U	**0.02**	J	**0.01**	J	0.015	U
2-Methylnaphthalene	**0.03**	J	**0.016**	J	**0.05**	J	**0.014**	J	**0.096**		0.012	U	**0.09**	J	**0.10**		0.012	U
Total LPAH	**0.176**		**0.078**		**0.470**		**0.082**		**0.386**		**0.079**		**1.110**		**0.960**		**0.328**	
	HPAHs																	
Fluoranthene	**0.02**	J	0.013	U	**0.099**		**0.022**	J	**0.06**	J	**0.023**	J	**0.06**	J	**0.05**	J	0.01	U
Pyrene	**0.02**	J	0.015	U	**0.12**		**0.025**	J	**0.03**	J	**0.022**	J	**0.19**		**0.16**		**0.10**	J
Benz(a)anthracene	0.095	U	0.012	U	**0.03**	J	0.013	U	**0.007**	J	0.012	U	**0.03**	J	**0.02**	J	0.012	U
Chrysene	**0.008**	J	0.014	U	**0.06**	J	0.015	U	**0.03**	J	0.015	U	**0.12**		**0.09**	J	0.014	U
Benzo(b)fluoranthene	**0.006**	J	0.020	U	**0.04**	J	0.021	U	**0.01**	J	0.020	U	**0.03**	J	**0.03**	J	0.020	U
Benzo(k)fluoranthene	**0.004**	J	0.020	U	**0.03**	J	0.021	U	**0.008**	J	0.020	U	**0.02**	J	**0.01**	J	0.020	U
Benzo(a)pyrene	0.095	U	0.016	U	**0.03**	J	0.017	U	0.095	U	0.017	U	**0.03**	J	**0.02**	J	0.016	U
Indeno(1,2,3-cd)pyrene	**0.006**	J	0.024	U	**0.04**	J	0.026	U	**0.01**	J	0.025	U	**0.02**	J	**0.02**	J	0.024	U
Dibenz(a,h)anthracene	0.19	U	0.031	U	**0.009**	J	0.032	U	0.19	U	0.031	U	**0.009**	J	**0.008**	J	0.031	U
Benzo(g,h,i)perylene	**0.007**	J	0.017	U	**0.06**	J	0.018	U	**0.01**	J	0.017	U	**0.04**	J	**0.03**	J	0.017	U
Total HPAHs	**0.071**				**0.52**		**0.047**		**0.17**		**0.045**		**0.55**		**0.44**		**0.10**	
	SVOCs																	
3- and 4-Methylphenol Coelution	**0.3**	J	**0.23**	J	**0.49**		**0.089**	J	0.48	U	**0.220**	J	**0.2**	J	**0.2**	J	0.051	U
Dibenzofuran	**0.01**	J	0.014	U	**0.02**	J	0.014	U	**0.01**	U	**0.019**	J	**0.13**		**0.11**		**0.11**	J
Butyl Benzyl Phthalate	**0.1**	J	**0.19**	J	**0.1**	J	**0.05**	J	**0.08**	J	**0.092**	J	**0.05**	J	**0.04**	J	**0.14**	J
Di-n-octyl Phthalate	0.95	U	0.032	U	0.95	U	0.032	U	0.95	U	0.033	U	0.95	U	0.96	U	0.032	U

NOTE: **Bold** indicates a detection above method reporting limit or method detection limit. µg/L = micrograms per liter or parts per billion. U = not detected at or above the indicated method reporting limit or method detection limit. J = estimated concentration. D = reported result is from a dilution.

TABLE 4
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
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
EX-1	Water	03/07/02		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	**3.2** D	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**13** D	2.5 U	2.5 U
EX-1	Water	10/03/02		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	0.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**11**	2.5 U	2.5 U
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
EX-2	Water	10/04/02		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	2.0 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
EX-2	Water	03/07/02		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	2.0 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
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
EX-3	Water	03/07/02		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	2.0 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
EX-3	Water	10/03/02		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	2.0 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
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
EX-4/MW-2	Water	03/07/02		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	2.0 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
EX-4/MW-2	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.8**	0.5 U	0.5 U	0.5 U	0.5 U
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
EX-5	Water	03/07/02		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	2.0 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
EX-5	Water	10/04/02		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U		**1.4**	2.0 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
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
EX-7	Water	03/06/02		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	2.0 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
EX-7	Water	10/03/02		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	2.0 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
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
MW-1	Water	03/06/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.7**	0.5 U	0.5 U	0.5 U	0.5 U
MW-1	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U
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
MW-3	Water	03/07/02		0.5 U	0.5 U	**2.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
MW-3 Duplicate	Water	03/07/02		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	2.0 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
MW-3	Water	10/03/02		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	2.0 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
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
MW-4	Water	03/07/02		0.5 U	0.5 U	**2.6**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
MW-4	Water	10/03/02		0.5 U	0.5 U	**0.69**	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.59**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
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
MW-5	Water	03/07/02		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	2.0 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
MW-5	Water	10/03/02		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	2.0 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
MW-5 Duplicate	Water	10/03/02		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	2.0 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
MW-6	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.8**	**6.4**	50 U	2.5 U	**422**	2.5 U	2.5 U	**7.45**	2.5 U	2.5 U
MW-6 Duplicate	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.6**	**6.9**	50 U	2.5 U	**411**	2.5 U	2.5 U	**7.65**	2.5 U	2.5 U
MW-6	Water	03/08/02		2.5 U	2.5 U	**5.6** D	2.5 U	2.5 U	2.5 U	100 U	**3.8** D		2.5 U	10.0 U	**4.0** D	**11.0** D	100 U	2.5 U	**700** D	2.5 U	2.5 U	**22** D	2.5 U	2.5 U
MW-6	Water	10/03/02		1.3 U	1.3 UJ	**11.0** D	1.3 U	1.3 U	1.3 U	50 U	**2.9** D		1.3 U	5.0 U	**3.8** D	**7.5** D	50 U	1.3 U	**770** D	1.3 U	1.3 U	**7.7** D	1.3 U	1.3 U
MW-6	Water	10/03/02		1.3 U	1.3 UJ	**12.0** D	1.3 U	1.3 U	1.3 U	50 U	**3.0** D		1.3 U	5.0 U	**3.9** D	**7.8** D	50 U	1.3 U	**740** D	1.3 U	1.3 U	**8.0** D	1.3 U	1.3 U
MW-7	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	**2.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	03/08/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**2.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	10/04/02		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	2.0 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

TABLE 4
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
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
EX-1	Water	03/07/02	2.5 U	2.5 U	**32** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**480** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
EX-1	Water	10/03/02	2.5 U	2.5 U	**25**	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**340** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
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
EX-2	Water	10/04/02	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
EX-2	Water	03/07/02	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
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
EX-3	Water	03/07/02	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
EX-3	Water	10/03/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.3**	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
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
EX-4/MW-2	Water	03/07/02	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
EX-4/MW-2	Water	10/03/02	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	**1.3**	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
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
EX-5	Water	03/07/02	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
EX-5	Water	10/04/02	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
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
EX-7	Water	03/06/02	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
EX-7	Water	10/03/02	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
MW-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
MW-1	Water	03/06/02	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	**3.2**	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
MW-1	Water	10/03/02	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	**1.4**	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
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
MW-3	Water	03/07/02	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
MW-3 Duplicate	Water	03/07/02	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
MW-3	Water	10/03/02	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
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
MW-4	Water	03/07/02	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
MW-4	Water	10/03/02	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
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
MW-5	Water	03/07/02	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
MW-5	Water	10/03/02	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
MW-5 Duplicate	Water	10/03/02	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
MW-6	Water	10/25/01	2.5 U	5 U	**20.5**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**23**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6 Duplicate	Water	10/25/01	2.5 U	5 U	**20.6**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**21.2**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6	Water	03/08/02	2.5 U	2.5 U	**200** D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	**360** D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-6	Water	10/03/02	1.3 U	1.3 U	**33** D	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	**40** D	1.3 U	5.0 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-6	Water	10/03/02	1.3 U	1.3 U	**36** D	1.3 U	1.3 U	1.3 U	50 U	1.3 U	1.3 U	1.3 U	1.3 U	50 U	1.3 U	**43** D	1.3 U	5.0 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**3.4**	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
MW-7	Water	10/04/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**2.4**	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

TABLE 4
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

Sample Designation	Matrix	Date Sampled																					
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-1	Water	03/07/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
EX-1	Water	10/03/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 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-2	Water	10/04/02	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	03/07/02	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-3	Water	03/07/02	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	10/03/02	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-4/MW-2	Water	03/07/02	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	10/03/02	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-5	Water	03/07/02	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	10/04/02	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
EX-7	Water	03/06/02	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	10/03/02	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-1	Water	03/06/02	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	10/03/02	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-3	Water	03/07/02	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 Duplicate	Water	03/07/02	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	10/03/02	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-4	Water	03/07/02	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	10/03/02	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
MW-5	Water	03/07/02	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	10/03/02	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 Duplicate	Water	10/03/02	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-6	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6 Duplicate	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6	Water	03/08/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
MW-6	Water	10/03/02	5.0 U	1.3 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-6	Water	10/03/02	5.0 U	1.3 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	1.3 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	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-7	Water	10/04/02	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 4
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
MW-8	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	**1.21**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	03/07/02		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	2.0 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
MW-8	Water	10/04/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-9	Water	01/22/02		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	2.0 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
MW-9	Water	03/06/02		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	2.0 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
MW-9 Duplicate	Water	03/06/02		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	2.0 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
MW-9	Water	10/03/02		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	2.0 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
MW-10	Water	01/22/02		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	2.0 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
MW-10	Water	03/06/02		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	2.0 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
MW-10	Water	10/03/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	**0.69**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-11	Water	01/22/02		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	2.0 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
MW-11	Water	03/08/02		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	2.0 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
MW-12	Water	01/22/02		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	2.0 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
MW-12	Water	03/06/02		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	2.0 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
MW-12	Water	10/04/02		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	2.0 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
MW-13	Water	01/22/02		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	2.0 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
MW-13	Water	03/06/02		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	2.0 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
MW-13 Duplicate	Water	03/06/02		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	2.0 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
MW-13	Water	10/04/02		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	2.0 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 4
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
MW-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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
MW-8	Water	10/04/02	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
MW-9	Water	01/22/02	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
MW-9	Water	03/06/02	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
MW-9 Duplicate	Water	03/06/02	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
MW-9	Water	10/03/02	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
MW-10	Water	01/22/02	0.5 U	0.5 U	**0.57**	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
MW-10	Water	03/06/02	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
MW-10	Water	10/03/02	0.5 U	0.5 U	**1.7**	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
MW-11	Water	01/22/02	0.5 U	**2.0**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.6**	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	**4.7**	**3.1**	**8.2**	0.5 U	0.5 U
MW-11	Water	03/08/02	0.5 U	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**1.1**	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	**2.9**	**2.3**	**5.2**	0.5 U	0.5 U
MW-12	Water	01/22/02	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
MW-12	Water	03/06/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	**0.52**	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
MW-12	Water	10/04/02	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
MW-13	Water	01/22/02	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
MW-13	Water	03/06/02	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
MW-13 Duplicate	Water	03/06/02	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
MW-13	Water	10/04/02	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 4
VOLATILE ORGANIC COMPOUNDS (µg/L)
GROUNDWATER
McCall/GWCC

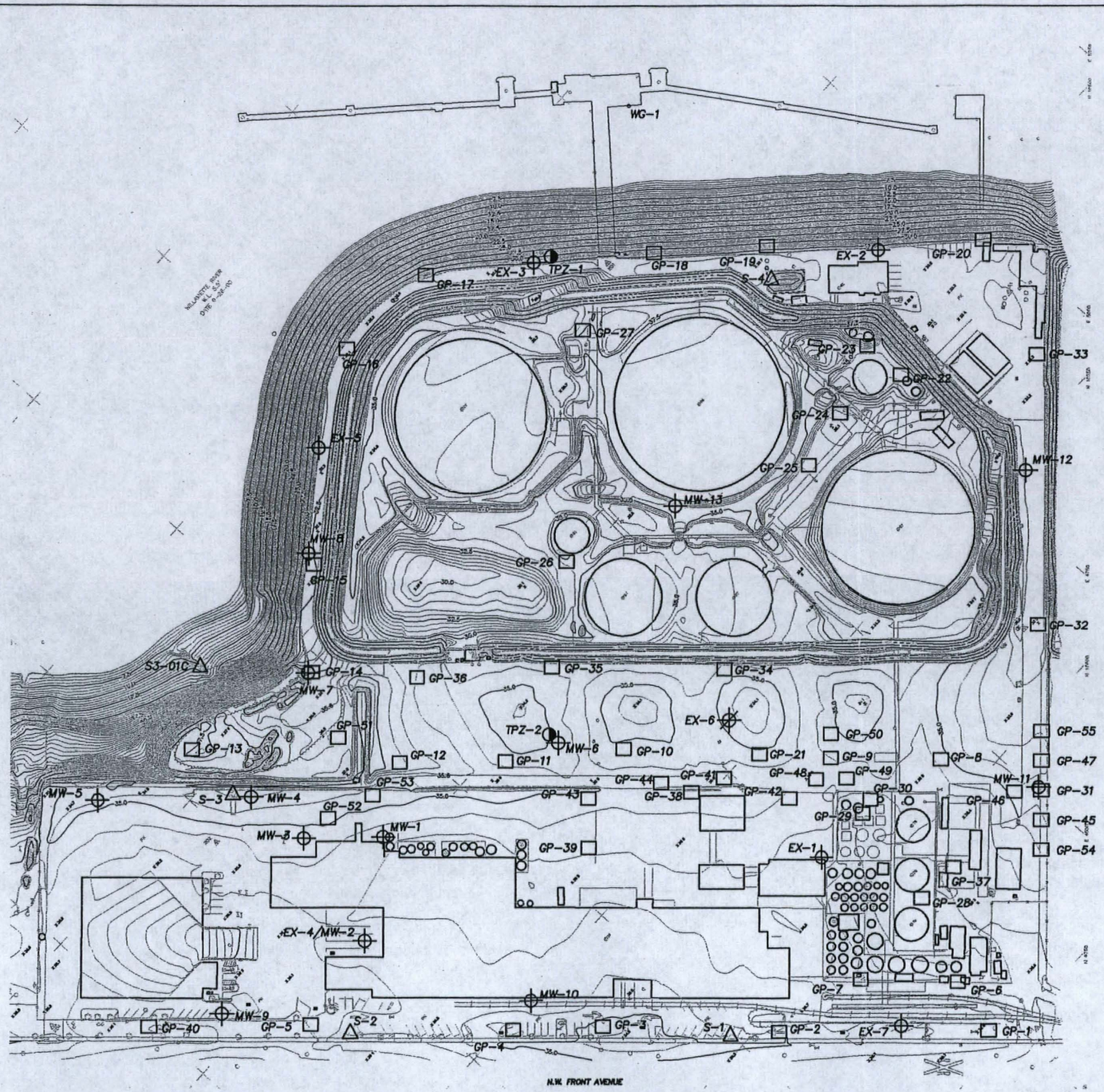
Sample Designation	Matrix	Date Sampled	Isopropylbenzene	1,1,2,2-Tetrachloroethane	1,2,3-Trichloropropane	Bromobenzene	n-Propylbenzene	2-Chlorotoluene	4-Chlorotoluene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	1,3-Dichlorobenzene	4-Isopropyltoluene	1,4-Dichlorobenzene	n-Butylbenzene	1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	Naphthalene	Hexachlorobutadiene
MW-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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-8	Water	10/04/02	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-9	Water	01/22/02	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-9	Water	03/06/02	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-9 Duplicate	Water	03/06/02	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-9	Water	10/03/02	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-10	Water	01/22/02	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-10	Water	03/06/02	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-10	Water	10/03/02	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-11	Water	01/22/02	**4.2**	0.5 U	0.5 U	2.0 U	**6.1**	2.0 U	2.0 U	2.0 U	2.0 U	**4.5**	2.0 U	0.5 U	2.0 U	0.5 U	**2.4**	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-11	Water	03/08/02	**3.6**	0.5 U	0.5 U	2.0 U	**5.2**	2.0 U	2.0 U	2.0 U	2.0 U	**3.3**	2.0 U	0.5 U	2.0 U	0.5 U	**2.3**	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-12	Water	01/22/02	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-12	Water	03/06/02	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-12	Water	10/04/02	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-13	Water	01/22/02	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	**4.8**	2.0 U
MW-13	Water	03/06/02	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-13 Duplicate	Water	03/06/02	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-13	Water	10/04/02	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

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 5
Metals
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

Location		Matrix	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Lead	Zinc
Monitoring Wells - Groundwater µg/L (ppb)									
EX-4/MW-2	Dissolved	Water	12/20/00	8.8		8.1	2.0		
EX-4/MW-2	Total	Water	03/07/02	56.8		5.8	7.7		
EX-4/MW-2	Dissolved	Water	03/07/02	47.5		2.4	0.6		
EX-4/MW-2	Dissolved	Water	10/03/02	14.9		0.4	2.5		
MW-1	Dissolved	Water	12/20/00	2.50 U		9.5	514		
MW-1	Total	Water	03/07/02	0.80		1.9	139		
MW-1	Dissolved	Water	03/07/02	1.00 U		2.0	130		
MW-1	Dissolved	Water	10/03/02	0.80		0.3	196		
MW-3	Dissolved	Water	12/20/00	39.7	0.10 U	0.4 U	0.5	0.04 U	1.3
MW-3	Total	Water	03/07/02	42.8		6.4	11.0		
MW-3 Duplicate	Total	Water	03/07/02	41.6		6.7	7.8		
MW-3	Dissolved	Water	03/07/02	43.4		5.7	1.3		
MW-3 Duplicate	Dissolved	Water	03/07/02	43.4		2.5	0.7		
MW-3	Dissolved	Water	10/03/02	49		0.7	0.9		
MW-4	Dissolved	Water	12/20/00	12.7		1.00 U	1.00 U		
MW-4	Total	Water	03/07/02	9.2		8.70	29.90		
MW-4	Dissolved	Water	03/07/02	10.0		3.30	1.20		
MW-4	Dissolved	Water	10/03/02	16.5		0.20 U	0.70		
MW-6	Total	Water	10/25/01	29.8		67.8	98.8		
MW-6 Duplicate	Total	Water	10/25/01	27.3		35.0	48.6		
MW-6	Dissolved	Water	10/25/01	18.2		1.00 U	2.00 U		
MW-6 Duplicate	Dissolved	Water	10/25/01	19.0		1.00 U	2.00 U		
MW-6	Total	Water	03/08/02	6.8		9.6	18.3		
MW-6	Dissolved	Water	03/08/02	20.4		0.80	2.5		
MW-6	Dissolved	Water	10/03/02	23.5		0.20	0.6		
MW-6 Duplicate	Dissolved	Water	10/03/02	23.3		0.30	0.9		
MW-7	Total	Water	10/25/01	18.1		127	164		
MW-7	Dissolved	Water	10/25/01	3.04		1.00 U	2.00 U		
MW-7	Total	Water	03/08/02	4.4		9.1	19.1		
MW-7	Dissolved	Water	03/08/02	3.5		2.3	1.3		
MW-7	Dissolved	Water	10/04/02	9.1		2.1	0.7		
MW-8	Total	Water	10/25/01	43.9		225	394		
MW-8	Dissolved	Water	10/25/01	2.33		1.00 U	2.00 U		
MW-8	Total	Water	03/07/02	4.3		14.7	36.1		
MW-8	Dissolved	Water	03/07/02	8.6		2.9	1.3		
MW-8	Dissolved	Water	10/04/02	9.6		1.4	0.3		
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-1W	Total	Water	03/06/02	0.5 U	0.20 U	0.4	3.7	0.31	195
S-2W	Total	Water	12/20/00	1 U	0.22	2.0	9.9	5.93	113
S-2W	Total	Water	03/06/02	0.5 U	0.20 U	0.6	6.0	1.13	73.3
S-3W	Dissolved	Water	12/15/00	1 U	0.63	2.9	29.6	1.62	596
S-3W	Total	Water	03/06/02	0.5 U	0.2 U	1.2	13.1	2.30	84.2
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
S-4W	Total	Water	04/09/02	0.6	0.20	0.9	9.0	3.29	86.6

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



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

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

0 150
Scale in Feet

Note: Figure prepared from drawing provided by IT Corporation.

MCC-0202016202-01.dwg cvd 5/17/02

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Boring and Well Locations
McCall Oil

ANCHOR ENVIRONMENTAL, L.L.C.

6650 SW Redwood Lane, #110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128
www.anchorenv.com

October 15, 2002
020162-02

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon, ECSI #134

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the third quarter 2002, and work planned for the fourth quarter 2002.

WORK COMPLETED, SECOND QUARTER 2002

- Met with DEQ on July 31, 2002 to discuss the work completed, future tasks, and planned schedule of the remedial investigation. During that meeting McCall agreed to conduct a site wide groundwater monitoring event in October 2002. The meeting also included a discussion of the draft DEQ Portland Harbor Source Control Strategy and how the final draft may affect the RI work scope. McCall agreed to provide the RI Report in December 2002, or January 2003; with the schedule subject to change imposed by the affect of the final Portland Harbor Source Control Strategy or McCall economic constraints.

PLANNED THIRD QUARTER 2002 RI TASKS

- Conduct a round of water level measurements in monitoring wells and at the Willamette River staff gauge (completed October 1, 2002)
- Sample monitoring wells (completed October 4, 2002)
- Sample stormwater catch basins and oil/water separator
- Data Management and Reporting
- Project Management and Meetings

PROBLEMS ENCOUNTERED

No problems were encountered during the third quarter 2002.

If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

July 15, 2002
020162-02

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the second quarter 2002, and work planned for the third quarter 2002.

WORK COMPLETED, SECOND QUARTER 2002

- Submitted first quarter sampling results to DEQ on May 15, 2002
- Performed aquifer testing using Ferris Time-Lag Method

PLANNED THIRD QUARTER 2002 RI TASKS

- Meet with DEQ on August 6 to discuss RI results.
- Data Management and Reporting.
- Project Management and Meetings.

AQUIFER TEST RESULTS

On June 3, 2002, pressure transducers were installed in monitoring wells EX-5, MW-6, MW-7 and the Willamette River at location WG-1. The pressure transducers were removed on June 11, 2002. The locations of the monitoring wells and WG-1 are shown in Figure 1. Water levels were recorded at 1-minute intervals to evaluate response time of water levels in the monitoring wells associated with the tidal fluctuations in the Willamette River.

Figure 2 is a plot of pressure head at WG-1 in feet. The period of each tidal event was calculated and an average period for the duration of the test was calculated at 742 minutes.

Calculations are shown on the attached worksheet. Figures 3, 4, and 5 display comparison plots between WG-1 and EX-5, WG-1 and MW-6, and WG-1 and MW-7, respectively. The aquifer thickness was estimated from the depth to basalt (75 feet) measured at borings GP-41, GP-42, GP-43, and GP-44.

Hydraulic conductivity values were calculated at 3.4×10^{-3} ft/minute at EX-5, 5.4×10^{-3} ft/minute at MW-6, and 1.6×10^{-1} ft/minute at MW-7. These data are still being evaluated, however, they preliminarily indicate a range of aquifer conditions from a low hydraulic conductivity typical of a silty, very-fine sand at EX-5 up to a high hydraulic conductivity typical of a coarse sand at MW-7.

PROBLEMS ENCOUNTERED

The time setting on the transducer in EX-5 was one hour fast. Data were corrected before analyzed.

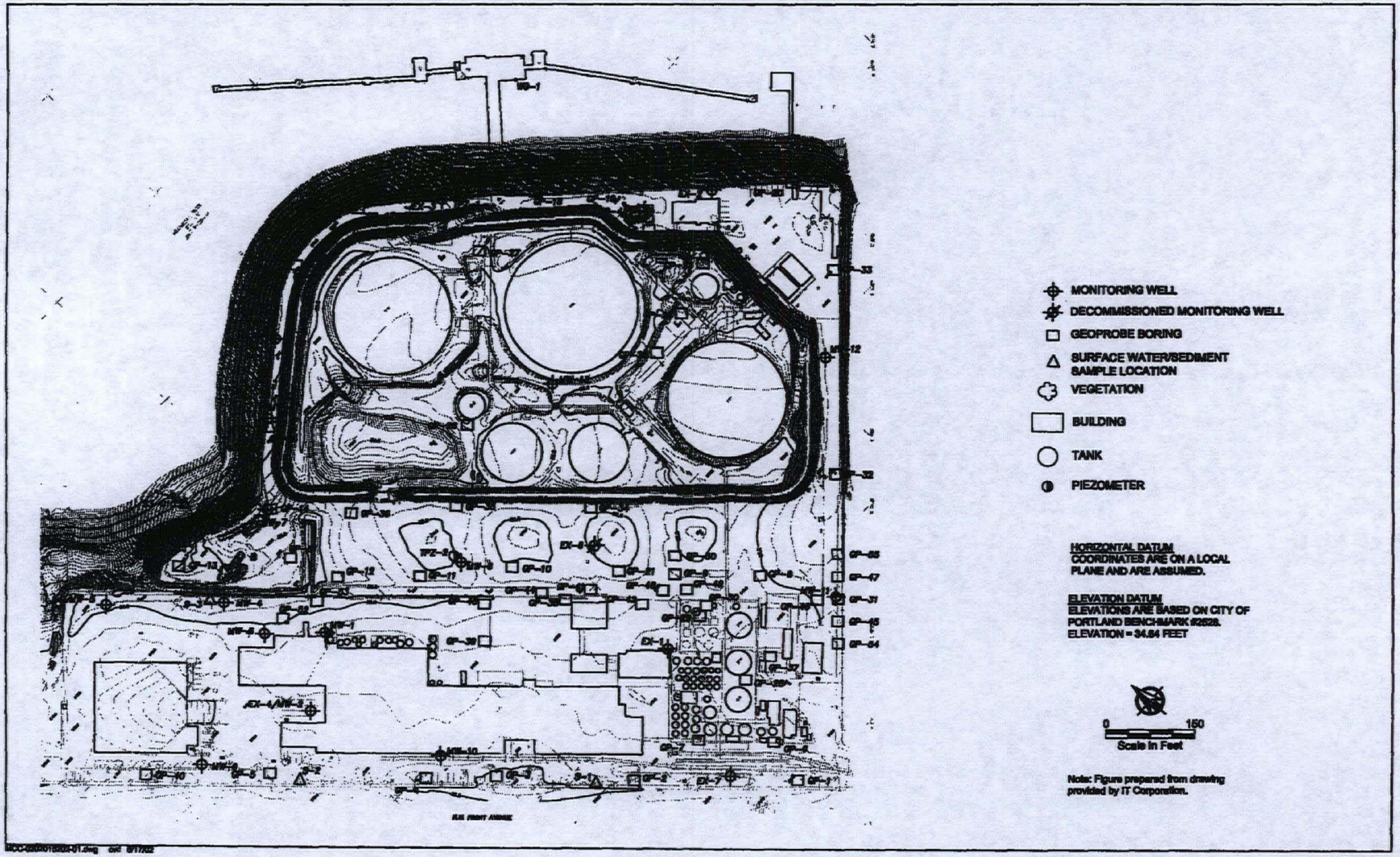
If you have any questions, please let us know.

Sincerely,

John J. Renda, R.G.
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

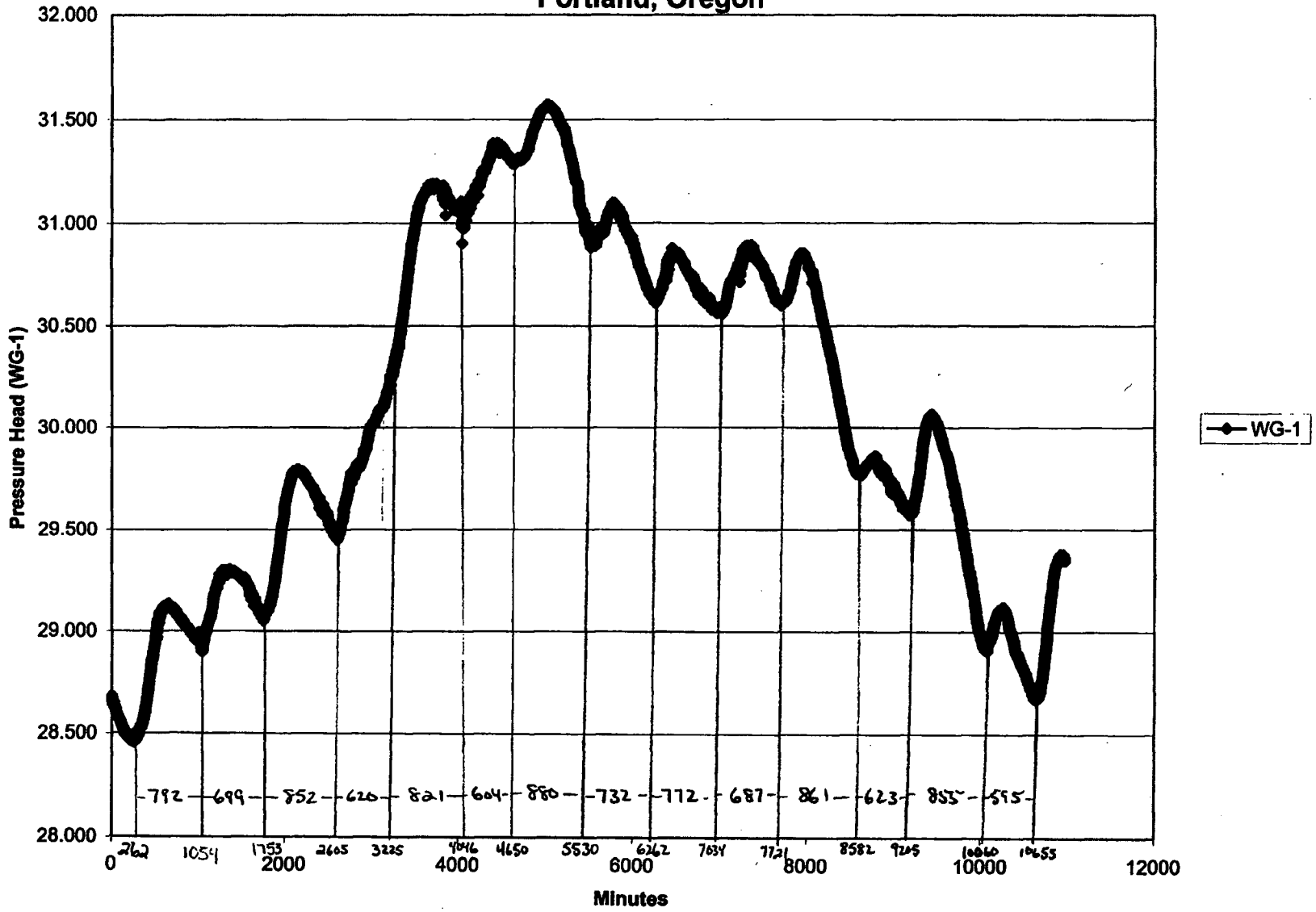
Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP



ANCHOR ENVIRONMENTAL, L.L.C.

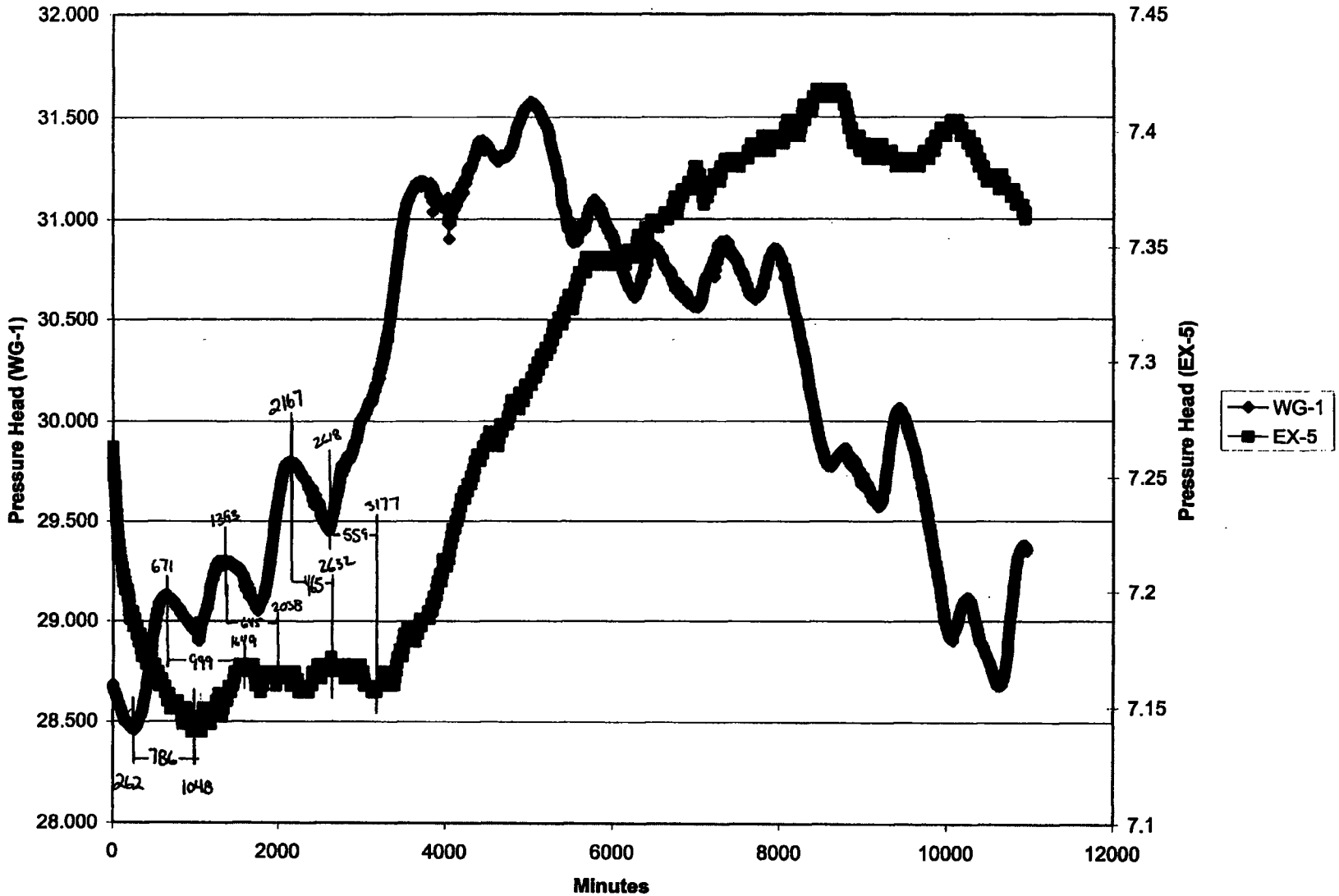
Figure 1
Boring and Well Locations
McCall Oil

Figure 2
Willamette River Tidal Period
McCall Oil and Chemical Corporation
Portland, Oregon



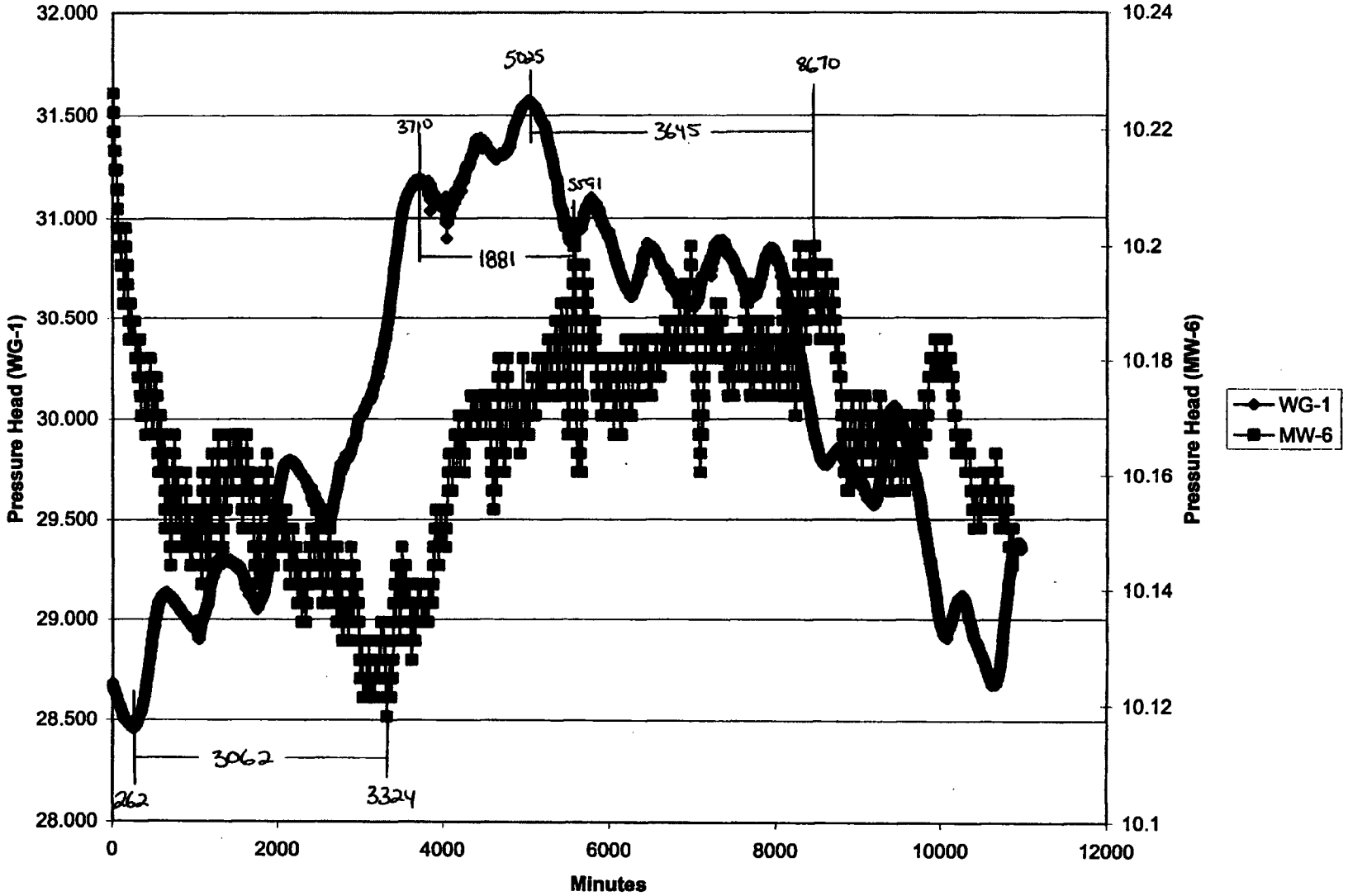
\\Union\Portland\Projects\McCall Portland\Raw data\Willamette - period

Figure 3
Time Lag WG-1/EX-5
McCall Oil and Chemical Corporation
Portland, Oregon



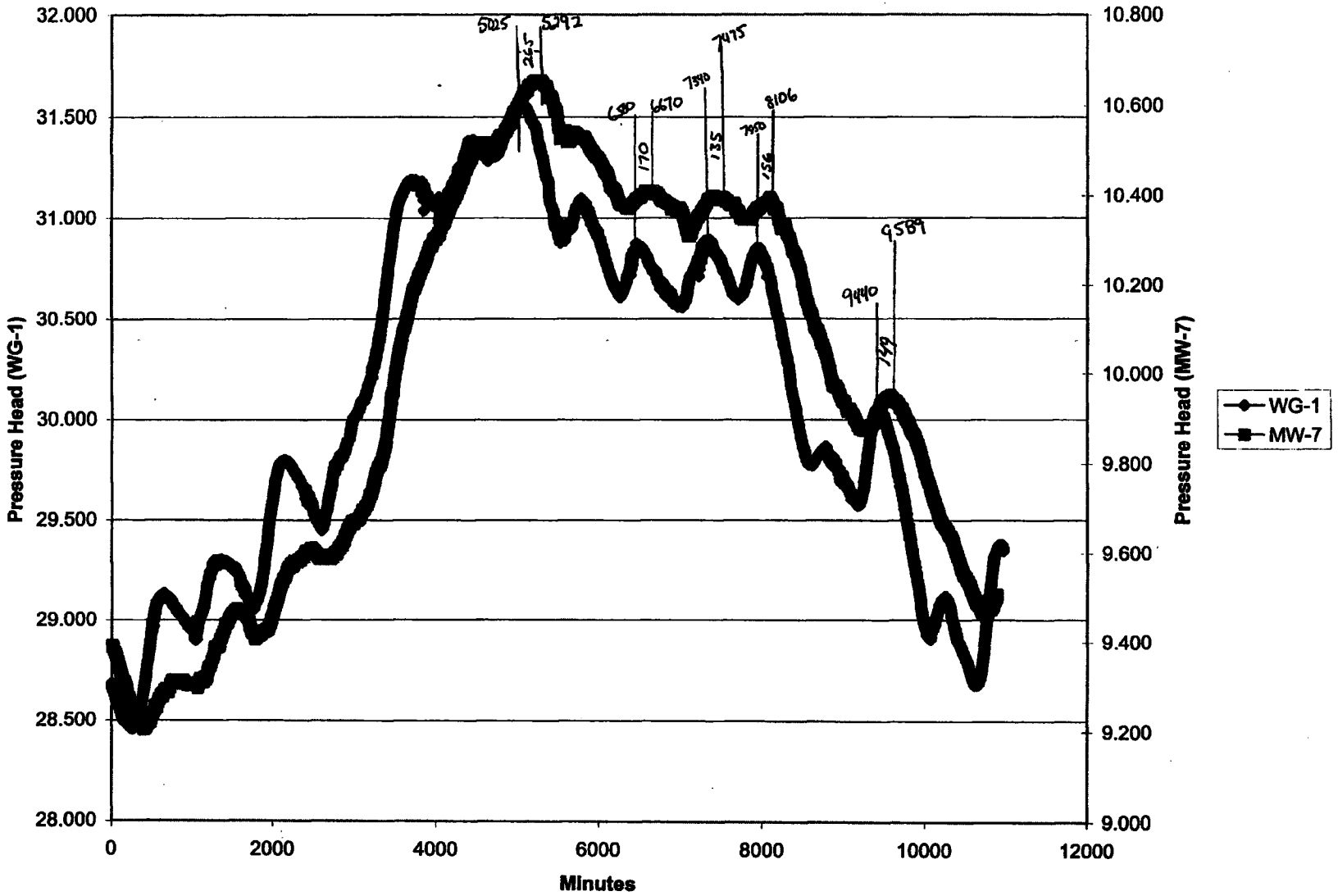
\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-EX5

Figure 4
Time Lag WG-1/MW-6
McCall Oil and Chemical Corporation
Portland, Oregon



\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-MW6

Figure 5
Time Lag WG-1/MW-7
McCall Oil and Chemical Corporation
Portland, Oregon



\\Union\Portland\Projects\McCall Portland\Tidal Lag Testing\Raw data\WG1-MW7

Worksheet
Time Lag Calculations
McCall Oil and Chemical
Portland, Oregon

T = Transmissivity
S = Specific storage
t_0 = period
x = distance of well from river
t = lag
PI = 3.14159
K = Hydraulic conductivity

T/S = (t_0/4*PI)(x/t)^2
K = T/Aquifer Thickness

Willamette River Period Measured at WG-1

Low Tide (minutes after start of test)	Period (minutes)
262	
1054	792
1753	699
2605	852
3225	620
4046	821
4650	604
5530	880
6262	732
7034	772
7721	687
8582	861
9205	623
10060	855
10655	595
t_0 =	742

WG-1/EX-5

t_0 =	742	minutes
x =	90	feet
S =	0.2	(estimated value)
t =	690.8	minutes
DTW =	16.55	feet (on 6/3/02 16:40)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	58.45	feet
T =	0.200449402	ft^2/minute
K =	0.003429417	ft/minute
K =	4.938359945	ft/day

Worksheet
Time Lag Calculations
McCall Oil and Chemical
Portland, Oregon

WG-1/MW-6

t_0 =	742	minutes
x =	475	feet
S =	0.2	(estimated value)
t =	2862.7	minutes
DTW =	14.28	feet (on 6/3/02 16:03)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	60.72	feet
T =	0.325132173	ft^2/minute
K =	0.005354614	ft/minute
K =	7.710644425	ft/day

WG-1/MW-7

t_0 =	742	minutes
x =	150	feet
S =	0.2	(estimated value)
t =	173.2	minutes
DTW =	20.64	feet (on 6/3/02 16:26)
Aquifer Thickness =	75 feet - DTW	75 feet is Depth to Basalt measured at GP-41, GP-42, GP-43, GP-44)
Aquifer Thickness =	54.36	feet
T =	8.857499704	ft^2/minute
K =	0.162941496	ft/minute
K =	234.6357538	ft/day

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

May 6, 2002
020162-02

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: First quarter 2002 Sampling Results; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon

Dear Tom:

The attached tables present all groundwater and surface water sampling results for the remedial investigation currently being conducted at the McCall Oil and Chemical facility in Portland, Oregon. These results include first quarter 2002 sampling results which have been validated and are judged to be acceptable for their intended use.

Table 1	Monitoring Well and River Hydrology Measurements
Table 2	Total Petroleum Hydrocarbons
Table 3	PAHs and SVOCs
Table 4	Volatile Organic Compounds
Table 5	Metals

If you have any questions, please let us know.

Sincerely,

John J. Renda
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

Table 1

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
		05/15/01	15.68	20.44
		06/12/01	15.75	20.37
		07/16/01	15.84	20.28
		08/14/01	15.97	20.15
		09/13/01	16.07	20.05
		10/25/01	16.31	19.81
		11/16/01	16.27	19.85
		12/18/01	15.88	20.24
		01/22/02	15.05	21.07
		02/14/02	14.56	21.56
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
		05/15/01	17.94	14.34
		06/12/01	17.94	14.34
		07/16/01	18.49	13.79
		08/14/01	18.73	13.55
		09/13/01	18.90	13.38
		10/25/01	19.18	13.10
		11/16/01	19.24	13.04
		12/18/01	18.50	13.78
		01/22/02	17.83	14.45
		02/14/02	17.49	14.79

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	17.08	14.99
		06/12/01	17.04	15.03
		07/16/01	17.82	14.25
		08/14/01	18.25	13.82
		09/13/01	18.51	13.56
		10/25/01	18.92	13.15
		11/16/01	19.02	13.05
		12/18/01	17.91	14.16
		01/22/02	16.41	15.66
		02/14/02	15.95	16.12
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
		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
		05/15/01	16.92	18.68
		06/12/01	16.98	18.62
		07/16/01	17.09	18.51
		08/14/01	17.22	18.38
		09/13/01	17.30	18.30
		10/25/01	17.51	18.09
		11/16/01	17.52	18.08
		12/18/01	17.22	18.38
		01/22/02	16.28	19.32
		02/14/02	15.80	19.80

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	18.94	12.93
		06/12/01	19.05	12.82
		07/16/01	19.76	12.11
		08/14/01	20.32	11.55
		09/13/01	20.70	11.17
		10/25/01	21.27	10.60
		11/16/01	21.04	10.83
		12/18/01	16.64	15.23
		01/22/02	16.10	15.77
		02/14/02	15.35	16.52
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	
		11/16/01	Decommissioned	
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
		05/15/01	14.33	20.96
		06/12/01	14.41	20.88
		07/16/01	14.51	20.78
		08/14/01	14.65	20.64
		09/13/01	14.75	20.54
		10/25/01	15.01	20.28
		11/16/01	14.98	20.31
		12/18/01	14.42	20.87
		01/22/02	13.50	21.79
		02/14/02	13.15	22.14

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	17.37	18.11
		06/12/01	NM	
		07/16/01	17.59	17.89
		08/14/01	17.70	17.78
		09/13/01	17.78	17.70
		10/25/01	17.97	17.51
		11/16/01	17.88	17.60
		12/18/01	17.44	18.04
		01/22/02	16.68	18.80
		02/14/02	16.38	19.10
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
		05/15/01	16.71	17.85
		06/12/01	16.76	17.80
		07/16/01	16.91	17.65
		08/14/01	16.97	17.59
		09/13/01	17.09	17.47
		10/25/01	17.24	17.32
		11/16/01	17.16	17.40
		12/18/01	16.82	17.74
		01/22/02	16.09	18.47
		02/14/02	15.65	18.91

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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	
		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
		05/15/01	16.28	17.33
		06/12/01	16.32	17.29
		07/16/01	16.43	17.18
		08/14/01	16.53	17.08
		09/13/01	16.60	17.01
		10/25/01	16.74	16.87
		11/16/01	16.63	16.98
		12/18/01	16.20	17.41
		01/22/02	15.65	17.96
		02/14/02	15.26	18.35
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
		05/15/01	20.00	14.66
		06/12/01	20.01	14.65
		07/16/01	20.32	14.34
		08/14/01	20.39	14.27
		09/13/01	20.47	14.19
		10/25/01	20.30	14.36
		11/16/01	20.19	14.47
		12/18/01	19.18	15.48
		01/22/02	19.00	15.66
		02/14/02	18.79	15.87
MW-6	34.83	10/25/01	16.73	18.10
		11/16/01	16.67	18.16
		12/18/01	16.35	18.48
		01/22/02	15.46	19.37
		02/14/02	15.94	18.89
MW-7	34.74	10/25/01	25.77	8.97
		11/16/01	24.94	9.80
		12/18/01	21.26	13.48
		01/22/02	22.72	12.02
		02/14/02	22.61	12.13
MW-8	32.24	10/25/01	25.64	6.60
		11/16/01	23.85	8.39

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
		12/18/01	19.55	12.69
		01/22/02	22.44	9.80
		02/14/02	22.54	9.70
MW-9	36.00	01/22/02	17.57	18.43
		02/14/02	17.21	18.79
MW-10	35.06	01/22/02	14.97	20.09
		02/14/02	14.46	20.60
MW-11	34.41	01/22/02	13.32	21.09
		02/14/02	12.94	21.47
MW-12	32.79	01/22/02	17.88	14.91
		02/14/02	17.46	15.33
MW-13	34.94	01/22/02	18.83	16.11
		02/14/02	17.95	16.99
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
		05/15/01	29.95	7.33
		06/12/01	31.02	6.26
		07/16/01	34.23	3.05
		08/14/01	33.27	4.01
		09/13/01	31.15	6.13
		10/25/01	31.38	5.90
		11/16/01	30.77	6.51
		12/18/01	25.45	11.83
		01/22/02	27.80	9.48
		02/14/02	29.27	8.01

Note: Reference point elevations for EX-1 to EX-7, MW-1 to MW-5 and WG-1 surveyed by WH&P on September 19, 2000.
MW-6 to MW-13 surveyed by WH&P on 1/30/02

Table 2
Total Petroleum Hydrocarbons
Groundwater and Storm Water
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)																				
GP-1	Water	12/11/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-2	Water	12/11/00	130	H	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-3	Water	12/11/00	170	H	100	U	100	U	100	U	100	U	100	U	280	L	250	U	250	U
GP-4	Water	12/11/00	2500	H	100	U	100	U	100	U	100	U	100	U	7100	F	250	U	4400	L
GP-5	Water	12/11/00	620	H	100	U	100	U	100	U	100	U	100	U	430	Y	250	U	300	Y
GP-6	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-7	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-8	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
GP-9	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
GP-10	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
GP-11	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
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
GP-13	Water	12/12/00	110	Z	100	U	100	U	100	U	100	U	100	U	260	Y	250	U	250	U
GP-14	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-15	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	2800	F	250	U	1200	F
GP-16	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-17	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-18	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-20	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	550	Y	250	U	250	U
GP-21	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	120	Y	250	U	250	U
GP-22	Water	02/09/01	210	H	100	U	100	U	100	U	100	U	100	U	1100	F	250	U	250	U
GP-23	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	440	H	250	U	250	U
GP-24	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	270	H	250	U	250	U
GP-25	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	280	H	250	U	250	U
GP-26	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	300	H	250	U	500	L
GP-27	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	170	H	250	U	250	U
GP-28	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-29	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-31	Water	02/13/01	1800	H	100	U	100	U	100	U	100	U	100	U	7600	Y	250	U	4800	F
GP-32	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	700	H	250	U	1100	F
GP-33	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	320	Y	250	U	250	U
GP-34	Water	02/13/01	130	H	100	U	100	U	100	U	100	U	100	U	2100	Y	250	U	580	L
GP-35	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	200	H	250	U	270	Y
GP-36	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	210	Y	250	U	250	U
GP-37	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-39	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-40	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	640	Y	250	U	250	U
GP-45	Water	11/14/01	> 667	DET											1680	U	1680	U		
GP-46	Water	11/14/01	> 714	DET											38700		28000			
GP-47	Water	11/14/01	> 250	DET											630	U	630	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 2
Total Petroleum Hydrocarbons
Groundwater and Storm Water
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)																				
EX-1	Water	12/20/00	990	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-1	Water	12/20/00	460	H											280	Y	550	O		
EX-2	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-2	Water	03/07/02	110	U											170	Y	270	U		
EX-3	Water	12/20/00	690	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-3	Water	03/07/02	110	U											110	Y	270	U		
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
EX-4/MW-2	Water	03/07/02	160	H											920	Y	290	O		
EX-5	Water	12/20/00	950	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-5	Water	03/07/02	100	U											140	Y	250	U		
EX-7	Water	12/20/00	530	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-7	Water	03/06/02	100	U											100	U	250	U		
MW-1	Water	12/20/00	1200	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-1	Water	03/07/02	100	U											110	Y	250	U		
MW-3	Water	12/20/00	720	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-3 Duplicate	Water	03/07/02	240	H											1000	Y	390	O		
MW-3	Water	03/07/02	220	H											1000	Y	410	O		
MW-4	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-4	Water	03/07/02	180	H											870	Y	350	O		
MW-5	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-5	Water	03/07/02	100	U											310	Y	260	O		
MW-6	Water	10/25/01	250	U											630	U	630	U		
MW-6 Duplicate	Water	10/25/01	250	U											630	U	630	U		
MW-6	Water	03/08/02	160	Z											240	Y	500	O		
MW-7	Water	10/25/01	250	U											630	U	630	U		
MW-7	Water	03/08/02	110	U											1500	Y	4000	O		
MW-8	Water	10/25/01	250	U											3090		1840			
MW-8	Water	03/07/02	650	H											20000	Y	9200	O		
MW-9	Water	01/22/02	140	H											480	Y	310	O		
MW-9	Water	03/06/02	200	H											520	Y	300	U		
MW-9 Duplicate	Water	03/06/02	210	H											600	Y	290	U		
MW-10	Water	01/22/02	100	U											250	Y	510	O		
MW-10	Water	03/06/02	110	U											170	Y	320	O		
MW-11	Water	01/22/02	1900	H											15000	Y	4300	O		
MW-11	Water	03/08/02	1700	H											11000	Y	2600	O		
MW-12	Water	01/22/02	110	H											630	Y	1000	O		
MW-12	Water	03/06/02	150	H											1100	Y	1900	O		
MW-13	Water	01/22/02	300	H											1000	Y	2300	O		
MW-13 Duplicate	Water	01/22/02	360	H											1300	Y	2900	O		
MW-13	Water	03/06/02	150	H											710	Y	1500	O		

Table 2
Total Petroleum Hydrocarbons
Groundwater and Storm Water
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	
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-1W	Water	03/06/02	110	U											110	U	270	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-2W	Water	03/06/02	**130**	**Z**											110	U	260	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
S-3W	Water	03/06/02	110	U											**110**	Z	260	U		
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
S-4W	Water	04/09/02	**220**	H											**1300**	F	**550**	O		

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.

DET= Detected above method reporting limit (method reporting limit shown)

D = The reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	GP-12 Duplicate	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18
	Groundwater																		
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date Sampled	12/11/00	12/11/00	12/11/00	12/11/00	12/11/00	12/14/00	12/14/00	12/12/00	12/12/00	12/12/00	12/12/00	12/13/00	12/13/00	12/12/00	12/13/00	12/13/00	12/13/00	12/13/00	12/14/00
LPAHs																			
Naphthalene	0.12	0.16	2.9	96 D	0.11	0.07 J	0.05 J	0.04 J	0.38	0.05 J	0.02 J	0.1 J	0.08 J	0.03 J	0.24	0.23	0.19	0.16	0.13
Acenaphthylene	0.02 J	0.05 J	0.096 U	1 JD	0.099 U	0.04 J	0.02 J	0.096 U	0.096 U	0.009 J	0.10 U	0.06 J	0.01 J	0.098 U	0.03 J	0.04 J	0.04 J	0.03 J	0.04 J
Acenaphthene	0.02 J	0.02 J	0.70	16 D	0.11	0.03 J	0.02 J	0.096 U	0.08 J	0.01 J	0.10 U	0.03 J	0.01 J	0.03 J	0.01 J	0.13	0.12	0.08 J	0.36
Fluorene	0.04 J	0.02 J	2.1	47 D	0.099 U	0.03 J	0.03 J	0.006 J	0.22	0.02 J	0.01 J	0.02 J	0.02 J	0.01 J	0.02 J	0.51	0.25	0.06 J	0.07 J
Phenanthrene	0.15	0.21	1.9	140 D	0.06 J	0.28	0.24	0.04 J	0.43	0.09 J	0.04 J	0.41	0.16	0.05 J	0.23	1.2	0.70	0.23	0.60
Anthracene	0.02 J	0.07 J	0.09 J	6 JD	0.008 J	0.07 J	0.02 J	0.01 J	0.02 J	0.01 J	0.03 J	0.09 J	0.02 J	0.008 J	0.04 J	0.07 J	0.05 J	0.02 J	0.07 J
2-Methylnaphthalene	0.09 J	0.12	19 D	340 D	0.09 J	0.06 J	0.09 J	0.02 J	1.5	0.14	0.03 J	0.07 J	0.08 J	0.03 J	0.06 J	0.14	0.1 J	0.07 J	0.08 J
Total LPAH	0.46	0.65	26.69	646	0.378	0.58	0.47	0.12	2.63	0.33	0.13	0.78	0.38	0.16	0.63	2.32	1.45	0.65	1.35
HPAHs																			
Fluoranthene	0.15	0.55	0.06 J	4.0 JD	0.02 J	0.33	0.20	0.07 J	0.11	0.04 J	0.04 J	0.49	0.12	0.06 J	0.35	0.17	0.20	0.13	0.47
Pyrene	0.20	0.64	0.13	13 D	0.05 J	0.40	0.24	0.11	0.50	0.05 J	0.09 J	0.67	0.18	0.06 J	0.50	0.51	0.32	0.20	0.68
Benz(a)anthracene	0.11	0.48	0.03 J	9.0 D	0.02 J	0.22	0.16	0.04 J	0.06 J	0.02 J	0.01 J	0.40	0.09 J	0.04 J	0.19	0.14	0.13	0.07 J	0.15
Chrysene	0.12	0.41	0.03 J	25 D	0.03 J	0.24	0.16	0.04 J	0.07 J	0.02 J	0.02 J	0.43	0.09 J	0.04 J	0.27	0.21	0.18	0.09 J	0.18
Benzo(b)fluoranthene	0.07 J	0.24	0.01 J	3 JD	0.01 J	0.10	0.097	0.02 J	0.02 J	0.01 J	0.008 J	0.21	0.04 J	0.02 J	0.21	0.099	0.10	0.06 J	0.15
Benzo(k)fluoranthene	0.08 J	0.28	0.02 J	4 JD	0.008 J	0.18	0.11	0.03 J	0.03 J	0.02 J	0.008 J	0.29	0.07 J	0.02 J	0.21	0.09 J	0.12	0.08 J	0.17
Benzo(a)pyrene	0.13	0.43	0.02 J	1 JD	0.01 J	0.23	0.15	0.04 J	0.03 J	0.02 J	0.008 J	0.39	0.08 J	0.03 J	0.37	0.16	0.17	0.10	0.29
Indeno(1,2,3-cd)pyrene	0.09 J	0.26	0.01 J	0.8 JD	0.02 J	0.10 J	0.09 J	0.03 J	0.02 J	0.01 J	0.009 J	0.2 J	0.05 J	0.02 J	0.37	0.1 J	0.1 J	0.07 J	0.20
Dibenz(a,h)anthracene	0.01 J	0.03 J	0.005 J	0.7 JD	0.20 U	0.03 J	0.02 J	0.004 J	0.005 J	0.007 J	0.2 U	0.04 J	0.02 J	0.006 J	0.05 J	0.02 J	0.03 J	0.01 J	0.02 J
Benzo(g,h,i)perylene	0.09 J	0.2 J	0.01 J	1 JD	0.02 J	0.10 J	0.07 J	0.04 J	0.02 J	0.01 J	0.008 J	0.2 J	0.05 J	0.02 J	0.43	0.2 J	0.1 J	0.08 J	0.27
Total HPAHs	1.05	3.52	0.33	61.50	0.19	1.93	1.30	0.42	0.87	0.21	0.201	3.32	0.79	0.32	2.95	1.70	1.45	0.89	2.58
SVOCs																			
3- and 4-Methylphenol Coelution	0.07 J	0.20 J	0.03 J	38 U	0.04 J	0.30 J	0.1 J	0.02 J	0.08 J	0.1 J	0.03 J	0.2 J	0.1 J	0.06 J	0.2 J	0.3 J	0.60	0.75	0.3 J
Dibenzofuran	0.01 J	0.01 J	1.0	19 D	0.099 U	0.01 J	0.01 J	0.096 U	0.09 J	0.01 J	0.09 J	0.01 J	0.01 J	0.098 U	0.02 J	0.02 J	0.02 J	0.01 J	0.02 J
Butyl Benzyl Phthalate	0.08 J	0.30	0.20	15 U	0.01 J	0.09 J	0.05 J	0.07 J	0.2 J	0.20 J	0.2 J	0.07 J	0.31	0.06 J	0.21 U	0.1 J	0.08 J	0.06 J	0.07 J
Di-n-octyl Phthalate	0.95 U	0.95 U	0.96 U	77 U	0.99 U	0.97 U	0.96 U	0.96 U	0.96 U	0.96 U	1.0 U	1.1 U	0.06 J	0.98 U	1.0 U	0.96 U	0.98 U	0.96 U	0.96 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. D - reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	GP-19	GP-19 Duplicate	GP-20	GP-21	GP-22	GP-22 F	GP-23	GP-24	GP-25	GP-26	GP-27	GP-27 F	GP-28	GP-28 F	GP-29	GP-29 F	GP-30	GP-30 Duplicate	GP-31	GP-32	GP-33
	Groundwater																				
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date Sampled	12/14/00	12/14/00	12/14/00	12/13/00	02/09/01	02/09/01	02/09/01	02/09/01	02/09/01	02/09/01	02/12/01	02/12/01	02/12/01	02/12/01	02/12/01	02/12/01	02/12/01	02/12/01	02/13/01	02/13/01	02/13/01
LPAHs																					
Naphthalene	0.02 J	0.008 J	0.15	0.04 J	0.56	0.09 J	0.05 J	0.21	0.22	0.20	0.22	0.095 U	0.097 U	0.096 U	0.17	0.096 U	0.097 U	0.098 U	7.6 D	0.57 D	0.12
Acenaphthylene	0.096 U	0.096 U	0.03 J	0.096 U	0.096 U	0.10 U	0.008 J	0.02 J	0.02 J	0.02 J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	4.8 U	0.09 JD	0.02 J
Acenaphthene	0.096 U	0.096 U	0.11	0.096 U	0.81	0.1 J	0.03 J	0.09 J	0.11	0.03 J	0.11	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	12 D	0.5 JD	0.17
Fluorene	0.096 U	0.096 U	0.02 J	0.01 J	2.1	0.13	0.02 J	0.06 J	0.05 J	0.05 J	0.32	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	24 D	0.79 D	0.04 J
Phenanthrene	0.03 J	0.008 J	0.26	0.06 J	2.0	0.10	0.06 J	0.21	0.28	0.13	0.73	0.095 U	0.12	0.096 U	0.28	0.096 U	0.16	0.12	70 D	2.6 D	0.16
Anthracene	0.096 U	0.096 U	0.02 J	0.006 J	0.06 J	0.10 U	0.008 J	0.02 J	0.06 J	0.02 J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	13 D	0.54 D	0.02 J
2-Methylnaphthalene	0.01 J	0.096 U	0.07 J	0.04 J	14 D	0.4	0.04 J	0.07 J	0.07 J	0.07 J	0.15	0.095 U	0.097 U	0.096 U	0.49	0.096 U	0.097 U	0.098 U	430 D	13 D	0.26
Total LPAH	0.06	0.016	0.66	0.16	19.53	0.82	0.22	0.68	0.81	0.52	1.53		0.12		0.94		0.16	0.12	556.6	18.1	0.79
HPAHs																					
Fluoranthene	0.096 U	0.096 U	0.15	0.01 J	0.06 J	0.02 J	0.03 J	0.099	0.38	0.12	0.12	0.095 U	0.23	0.096 U	0.46	0.096 U	0.097 U	0.098 U	6.3 D	0.75 D	0.09 J
Pyrene	0.01 J	0.02 J	0.20	0.04 J	0.23	0.03 J	0.06 J	0.23	0.48	0.15	0.23	0.095 U	0.31	0.096 U	0.81	0.096 U	0.28	0.31	32 D	2.0 D	0.15
Benz(a)anthracene	0.005 J	0.096 U	0.08 J	0.096 U	0.02 J	0.009 J	0.01 J	0.06 J	0.26	0.06 J	0.097 U	0.095 U	0.18	0.096 U	0.28	0.096 U	0.097 U	0.098 U	9.2 D	0.75 D	0.06 J
Chrysene	0.007 J	0.096 U	0.12	0.096 U	0.03 J	0.01 J	0.02 J	0.07 J	0.28	0.07 J	0.13	0.095 U	0.17	0.096 U	0.40	0.096 U	0.11	0.10	25 D	1.4 D	0.08 J
Benzo(b)fluoranthene	0.005 J	0.096 U	0.08 J	0.096 U	0.01 J	0.006 J	0.01 J	0.05 J	0.15	0.05 J	0.10	0.095 U	0.12	0.096 U	0.27	0.096 U	0.097 U	0.098 U	2 JD	0.4 JD	0.05 J
Benzo(k)fluoranthene	0.006 J	0.096 U	0.07 J	0.096 U	0.01 J	0.007 J	0.02 J	0.06 J	0.16	0.06 J	0.097 U	0.095 U	0.12	0.096 U	0.25	0.096 U	0.097 U	0.098 U	1 JD	0.3 JD	0.05 J
Benzo(a)pyrene	0.096 U	0.096 U	0.12	0.096 U	0.02 J	0.10 U	0.02 J	0.08 J	0.23	0.07 J	0.12	0.095 U	0.20	0.096 U	0.46	0.096 U	0.097 U	0.098 U	5 JD	0.59 D	0.08 J
Indeno(1,2,3-cd)pyrene	0.008 J	0.005 J	0.10 J	0.004 J	0.01 J	0.005 J	0.01 J	0.05 J	0.12	0.06 J	0.14	0.095 U	0.18	0.096 U	0.51	0.096 U	0.097 U	0.098 U	1 JD	0.4 JD	0.06 J
Dibenz(a,h)anthracene	0.006 J	0.006 J	0.02 J	0.19 U	0.006 J	0.005 J	0.005 J	0.01 J	0.03 J	0.02 J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	0.6 JD	0.1 JD	0.01 J
Benzo(g,h,i)perylene	0.009 J	0.008 J	0.10 J	0.19 U	0.01 J	0.007 J	0.02 J	0.06 J	0.11	0.05 J	0.10	0.095 U	0.13	0.096 U	0.47	0.096 U	0.097 U	0.098 U	3 JD	0.53 D	0.07 J
Total HPAHs	0.056	0.039	1.04	0.054	0.406	0.099	0.205	0.769	2.200	0.710	0.94		1.64		3.91		0.39	0.41	85.1	7.2	0.70
SVOCs																					
3- and 4-Methylphenol Coelution	0.03 J	0.007 J	2.0	0.06 J	0.01 J	0.25 U	0.2 J	0.88	0.44	1.3	0.49	0.24 U	0.24 U	0.24 U	0.28	0.24 U	0.24 U	0.25 U	12 U	1.4 D	0.74
Dibenzofuran	0.096 U	0.096 U	0.01 J	0.096 U	0.86 J	0.02 J	0.097 U	0.02 J	0.02 J	0.02 J	0.12	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	6.1 D	0.2 JD	0.02 J
Butyl Benzyl Phthalate	0.02 J	0.19 U	0.04 J	0.35	0.098	0.16	0.05 J	0.06 J	0.1 J	0.08 J	1.7	0.25	0.25	0.096 U	0.33	0.096 U	0.45	0.28	4.8 U	0.65 D	0.53
Di-n-octyl Phthalate	0.96 U	0.004 J	1.1 U	0.96 U	0.96 U	0.04 J	0.97 U	0.97 U	0.96 U	0.96 U	0.97 U	0.95 U	0.97 U	0.96 U	0.97 U	0.96 U	0.97 U	0.98 U	48 U	4.8 U	0.95 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. D - reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

	Groundwater																																					
Sample Designation	GP-34		GP-35		GP-36		GP-37		GP-38		GP-38 Duplicate		GP-39		GP-40		Field Blank		Field Blank		EX-1		EX-1		EX-2		EX-2		EX-3		EX-3		EX-4 MW-2		EX-4 MW-2		EX-5		EX-5		EX-7	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	02-13-01		02-13-01		02-13-01		02-14-01		02-14-01		02-14-01		02-14-01		02-14-01		12-14-00		02-14-01		12-20-00		03-07-02		12-20-00		03-07-02		12-20-00		03-07-02		12-20-00		03-07-02		12-20-00		03-07-02	
LPAHs																																								
Naphthalene	0.09	J	0.31		0.24		0.09	J	0.16		0.05	J	0.02	J	0.12		0.009	J	0.095	U	0.095	U	0.013	U	0.01	J	0.013	U	0.02	J	0.013	U	0.095	U	0.014	U	0.009	J	0.028	J	0.095	U
Acenaphthylene	0.095	U	0.09	J	0.04	J	0.008	J	0.020	J	0.095	U	0.095	U	0.02	J	0.096	U	0.095	U	0.095	U	0.011	U	0.095	U	0.011	U	0.095	U	0.011	U	0.095	U	0.012	U	0.095	U	0.011	U	0.095	U
Acenaphthene	0.09	J	0.07	J	0.04	J	0.009	J	0.020	J	0.095	U	0.095	U	0.08	J	0.096	U	0.095	U	0.095	U	0.0094	U	0.02	J	0.041	J	0.01	J	0.0093	U	0.14		0.30		0.009	J	0.024	J	0.095	U
Fluorene	0.099		0.06	J	0.06	J	0.01	J	0.02	J	0.01	J	0.008	J	0.02	J	0.096	U	0.095	U	0.095	U	0.013	U	0.095	U	0.013	U	0.095	U	0.013	U	0.095	U	0.014	U	0.095	U	0.013	U	0.095	U
Phenanthrene	0.15		0.54		0.44		0.11		0.16		0.06	J	0.05	J	0.30		0.096	U	0.095	U	0.01	J	0.038	J	0.04	J	0.047	J	0.04	J	0.06	J	0.10		0.52		0.02	J	0.034	J	0.095	U
Anthracene	0.04	J	0.16		0.10		0.02	J	0.03	J	0.02	J	0.008	J	0.08	J	0.096	U	0.095	U	0.008	J	0.063	J	0.095	U	0.016	U	0.095	U	0.019	J	0.095	U	0.071	J	0.095	U	0.016	U	0.095	U
2-Methylnaphthalene	0.06	J	0.14		0.08	J	0.03	J	0.04	J	0.02	J	0.02	J	0.05	J	0.096	U	0.095	U	0.095	U	0.013	U	0.008	J	0.012	J	0.095	U	0.012	U	0.095	U	0.013	U	0.095	U	0.012	U	0.095	U
Total LPAH	0.53		1.37		1.00		0.29		0.45		0.16		0.11		0.67		0.009				0.018		0.101		0.078		0.100		0.07		0.08		0.24		0.89		0.038		0.086			
HPAHs																																								
Fluoranthene	0.12		0.75		0.55		0.12		0.32		0.08	J	0.02	J	0.32		0.096	U	0.095	U	0.02	J	0.014	U	0.009	J	0.017	J	0.01	J	0.038	J	0.01	J	0.048	J	0.009	J	0.013	U	0.095	U
Pyrene	0.23		1.1		0.58		0.15		0.45		0.11		0.04	J	0.53		0.096	U	0.095	U	0.03	J	0.039	J	0.03	J	0.039	J	0.03	J	0.064	J	0.02	J	0.13	J	0.040	J	0.046	J	0.095	U
Benz(a)anthracene	0.07	J	0.49		0.35		0.06	J	0.17		0.03	J	0.009	J	0.23		0.096	U	0.095	U	0.01	J	0.013	U	0.007	J	0.013	U	0.008	J	0.013	U	0.007	J	0.013	U	0.006	J	0.013	U	0.095	U
Chrysene	0.14		0.57		0.34		0.08	J	0.21		0.04	J	0.01	J	0.25		0.096	U	0.095	U	0.02	J	0.015	U	0.007	J	0.015	U	0.01	J	0.015	U	0.008	J	0.016	U	0.008	J	0.015	U	0.095	U
Benzo(b)fluoranthene	0.05	J	0.36		0.16		0.04	J	0.13		0.02	J	0.009	J	0.14		0.096	U	0.095	U	0.01	J	0.021	U	0.006	J	0.021	U	0.006	J	0.021	U	0.006	J	0.021	U	0.095	U	0.021	U	0.095	U
Benzo(k)fluoranthene	0.04	J	0.36		0.22		0.05	J	0.15		0.03	J	0.008	J	0.15		0.096	U	0.095	U	0.01	J	0.021	U	0.006	J	0.021	U	0.006	J	0.021	U	0.006	J	0.021	U	0.003	J	0.021	U	0.004	J
Benzo(a)pyrene	0.07	J	0.63		0.29		0.07	J	0.24		0.04	J	0.01	J	0.23		0.096	U	0.095	U	0.02	J	0.018	U	0.007	J	0.017	U	0.007	J	0.017	U	0.007	J	0.018	U	0.095	U	0.017	U	0.095	U
Indeno(1,2,3-cd)pyrene	0.05	J	0.52		0.15		0.06	J	0.21		0.03	J	0.01	J	0.15		0.19	U	0.095	U	0.02	J	0.026	U	0.009	J	0.026	U	0.009	J	0.026	U	0.007	J	0.027	U	0.007	J	0.026	U	0.005	J
Dibenz(a,h)anthracene	0.01	J	0.08	J	0.03	J	0.01	J	0.03	J	0.005	J	0.095	U	0.03	J	0.014	J	0.095	U	0.19	U	0.03	U	0.005	J	0.033	U	0.19	U	0.033	J	0.19	U	0.034	U	0.19	U	0.033	U	0.19	U
Benzo(g,h,i)perylene	0.06	J	0.53		0.14		0.06	J	0.25		0.04	J	0.02	J	0.15		0.19	U	0.095	U	0.02	J	0.039	J	0.01	J	0.018	U	0.02	J	0.034	J	0.009	J	0.019	U	0.03	J	0.054	J	0.007	J
Total HPAHs	0.84		5.39		2.81		0.70		2.16		0.43		0.14		2.18		0.804				0.16		0.08		0.10		0.06		0.106		0.136		0.080		0.178		0.103		0.180		0.016	
SVOCs																																								
3- and 4-Methylphenol Coelution	0.75		1.5		0.67		0.04	J	0.09	J	0.01	J	0.01	J	0.04	J	0.48	U	0.24	U	0.48	U	0.055	U	0.02	J	0.055	U	0.05	J	0.087	J	0.48	U	0.056	U	0.007	J	0.055	U	0.48	U
Dibenzofuran	0.05	J	0.03	J	0.03	J	0.095	U	0.01	J	0.095	U	0.095	U	0.01	J	0.096	U	0.095	U	0.095	U	0.015	U	0.095	U	0.014	U	0.095	U	0.014	U	0.095	U	0.015	U	0.095	U	0.014	U	0.095	U
Butyl Benzyl Phthalate	0.13		0.43		0.83		0.51		0.50		0.34		0.59		1.00		0.19	U	0.095	U	0.19	U	0.028	U	0.19	U	0.028	U	0.19	U	0.028	U	0.19	U	0.028	U	0.19	U	0.028	U	0.19	U
Di-n-octyl Phthalate	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.96	U	0.95	U	0.95	U	0.035	U	0.95	U	0.035	U	0.95	U	0.035	U	0.95	U	0.036	U	0.95	U	0.035	U	0.95	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. D - reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Groundwater

Sample Designation / Matrix / Date Sampled	EX-7 Water 03/06/02	MW-1 Water 12/20/00	MW-1 Water 03/07/02	MW-3 Water 12/20/00	MW-3 Water 03/07/02	MW-3 Dup Water 03/07/02	MW-4 Water 12/20/00	MW-4 Water 03/07/02	MW-5 Water 12/20/00
LPAHs									
Naphthalene	0.14 J	0.095 U	0.012 U	0.095 U	0.012 U	0.012 U	0.095 U	0.014 U	0.095 U
Acenaphthylene	0.011 U	0.095 U	0.011 U	0.095 U	0.011 U	0.011 U	0.095 U	0.012 U	0.095 U
Acenaphthene	0.0089 U	0.095 U	0.0088 U	0.17	0.21	0.23	0.03 J	0.064 J	0.095 U
Fluorene	0.013 U	0.095 U	0.012 U	0.095 U	0.012 U	0.012 U	0.095 U	0.014 U	0.095 U
Phenanthrene	0.016 J	0.095 U	0.011 U	0.13	0.18 J	0.17 J	0.06 J	0.082 J	0.095 U
Anthracene	0.019 J	0.095 U	0.015 U	0.02 J	0.049 J	0.055 J	0.01 J	0.035 J	0.095 U
2-Methylnaphthalene	0.012 U	0.095 U	0.012 U	0.095 U	0.012 U	0.012 U	0.095 U	0.013 U	0.095 U
Total LPAH	0.18			0.32	0.44	0.46	0.10	0.18	
HPAHs									
Fluoranthene	0.018 J	0.095 U	0.013 U	0.01 J	0.065 J	0.071 J	0.02 J	0.04 J	0.095 U
Pyrene	0.022 J	0.095 U	0.015 U	0.05 J	0.13 J	0.11 J	0.05 J	0.11 J	0.095 U
Benz(a)anthracene	0.012 U	0.095 U	0.012 U	0.008 J	0.012 U	0.024 J	0.01 J	0.053 J	0.095 U
Chrysene	0.015 U	0.095 U	0.014 U	0.009 J	0.033 J	0.030 J	0.02 J	0.048 J	0.095 U
Benzo(b)fluoranthene	0.020 U	0.095 U	0.020 U	0.006 J	0.020 U	0.020 U	0.01 J	0.021 U	0.095 U
Benzo(k)fluoranthene	0.020 U	0.095 U	0.020 U	0.006 J	0.020 U	0.020 U	0.01 J	0.021 U	0.095 U
Benzo(a)pyrene	0.017 U	0.095 U	0.016 U	0.007 J	0.016 U	0.016 U	0.01 J	0.018 U	0.095 U
Indeno(1,2,3-cd)pyrene	0.025 U	0.19 U	0.024 U	0.008 J	0.024 U	0.024 U	0.01 J	0.026 U	0.19 U
Dibenz(a,h)anthracene	0.031 U	0.19 U	0.031 U	0.19 U	0.031 U	0.031 U	0.19 U	0.033 U	0.19 U
Benzo(g,h,i)perylene	0.017 U	0.19 U	0.017 U	0.009 J	0.039 J	0.017 U	0.02 J	0.018 U	0.19 U
Total HPAHs	0.040			0.113	0.267	0.235	0.160	0.251	
SVOCs									
3- and 4-Methylphenol Coelution	0.052 U	0.48 U	0.051 U	0.48 U	0.051 U	0.051 U	0.48 U	0.056 U	0.48 U
Dibenzofuran	0.014 U	0.095 U	0.014 U	0.095 U	0.014 U	0.014 U	0.095 U	0.015 U	0.095 U
Butyl Benzyl Phthalate	0.041 J	0.19 U	0.052 J	0.19 U	0.026 U	0.026 U	0.19 U	0.028 U	0.19 U
Di-n-octyl Phthalate	0.033 U	0.95 U	0.032 U	0.95 U	0.032 U	0.032 U	0.95 U	0.035 U	0.95 U

Sample Designation / Matrix / Date Sampled	MW-5 Water 03/07/02	MW-6 Water 10/25/01	MW-6 Dup Water 10/25/01	MW-6 Water 03/08/02	MW-7 Water 10/25/01	MW-7 Water 03/08/02	MW-8 Water 10/25/01	MW-8 Water 03/07/02	MW-9 Water 01/22/02	MW-9 Water 03/06/02	MW-9 Dup Water 03/06/02	MW-10 Water 01/22/02
LPAHs												
Naphthalene	0.034 J	5.00 U	5.00 U	0.12 J	5.00 U	0.086 J	5.00 U	0.16 J	0.20 U	0.013 U	0.012 U	0.20 U
Acenaphthylene	0.011 U	5.00 U	5.00 U	0.038 J	5.00 U	0.025 J	5.00 U	0.011 U	0.20 U	0.11 J	0.069 J	0.20 U
Acenaphthene	0.0094 U	5.00 U	5.00 U	0.0095 U	5.00 U	0.0092 U	5.00 U	0.58	0.20 U	0.12 J	0.15 J	0.20 U
Fluorene	0.013 U	5.00 U	5.00 U	0.02 J	5.00 U	0.013 U	5.00 U	0.56	0.20 U	0.01 U	0.012 U	0.20 U
Phenanthrene	0.011 U	5.00 U	5.00 U	0.13 J	5.00 U	0.077 J	5.00 U	1.2	0.26	0.22	0.16 J	0.20 U
Anthracene	0.016 U	5.00 U	5.00 U	0.047 J	5.00 U	0.039 J	5.00 U	0.097 J	0.20 U	0.098 J	0.067 J	0.20 U
2-Methylnaphthalene	0.013 U	5.00 U	5.00 U	0.025 J	5.00 U	0.034 J	5.00 U	0.081 J	0.20 U	0.012 U	0.012 U	0.20 U
Total LPAH	0.03			0.38		0.26		2.68	0.26	0.55	0.45	
HPAHs												
Fluoranthene	0.014 U	5.00 U	5.00 U	0.18 J	5.00 U	0.061 J	5.00 U	0.22	0.25	0.33	0.13 J	0.20 U
Pyrene	0.024 J	5.00 U	5.00 U	0.25	5.00 U	0.089 J	5.00 U	0.34	0.41	0.48	0.26	0.20 U
Benz(a)anthracene	0.013 U	5.00 U	5.00 U	0.077 J	5.00 U	0.044 J	5.00 U	0.071 J	0.20 U	0.23	0.096 J	0.20 U
Chrysene	0.015 U	5.00 U	5.00 U	0.087 J	5.00 U	0.045 J	5.00 U	0.16 J	0.20 U	0.24	0.10 J	0.20 U
Benzo(b)fluoranthene	0.021 U	5.00 U	5.00 U	0.088 J	5.00 U	0.021 U	5.00 U	0.064 J	0.20 U	0.28	0.098 J	0.20 U
Benzo(k)fluoranthene	0.021 U	5.00 U	5.00 U	0.045 J	5.00 U	0.021 U	5.00 U	0.02 U	0.20 U	0.096 J	0.027 J	0.20 U
Benzo(a)pyrene	0.018 U	5.00 U	5.00 U	0.096 J	5.00 U	0.017 U	5.00 U	0.089 J	0.20 U	0.26	0.094 J	0.20 U
Indeno(1,2,3-cd)pyrene	0.026 U	5.00 U	5.00 U	0.088 J	5.00 U	0.026 U	5.00 U	0.04 J	0.20 U	0.15 J	0.062 J	0.20 U
Dibenz(a,h)anthracene	0.033 U	5.00 U	5.00 U	0.033 U	5.00 U	0.032 U	5.00 U	0.031 U	0.20 U	0.031 U	0.031 U	0.20 U
Benzo(g,h,i)perylene	0.018 U	5.00 U	5.00 U	0.09 J	5.00 U	0.099 J	5.00 U	0.057 J	0.20 U	0.16 J	0.065 J	0.20 U
Total HPAHs	0.02			1.00		0.34		1.04	0.66	2.23	0.93	
SVOCs												
3- and 4-Methylphenol Coelution	0.055 U	5.00 U	5.00 U	0.073 J	5.00 U	1.1	5.00 U	0.22 J	0.480 U	0.052 U	0.051 U	0.48 U
Dibenzofuran	0.015 U	5.00 U	5.00 U	0.015 U	5.00 U	0.014 U	5.00 U	0.18 J	0.20 U	0.014 U	0.014 U	0.20 U
Butyl Benzyl Phthalate	0.028 U	5.00 U	5.00 U	0.028 U	5.00 U	0.027 U	5.00 U	0.13 J	0.20 U	0.050 J	0.074 J	0.20 U
Di-n-octyl Phthalate	0.035 U	5.00 U	5.00 U	0.035 U	5.00 U	0.034 U	5.00 U	0.032 U	0.20 U	0.033 U	0.032 U	0.20 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. D - reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

	Groundwater																															
Sample Designation	MW-10		MW-11		MW-11		MW-12		MW-12		MW-13		MW-13 Dup		MW-13		S-1		S-1		S-2		S-2		S-3		S-3		S-4		S-4 Duplicate		S-4	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	03/06/02		01/22/02		03/08/02		01/22/02		03/06/02		01/22/02		01/22/02		03/06/02		12/20/00		03/06/02		12/20/00		03/06/02		12/20/00		03/06/02		12/20/00		12/20/00		04/09/02	
LPAHs																																		
Naphthalene	0.24		0.20	U	0.12	U	0.20	U	0.12	J	0.20	U	0.25		0.34		0.03	J	0.03	J	0.07	J	0.025	J	0.07	J	0.025	J	0.04	J	0.04	J	0.012	U
Acenaphthylene	0.022	J	0.20	U	0.110	U	0.20	U	0.028	J	0.20	U	0.20	U	0.054	J	0.006	J	0.011	U	0.02	J	0.011	U	0.095	U	0.011	U	0.095	U	0.096	U	0.011	U
Acenaphthene	0.009	U	0.43		1.6	JD	0.20	U	0.15	J	0.20	U	0.20	U	0.18	J	0.02	J	0.0088	U	0.02	J	0.0092	U	0.095	U	0.0089	U	0.14		0.12		0.085	J
Fluorene	0.013	U	0.86		2.0	D	0.20	U	0.013	U	0.20	U	0.20	U	0.037	J	0.02	J	0.012	U	0.04	J	0.013	U	0.02	J	0.013	U	0.36		0.34		0.17	J
Phenanthrene	0.08	J	1.80		3.0	D	0.20	U	0.11	J	0.20	U	0.20	U	0.19	J	0.07	J	0.032	J	0.25		0.043	J	0.20		0.054	J	0.46		0.35		0.073	J
Anthracene	0.029	J	0.41		0.660	JD	0.20	U	0.016	U	0.20	U	0.20	U	0.041	J	0.095	U	0.015	U	0.02	J	0.016	U	0.095	U	0.015	U	0.02	J	0.01	J	0.015	U
2-Methylnaphthalene	0.015	J	20.00	D	24	D	0.20	U	0.034	J	0.20	U	0.20	U	0.056	J	0.03	J	0.016	J	0.05	J	0.014	J	0.096		0.012	U	0.09	J	0.10		0.012	U
Total LPAH	0.39		23.50		31.26		0.44								0.80		0.176		0.078		0.470		0.082		0.386		0.079		1.110		0.960		0.328	
HPAHs																																		
Fluoranthene	0.10	J	0.43		0.38	JD	0.20	U	0.058	J	0.20	U	0.20	U	0.14	J	0.02	J	0.013	U	0.099		0.022	J	0.06	J	0.023	J	0.06	J	0.05	J	0.01	U
Pyrene	0.15	J	0.61		0.89	JD	0.20	U	0.11	J	0.20	U	0.20	U	0.19	J	0.02	J	0.015	U	0.12		0.025	J	0.03	J	0.022	J	0.19		0.16		0.10	J
Benz(a)anthracene	0.081	J	0.20	U	0.23	JD	0.20	U	0.052	J	0.20	U	0.20	U	0.063	J	0.095	U	0.012	U	0.03	J	0.013	U	0.007	J	0.012	U	0.03	J	0.012	J	0.012	U
Chrysene	0.094	J	0.20	U	0.50	JD	0.20	U	0.046	J	0.20	U	0.20	U	0.075	J	0.008	J	0.014	U	0.06	J	0.015	U	0.03	J	0.015	U	0.12		0.09	J	0.014	U
Benzo(b)fluoranthene	0.070	J	0.20	U	0.20	U	0.20	U	0.021	U	0.20	U	0.20	U	0.020	U	0.006	J	0.020	U	0.04	J	0.021	U	0.01	J	0.020	U	0.03	J	0.03	J	0.020	U
Benzo(k)fluoranthene	0.037	J	0.20	U	0.20	U	0.20	U	0.021	U	0.20	U	0.20	U	0.020	U	0.004	J	0.020	U	0.03	J	0.021	U	0.008	J	0.020	U	0.02	J	0.01	J	0.020	U
Benzo(a)pyrene	0.090	J	0.20	U	0.16	U	0.20	U	0.018	U	0.20	U	0.20	U	0.098	J	0.095	U	0.016	U	0.03	J	0.017	U	0.095	U	0.017	U	0.03	J	0.02	J	0.016	U
Indeno(1,2,3-cd)pyrene	0.052	J	0.20	U	0.24	U	0.20	U	0.026	U	0.20	U	0.20	U	0.082	J	0.006	J	0.024	U	0.04	J	0.026	U	0.01	J	0.025	U	0.02	J	0.02	J	0.024	U
Dibenz(a,h)anthracene	0.031	U	0.20	U	0.31	U	0.20	U	0.033	U	0.20	U	0.20	U	0.031	U	0.19	U	0.031	U	0.009	J	0.032	U	0.19	U	0.031	U	0.009	J	0.008	J	0.031	U
Benzo(g,h,i)perylene	0.061	J	0.20	U	0.17	U	0.20	U	0.047	J	0.20	U	0.20	U	0.110	J	0.007	J	0.017	U	0.06	J	0.018	U	0.01	J	0.017	U	0.04	J	0.03	J	0.017	U
Total HPAHs	0.74		1.04		2.00		0.31								0.76		0.071				0.52		0.047		0.17		0.045		0.55		0.44		0.10	
SVOCs																																		
3- and 4-Methylphenol Coelution	0.053	U	0.49	U	0.510	U	1.9		0.41	J	28	D	31	D	1.5		0.3	J	0.23	J	0.49		0.089	J	0.48	U	0.220	J	0.2	J	0.2	J	0.051	U
Dibenzofuran	0.014	U	0.20	U	0.81	JD	0.20	U	0.015	U	0.20	U	0.20	U	0.021	J	0.01	J	0.014	U	0.02	J	0.014	U	0.01	U	0.019	J	0.13		0.11		0.11	J
Butyl Benzyl Phthalate	0.040	J	0.20	U	0.26	U	0.20	U	0.028	U	0.20	U	0.20	U	0.027	U	0.1	J	0.19	J	0.1	J	0.05	J	0.08	J	0.092	J	0.05	J	0.04	J	0.14	J
Di-n-octyl Phthalate	0.033	U	0.20	U	0.32	U	0.20	U	0.035	U	0.20	U	0.20	U	0.034	U	0.95	U	0.032	U	0.95	U	0.032	U	0.95	U	0.033	U	0.95	U	0.96	U	0.032	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. D - reported result is from a dilution.

TABLE 4
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
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
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
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
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
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
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
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	3.3	0.5 U	0.5 U	0.5 U
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
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
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
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
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
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
GP-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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
GP-31	Water	02/13/01	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-32	Water	02/13/01	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-33	Water	02/13/01	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	0.84	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-34	Water	02/13/01	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	0.61	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-35	Water	02/13/01	5.0 U	0.5 U	0.5 U	67	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	7	20 U	0.5 U	8.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-36	Water	02/13/01	5.0 U	0.5 U	0.5 U	2.5	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	1.1	1.0 U	0.5 U	1.1	20 U	0.5 U	23	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-37	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
GP-38	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	0.56	1.0 U	0.5 U	0.5 U	20 U	0.5 U	11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-38 Duplicate	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	8.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

TABLE 4
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
GP-1	Water	12/11/00	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
GP-2	Water	12/11/00	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
GP-3	Water	12/11/00	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
GP-4	Water	12/11/00	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
GP-5	Water	12/11/00	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
GP-6	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
GP-7	Water	12/14/00	0.5 U	0.5 U	1.6	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	31	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-8	Water	12/12/00	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
GP-9	Water	12/12/00	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	1.2	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-10	Water	12/12/00	0.5 U	0.5 U	220 D	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	430 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
GP-11	Water	12/12/00	0.5 U	0.5 U	27	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	140 D	0.5 U	2.0 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-12	Water	12/13/00	0.5 U	0.5 U	1.3	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	1.2	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-12 Duplicate	Water	12/13/00	0.5 U	0.5 U	1.1	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	0.97	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-13	Water	12/12/00	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
GP-14	Water	12/13/00	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
GP-15	Water	12/13/00	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
GP-16	Water	12/13/00	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
GP-17	Water	12/13/00	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
GP-18	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
GP-19	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
GP-19 Duplicate	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
GP-20	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
GP-21	Water	12/13/00	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	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
GP-22	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	1.3	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
GP-23	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
GP-24	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
GP-25	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
GP-26	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
GP-27	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	0.53	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
GP-28	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
GP-29	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	3.3	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-30	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	1.2	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-30 Duplicate	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	1.2	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-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
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
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
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
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
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
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
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

TABLE 4
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-1	Water	12/11/00	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
GP-2	Water	12/11/00	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
GP-3	Water	12/11/00	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
GP-4	Water	12/11/00	9.8	0.5 U	0.5 U	2.0 U	16	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.5	0.5 U	2.0 U	0.5 U	5.3	0.5 U	2.0 U	2.0 U	2.0 U	25	2.0 U
GP-5	Water	12/11/00	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
GP-6	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
GP-7	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
GP-8	Water	12/12/00	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
GP-9	Water	12/12/00	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
GP-10	Water	12/12/00	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
GP-11	Water	12/12/00	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
GP-12	Water	12/13/00	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
GP-12 Duplicate	Water	12/13/00	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
GP-13	Water	12/12/00	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
GP-14	Water	12/13/00	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
GP-15	Water	12/13/00	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
GP-16	Water	12/13/00	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
GP-17	Water	12/13/00	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
GP-18	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
GP-19	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
GP-19 Duplicate	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
GP-20	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
GP-21	Water	12/13/00	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
GP-22	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
GP-23	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
GP-24	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
GP-25	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
GP-26	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
GP-27	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
GP-28	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
GP-29	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
GP-30	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
GP-30 Duplicate	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
GP-31	Water	02/13/01	4.2	0.5 U	0.5 U	2.0 U	4.7	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

TABLE 4
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
GP-39	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	**0.8**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**5.9**	0.5 U	0.5 U	**0.83**	0.5 U	0.5 U
GP-40	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**	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-41-19.5	Water	04/06/01	NA	0.5 U	0.5 U	**0.760**	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-41-39.5	Water	04/06/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-41-56.0	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	1.0 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
GP-41-74.0	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	1.0 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
GP-42-19.0	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-42-42.5	Water	04/06/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-42-54.5	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	1.0 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
GP-42-75.5	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	1.0 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
GP-43-22.5	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**1.48**	10 U	0.5 U	**8.72**	0.5 U	0.5 U	**1.17**	0.5 U	0.5 U
GP-43-34.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-64.0	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-64.0D	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-74.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-44-22.0	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**2.02**	10 U	0.5 U	**2.83**	0.5 U	0.5 U	**1.33**	0.5 U	0.5 U
GP-44-22.0D	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**2.09**	10 U	0.5 U	**2.73**	0.5 U	0.5 U	**1.49**	0.5 U	0.5 U
GP-44-45.5	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	1.0 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
GP-44-75.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-44-76.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
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
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
EX-1	Water	03/07/02		2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U		2.5 U	10 U	2.5 U	**3.2 D**	100 U	2.5 U	2.5 U	2.5 U	2.5 U	**13 D**	2.5 U	2.5 U
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
EX-2	Water	03/07/02		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	2.0 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
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
EX-3	Water	03/07/02		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	2.0 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
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
EX-4/MW-2	Water	03/07/02		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	2.0 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
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
EX-5	Water	03/07/02		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	2.0 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
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
EX-7	Water	03/06/02		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	2.0 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
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
MW-1	Water	03/06/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**9.7**	0.5 U	0.5 U	0.5 U	0.5 U
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

TABLE 4
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-Xylene	o-Xylene	Styrene	Bromoform
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	84	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-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
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
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
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	0.984	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-44-22.0	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	42.3	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	45.7	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
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
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
EX-1	Water	03/07/02	2.5 U	2.5 U	33 D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	490 D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
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
EX-2	Water	03/07/02	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
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
EX-3	Water	03/07/02	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
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
EX-4/MW-2	Water	03/07/02	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
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
EX-5	Water	03/07/02	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
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
EX-7	Water	03/06/02	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
MW-1	Water	12/20/00	0.5 U	0.5 U	0.86	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	3.8	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
MW-1	Water	03/06/02	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	3.3	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
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

TABLE 4
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-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	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	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	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	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	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	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	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	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	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	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	55	5.0 U	0.5 U	0.5 U	2.0 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	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	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	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	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	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	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	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	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	NA
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	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	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	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	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	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	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	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	2.0 U
EX-1	Water	03/07/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 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	2.0 U
EX-2	Water	03/07/02	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	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	2.0 U
EX-3	Water	03/07/02	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	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	2.0 U
EX-4/MW-2	Water	03/07/02	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	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	2.0 U
EX-5	Water	03/07/02	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	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	2.0 U
EX-7	Water	03/06/02	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	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	2.0 U
MW-1	Water	03/06/02	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	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	2.0 U

TABLE 4
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
MW-3	Water	03/07/02		0.5 U	0.5 U	2.6	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
MW-3 Duplicate	Water	03/07/02		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	2.0 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
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
MW-4	Water	03/07/02		0.5 U	0.5 U	2.6	0.5 U	0.5 U	0.5 U	20 U	0.5 U		0.5 U	2.0 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
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
MW-5	Water	03/07/02		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	2.0 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
MW-6	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	2.8	6.4	50 U	2.5 U	422	2.5 U	2.5 U	7.48	2.5 U	2.5 U
MW-6 Duplicate	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	2.6	6.9	50 U	2.5 U	411	2.5 U	2.5 U	7.65	2.5 U	2.5 U
MW-6	Water	03/08/02		2.5 U	2.5 U	5.6 D	2.5 U	2.5 U	2.5 U	100 U	2.8 D		2.5 U	10.0 U	4.0 D	11.0 D	100 U	2.5 U	700 D	2.5 U	2.5 U	22 D	2.5 U	2.5 U
MW-7	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	2.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-7	Water	03/08/02		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	2.0 U	0.5 U	0.5 U	20 U	0.5 U	2.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	1.21	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	03/07/02		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	2.0 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
MW-9	Water	01/22/02		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	2.0 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
MW-9	Water	03/06/02		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	2.0 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
MW-9 Duplicate	Water	03/06/02		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	2.0 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
MW-10	Water	01/22/02		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	2.0 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
MW-10	Water	03/06/02		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	2.0 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
MW-11	Water	01/22/02		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	2.0 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
MW-11	Water	03/08/02		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	2.0 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
MW-12	Water	01/22/02		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	2.0 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
MW-12	Water	03/06/02		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	2.0 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
MW-13	Water	01/22/02		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	2.0 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
MW-13	Water	03/06/02		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	2.0 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
MW-13 Duplicate	Water	03/06/02		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	2.0 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 4
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
MW-3	Water	03/07/02	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
MW-3 Duplicate	Water	03/07/02	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
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
MW-4	Water	03/07/02	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
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
MW-5	Water	03/07/02	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
MW-6	Water	10/25/01	2.5 U	5 U	20.5	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	23	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6 Duplicate	Water	10/25/01	2.5 U	5 U	20.6	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	21.2	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6	Water	03/08/02	2.5 U	2.5 U	280 D	2.5 U	2.5 U	2.5 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	100 U	2.5 U	360 D	2.5 U	10.0 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	3.4	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
MW-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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
MW-9	Water	01/22/02	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
MW-9	Water	03/06/02	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
MW-9 Duplicate	Water	03/06/02	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
MW-10	Water	01/22/02	0.5 U	0.5 U	0.57	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
MW-10	Water	03/06/02	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
MW-11	Water	01/22/02	0.5 U	2.0	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.6	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	4.7	3.1	8.3	0.5 U	0.5 U
MW-11	Water	03/08/02	0.5 U	1.2	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	1.1	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	2.9	2.3	5.2	0.5 U	0.5 U
MW-12	Water	01/22/02	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
MW-12	Water	03/06/02	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.53	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
MW-13	Water	01/22/02	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
MW-13	Water	03/06/02	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
MW-13 Duplicate	Water	03/06/02	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 4
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
MW-3	Water	03/07/02	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 Duplicate	Water	03/07/02	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-4	Water	03/07/02	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
MW-5	Water	03/07/02	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-6	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6 Duplicate	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6	Water	03/08/02	10.0 U	2.5 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	2.5 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
MW-7	Water	10/25/01	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	0.5 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
MW-7	Water	03/08/02	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-8	Water	10/25/01	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	0.5 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
MW-8	Water	03/07/02	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-9	Water	01/22/02	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-9	Water	03/06/02	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-9 Duplicate	Water	03/06/02	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-10	Water	01/22/02	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-10	Water	03/06/02	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-11	Water	01/22/02	4.3	0.5 U	0.5 U	2.0 U	6.1	2.0 U	2.0 U	2.0 U	2.0 U	4.5	2.0 U	0.5 U	2.0 U	0.5 U	2.4	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-11	Water	03/08/02	3.6	0.5 U	0.5 U	2.0 U	5.3	2.0 U	2.0 U	2.0 U	2.0 U	3.3	2.0 U	0.5 U	2.0 U	0.5 U	2.3	0.5 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
MW-12	Water	01/22/02	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-12	Water	03/06/02	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-13	Water	01/22/02	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	4.8	2.0 U
MW-13	Water	03/06/02	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-13 Duplicate	Water	03/06/02	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

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 5
Metals
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

Location		Matrix	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Lead	Zinc
Geoprobe Borings - Groundwater µg/L (ppb)									
GP-3	Dissolved	Water	12/11/00	35.8		4.75	3.71		
GP-4	Dissolved	Water	12/11/00	19.3		5.89	3.69		
GP-5	Dissolved	Water	12/11/00	22.5		8.06	3.04		
GP-11	Dissolved	Water	12/12/00	14.7		5.04	2.33		
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		
GP-13	Dissolved	Water	12/12/00	61.9		7.63	5.35		
GP-14	Dissolved	Water	12/13/00	4.8		5.1	1.3		
GP-15	Dissolved	Water	12/13/00	18.6		8.1	1.1		
GP-51	Total	Water	11/15/01	19.9		62.1	74.1		
GP-51 Duplicate	Total	Water	11/15/01	3.65		15.3	18.3		
GP-51	Dissolved	Water	11/15/01	5.48		1 U	2 U		
GP-51 Duplicate	Dissolved	Water	11/15/01	4.20		1 U	2 U		
GP-52	Total	Water	11/15/01	3.64		14.0	18.2		
GP-52	Dissolved	Water	11/15/01	6.51		1 U	2 U		
GP-53	Total	Water	11/15/01	2.84		25.0	20.3		
GP-53	Dissolved	Water	11/15/01	16.6		1 U	2 U		
Field Blank	Dissolved	Water	12/13/00	0.5 U		0.3	0.2 U		
Monitoring Wells - Groundwater µg/L (ppb)									
EX-4/MW-2	Dissolved	Water	12/20/00	8.8		8.1	2.0		
EX-4/MW-2	Total	Water	03/07/02	56.8		5.8	7.7		
EX-4/MW-2	Dissolved	Water	03/07/02	47.5		2.4	0.6		
MW-1	Dissolved	Water	12/20/00	2.50 U		9.5	514		
MW-1	Total	Water	03/07/02	0.80		1.9	139		
MW-1	Dissolved	Water	03/07/02	1.00 U		2.0	130		
MW-3	Dissolved	Water	12/20/00	39.7	0.10 U	0.4 U	0.5	0.04 U	1.3
MW-3	Total	Water	03/07/02	42.8		6.4	11.0		
MW-3 Duplicate	Total	Water	03/07/02	41.6		6.7	7.8		
MW-3	Dissolved	Water	03/07/02	43.4		5.7	1.3		
MW-3 Duplicate	Dissolved	Water	03/07/02	43.4		2.5	0.7		
MW-4	Dissolved	Water	12/20/00	12.7		1.00 U	1.00 U		
MW-4	Total	Water	03/07/02	9.2		8.70	29.90		
MW-4	Dissolved	Water	03/07/02	10.0		3.30	1.20		
MW-6	Total	Water	10/25/01	29.8		67.8	98.8		
MW-6 Duplicate	Total	Water	10/25/01	27.3		35.0	48.6		
MW-6	Dissolved	Water	10/25/01	18.2		1.00 U	2.00 U		
MW-6 Duplicate	Dissolved	Water	10/25/01	19.0		1.00 U	2.00 U		
MW-6	Total	Water	03/08/02	6.8		9.6	18.3		
MW-6	Dissolved	Water	03/08/02	20.4		0.80	2.5		
MW-7	Total	Water	10/25/01	18.1		127	164		
MW-7	Dissolved	Water	10/25/01	3.04		1.00 U	2.00 U		
MW-7	Total	Water	03/08/02	4.4		9.1	19.1		
MW-7	Dissolved	Water	03/08/02	3.5		2.3	1.3		
MW-8	Total	Water	10/25/01	43.9		225	394		
MW-8	Dissolved	Water	10/25/01	2.33		1.00 U	2.00 U		
MW-8	Total	Water	03/07/02	4.3		14.7	36.1		
MW-8	Dissolved	Water	03/07/02	8.6		2.9	1.3		
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-1W	Total	Water	03/06/02	0.5 U	0.20 U	0.4	3.7	0.31	195
S-2W	Total	Water	12/20/00	1 U	0.22	2.0	9.9	5.93	113
S-2W	Total	Water	03/06/02	0.5 U	0.20 U	0.6	6.0	1.13	73.3
S-3W	Dissolved	Water	12/15/00	1 U	0.63	2.9	29.6	1.62	596
S-3W	Total	Water	03/06/02	0.5 U	0.2 U	1.2	13.1	2.30	84.2
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
S-4W	Total	Water	04/09/02	0.6	0.20	0.9	9.0	3.29	86.6

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

ANCHOR ENVIRONMENTAL, L.L.C.

Anchor Environmental, L.L.C.
6650 SW Redwood Lane, Suite 110
Portland, OR 97224
Phone 503.670.1108
Fax 503.670.1128

April 18, 2002
020162

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon

Dear Tom:

This status report provides DEQ with information on the remedial investigation tasks completed during the first quarter 2002, and work planned for the second quarter 2002.

WORK COMPLETED, FIRST QUARTER 2002

- Installed monitoring wells MW-10, MW-11, MW-12, and MW-13 on January 7, 2002.
- Developed monitoring wells MW-10, MW-11, MW-12, and MW-13 on January 15, 2002.
- Sampled monitoring wells MW-10, MW-11, MW-12, and MW-13 on January 22, 2002.
- Surveyed the locations of newly installed monitoring wells MW-6 through MW-13.
- Measured water levels in all monitoring wells, piezometers, and the staff gauge on March 6, 2002.
- Sampled monitoring wells EX-1 through EX-5, EX-7, MW-1 through MW-13; stormwater locations S-1 through S-3 on March 6-8, 2002.

PLANNED SECOND QUARTER 2002 RI TASKS

- Perform pump tests on monitoring well EX-3 with TPZ-1 as an observation well and MW-6 with TPZ-2 as an observation well.
- Data Management and Reporting.
- Project Management and Meetings.

- We would like to meet with DEQ for a discussion of the latest investigation results and the status of the investigation.

RESULTS

The lab results from the March groundwater sampling were received by Anchor the week of April 8, 2002 and are currently being validated.

PROBLEMS ENCOUNTERED

During the March 2002 sampling event, stormwater location S-4, the oil-water separator, contained insufficient water to collect a sample. A sample was collected form S-4 on April 9, 2002.

If you have any questions, please let us know.

Sincerely,

John J. Renda
Anchor Environmental, L.L.C.

John E. Edwards, C.E.G, R.G.

Cc: Ted McCall; McCall Oil and Chemical
Don Pyle, Lane, Powell, Spears, Lubersky, LLP

IT Corporation
8405 SW Nimbus Avenue
Beaverton, OR 97008-7141
Tel. 503.372.3663
Fax. 503.526.0775

January 14, 2002
Project 832537

Mr. Tom Gainer, P.E.
Project Manager, Portland Harbor and Voluntary Cleanup
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201-4987

Re: Status Report; McCall Oil and Chemical Corporation, RIFS, Portland, Oregon

Dear Tom:

This letter serves as a status report, notifying DEQ of the remedial investigation tasks completed during the fourth quarter 2001, and work planned for the first quarter 2002.

WORK COMPLETED, FOURTH QUARTER 2001

- Collected monthly water level measurements at site wells and the river gauge.
- Installed monitoring wells MW-6, MW-7, MW-8 and piezometer TPZ-2 on September 26, 2001, locations shown on Figure 1.
- Developed monitoring wells MW-6, MW-7, MW-8 and piezometer TPZ-2 on October 18, 2001.
- Sampled monitoring wells MW-6, MW-7, and MW-8 on October 25, 2001.
- Advanced GeoProbe borings GP-45 through GP-55 on November 14-15, 2001, locations shown on Figure 1.
- Installed monitoring well MW-9 and decommissioned EX-6 on November 16, 2001, locations shown on Figure 1.
- Developed monitoring well MW-9 on November 21, 2001.

PLANNED FIRST QUARTER 2002 RI TASKS

- Install the remaining four monitoring wells that were discussed with DEQ at the 8/1/01 meeting (Figure 1).
- Survey the locations of the newly installed monitoring wells, MW-6 through MW-13.
- Develop and sample the four new monitoring wells and sample MW-9.
- Sampling of all monitoring wells when water levels rise to normal winter levels. This task may not be done until after March, water levels will be reviewed monthly to determine when normal winter levels have been attained.
- Stormwater sampling and testing.
- Well pump tests.
- Data Management and Reporting.
- Project Management and Meetings.

RESULTS

Monthly water level measurements continued in the site monitoring wells and at the river staff gauge in September, October, November, and December. The depth to water measurements are presented in Table 1. As shown in Figure 2, the groundwater elevations are increasing over past months, however, they are still considerably lower than those measured in previous years. Water levels will continue to be monitored monthly and a full round of water quality samples will be collected once water levels rise to normal winter levels.

The locations of the newly installed monitoring wells, borings, and piezometer as well as the proposed locations of the remaining monitoring wells scheduled for installation the week of January 7, 2002 are presented in Figure 1.

Monitoring wells MW-6, -7, -8, and –9 and piezometer TPZ-2 were installed during the fourth quarter. Each of the wells were developed and sampled with the exception of well MW-9 which was developed and will be sampled after the remaining wells are installed in early January. Piezometer TPZ-2 will not be sampled. The ground water quality data for MW-6, MW-6 duplicate, MW-7, and MW-8 are presented in Tables 2, 3, 4, and 5. Draft boring logs and well completion details are included in Appendix A. Monitoring well EX-6 was decommissioned by overdrilling and backfilled with bentonite chips.

Geoprobe borings GP-45, -46, -47, -54, and –55 were advanced to assess the petroleum hydrocarbon contamination discovered in Geoprobe boring GP-31. The locations of these borings are shown of Figure1. Petroleum hydrocarbon contaminated soil was encountered in each of the borings ranging from 4 to 11.5 feet thick. The lateral extent of contamination was not fully determined during this part of the investigation. Please refer to the attached draft boring logs. Groundwater samples were collected from GP-45, -46, and –47 and were analyzed for total petroleum hydrocarbons. A petroleum hydrocarbon sheen was present in each of the groundwater samples collected from these borings, however, no measurable free-phase liquid was encountered. Diesel and heavy oil were detected in GP-46 and gasoline components were detected in all three samples. The groundwater analytical results are presented in Table 2.

Geoprobe borings GP-48, -49, and -50 were advanced near GP-9 to investigate the extent of a consolidated oily layer encountered at GP-9 at a depth of 11.5 to 12.0 feet. Soil samples from a depth interval of 10-12 feet were sent for laboratory analysis for TPH by EPA method 8015M. Heavy range and diesel range hydrocarbons were detected in each of the borings. The analytical results for these samples are presented in Table 6.

Geoprobe borings GP-51, -52, and –53 were advanced between GP-12 and GP-13 (downgradient of the former CCA production area) to investigate the elevated metals concentrations detected in the groundwater sample collected from GP-13. A groundwater sample was collected from each of the borings (a duplicate sample was collected from GP-51) and analyzed for dissolved and total Cu, Cr, and As. Low concentrations of total Cu, Cr, and As were detected in each of the groundwater samples, however, only As was detected in the filtered samples. The groundwater analytical results are presented in Table 5.

PROBLEMS ENCOUNTERED

On November 16, 2001, a boring was advanced between GP-3 and GP-4. At a depth of 20 feet, a 54-inch sanitary sewer was encountered. The City of Portland (City) failed to mark the location of the sewer when requested. The City was contacted and they repaired the sewer, however, several cubic yards of soil were lost into the sewer. An approximately 10'x10'x7' void is currently present immediate below the asphalt. The City plans to collapse the asphalt, backfill the void, and repave the area.

In the initial phase of the RI, soil and water samples were submitted to Columbia Analytical Services (CAS) of Kelso, Washington. Beginning in April 2001, laboratory samples were submitted to North Creek Analytical (NCA) of Beaverton, Oregon. NCA has been unable to meet the method reporting limit goals outlined in the RI Workplan (IT

Corporation, 2000). While the results serve the purposes of this phase of the investigation, future analytical samples will be submitted to CAS.

If you have any question, please let us know.

Sincerely,

IT CORPORATION

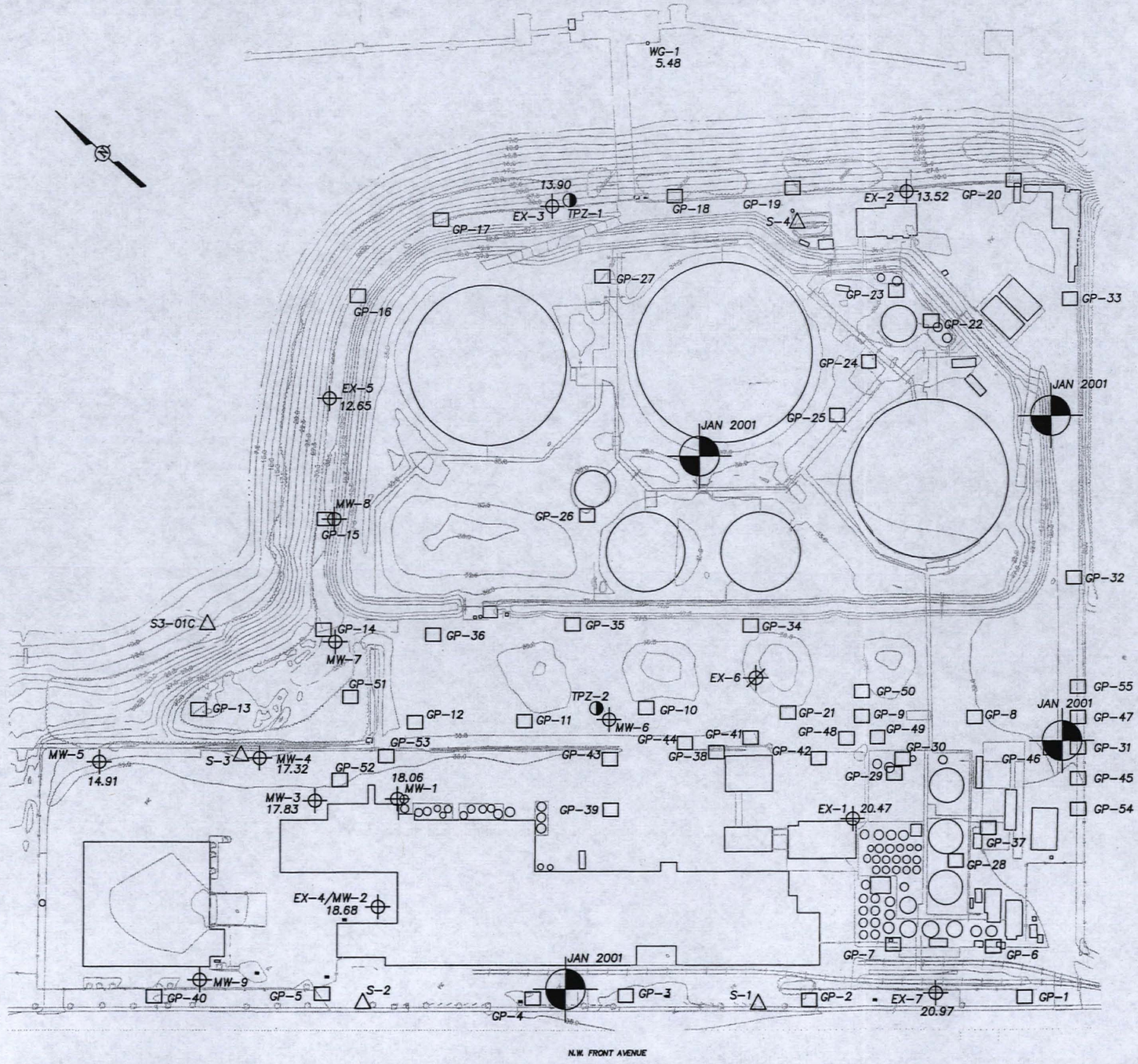
John J. Renda
Project Geologist

John E. Edwards, C.E.G, R.G.
Senior Consultant

Attachments: Figure 1. Boring and Well Location
Figure 2. Monitoring Well and Willamette River Hydrographs
Table 1. Monitoring Well and River Hydrology Measurements
Table 2. Total Petroleum Hydrocarbons in Groundwater and Storm Water
Table 3. PAHs and SVOCs in Groundwater and Storm Water
Table 4. Volatile Organic Compounds in Groundwater
Table 5. Metals in Groundwater and Storm Water
Table 6. Total Petroleum Hydrocarbons in Upland Soil
Appendix A. Draft Boring Logs and Well Completion Details

cc: Ted McCall; McCall Oil and Chemical

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
Portland	TWilliams	12/21/2001	1/11/02	820910-B13



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
- DECOMMISSIONED MONITORING WELL
- GEOPROBE BORING
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- VEGETATION
- BUILDING
- TANK
- PROPOSED MONITORING WELL LOCATIONS
- PIEZOMETER

SCALE

0 150 300 FEET

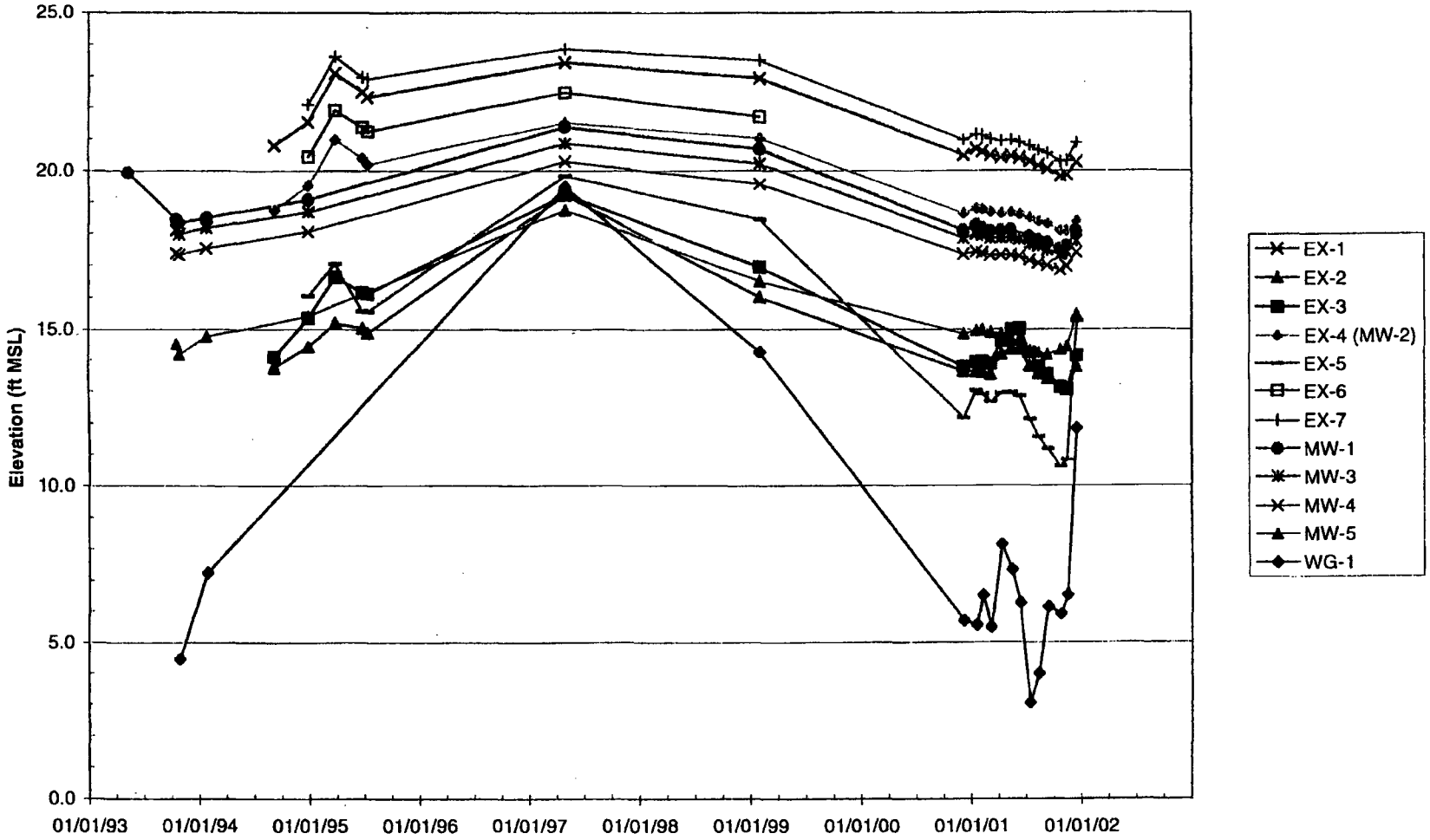
IT CORPORATION
8405 SW Nimbus Avenue
Beaverton, Oregon 97008-7141
(503)372-3663 Fax(503)526-0775

Figure 1
BORING AND WELL LOCATIONS
McCALL OIL
PORTLAND, OREGON

Jan 09, 2002 - 8:55am
N:\Cad\Drawings\820910-McCall\820910-B13.dwg

Figure 2

Monitoring Well and Willamette River Hydrographs
McCall Oil and Chemical Corporation
Focused RI Workplan



N\RemedJobs\mccallGWC\database\Water-base.xls\Hydrographs

12/26/2001

Table 1

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
		05/15/01	15.68	20.44
		06/12/01	15.75	20.37
		07/16/01	15.84	20.28
		08/14/01	15.97	20.15
		09/13/01	16.07	20.05
		10/25/01	16.31	19.81
		11/16/01	16.27	19.85
		12/18/01	15.88	20.24
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
		05/15/01	17.94	14.34
		06/12/01	17.94	14.34
		07/16/01	18.49	13.79
		08/14/01	18.73	13.55
		09/13/01	18.90	13.38
		10/25/01	19.18	13.10
		11/16/01	19.24	13.04
		12/18/01	18.50	13.78

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	17.08	14.99
		06/12/01	17.04	15.03
		07/16/01	17.82	14.25
		08/14/01	18.25	13.82
		09/13/01	18.51	13.56
		10/25/01	18.92	13.15
		11/16/01	19.02	13.05
		12/18/01	17.91	14.16
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
		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
		05/15/01	16.92	18.68
		06/12/01	16.98	18.62
		07/16/01	17.09	18.51
		08/14/01	17.22	18.38
		09/13/01	17.30	18.30
		10/25/01	17.51	18.09
		11/16/01	17.52	18.08
		12/18/01	17.22	18.38

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	18.94	12.93
		06/12/01	19.05	12.82
		07/16/01	19.76	12.11
		08/14/01	20.32	11.55
		09/13/01	20.70	11.17
		10/25/01	21.27	10.60
		11/16/01	21.04	10.83
		12/18/01	16.64	15.23
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	
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
		05/15/01	14.33	20.96
		06/12/01	14.41	20.88
		07/16/01	14.51	20.78
		08/14/01	14.65	20.64
		09/13/01	14.75	20.54
		10/25/01	15.01	20.28
		11/16/01	14.98	20.31
		12/18/01	14.42	20.87

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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
		05/15/01	17.37	18.11
		06/12/01	NM	
		07/16/01	17.59	17.89
		08/14/01	17.70	17.78
		09/13/01	17.78	17.70
		10/25/01	17.97	17.51
		11/16/01	17.88	17.60
		12/18/01	17.44	18.04
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
		05/15/01	16.71	17.85
		06/12/01	16.76	17.80
		07/16/01	16.91	17.65
		08/14/01	16.97	17.59
		09/13/01	17.09	17.47
		10/25/01	17.24	17.32
		11/16/01	17.16	17.40
		12/18/01	16.82	17.74

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
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	
		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
		05/15/01	16.28	17.33
		06/12/01	16.32	17.29
		07/16/01	16.43	17.18
		08/14/01	16.53	17.08
		09/13/01	16.60	17.01
		10/25/01	16.74	16.87
		11/16/01	16.63	16.98
		12/18/01	16.20	17.41
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
		05/15/01	20.00	14.66
		06/12/01	20.01	14.65
		07/16/01	20.32	14.34
		08/14/01	20.39	14.27
		09/13/01	20.47	14.19
		10/25/01	20.30	14.36
		11/16/01	20.19	14.47
		12/18/01	19.18	15.48
MW-6		10/25/01	16.73	
		11/16/01	16.67	
		12/18/01	16.35	

Table 1

Monitoring Well and River Hydrology Measurements

McCall Oil and Chemical Corporation

Well	Reference Point Elevation (Feet MSL)	Date	DTW (Feet)	WLE (Feet MSL)
MW-7		10/25/01	25.77	
		11/16/01	24.94	
		12/18/01	21.26	
MW-8		10/25/01	25.64	
		11/16/01	23.85	
		12/18/01	19.55	
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
		05/15/01	29.95	7.33
		06/12/01	31.02	6.26
		07/16/01	34.23	3.05
		08/14/01	33.27	4.01
		09/13/01	31.15	6.13
		10/25/01	31.38	5.90
		11/16/01	30.77	6.51
		12/18/01	25.45	11.83

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

Table 2
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)																				
GP-1	Water	12/11/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-2	Water	12/11/00	130	H	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-3	Water	12/11/00	170	H	100	U	100	U	100	U	100	U	100	U	280	L	250	U	250	U
GP-4	Water	12/11/00	2500	H	100	U	100	U	100	U	100	U	100	U	7100	F	250	U	4400	L
GP-5	Water	12/11/00	620	H	100	U	100	U	100	U	100	U	100	U	430	Y	250	U	300	Y
GP-6	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-7	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-8	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
GP-9	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
GP-10	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	100	Y	250	U	250	U
GP-11	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	130	Y	250	U	250	U
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
GP-13	Water	12/12/00	110	Z	100	U	100	U	100	U	100	U	100	U	260	Y	250	U	250	U
GP-14	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-15	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	2800	F	250	U	1200	F
GP-16	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-17	Water	12/13/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-18	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-20	Water	12/14/00	100	U	100	U	100	U	100	U	100	U	100	U	550	Y	250	U	250	U
GP-21	Water	12/12/00	100	U	100	U	100	U	100	U	100	U	100	U	120	Y	250	U	250	U
GP-22	Water	02/09/01	210	H	100	U	100	U	100	U	100	U	100	U	1100	F	250	U	250	U
GP-23	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	440	H	250	U	250	U
GP-24	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	270	H	250	U	250	U
GP-25	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	280	H	250	U	250	U
GP-26	Water	02/09/01	100	U	100	U	100	U	100	U	100	U	100	U	300	H	250	U	500	L
GP-27	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	170	H	250	U	250	U
GP-28	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-29	Water	02/12/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-31	Water	02/13/01	1800	H	100	U	100	U	100	U	100	U	100	U	7600	Y	250	U	4800	F
GP-32	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	700	H	250	U	1100	F
GP-33	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	320	Y	250	U	250	U
GP-34	Water	02/13/01	130	H	100	U	100	U	100	U	100	U	100	U	2100	Y	250	U	580	L
GP-35	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	200	H	250	U	270	Y
GP-36	Water	02/13/01	100	U	100	U	100	U	100	U	100	U	100	U	210	Y	250	U	250	U
GP-37	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
GP-39	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
GP-40	Water	02/14/01	100	U	100	U	100	U	100	U	100	U	100	U	640	Y	250	U	250	U
GP-45	Water	11/14/01	> 667	DET											1680	U	1680	U		
GP-46	Water	11/14/01	> 714	DET											38700		28000			
GP-47	Water	11/14/01	> 250	DET											630	U	630	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 2
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)																				
EX-1	Water	12/20/00	990	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-2	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-3	Water	12/20/00	690	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
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
EX-5	Water	12/20/00	950	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
EX-7	Water	12/20/00	530	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-1	Water	12/20/00	1200	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-3	Water	12/20/00	720	Z	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-4	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-5	Water	12/20/00	100	U	100	U	100	U	100	U	100	U	100	U	100	U	250	U	250	U
MW-6	Water	10/25/01	250	U											630	U	630	U		
MW-6 Duplicate	Water	10/25/01	250	U											630	U	630	U		
MW-7	Water	10/25/01	250	U											630	U	630	U		
MW-8	Water	10/25/01	250	U											3090		1840			
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.

DET = Detected above method reporting limit (method reporting limit shown)

D = The *reported* result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11		GP-12		GP-12 Duplicate		GP-13		GP-14		GP-15		GP-16		GP-17		GP-18	
Matrix	Groundwater																																			
Date Sampled	Water 12/11/00		Water 12/11/00		Water 12/11/00		Water 12/11/00		Water 12/11/00		Water 12/14/00		Water 12/14/00		Water 12/12/00		Water 12/12/00		Water 12/12/00		Water 12/12/00		Water 12/13/00		Water 12/13/00		Water 12/12/00		Water 12/13/00		Water 12/13/00		Water 12/13/00		Water 12/13/00		Water 12/14/00	
LPAHs																																				
Naphthalene	0.12		0.16		2.9		96	D	0.11		0.07	J	0.05	J	0.04	J	0.38		0.05	J	0.02	J	0.1	J	0.08	J	0.03	J	0.24		0.23		0.19		0.16		0.13	
Acenaphthylene	0.02	J	0.05	J	0.096	U	1	JD	0.099	U	0.04	J	0.02	J	0.096	U	0.096	U	0.009	J	0.10	U	0.06	J	0.01	J	0.098	U	0.03	J	0.04	J	0.04	J	0.03	J	0.04	J
Acenaphthene	0.02	J	0.02	J	0.70		16	D	0.11		0.03	J	0.02	J	0.096	U	0.08	J	0.01	J	0.10	U	0.03	J	0.01	J	0.03	J	0.01	J	0.13		0.12		0.08	J	0.36	
Fluorene	0.04	J	0.02	J	2.1		47	D	0.099	U	0.03	J	0.03	J	0.006	J	0.22		0.02	J	0.01	J	0.02	J	0.02	J	0.01	J	0.02	J	0.51		0.25		0.06	J	0.07	J
Phenanthrene	0.15		0.21		1.9		140	D	0.06	J	0.28		0.24		0.04	J	0.43		0.09	J	0.04	J	0.41		0.16		0.05	J	0.23		1.2		0.70		0.23		0.60	
Anthracene	0.02	J	0.07	J	0.09	J	6	JD	0.008	J	0.07	J	0.02	J	0.01	J	0.02	J	0.01	J	0.03	J	0.09	J	0.02	J	0.008	J	0.04	J	0.07	J	0.05	J	0.02	J	0.07	J
2-Methylnaphthalene	0.09	J	0.12		19	D	340	D	0.09	J	0.06	J	0.09	J	0.02	J	1.5		0.14		0.03	J	0.07	J	0.08	J	0.03	J	0.06	J	0.14		0.1	J	0.07	J	0.08	J
Total LPAH	0.46		0.65		26.69		646		0.378		0.58		0.47		0.12		2.63		0.33		0.13		0.78		0.38		0.16		0.63		2.32		1.45		0.65		1.35	
HPAHs																																				
Fluoranthene	0.15		0.55		0.06	J	4.0	JD	0.02	J	0.33		0.20		0.07	J	0.11		0.04	J	0.04	J	0.49		0.12		0.06	J	0.35		0.17		0.20		0.13		0.47	
Pyrene	0.20		0.64		0.13		13	D	0.05	J	0.40		0.24		0.11		0.50		0.05	J	0.09	J	0.67		0.18		0.06	J	0.50		0.51		0.32		0.20		0.68	
Benz(a)anthracene	0.11		0.48		0.03	J	9.0	D	0.02	J	0.22		0.16		0.04	J	0.06	J	0.02	J	0.01	J	0.40		0.09	J	0.04	J	0.19		0.14		0.13		0.07	J	0.15	
Chrysene	0.12		0.41		0.03	J	25	D	0.03	J	0.24		0.16		0.04	J	0.07	J	0.02	J	0.02	J	0.43		0.09	J	0.04	J	0.27		0.21		0.18		0.09	J	0.18	
Benzo(b)fluoranthene	0.07	J	0.24		0.01	J	3	JD	0.01	J	0.10		0.097		0.02	J	0.02	J	0.01	J	0.008	J	0.21		0.04	J	0.02	J	0.21		0.099		0.10		0.06	J	0.15	
Benzo(k)fluoranthene	0.08	J	0.28		0.02	J	4	JD	0.008	J	0.18		0.11		0.03	J	0.03	J	0.02	J	0.008	J	0.29		0.07	J	0.02	J	0.21		0.09	J	0.12		0.08	J	0.17	
Benzo(a)pyrene	0.13		0.43		0.02	J	1	JD	0.01	J	0.23		0.15		0.04	J	0.03	J	0.02	J	0.008	J	0.39		0.08	J	0.03	J	0.37		0.16		0.17		0.10		0.29	
Indeno(1,2,3-cd)pyrene	0.09	J	0.26		0.01	J	0.8	JD	0.02	J	0.10	J	0.09	J	0.03	J	0.02	J	0.01	J	0.009	J	0.2	J	0.05	J	0.02	J	0.37		0.1	J	0.1	J	0.07	J	0.20	
Dibenz(a,h)anthracene	0.01	J	0.03	J	0.005	J	0.7	JD	0.20	U	0.03	J	0.02	J	0.004	J	0.005	J	0.007	J	0.2	U	0.04	J	0.02	J	0.006	J	0.05	J	0.02	J	0.03	J	0.01	J	0.02	J
Benzo(g,h,i)perylene	0.09	J	0.2	J	0.01	J	1	JD	0.02	J	0.10	J	0.07	J	0.04	J	0.02	J	0.01	J	0.008	J	0.2	J	0.05	J	0.02	J	0.43		0.2	J	0.1	J	0.08	J	0.27	
Total HPAHs	1.05		3.52		0.33		61.50		0.19		1.93		1.30		0.42		0.87		0.21		0.201		3.32		0.79		0.32		2.95		1.70		1.45		0.89		2.58	
SVOCs																																				
3- and 4-Methylphenol Coelution	0.07	J	0.20	J	0.03	J	38	U	0.04	J	0.30	J	0.1	J	0.02	J	0.08	J	0.1	J	0.03	J	0.2	J	0.1	J	0.06	J	0.2	J	0.3	J	0.60		0.75		0.3	J
Dibenzofuran	0.01	J	0.01	J	1.0		19	D	0.099	U	0.01	J	0.01	J	0.096	U	0.09	J	0.01	J	0.09	J	0.01	J	0.01	J	0.098	U	0.02	J	0.02	J	0.02	J	0.01	J	0.02	J
Butyl Benzyl Phthalate	0.08	J	0.30		0.20		15	U	0.01	J	0.09	J	0.05	J	0.07	J	0.2	J	0.20	J	0.2	J	0.07	J	0.31		0.06	J	0.21	U	0.1	U	0.08	J	0.06	J	0.07	J
Di-n-octyl Phthalate	0.95	U	0.95	U	0.96	U	77	U	0.99	U	0.97	U	0.96	U	0.96	U	0.96	U	0.96	U	1.0	U	1.1	U	0.06	J	0.98	U	1.0	U	0.96	U	0.98	U	0.96	U	0.96	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. D = reported result is from a dilution.

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	GP-19	GP-19 Duplicate	GP-20	GP-21	GP-22	GP-22 F	GP-23	GP-24	GP-25	GP-26	GP-27	GP-27 F	GP-28	GP-28 F	GP-29	GP-29 F	GP-30	GP-30 Duplicate	GP-31	GP-32	GP-33
Matrix	Groundwater																				
Date Sampled	Water 12/14/00	Water 12/14/00	Water 12/14/00	Water 12/13/00	Water 02/09/01	Water 02/09/01	Water 02/09/01	Water 02/09/01	Water 02/09/01	Water 02/09/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/12/01	Water 02/13/01	Water 02/13/01	Water 02/13/01
LPAHs																					
Naphthalene	**0.02** J	**0.008** J	**0.15**	**0.04** J	**0.56**	**0.09** J	**0.05** J	**0.21**	**0.22**	**0.20**	**0.22**	0.095 U	0.097 U	0.096 U	**0.17**	0.096 U	0.097 U	0.098 U	**7.6** D	**0.57** D	**0.12**
Acenaphthylene	0.096 U	0.096 U	**0.03** J	0.096 U	0.096 U	0.10 U	**0.008** J	**0.02** J	**0.02** J	**0.02** J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	4.8 U	**0.09** JD	**0.02** J
Acenaphthene	0.096 U	0.096 U	**0.11**	0.096 U	**0.81**	**0.1** J	**0.03** J	**0.09** J	**0.11**	**0.03** J	**0.11**	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	**12** D	**0.5** JD	**0.17**
Fluorene	0.096 U	0.096 U	**0.02** J	**0.01** J	**2.1**	**0.13**	**0.02** J	**0.06** J	**0.05** J	**0.05** J	**0.32**	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	**24** D	**0.79** D	**0.04** J
Phenanthrene	**0.03** J	**0.008** J	**0.26**	**0.06** J	**2.0**	**0.10**	**0.06** J	**0.21**	**0.28**	**0.13**	**0.73**	0.095 U	**0.12**	0.096 U	**0.28**	0.096 U	**0.16**	**0.12**	**70** D	**2.6** D	**0.16**
Anthracene	0.096 U	0.096 U	**0.02** J	**0.006** J	**0.06** J	0.10 U	**0.008** J	**0.02** J	**0.06** J	**0.02** J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	**13** D	**0.54** D	**0.02** J
2-Methylnaphthalene	**0.01** J	0.096 U	**0.07** J	**0.04** J	**14** D	**0.4**	**0.04** J	**0.07** J	**0.07** J	**0.07** J	**0.15**	0.095 U	0.097 U	0.096 U	**0.49**	0.096 U	0.097 U	0.098 U	**430** D	**13** D	**0.26**
Total LPAH	**0.06**	**0.016**	**0.66**	**0.16**	**19.53**	**0.82**	**0.22**	**0.68**	**0.81**	**0.52**	**1.53**		**0.12**		**0.94**		**0.16**	**0.12**	**556.6**	**18.1**	**0.79**
HPAHs																					
Fluoranthene	0.096 U	0.096 U	**0.15**	**0.01** J	**0.06** J	**0.02** J	**0.03** J	**0.099**	**0.38**	**0.12**	**0.12**	0.095 U	**0.23**	0.096 U	**0.46**	0.096 U	0.097 U	0.098 U	**6.3** D	**0.75** D	**0.09** J
Pyrene	**0.01** J	**0.02** J	**0.20**	**0.04** J	**0.23**	**0.03** J	**0.06** J	**0.23**	**0.48**	**0.15**	**0.23**	0.095 U	**0.31**	0.096 U	**0.81**	0.096 U	**0.28**	**0.31**	**32** D	**2.0** D	**0.15**
Benz(a)anthracene	**0.005** J	0.096 U	**0.08** J	0.096 U	**0.02** J	**0.009** J	**0.01** J	**0.06** J	**0.26**	**0.06** J	0.097 U	0.095 U	**0.18**	0.096 U	**0.28**	0.096 U	0.097 U	0.098 U	**9.2** D	**0.75** D	**0.06** J
Chrysene	**0.007** J	0.096 U	**0.12**	0.096 U	**0.03** J	**0.01** J	**0.02** J	**0.07** J	**0.28**	**0.07** J	**0.13**	0.095 U	**0.17**	0.096 U	**0.40**	0.096 U	**0.11**	**0.10**	**25** D	**1.4** D	**0.08** J
Benzo(b)fluoranthene	**0.005** J	0.096 U	**0.08** J	0.096 U	**0.01** J	**0.006** J	**0.01** J	**0.05** J	**0.15**	**0.05** J	**0.10**	0.095 U	**0.12**	0.096 U	**0.27**	0.096 U	0.097 U	0.098 U	**2** JD	**0.4** JD	**0.05** J
Benzo(k)fluoranthene	**0.006** J	0.096 U	**0.07** J	0.096 U	**0.01** J	**0.007** J	**0.02** J	**0.06** J	**0.16**	**0.06** J	0.097 U	0.095 U	**0.12**	0.096 U	**0.25**	0.096 U	0.097 U	0.098 U	**1** JD	**0.3** JD	**0.05** J
Benzo(a)pyrene	0.096 U	0.096 U	**0.12**	0.096 U	**0.02** J	0.10 U	**0.02** J	**0.08** J	**0.23**	**0.07** J	**0.12**	0.095 U	**0.20**	0.096 U	**0.46**	0.096 U	0.097 U	0.098 U	**5** JD	**0.59** D	**0.08** J
Indeno(1,2,3-cd)pyrene	**0.008** J	**0.005** J	**0.10** J	**0.004** J	**0.01** J	**0.005** J	**0.01** J	**0.05** J	**0.12**	**0.06** J	**0.14**	0.095 U	**0.18**	0.096 U	**0.51**	0.096 U	0.097 U	0.098 U	**1** JD	**0.4** JD	**0.06** J
Dibenz(a,h)anthracene	**0.006** J	**0.006** J	**0.02** J	0.19 U	**0.006** J	**0.005** J	**0.005** J	**0.01** J	**0.03** J	**0.02** J	0.097 U	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	**0.6** JD	**0.1** JD	**0.01** J
Benzo(g,h,i)perylene	**0.009** J	**0.008** J	**0.10** J	0.19 U	**0.01** J	**0.007** J	**0.02** J	**0.06** J	**0.11**	**0.05** J	**0.10**	0.095 U	**0.13**	0.096 U	**0.47**	0.096 U	0.097 U	0.098 U	**3** JD	**0.53** D	**0.07** J
Total HPAHs	**0.056**	**0.039**	**1.04**	**0.054**	**0.406**	**0.099**	**0.205**	**0.769**	**2.200**	**0.710**	**0.94**		**1.64**		**3.91**		**0.39**	**0.41**	**85.1**	**7.2**	**0.70**
SVOCs																					
3- and 4-Methylphenol Coelution	**0.03** J	**0.007** J	**2.0**	**0.06** J	**0.01** J	0.25 U	**0.2** J	**0.88**	**0.44**	**1.3**	**0.49**	0.24 U	0.24 U	0.24 U	**0.28**	0.24 U	0.24 U	0.25 U	12 U	**1.4** D	**0.74**
Dibenzofuran	0.096 U	0.096 U	**0.01** J	0.096 U	**0.86** J	**0.02** J	0.097 U	**0.02** J	**0.02** J	**0.02** J	**0.12**	0.095 U	0.097 U	0.096 U	0.097 U	0.096 U	0.097 U	0.098 U	**6.1** D	**0.2** JD	**0.02** J
Butyl Benzyl Phthalate	**0.02** J	0.19 U	**0.04** J	**0.35**	**0.098**	**0.16**	**0.05** J	**0.06** J	**0.1** J	**0.08** J	**1.7**	**0.25**	**0.25**	0.096 U	**0.33**	0.096 U	**0.45**	**0.28**	4.8 U	**0.65** D	**0.53**
Di-n-octyl Phthalate	0.96 U	**0.004** J	1.1 U	0.96 U	0.96 U	**0.04** J	0.97 U	0.97 U	0.96 U	0.96 U	0.97 U	0.95 U	0.97 U	0.96 U	0.97 U	0.96 U	0.97 U	0.98 U	48 U	4.8 U	0.95 U

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

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

Sample Designation	GP-34		GP-35		GP-36		GP-37		GP-38		GP-38 Duplicate		GP-39		GP-40		Field Blank		Field Blank		EX-1		EX-2		EX-3		EX-4/MW-2		EX-5		EX-7		MW-1		MW-3		MW-4		MW-5		MW-6	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	02/13/01		02/13/01		02/13/01		02/14/01		02/14/01		02/14/01		02/14/01		02/14/01		12/14/00		02/14/01		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00		10/25/01	
	Groundwater																																							
LPAHs																																								
Naphthalene	**0.09**	J	**0.31**		**0.24**		**0.09**	J	**0.16**		**0.05**	J	**0.02**	J	**0.12**		**0.009**	J	0.095	U	0.095	U	**0.01**	J	**0.02**	J	0.095	U	**0.009**	J	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	5.00	U
Acenaphthylene	0.095	U	**0.09**	J	**0.04**	J	**0.008**	J	**0.020**	J	0.095	U	0.095	U	**0.02**	J	0.096	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	5.00	U
Acenaphthene	**0.09**	J	**0.07**	J	**0.04**	J	**0.009**	J	**0.020**	J	0.095	U	0.095	U	**0.08**	J	0.096	U	0.095	U	0.095	U	**0.02**	J	**0.01**	J	**0.14**		**0.009**	J	0.095	U	0.095	U	**0.17**		**0.03**	J	0.095	U	5.00	U
Fluorene	**0.099**		**0.06**	J	**0.06**	J	**0.01**	J	**0.02**	J	**0.01**	J	**0.008**	J	**0.02**	J	0.096	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	5.00	U
Phenanthrene	**0.15**		**0.54**		**0.44**		**0.11**		**0.16**		**0.06**	J	**0.05**	J	**0.30**		0.096	U	0.095	U	**0.01**	J	**0.04**	J	**0.04**	J	**0.10**		**0.02**	J	0.095	U	0.095	U	**0.13**		**0.06**	J	0.095	U	5.00	U
Anthracene	**0.04**	J	**0.16**		**0.10**		**0.02**	J	**0.03**	J	**0.02**	J	**0.008**	J	**0.08**	J	0.096	U	0.095	U	**0.008**	J	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	**0.02**	J	**0.01**	J	0.095	U	5.00	U
2-Methylnaphthalene	**0.06**	J	**0.14**		**0.08**	J	**0.04**	J	**0.04**	J	**0.02**	J	**0.02**	J	**0.05**	J	0.096	U	0.095	U	0.095	U	**0.008**	J	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	5.00	U
Total LPAH	**0.53**		**1.37**		**1.00**		**0.29**		**0.45**		**0.16**		**0.11**		**0.67**		**0.009**				**0.018**		**0.078**		**0.07**		**0.24**		**0.038**						**0.32**		**0.10**					
HPAHs																																								
Fluoranthene	**0.12**		**0.75**		**0.55**		**0.12**		**0.32**		**0.08**	J	**0.02**	J	**0.32**		0.096	U	0.095	U	**0.02**	J	**0.009**	J	**0.01**	J	**0.01**	J	**0.009**	J	0.095	U	0.095	U	**0.01**	J	**0.02**	J	0.095	U	5.00	U
Pyrene	**0.23**		**1.1**		**0.58**		**0.15**		**0.45**		**0.11**		**0.04**	J	**0.53**		0.096	U	0.095	U	**0.03**	J	**0.03**	J	**0.03**	J	**0.02**	J	**0.040**	J	0.095	U	0.095	U	**0.05**	J	**0.05**	J	0.095	U	5.00	U
Benz(a)anthracene	**0.07**	J	**0.49**		**0.35**		**0.06**	J	**0.17**		**0.03**	J	**0.009**	J	**0.23**		0.096	U	0.095	U	**0.01**	J	**0.007**	J	**0.008**	J	**0.007**	J	**0.006**	J	0.095	U	0.095	U	**0.008**	J	**0.01**	J	0.095	U	5.00	U
Chrysene	**0.14**		**0.57**		**0.34**		**0.08**	J	**0.21**		**0.04**	J	**0.01**	J	**0.25**		0.096	U	0.095	U	**0.02**	J	**0.007**	J	**0.01**	J	**0.008**	J	**0.008**	J	0.095	U	0.095	U	**0.009**	J	**0.02**	J	0.095	U	5.00	U
Benzo(b)fluoranthene	**0.05**	J	**0.36**		**0.16**		**0.04**	J	**0.13**		**0.02**	J	**0.009**	J	**0.14**		0.096	U	0.095	U	**0.01**	J	**0.006**	J	**0.006**	J	**0.006**	J	0.095	U	0.095	U	0.095	U	**0.006**	J	**0.01**	J	0.095	U	5.00	U
Benzo(k)fluoranthene	**0.04**	J	**0.36**		**0.22**		**0.05**	J	**0.15**		**0.03**	J	**0.008**	J	**0.15**		0.096	U	0.095	U	**0.01**	J	**0.006**	J	**0.006**	J	**0.006**	J	**0.003**	J	**0.004**	J	0.095	U	**0.006**	J	**0.01**	J	0.095	U	5.00	U
Benzo(a)pyrene	**0.07**	J	**0.63**		**0.29**		**0.07**	J	**0.24**		**0.04**	J	**0.01**	J	**0.23**		0.096	U	0.095	U	**0.02**	J	**0.007**	J	**0.007**	J	**0.007**	J	0.095	U	0.095	U	0.095	U	**0.007**	J	**0.01**	J	0.095	U	5.00	U
Indeno(1,2,3-cd)pyrene	**0.05**	J	**0.52**		**0.15**		**0.06**	J	**0.21**		**0.03**	J	**0.01**	J	**0.15**		0.19	U	0.095	U	**0.02**	J	**0.009**	J	**0.009**	J	**0.007**	J	**0.007**	J	**0.005**	J	0.19	U	**0.008**	J	**0.01**	J	0.19	U	5.00	U
Dibenz(a,h)anthracene	**0.01**	J	**0.08**	J	**0.03**	J	**0.01**	J	**0.03**	J	**0.005**	J	0.095	U	**0.03**	J	**0.004**	J	0.095	U	0.19	U	**0.005**	J	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	5.00	U
Benzo(g,h,i)perylene	**0.06**	J	**0.53**		**0.14**		**0.06**	J	**0.25**		**0.04**	J	**0.02**	J	**0.15**		0.19	U	0.095	U	**0.02**	J	**0.01**	J	**0.02**	J	**0.009**	J	**0.03**	J	**0.007**	J	0.19	U	**0.009**	J	**0.02**	J	0.19	U	5.00	U
Total HPAHs	**0.84**		**5.39**		**2.81**		**0.70**		**2.16**		**0.43**		**0.14**		**2.18**		**0.004**				**0.16**		**0.10**		**0.106**		**0.080**		**0.103**		**0.016**				**0.113**		**0.160**					
SVOCs																																								
3- and 4-Methylphenol Coelution	**0.75**		**1.5**		**0.67**		**0.04**	J	**0.09**	J	**0.01**	J	**0.01**	J	**0.04**	J	0.48	U	0.24	U	0.48	U	**0.02**	J	**0.05**	J	0.48	U	**0.007**	J	0.48	U	0.48	U	0.48	U	0.48	U	0.48	U	5.00	U
Dibenzofuran	**0.05**	J	**0.03**	J	**0.03**	J	0.095	U	**0.01**	J	0.095	U	0.095	U	**0.01**	J	0.096	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	0.095	U	5.00	U
Butyl Benzyl Phthalate	**0.13**		**0.43**		**0.83**		**0.51**		**0.50**		**0.34**		**0.59**		**1.00**		0.19	U	0.095	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	5.00	U
Di-n-octyl Phthalate	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.96	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	0.95	U	5.00	U

TABLE 3
PAHs and SVOCs (µg/L)
Groundwater and Storm Water
McCall/GWCC

	Groundwater						Storm Water									
Sample Designation	MW-6 Dup		MW-7		MW-8		S-1		S-2		S-3		S-4		S-4 Duplicate	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Date Sampled	10/25/01		10/25/01		10/25/01		12/20/00		12/20/00		12/20/00		12/20/00		12/20/00	
	LPAHs						LPAHs									
Naphthalene	5.00	U	5.00	U	5.00	U	**0.03**	J	**0.07**	J	**0.07**	J	**0.04**	J	**0.04**	J
Acenaphthylene	5.00	U	5.00	U	5.00	U	**0.006**	J	**0.02**	J	0.095	U	0.095	U	0.096	U
Acenaphthene	5.00	U	5.00	U	5.00	U	**0.02**	J	**0.02**	J	0.095	U	**0.14**		**0.12**	
Fluorene	5.00	U	5.00	U	5.00	U	**0.02**	J	**0.04**	J	**0.02**	J	**0.36**		**0.34**	
Phenanthrene	5.00	U	5.00	U	5.00	U	**0.07**	J	**0.25**		**0.20**		**0.46**		**0.35**	
Anthracene	5.00	U	5.00	U	5.00	U	0.095	U	**0.02**	J	0.095	U	**0.02**	J	**0.01**	J
2-Methylnaphthalene	5.00	U	5.00	U	5.00	U	**0.03**	J	**0.05**	J	**0.096**		**0.09**	J	**0.10**	
Total LPAH							**0.176**		**0.470**		**0.386**		**1.110**		**0.960**	
	HPAHs						HPAHs									
Fluoranthene	5.00	U	5.00	U	5.00	U	**0.02**	J	**0.099**		**0.06**	J	**0.06**	J	**0.05**	J
Pyrene	5.00	U	5.00	U	5.00	U	**0.02**	J	**0.12**		**0.03**	J	**0.19**		**0.16**	
Benz(a)anthracene	5.00	U	5.00	U	5.00	U	0.095	U	**0.03**	J	**0.007**	J	**0.03**	J	**0.02**	J
Chrysene	5.00	U	5.00	U	5.00	U	**0.008**	J	**0.06**	J	**0.03**	J	**0.12**		**0.09**	J
Benzo(b)fluoranthene	5.00	U	5.00	U	5.00	U	**0.006**	J	**0.04**	J	**0.01**	J	**0.03**	J	**0.03**	J
Benzo(k)fluoranthene	5.00	U	5.00	U	5.00	U	**0.004**	J	**0.03**	J	**0.008**	J	**0.02**	J	**0.01**	J
Benzo(a)pyrene	5.00	U	5.00	U	5.00	U	0.095	U	**0.03**	J	0.095	U	**0.03**	J	**0.02**	J
Indeno(1,2,3-cd)pyrene	5.00	U	5.00	U	5.00	U	**0.006**	J	**0.04**	J	**0.01**	J	**0.02**	J	**0.02**	J
Dibenz(a,h)anthracene	5.00	U	5.00	U	5.00	U	0.19	U	**0.009**	J	0.19	U	**0.009**	J	**0.008**	J
Benzo(g,h,i)perylene	5.00	U	5.00	U	5.00	U	**0.007**	J	**0.06**	J	**0.01**	J	**0.04**	J	**0.03**	J
Total HPAHs							**0.071**		**0.52**		**0.17**		**0.55**		**0.44**	
	SVOCs						SVOCs									
3- and 4-Methylphenol Coelution	5.00	U	5.00	U	5.00	U	**0.3**	J	**0.49**		0.48	U	**0.2**	J	**0.2**	J
Dibenzofuran	5.00	U	5.00	U	5.00	U	**0.01**	J	**0.02**	J	**0.01**	U	**0.13**		**0.11**	
Butyl Benzyl Phthalate	5.00	U	5.00	U	5.00	U	**0.1**	J	**0.1**	J	**0.08**	J	**0.05**	J	**0.04**	J
Di-n-octyl Phthalate	5.00	U	5.00	U	5.00	U	0.95	U	0.95	U	0.95	U	0.95	U	0.96	U

TABLE 4
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
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
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
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
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
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
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
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
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
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
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
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
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
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
GP-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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

TABLE 4
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
GP-1	Water	12/11/00	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
GP-2	Water	12/11/00	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
GP-3	Water	12/11/00	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
GP-4	Water	12/11/00	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
GP-5	Water	12/11/00	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
GP-6	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
GP-7	Water	12/14/00	0.5 U	0.5 U	**1.6**	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	**21**	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-8	Water	12/12/00	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
GP-9	Water	12/12/00	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	**1.2**	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-10	Water	12/12/00	0.5 U	0.5 U	**220** D	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	**430** 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
GP-11	Water	12/12/00	0.5 U	0.5 U	**27**	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	**140** D	0.5 U	2.0 U	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-12	Water	12/13/00	0.5 U	0.5 U	**1.3**	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	**1.2**	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-12 Duplicate	Water	12/13/00	0.5 U	0.5 U	**1.1**	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	**0.87**	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-13	Water	12/12/00	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
GP-14	Water	12/13/00	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
GP-15	Water	12/13/00	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
GP-16	Water	12/13/00	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
GP-17	Water	12/13/00	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
GP-18	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
GP-19	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
GP-19 Duplicate	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
GP-20	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
GP-21	Water	12/13/00	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	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
GP-22	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	**1.3**	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
GP-23	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
GP-24	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
GP-25	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
GP-26	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
GP-27	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	**0.53**	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
GP-28	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
GP-29	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	**3.3**	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-30	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	**1.2**	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-30 Duplicate	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	**1.2**	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

TABLE 4
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-1	Water	12/11/00	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
GP-2	Water	12/11/00	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
GP-3	Water	12/11/00	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
GP-4	Water	12/11/00	**9.8**	0.5 U	0.5 U	2.0 U	**16**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**3.5**	0.5 U	2.0 U	0.5 U	**5.3**	0.5 U	2.0 U	2.0 U	2.0 U	**25**	2.0 U
GP-5	Water	12/11/00	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
GP-6	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
GP-7	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
GP-8	Water	12/12/00	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
GP-9	Water	12/12/00	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
GP-10	Water	12/12/00	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
GP-11	Water	12/12/00	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
GP-12	Water	12/13/00	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
GP-12 Duplicate	Water	12/13/00	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
GP-13	Water	12/12/00	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
GP-14	Water	12/13/00	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
GP-15	Water	12/13/00	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
GP-16	Water	12/13/00	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
GP-17	Water	12/13/00	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
GP-18	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
GP-19	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
GP-19 Duplicate	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
GP-20	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
GP-21	Water	12/13/00	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
GP-22	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
GP-23	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
GP-24	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
GP-25	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
GP-26	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
GP-27	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
GP-28	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
GP-29	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
GP-30	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
GP-30 Duplicate	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

TABLE 4
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
GP-31	Water	02/13/01	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-32	Water	02/13/01	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-33	Water	02/13/01	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	**0.84**	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-34	Water	02/13/01	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	**0.61**	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-35	Water	02/13/01	5.0 U	0.5 U	0.5 U	**67**	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	**7**	20 U	0.5 U	**8.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-36	Water	02/13/01	5.0 U	0.5 U	0.5 U	**2.5**	0.5 U	0.5 U	0.5 U	20 U	0.5 U	0.5 U	**1.1**	1.0 U	0.5 U	**1.1**	20 U	0.5 U	**23**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-37	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
GP-38	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	**0.56**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**11**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-38 Duplicate	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	**8.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-39	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	**0.8**	1.0 U	0.5 U	0.5 U	20 U	0.5 U	**5.9**	0.5 U	0.5 U	**0.83**	0.5 U	0.5 U
GP-40	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**	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-41-19.5	Water	04/06/01	NA	0.5 U	0.5 U	**0.760**	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-41-39.5	Water	04/06/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-41-56.0	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	1.0 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
GP-41-74.0	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	1.0 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
GP-42-19.0	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GP-42-42.5	Water	04/06/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-42-54.5	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	1.0 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
GP-42-75.5	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	1.0 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
GP-43-22.5	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**1.45**	10 U	0.5 U	**8.72**	0.5 U	0.5 U	**1.17**	0.5 U	0.5 U
GP-43-34.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-64.0	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-64.0D	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-43-74.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-44-22.0	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**2.02**	10 U	0.5 U	**2.83**	0.5 U	0.5 U	**1.23**	0.5 U	0.5 U
GP-44-22.0D	Water	04/06/01	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	1.0 U	10 U	5.0 U	0.5 U	**2.09**	10 U	0.5 U	**2.73**	0.5 U	0.5 U	**1.49**	0.5 U	0.5 U
GP-44-45.5	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	1.0 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
GP-44-75.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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
GP-44-76.5	Water	04/09/01	NA	5.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	NA	0.5 U	1.0 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

TABLE 4
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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 4
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 4
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
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
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
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
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
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
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
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
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
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
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
MW-6	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.8**	**6.4**	50 U	2.5 U	**422**	2.5 U	2.5 U	**7.45**	2.5 U	2.5 U
MW-6 Duplicate	Water	10/25/01		2.5 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	125 U	2.5 U	10 U	50 U	25.0 U	**2.6**	**6.9**	50 U	2.5 U	**411**	2.5 U	2.5 U	**7.65**	2.5 U	2.5 U
MW-7	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10.0 U	0.5 U	**2.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
MW-8	Water	10/25/01		0.5 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	2.0 U	10.0 U	5.0 U	0.5 U	0.5 U	10.0 U	0.5 U	**1.21**	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 4
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
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
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
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
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
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
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
MW-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
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
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
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
MW-6	Water	10/25/01	2.5 U	5 U	**20.5**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**23**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-6 Duplicate	Water	10/25/01	2.5 U	5 U	**20.6**	2.5 U	2.5 U	2.5 U	50 U	2.5 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	**21.2**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	10 U	5 U	5 U	2.5 U
MW-7	Water	10/25/01	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	10.0 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 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
MW-8	Water	10/25/01	0.5 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	10.0 U	0.5 U	1.0 U	0.5 U	0.5 U	0.5 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

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 4
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
MW-6	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-6 Duplicate	Water	10/25/01	10.0 U	2.5 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U	5.0 U	2.5 U	10.0 U	2.5 U	25 U	2.5 U	25 U	2.5 U	2.5 U	10 U	10 U
MW-7	Water	10/25/01	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	0.5 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
MW-8	Water	10/25/01	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	0.5 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

Table 5
Metals
Groundwater and Stormwater
McCall/GWCC
Portland, Oregon

Location		Matrix	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Lead	Zinc
Geoprobe Borings - Groundwater µg/L (ppb)									
GP-3	Dissolved	Water	12/11/00	35.8		4.75	3.71		
GP-4	Dissolved	Water	12/11/00	19.3		5.89	3.69		
GP-5	Dissolved	Water	12/11/00	22.5		8.06	3.04		
GP-11	Dissolved	Water	12/12/00	14.7		5.04	2.33		
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		
GP-13	Dissolved	Water	12/12/00	61.9		7.63	5.35		
GP-14	Dissolved	Water	12/13/00	4.8		5.1	1.3		
GP-15	Dissolved	Water	12/13/00	18.6		8.1	1.1		
GP-51	Total	Water	11/15/01	19.9		62.1	74.1		
GP-51 Duplicate	Total	Water	11/15/01	3.65		15.3	18.3		
GP-51	Dissolved	Water	11/15/01	5.48		1 U	2 U		
GP-51 Duplicate	Dissolved	Water	11/15/01	4.20		1 U	2 U		
GP-52	Total	Water	11/15/01	3.64		14.0	18.2		
GP-52	Dissolved	Water	11/15/01	6.51		1 U	2 U		
GP-53	Total	Water	11/15/01	2.84		25.0	20.3		
GP-53	Dissolved	Water	11/15/01	16.6		1 U	2 U		
Field Blank	Dissolved	Water	12/13/00	0.5 U		0.3	0.2 U		
Monitoring Wells - Groundwater µg/L (ppb)									
EX-4/MW-2	Dissolved	Water	12/20/00	8.8		8.1	2.0		
MW-1	Dissolved	Water	12/20/00	2.50 U		9.5	514		
MW-3	Dissolved	Water	12/20/00	39.7	0.10 U	0.4 U	0.5	0.04 U	1.3
MW-4	Dissolved	Water	12/20/00	12.7		1.00 U	1.00 U		
MW-6	Total	Water	10/25/01	29.8		67.8	98.8		
MW-6 Duplicate	Total	Water	10/25/01	27.3		35.0	48.6		
MW-6	Dissolved	Water	10/25/01	18.2		1.00 U	2.00 U		
MW-6 Duplicate	Dissolved	Water	10/25/01	19.0		1.00 U	2.00 U		
MW-7	Total	Water	10/25/01	18.1		127	164		
MW-7	Dissolved	Water	10/25/01	3.04		1.00 U	2.00 U		
MW-8	Total	Water	10/25/01	43.9		225	394		
MW-8	Dissolved	Water	10/25/01	2.33		1.00 U	2.00 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 6
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
GP-48 10-12	Soil	11/14/01	20	U											1420		1300			
GP-49 10-12	Soil	11/14/01	20	U											128		171			
GP-50 10-12	Soil	11/14/01	20	U											265		543			
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 = 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 panern does not match the calibration standard.

Z = The fingerprint does not resemble a petroleum product.

D = The reported result is from a dilution.

APPENDIX A

DRAFT BORING LOGS AND WELL COMPLETION DETAILS

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT # _____
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-45
DATE BEGAN 11/14/01
DATE COMPLETED 11/14/01
TOTAL DEPTH 24 feet
SHEET 1 OF 1

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION _____
DATUM _____

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	RECOVERY (feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		
1				4'		2		0 to 3 feet: GRAVEL FILL
10						4		3 to 15.5 feet: Sand (SP); medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
20				4'		6		@ 3.2 feet: 0.1 foot-thick tar-like layer
0						8		@ 3.5 feet: 0.2 foot-thick tar-like layer
0				2'		10		@ 5.2 feet: 0.1 foot-thick tar-like layer
2						12		
1000				4'		14		15.5 to 23.5 feet: Sand (SP); gray to black, fine to medium sand, oil saturated, gasoline-like odor, moist.
600				2'		16		
800						18		
5000				4'		20		
						22		@ 22 feet: wet
						24		23.5 to 24: SILT (ML); dark gray, medium to high plasticity fines.
								Boring terminated at 24 feet. Borehole backfilled with bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT # _____
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-46
DATE BEGAN 11/14/01
DATE COMPLETED 11/14/01
TOTAL DEPTH 24 feet
SHEET 1 OF 1

FIELD LOCATION OF BORING:

GROUND ELEVATION _____
DATUM _____

DRAFT

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OVM (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery (BLOWS/FT)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		
1				4'		2		0 to 4 feet: Gravel fill.
5				4'		4		4 to 12 feet: Sand (SP); medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
4				2'		8		@ 6 feet: 0.1 foot-thick tar-like layer.
8000				1'		10		@ 7.8 feet: 0.1 foot-thick tar-like layer.
400				2'		12		12.0 to 23.7 feet: Sand (SP); gray to black, fine to medium sand, oil saturated, gasoline-like odor.
2000				4'		14		
						16		
						18		
						20		
						22		23.7 to 24 feet: Silt (ML); dark gray, non- to low plasticity fines.
						24		
								Boring terminated at 24 feet. Borehole backfilled with bentonite chips

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-47
DATE BEGAN
DATE COMPLETED
TOTAL DEPTH
SHEET 1 OF 1

FIELD LOCATION OF BORING:

GROUND ELEVATION
DATUM

DRAFT

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER* FIN ppm	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/FT	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0 to 4.0 feet: GRAVEL Fill
1				4'		2		
0						4		4.0 to 14.5 feet: SAND (SP); medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
0				2'		6		
						8		
0				4'		10		
1						12		
0				4'		14		
>10,000						16		14.5 to 19.8 feet: Sand (SP); gray to black, fine to medium sand, oil saturated, gasoline-like odor.
3000				4'		18		
						20		19.8 to 24.0 feet: SILT (ML); dark gray, medium to low plasticity fines.
2000				4'		22		
						24		

Boring terminated at 24' feet.
Borehole backfilled with bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-48
DATE BEGAN 11/14/01
DATE COMPLETED 11/14/01
TOTAL DEPTH 16 feet
SHEET 1 OF 1

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

OTHER FIL PPM	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery ~~BLOWS~~ (feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0-2.0 feet: Sandy Gravel (GW); fine to coarse, angular basalt gravel with sand and SILT. (fill)
1				4'		2		2.0 to 3.8 feet: Sand (SP); medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
4						4		@ 3.0 feet: 0.2 foot-thick tar-like layer.
1				4'		6		3.8 to 8.0 feet: Sand (SP); medium to dark gray, fine to medium sand.
15						8		@ 7.0 to 7.7 feet: trace green, red, and white roofing sands.
9				4'		10		8.0 to 8.5 feet: Sand (SP); medium to dark brown, fine to medium sand.
60						12		
1				4'		14		8.5 to 15.0 feet: Sand (SP); medium to dark gray, fine to medium sand
0						16		@ 9.0 to 11.4 feet: trace red, green, and white roofing sands.
						18		@ 11.4 feet: 0.1-foot-thick tar-like layer w/wood fibers.
						20		15.0 to 16.0 feet: SAND (SP); medium to dark brown, fine to medium sand.
						22		
						24		
								Boring terminated at 16.0 feet
								Borehole backfilled w/ bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. 6P-44
DATE BEGAN 11/14/01
DATE COMPLETED 11/14/01
TOTAL DEPTH 16 feet
SHEET 1 OF 1

FIELD LOCATION OF BORING:

GROUND ELEVATION
DATUM

DRAFT

WATER LEVEL DATA				
DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER* Fill ppm	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery (feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0 to 1.5 feet: Sandy Gravel (GW); fine to coarse, angular basalt gravel with sand and silt. (fill)
0				4'		2		
2						4		1.5 to 3.5 feet: Silty Sand (SM); medium brown, 60 to 70% fine to medium sand, 30 to 40% non- to low-plasticity fines.
1				3'		6		3.5 to 7.0 feet: Sand (SP); light to medium gray, fine to medium sand.
1						8		
0				4'		10		@ 4 to 6 feet: 10-15% non- to low-plasticity fines.
8								@ 6 to 7 feet: Trace red, green, and white roofing sands.
20				4'		12		7.0 to 9.0: SAND (SP); light to medium brown, fine to medium sand, trace fines.
5						14		@ 8 to 9 feet: increase in fines.
						16		9.0 to 14.5 feet: SAND (SP); light to medium gray, fine to medium sand, trace fines.
						18		
						20		@ 10.3 feet: 0.4 foot-thick red, green, and white roofing sands layer.
						22		@ 10.7 feet: 0.6 foot-thick layer, slightly oily, trace wood fragments.
						24		14.5 to 16 feet: Sand (SP); light to medium brown, fine to medium sand, trace fines.
								Boring terminated at 16.0 feet.
								Borehole backfilled with bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-50
DATE BEGAN 11/14/01
DATE COMPLETED 11/14/01
TOTAL DEPTH 16 feet
SHEET 1 OF 1

FIELD LOCATION OF BORING:

DRAFT

ORIGINAL ELEVATION
DATUM

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER: FID ppm	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery ~~BLOWS/6"~~ (feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0.0 to 2.0 feet: Sandy Gravel (GW); fine to coarse, angular basalt gravel with sand and silt (fill).
10				4'		2		
200						4		2.0 to 3.0 feet: SAND (SP); medium to dark brown, fine to medium sand, subangular to subrounded, trace fines.
1				3'		6		3.0 to 4.0 feet: SILT (ML); medium gray, non- to low plasticity fines.
100						8		4.0 to 7.5 feet: SAND (SP); light to medium gray, fine sand, trace fines.
1				3'		10		7.5 to 8.0 feet: SAND (SP); light to medium gray, fine to medium sand with red, green, and white roofing sands. Trace fines.
25						12		8.0 to 11.5 feet: SAND (SP); light to medium gray, fine to medium sand, trace fines.
90				4'		14		11.5 to 14.0 feet: SILTY SAND (SM); light to medium gray, fine to medium sand, trace wood fragments, slight petroleum-hydrocarbon like odor, trace gravel.
6						16		
						18		
						20		14 to 16 feet: SAND (SP); light to medium gray, fine to medium sand, trace fines.
						22		
						24		Boring terminated at 16 feet. Borehole backfilled w/ bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-51
DATE BEGAN
DATE COMPLETED 11/13/01
TOTAL DEPTH
SHEET 1 OF 1

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

OTHER* FID PID	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery (Feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0.0 to 4.0 feet: Silty Sand (SM); Silty sand with gravel, brick, and asphalt chunks. (fill)
15			2			2		
3						4		4.0 to 11.0 feet: Sand (SP); medium to dark brown, fine to medium sand
20			4			6		11.0 to 20.0 feet: SILTY SAND (SM), medium to dark gray, fine to medium sand, non-to low-plasticity fines.
20						8		
300			4			10		
						12		
1000			3			14		
						16		@ 15.8 feet: increase in density.
5			4			18		
7						20		@ 20 feet: wet
								20 to 24.0 feet: SAND (SP), gray to black, fine to medium sand, trace fines.
20			2			22		
						24		Boring terminated at 24 feet. Borehole backfilled with bentonite chips

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT # _____
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-52
DATE BEGAN _____
DATE COMPLETED 11/15/01
TOTAL DEPTH _____
SHEET 1 OF 1

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION _____
DATUM _____

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery (Feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
FID 0						0		0.0 to 0.5 feet: Asphalt.
5				4		2		0.5 to 1.0 feet: SAND (SP); Red, white, and green, medium to coarse roofing sands.
0						4		1.0 to 18.0 feet: SAND (SP); medium to dark brown, fine to medium sand; trace fines.
1				2		6		
0						8		
2				4		10		
5						12		
1				4		14		
3						16		
200				4		18		18.0 to 18.2 feet: Sand (SP); rusty brown; fine to medium sand.
						20		@ 18.2 feet: wet.
						22		18.2 to 20.0 feet: SAND (SP); gray to black; fine to medium sand; trace fines.
						24		
								Boring terminated at 20 feet.
								Borehole backfilled with bentonite chips

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-05
DATE BEGAN
DATE COMPLETED
TOTAL DEPTH
SHEET 1 OF 1

FIELD LOCATION OF BORING:
DRAFT
GROUND ELEVATION
DATUM

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery (feet)	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
FID						0		0.0 to 0.5 feet: Asphalt
5				4		2		0.5 to 7.3 feet: SAND (SP); medium to dark brown; fine to medium sand, trace fines.
0						4		
1				3		6		
0						8		7.3 to 7.5 feet: SILT (ML); rusty brown; laminated, non to low plasticity fines.
2				4		10		7.5 to 10.0 feet: SILT (ML); gray; non- to low-plasticity fines; trace fine sand.
6						12		10.0 to 11.6 feet: SANDY SILT (ML); medium to dark brown, non to low-plasticity fines; fine to medium sand.
1				4		14		@ 10.4 feet: 0.2' wood debris.
1						16		11.6 to 12.0: SAND (SP); medium to dark brown, fine to medium sand, trace fines.
2				4		18		12.0 to 13.7 feet: SILT (ML); medium gray; non- to low-plasticity fines, trace fine sand.
200						20		13.7 to 20.0 feet: SAND (SP); light to medium brown, fine to medium sand, trace fines
						22		@ 18.4 to 20.0 feet: color grades to gray.
						24		@ 19 feet: wet.
								Boring terminated at 20 feet.
								Borehole backfilled with bentonite chips.

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-54
DATE BEGAN 11/15/01
DATE COMPLETED 11/15/01
TOTAL DEPTH 24 feet
SHEET 1 OF 1

FIELD LOCATION OF BORING:
DRAFT
GROUND ELEVATION
DATUM

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	Recovery / BLOWS/FT	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0 to 3.0 feet: GRAVEL FILL
				2'		2		
						4		3.0 to 15.5 feet: Sand (SP); medium to dark brown, fine to medium sand, subangular to subrounded.
2				3'		6		
						8		
0				2'		10		
						12		
0				4'		14		
1000						16		15.5 to 20.0 feet: SAND (SP); gray to black, fine to medium sand, oil saturated, gasoline-like odor.
2000				2'		18		
						20		20.0 to 24.0 feet: SILT (ML); dark gray, medium to low plasticity fines.
5000				4'		22		
500						24		Boring terminated at 24 feet. Borehole backfilled with bentonite chips

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech Explorations, Inc.
DRILLING METHOD Geoprobe
HOLE DIA. 2"

BORING NO. GP-55
DATE BEGAN 11/15/01
DATE COMPLETED 11/15/01
TOTAL DEPTH 24 feet
SHEET 1 OF 1

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

OTHER*	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/FT	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		0 to 4.0 feet: Gravel fill
00				3'		2		
						4		4.0 to 14.5 feet: Sand (SP); medium to dark brown, fine to medium sand, subangular to subrounded.
5				4'		6		
						8		
9				4'		10		
						12		
7				4'		14		14.5 to 18.5 feet: Sand (SP); gray to black, fine to medium sand, oil saturated, gasoline-like odor
7000						16		
3000				2'		18		18.5 to 24 feet: Driller noted softer drilling, SILT? no recovery
						20		
No recovery				0		22		
						24		Boring terminated at 24 feet. Borehole backfilled with bentonite chips

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA. 8.25

BORING NO. MW-6
DATE BEGAN 9/26/01
DATE COMPLETED
TOTAL DEPTH
SHEET 1 OF 2

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

OTHER* (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	WATER LEVEL DATA	LITHOLOGIC DESCRIPTION
								DEPTH	0.0 to 0.5 feet: GRAVEL FILL.
								TIME	
								DATE	
								BORING DEPTH	
				7	X	5			5.0 to 6.3 feet: SAND (SP); gray to black, fine to medium sand, trace fines.
10				11	X	6			6.3 to 6.5 feet: SILT (ML); medium gray, non- to low-plasticity fines
				9	X	7			
						8			
						9			
				4	X	10			10.0 to 11.5 feet: SAND (SP); gray to black, fine to medium sand, trace red, green and white rock fragments.
500				5	X	11			
				5	X	12			
						13			
						14			
				1	X	15			15.0 to 16.2 feet: SILT (ML); medium gray, non- to low-plasticity fines.
2000				1	X	16			16.2 - 16.3 feet: Organic lense; wood and roots.
				3	X	17			16.3 - 16.5 feet: SAND (SP); gray to black, fine to medium sand.
						18			
						19			
						20			

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-6
DATE BEGAN 9/26/01
DATE COMPLETED 9/26/01
TOTAL DEPTH 25
SHEET 2 OF 2

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER: FID (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
				1		20		20 to 21.0 feet: SAND (SP), gray to black; fine to medium sand.
100				1				
				2		21		21.0 to 21.1 feet: wood chunk
								21.1 to 21.5 feet: SILT (ML); medium gray, non-to low-plasticity fines
						22		
						23		
						24		
						25		
				1				25.0 to 26.0 feet: SAND (SP); gray to black, fine to medium sand.
600				0		26		
				1				26.0 to 26.5 feet: SILT (ML); medium gray, non-to low plasticity fines.
						27		
						28		Boring terminated at 25 feet. Split spoon advanced to 26.5 feet
						29		Well set at terminal depth. Refer to well completion detail
						30		
						31		
						32		
						33		
						34		
						35		
						36		
						37		
						38		
						39		
						40		

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-7
DATE BEGAN 9/26/01
DATE COMPLETED 9/26/01
TOTAL DEPTH 30
SHEET 1 OF 2

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
BOTTOM

OTHER: PID (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	WATER LEVEL DATA	LITHOLOGIC DESCRIPTION
						0		DEPTH / TIME / DATE / BORING DEPTH	0.0 to 0.5 feet: Gravel Fill
						1			
						2			
						3			
						4			
				3	X	5			5.0 to 6.0 feet: SAND (SP): medium to dark brown; fine to medium sand; trace silt
0				3	X	6			6.0 to 6.5 feet: SILT (ML): brown and gray mottled; low- to medium-plasticity fines; moist.
				3	X	7			
						8			
						9			
				9	X	10			10.0 to 11.5 feet: SAND (SP); medium to dark brown fine to medium sand; trace fines, trace medium gravel; dense
0				11	X	11			
				4	X	12			
						13			
						14			
				11	X	15			15 to 16.5 feet: SAND (SP): medium to dark brown, fine to medium sand; trace fines, trace medium to coarse gravel.
0				23	X	16			
				19	X	17			
						18			
						19			
						20			

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-7
DATE BEGAN 9/26/01
DATE COMPLETED 9/26/01
TOTAL DEPTH 30
SHEET 2 OF 2

FIELD LOCATION OF BORING:

DRAFT

GROUND ELEVATION
DATUM

Other PID (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						20		20 to 21.5 feet: SILTY SAND (SM); dark gray; 80 percent fine to medium sands; 20 percent nonplastic fines.
1000				5	X			
				7		21		
				7				
						22		
						23		
						24		
						25		25 to 26.5 feet: SILT (ML); medium to dark brown, low- to medium plasticity fines, organic rich with wood fragments.
3000				6	X			
				9		26		
				8				
						27		
						28		
						29		
						30		30 to 31.5 feet: SILT (ML); Grayish green, medium plasticity fines, trace wood and roots, mottled.
				0	X			
3000				0		31		
				2				
						32		Boring terminated at 30 feet. Split spoon advanced to 31.5 feet.
						33		Well completed at terminal depth. Refer to well completion details.
						34		
						35		
						36		
						37		
						38		
						39		
						40		

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-8
DATE BEGAN 9/26/01
DATE COMPLETED 9/26/01
TOTAL DEPTH 30 feet
SHEET 1 OF 2

FIELD LOCATION OF BORING:

GROUND ELEVATION
DATUM

DRAFT

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER* (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						0		
						1		
						2		
						3		
						4		
						5		
				6	X			5.0 to 6.5 feet: SAND (SP); medium to dark brown; fine to
2				10	X	6		medium sand, trace silt
				8	X			
						7		
						8		
						9		
						10		
				14	X			10.0 to 10.5 feet: SAND (SP); medium to dark brown; fine to medium
1000				20	X			sand, trace silt.
				17	X	11		@ 10.1 feet: 0.1 foot-thick rust discoloration and wood fragment.
								10.5 to 11.5 feet: SILTY SAND (SM); dark gray; 80% fine to
						12		medium sand; 20% non- to low plasticity fines.
						13		
						14		
						15		15.0 to 16.5 feet: SILTY SAND (SM); dark gray; 80% fine to
				3	X			medium sand; 15 to 20% non- to low plasticity fines;
4000				5	X	16		Trace wood fragments.
				6	X			
						17		
						18		
						19		
						20		

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the i group

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-8
DATE BEGAN 9/22/01
DATE COMPLETED 9/22/01
TOTAL DEPTH 30 feet
SHEET 1 OF 2

FIELD LOCATION OF BORING: DRAFT
GROUND ELEVATION
DATUM

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

OTHER: FID (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
				5	X	20		20 to 21.5 feet: SILTY SAND (SM); dark gray; 80% fine to medium-sand, 15 to 20% non- to low-plasticity fines; trace wood fragments.
4000				7	X	21		
				5	X			
						22		
						23		
						24		
						25		25.0 to 26.5 feet: SILT (ML); medium to dark gray, non- to low-plasticity fines; trace wood fragments; laminated.
				3	X			
6000				3	X	26		
				5	X			
						27		
						28		
						29		
						30		30.0 to 31.0 feet: SAND (SP); gray to black; fine to medium sand; oily, petroleum hydrocarbon-like odor, wet.
				1	X			
500				2	X	31		31.0 to 31.5 feet: SILT (ML); dark gray; low- to medium-plasticity fines.
				2	X			
						32		
						33		
						34		Boring terminated at 30 feet. Split spoon advanced to 31.5 feet. Well completed at terminal depth. Refer to well completion details.
						35		
						36		
						37		
						38		
						39		
						40		

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT # _____
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA. _____

BORING NO. MW-9
DATE BEGAN 11/16/01
DATE COMPLETED 11/16/01
TOTAL DEPTH 25 feet
SHEET 1 OF 2

FIELD LOCATION OF BORING:
DRAFT
GROUND ELEVATION _____
DATUM _____

OTHER* PID (ppm)	WELL OR PIEZOMETER DETAILS	SAMPLING DATA: SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	WATER LEVEL DATA					LITHOLOGIC DESCRIPTION
								DEPTH					
								TIME					
								DATE					
								BORING DEPTH					
						0							0 to 0.5 feet: Asphalt
						1							
						2							
						3							
						4							
				4	X	5							5.0 to 6.5: SAND (SP); medium to dark brown, fine to
5				3	X	6							medium sand, trace fines.
				3	X								
						7							
						8							
						9							
						10							
				2	X								10.0 to 11.5 feet: SAND (SP); medium to dark brown, fine to
3				4	X	11							medium sand, trace fines.
				5	X								
						12							
						13							
						14							
						15							
				3	X								15.0 to 16.5 feet: SAND (SP); medium to dark brown, fine to
2				6	X	16							medium sand, trace fines.
				6	X								
						17							
						18							
						19							
						20							

REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

the igroup

LOG OF EXPLORATORY BORING

CLIENT/PROJECT NAME McCall
PORTLAND, OR PROJECT #
GEOLOGIST/ENGINEER J. RENDA
DRILLING CONTRACTOR Geo-Tech
DRILLING METHOD Hollow Stem Auger
HOLE DIA.

BORING NO. MW-4
DATE BEGAN 11/16/01
DATE COMPLETED 11/16/01
TOTAL DEPTH 25 feet
SHEET 2 OF 2

FIELD LOCATION OF BORING:
DRAFT
GROUND ELEVATION
DATUM

OTHER* (PID (ppm))	WELL OR PIEZOMETER DETAILS	SAMPLING METHOD	SAMPLE NUMBER	BLOWS/6"	DEPTH SAMPLED	DEPTH IN FEET	SOIL GROUP SYMBOL (USCS)	LITHOLOGIC DESCRIPTION
						20		20.0 to 21.5 feet: SAND (SP); dark gray to black, fine to medium sand, trace fines, wet
400				2	X			
				2	X	21		
				2	X			
						22		
						23		
						24		
						25		25 to 26.5 feet: SAND (SP); dark gray to black, fine to medium sand, trace fines, wet.
				3	X			
400				10	X	26		
				20	X			
						27		
						28		Boring terminated at 25 feet. Split spoon sampler advanced to 26.5 feet
						29		Well completed at terminal depth. Please refer to well completion details
						30		
						31		
						32		
						33		
						34		
						35		
						36		
						37		
						38		
						39		
						40		

WATER LEVEL DATA

DEPTH				
TIME				
DATE				
BORING DEPTH				

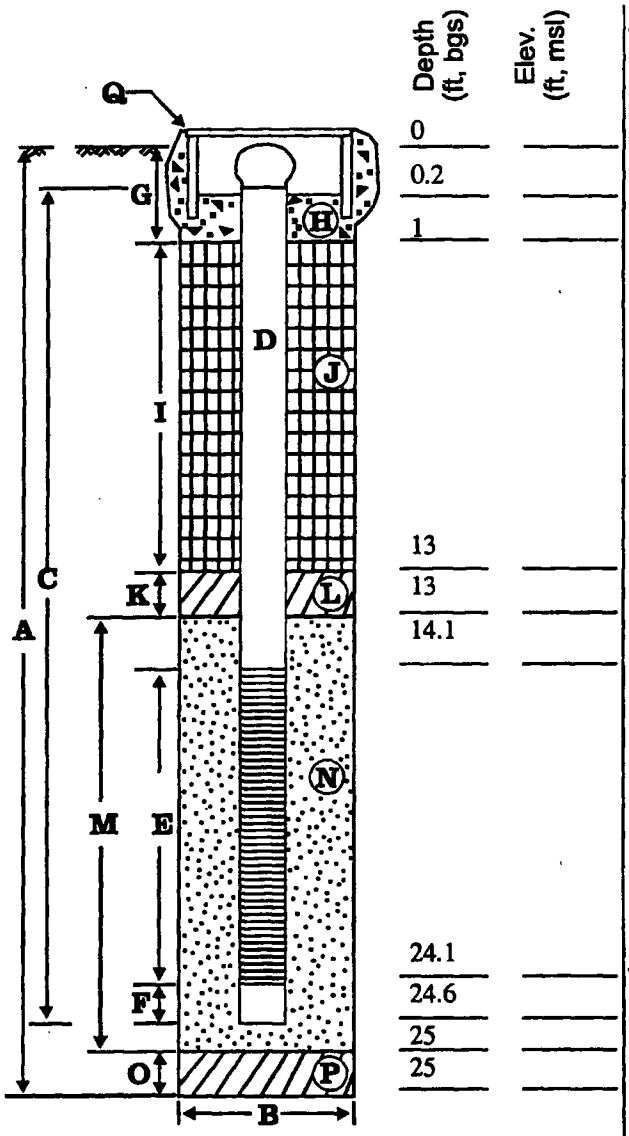
REMARKS:

*NOTE: Specify data recorded in undesignated column (e.g. conductance, pH, tip reading, pocket torvane, etc.)

WELL DETAILS

DRAFT

Project Number:	820910	Boring/Well No.:	MW-6
Client Name:	McCall/GWCC	Top of Casing Elev.:	
Project Name:	McCall/GWCC	Ground Surface Elev.:	
Location:	Portland, OR	Installation Date:	9/26/01
Driller:	Geo-Tech Explorations, Inc.	Permit/Start Card No.:	133118



EXPLORATORY BORING

A.	Total depth:	25 ft.
B.	Diameter	8.25 in.
	Drilling method:	Hollow Stem Auger

WELL CONSTRUCTION

C.	Well casing length:	24.4 ft.
	Well casing material:	Sch. 40 PVC
D.	Well casing diameter:	2 in.
E.	Well screen length:	10 ft.
	Well screen type:	machine slot
	Well screen slot size:	0.02 in.
F.	Well sump/end cap length:	0.5 ft.
G.	Surface seal thickness:	1 ft.
H.	Surface seal material:	Concrete
I.	Annular seal thickness:	12 ft.
J.	Annular seal material:	Bentonite Chips
K.	Filter pack seal thickness:	n/a
L.	Filter pack seal material:	n/a
M.	Sand pack thickness:	12 ft.
N.	Sand pack material:	10X20 Silica Sand
O.	Bottom material thickness:	0.4
P.	Bottom material:	Native
Q.	Vault box type:	flush mount
	Well centralizer depths:	n/a ft.

NOTES:

Water Resources #: L52691

Installed by: J. Renda

Reviewed by: _____

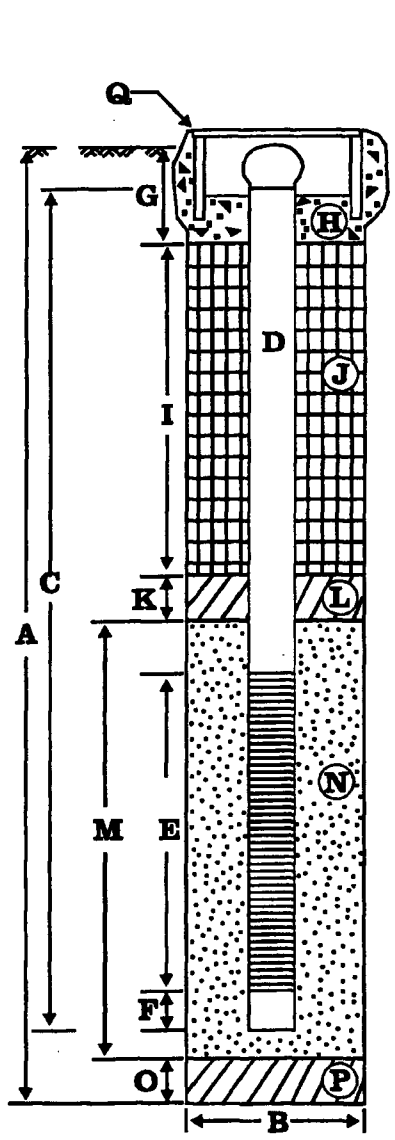
Date: _____

P\\\PORTFP1\COMMON\Data\Projects\Remed\Jobs\mccallGWC\Well-inst\MW-6-Det.docUJR

WELL DETAILS

Project Number:	820910	Boring/Well No.:	MW-7
Client Name:	McCall/GWCC	Top of Casing Elev.:	
Project Name:	McCall/GWCC	Ground Surface Elev.:	
Location:	Portland, OR	Installation Date:	9/26/01
Driller:	Geo-Tech Explorations, Inc.	Permit/Start Card No.:	133120

DRAFT



	Depth (ft, bgs)	Elev. (ft, msl)
	0	
	0.2	
	1	
	18	
	18	
	19.5	
	29.5	
	30	
	30	
	30	

EXPLORATORY BORING

A. Total depth:	30	ft.
B. Diameter	8.25	in.
Drilling method:	Hollow Stem Auger	

WELL CONSTRUCTION

C. Well casing length:	30	ft.
Well casing material:	Sch. 40 PVC	
D. Well casing diameter:	2	in.
E. Well screen length:	10	ft.
Well screen type:	machine slot	
Well screen slot size:	0.02	in.
F. Well sump/end cap length:	0.5	ft.
G. Surface seal thickness:	1	ft.
H. Surface seal material:	Concrete	
I. Annular seal thickness:	17	ft.
J. Annular seal material:	Bentonite Chips	
K. Filter pack seal thickness:	n/a	
L. Filter pack seal material:	n/a	
M. Sand pack thickness:	12	ft.
N. Sand pack material:	10X20 Silica Sand	
O. Bottom material thickness:	n/a	ft.
P. Bottom material:	n/a	
Q. Vault box type:	flush mount	
Well centralizer depths:	n/a	ft.

NOTES:

Water Resources #: L52693

Installed by: J. Renda

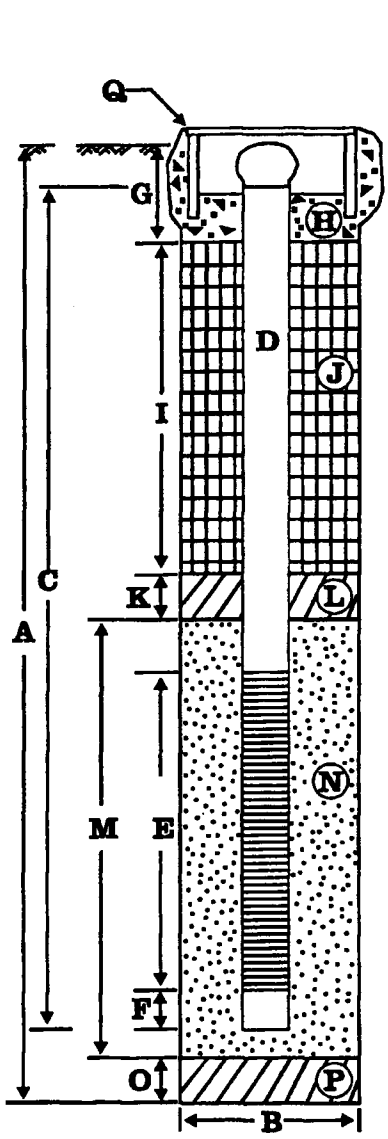
Reviewed by: _____

Date: _____

P:\N:\Data\Projects\Remed\Jobs\mccall\GWC\Well-inst\MW-7-Det.doc\JJR

WELL DETAILS

Project Number:	820910	Boring/Well No.:	MW-8
Client Name:	McCall/GWCC	Top of Casing Elev.:	
Project Name:	McCall/GWCC	Ground Surface Elev.:	DRAFT
Location:	Portland, OR	Installation Date:	9/26/01
Driller:	Geo-Tech Explorations, Inc.	Permit/Start Card No.:	133121



	Depth (ft, bgs)	Elev. (ft, msl)
	0	
	0.2	
	1	
	18	
	18	
	19.2	
	29.2	
	29.7	
	30	
	30	

EXPLORATORY BORING

A. Total depth:	30	ft.
B. Diameter	8.25	in.
Drilling method:	Hollow Stem Auger	

WELL CONSTRUCTION

C. Well casing length:	29.5	ft.
Well casing material:	Sch. 40 PVC	
D. Well casing diameter:	2	in.
E. Well screen length:	10	ft.
Well screen type:	machine slot	
Well screen slot size:	0.02	in.
F. Well sump/end cap length:	0.5	ft.
G. Surface seal thickness:	1	ft.
H. Surface seal material:	Concrete	
I. Annular seal thickness:	17	ft.
J. Annular seal material:	Bentonite Chips	
K. Filter pack seal thickness:	n/a	
L. Filter pack seal material:	n/a	
M. Sand pack thickness:	12	ft.
N. Sand pack material:	10X20 Silica Sand	
O. Bottom material thickness:	n/a	ft.
P. Bottom material:	n/a	
Q. Vault box type:	flush mount	
Well centralizer depths:	n/a	ft.

NOTES:

Water Resources #: L52694

Installed by: J. Renda

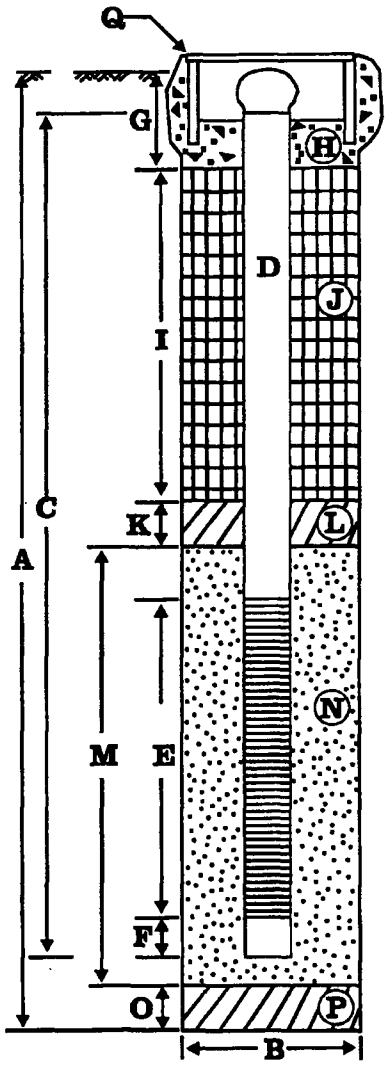
Reviewed by: _____

Date: _____

P:\N:\Data\Projects\Remed\Jobs\mccallGWC\Well-inst\MW-8-Det.doc\JJR

WELL DETAILS

Project Number:	832537	Boring/Well No.:	MW-9
Client Name:	McCall/GWCC	Top of Casing Elev.:	
Project Name:	McCall/GWCC	Ground Surface Elev.:	DRAFT
Location:	Portland, OR	Installation Date:	11/16/01
Driller:	Geo-Tech Explorations, Inc.	Permit/Start Card No.:	146329



	Depth (ft, bgs)	Elev. (ft, msl)
	0	
	0.4	
	1.0	
	NA	
	12.2	
	14.5	
	24.5	
	25	
	25	
	25	

EXPLORATORY BORING

A. Total depth:	25	ft.
B. Diameter	10	in.
Drilling method:	Hollow Stem Auger	

WELL CONSTRUCTION

C. Well casing length:	24.6	ft.
Well casing material:	Sch. 40 PVC	
D. Well casing diameter:	2	in.
E. Well screen length:	10	ft.
Well screen type:	machine slot	
Well screen slot size:	0.01	in.
F. Well sump/end cap length:	0.5	ft.
G. Surface seal thickness:	1	ft.
H. Surface seal material:	Concrete	
I. Annular seal thickness:	11.2	ft.
J. Annular seal material:	Bentonite Chips	
K. Filter pack seal thickness:	n/a	
L. Filter pack seal material:	n/a	
M. Sand pack thickness:	12.8	ft.
N. Sand pack material:	10X20 Silica Sand	
O. Bottom material thickness:	n/a	ft.
P. Bottom material:	n/a	
Q. Vault box type:	flush mount	
Well centralizer depths:	n/a	ft.

NOTES:

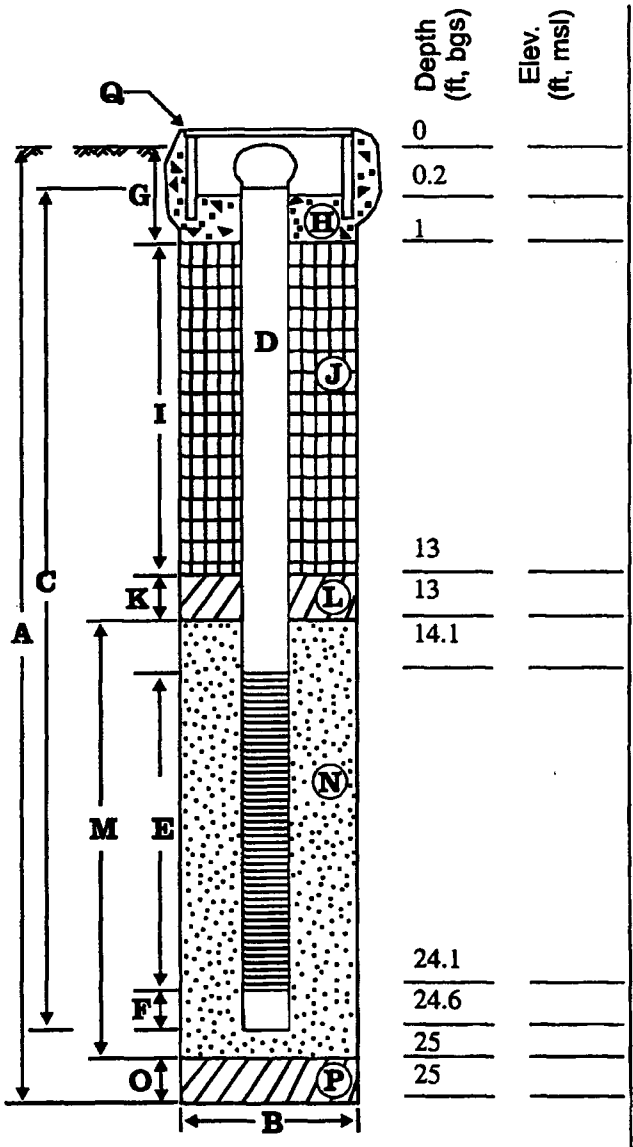
Installed by: J. Renda

Reviewed by: _____

Date: _____

WELL DETAILS

Project Number:	820910	Boring/Well No.:	TPZ-2
Client Name:	McCall/GWCC	Top of Casing Elev.:	DRAFT
Project Name:	McCall/GWCC	Ground Surface Elev.:	
Location:	Portland, OR	Installation Date:	9/26/01
Driller:	Geo-Tech Explorations, Inc.	Permit/Start Card No.:	133119



EXPLORATORY BORING

A.	Total depth:	25 ft.
B.	Diameter	8.25 in.
	Drilling method:	Hollow Stem Auger

WELL CONSTRUCTION

C.	Well casing length:	24.4 ft.
	Well casing material:	Sch. 40 PVC
D.	Well casing diameter:	2 in.
E.	Well screen length:	10 ft.
	Well screen type:	machine slot
	Well screen slot size:	0.02 in.
F.	Well sump/end cap length:	0.5 ft.
G.	Surface seal thickness:	1 ft.
H.	Surface seal material:	Concrete
I.	Annular seal thickness:	12 ft.
J.	Annular seal material:	Bentonite Chips
K.	Filter pack seal thickness:	n/a
L.	Filter pack seal material:	n/a
M.	Sand pack thickness:	12 ft.
N.	Sand pack material:	10X20 Silica Sand
O.	Bottom material thickness:	0.4 ft.
P.	Bottom material:	Native
Q.	Vault box type:	flush mount
	Well centralizer depths:	n/a ft.

NOTES:

Water Resources #: L52692

Installed by: J. Renda

Reviewed by: _____

Date: _____

P\N:\Data\Projects\Remed\Jobs\mccallGWC\Well-inst\TPZ-2-Det.doc\JJR

LEVEL 1 ECOLOGICAL SCOPING REPORT
MCCALL OIL AND CHEMICAL CORPORATION
PORTLAND, OREGON

Prepared for

McCall Oil and Chemical Corporation

August 8, 2001

Prepared by

IT Corporation
8405 SW Nimbus Ave
Beaverton, Oregon 97008-7141

Project 820910

1 BACKGROUND

On behalf of McCall Oil & Chemical Corporation (MOCC) and Great Western Chemical Company (GWCC), IT Corporation (IT) performed a scoping level ecological evaluation for the MOCC/GWCC facility in Portland, Oregon. The Oregon Department of Environmental Quality (DEQ) advocates a tiered process to evaluate potential risks that chemical releases may pose to the environment (DEQ, 1998). The first step in this tiered process is a scoping assessment. The objective of the scoping assessment is to determine if important ecological receptors can have significant exposure to site-related chemicals.

This report describes the ecological conditions near the site, and evaluates if there are important pathways by which ecological receptors may contact chemicals associated with historical releases. A detailed review of the site setting, site history, and other relevant background information is provided in the Focused Remedial Investigation (RI) workplan (IT, 2000). A brief summary of background information is provided below.

1.1 Site Setting

The site is located in the industrialized area of northwest Portland along NW Front Avenue. It occupies approximately 36 acres on the southwest bank of the Willamette River. The property is currently occupied by two separate facilities: MOCC, which operates a marine terminal and asphalt facility, and GWCC, which operates a chemical distribution facility. The site is included in the Willamette Greenway (Greenway) established by the City of Portland to monitor and control land use next to the river. The site and surrounding properties are zoned for heavy industrial use, both within the Greenway on the left bank (facing downriver) and outside of the Greenway. Surrounding industries include: petroleum bulk distribution terminals, chemical plants, sand and gravel operations, a steel fabrication facility, shipyards, and rail yards.

1.2 Hazardous substances

Based on past industrial uses at the site and analytical results of soil and groundwater samples (IT, 2001), chemicals of potential concern (COPCs) associated with the site include some metals, volatile organic compounds (VOCs), "semi-voilitle organic compounds" petroleum hydrocarbons, and polynuclear aromatic hydrocarbons (PAHs). In general these types of COPCs are not expected to bioaccumulate in food chains to any significant degree. Fish, mammals, and other vertebrates typically metabolize PAHs and these chemicals have little tendency to accumulate in fish or wildlife tissues. However, PAHs may accumulate in some invertebrate tissues.

1.3 Locality of the facility

The locality of the facility (LOF) is defined as "any point where a human or ecological receptor contacts, or is reasonably likely to come into contact with, facility-related hazardous substances" (OAR 340-122-115(34)). The LOF is typically defined after considering potential spatial migration of a chemical. At this time, site characterization activities are ongoing and the LOF can not be completely defined for all potentially impacted media.

For the purposes of this scoping assessment, the LOF for soil is considered all surface and subsurface soil at the site. This is obviously an overestimate of the LOF, but until characterization is complete, there are insufficient data to accurately define the LOF for soil. Also, the overestimated LOF will have little bearing on findings of the scoping assessment. Other evaluations of potential risks associated with soil impacts will require a more accurate LOF definition.

Chemicals have been detected in shallow groundwater, but the spatial extent of groundwater impacts has not been fully defined. It appears that most impacted groundwater is confined to the site, but some chemicals may migrate in groundwater towards the Willamette River. For the purposes of this assessment, it is assumed that impacted groundwater discharges to surface water of the Willamette River. As a result, the Willamette River adjacent to the site is considered within the LOF. Again, this is a conservative assumption that may require modification in future assessments.

2 HABITAT CONDITIONS AND ECOLOGICAL RECEPTORS

2.1 Sensitive Environments

According to OAR 340-122-115(49), ecologically sensitive environments include: critical habitat to endangered or threatened species, wetlands, wild and scenic rivers, fishery resources, parks, wildlife refuges and a number of other habitat designations. No sensitive environments are located in the LOF for soil at the site. However, the adjacent Willamette River is considered a sensitive environment within the LOF for surface water. The Willamette River is a sensitive environment because it provides important habitat for threatened species and is an important fishery resource.

2.2 Species of Special Concern

According to DEQ guidance (DEQ, 1998), the following are considered ecologically important species for the purposes of a Scoping Assessment:

- Threatened or endangered species
- Local populations of species that are commercial or recreational resources
- Local populations of species known to be susceptible to site-related chemicals
- Local populations of vertebrate species
- Local populations of invertebrate species that provide a critical ecological function

Species that are classified as "threatened" or "endangered" receive special protection under the state and federal Endangered Species Acts (ESA). State threatened and endangered (T&E) species classifications are made by the Oregon Department of Fish and Wildlife (ODFW). Federal T&E species classifications are made by both the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The NMFS usually determines the T&E status of marine species or species that spend some portion of their life in marine systems (e.g., anadramous salmonids). The T&E status of other species is usually determined by the USFWS.

Threatened or endangered species that may occur in the area were identified by reviewing the ODFW list of state and federal T&E species that are permanent or seasonal residents of Oregon (Attachment 1). Range maps and habitat use information described in Marshall et al. (1996) were reviewed to determine if nonfish T&E species may be present in the north Portland area. Also, the Oregon Natural Heritage Program (ONHP) database was queried for observations of T&E species near the site (Attachment 2). Finally, a fisheries biologist with ODFW was

interviewed regarding the distribution of T&E fish species in the area. The results of this review are described below.

No amphibian, reptile, or mammal species that have been classified as threatened or endangered reside in the area. Three T&E bird species may occur in the area, but none are expected to use habitats within the LOF to any significant degree. These species are as follows:

- Aleutian Canada goose (*Branta canadensis leucoparela*): Members of a subpopulation of this goose have been known to occasionally stop over in the Willamette Valley during its migration between wintering grounds in California and breeding sites in Alaska (Marshall et al., 1996). However, the large majority of migrants that visit Oregon occur on the coast. The nearest potential stop over area is likely to be Sauvie Island. Upland portions of the site do not provide important foraging habitat for Canada geese, although geese were observed resting on a beach, on barges, and in the river near the western property boundary. None of the geese observed near the site were Aleutians, which can be distinguished from the more common western and Taverner's subspecies by their relatively small body size and neck ring.

- Bald eagle (*Haliaeetus leucocephalus*): Bald eagles may winter in the upper Willamette Valley, but there are few known breeding locations near the site (Marshall et al., 1996). The eagle primarily preys on fish and waterfowl, but also forages on small mammals and carrion. The site does not contain suitable habitat for this species. It is unlikely that eagles could have significant exposure to site-related chemicals in their diet because few, if any, of the COPCs are expected to accumulate in fish that an eagle may eat. Also, the site is so small relative to an eagle's foraging area that only a very small fraction of their diet could possibly contain site-related chemicals.

- Peregrine falcon (*Falco peregrinus*): The American peregrine falcon may occur throughout Oregon. These falcons typically nest on cliffs near large open areas with an ample food supply. They prey primarily on waterbirds. The site does not contain suitable habitat for this species. It is unlikely that peregrines would nest or forage extensively near the site, and these birds are unlikely to have significant exposure to site-related chemicals

Several T&E trout and salmon species (*Oncorhynchus* spp.) are present in the Willamette River near the site on a seasonal basis (Mr. Dave Ward, ODFW biologist, personal communication, February 9, 2001). The fish species of special concern that may be present in the adjacent Willamette River are as follows:

- Chinook salmon (*Oncorhyncus tshawytscha*): The section of the Willamette River adjacent to the site is within the boundaries of the Lower Columbia River Evolutionary Significant Unit (ESU) of the fall run of chinook salmon. Also, spring run chinook of the Upper Willamette River ESU pass through this section of river. These chinook ESUs have been listed as threatened by the NMFS. The lower Willamette River serves as a migration corridor for both juvenile and adult fish, and could be a rearing area for juvenile chinook. Insufficient data are available for the chinook and the other T&E salmonid species to estimate residence times in the Willamette near the site. However, fish with relatively small juveniles such as fall chinook (not spring chinook or steelhead) would be most likely to have significant residence times during rearing. Adult salmon, or fish runs with relatively large juveniles, would be expected to migrate through the lower Willamette relatively quickly.

- Steelhead (*Oncorhyncus mykiss*): The Willamette River near the site is within the Lower Columbia River ESU, and is a migration corridor for steelhead of the Upper Willamette River ESU. These steelhead ESUs have been listed as a threatened by the NMFS.

- Coho salmon (*Oncorhyncus kisutch*): The Willamette River from the mouth to Oregon City is within the Lower Columbia River / Southwest Washington ESU for coho. However, it is unclear if any significant numbers of wild coho salmon pass through the section of the Willamette near the site. This coho ESU is listed by ODFW as an endangered species, but is not considered threatened or endangered by NMFS. Instead, the NMFS has classified this coho population as a candidate species for listing.

- Cutthroat trout (*Oncorhyncus clarki clarki*): Cutthroat trout in the Willamette River and tributaries downstream from the Oregon City falls have been proposed for listing as a threatened species. As with coho, few cutthroat are expected in Willamette River near the site.

In summary, no T&E amphibian, reptile, bird, or mammal species are expected to have significant exposure to site-related chemicals. However, T&E fish species such as chinook and steelhead could possibly contact site-related chemicals if a sufficient mass of a contaminant in groundwater or stormwater migrates and discharges to the Willamette River. Even if low levels of chemicals could be present in surface water, it is unknown if juveniles of these threatened fish populations spend sufficient time in the section of river near the site to have a chemical exposure that could result in biological effects. It is highly unlikely that adult fish could have significant exposure to site-related chemicals in surface water.

Juvenile salmon undergo a complex smoltification process as they transition from freshwater to a saltwater environment. This process may involve a number of important hormonal changes. In theory, relatively brief exposures to elevated levels of certain contaminants during the juvenile stage, especially substances that accumulate in tissues and mimic endogenous hormones, could lead to significant biological effects during smoltification. This is because small changes in hormone levels could possibly have significant biological effects, and certain chemicals may be released from fat stores during smoltification. It appears that most COPCs at the site are unlikely to bioaccumulate in fish tissues. Also, the COPCs are unlikely to act as endocrine disrupters. However, for the purposes of this scoping assessment, it is assumed that T&E species could possibly be exposed to biologically significant levels of site-related contaminants.

2.3 Site Description

An IT Corporation ecologist performed a site visit from approximately 1 to 3 PM on February 2, 2001. The weather during the day of the visit included frequent rain showers, although no rain fell during the visit. The temperature was approximately 50° F, and winds were variable and from the north. A DEQ checklist of ecological conditions at the site is presented in Appendix A. Photographs of site conditions are presented in Appendix B. A map of the site with the approximate locations of buildings, sampling points, and photograph locations is presented as an attached figure.

Almost all land at the site is developed and there are no natural habitats on the property that could support important ecological receptors (Appendix B). Only a small proportion of the surface soil (less than 5%) is exposed. Most soil is covered by buildings, asphalt, or graveled parking areas. Along the entire length of the property, the riverbank has been stabilized with riprap.

The only vegetation at the site is located in an approximately 30-foot wide strip along the top of the riprap that covers the riverbank. This plant community is dominated by two exotic shrub-like species: Himalaya berry (*Rubus discolor*), and Scotch broom (*Cytisus scoparius*). Himalaya berry represents approximately 60% of the plant cover, with the remaining cover comprising Scotch broom, grasses, and other plants. The plants are patchily distributed on the riverbank, and the average height of the dominant plant species is approximately 4 feet.

3 EXPOSURE PATHWAYS

There are no significant pathways by which important ecological receptors can be exposed to site-related chemicals in soil. However, if chemicals that have been detected in groundwater or stormwater migrate to the Willamette River, then it is possible that organisms in the river could contact site-related chemicals. At present, it is unknown if contaminants in groundwater or stormwater are migrating to the river at ecologically significant levels. A DEQ checklist of ecologically important exposure pathways is presented as Appendix A.

As discussed previously, the site does not contain natural habitats that would support important terrestrial ecological receptors. Some exotic plant species such as the introduced Himalaya berry are present at the site, but these degraded plant communities do not comprise valuable habitat for most native wildlife in the area. Most of the land surface is covered with buildings, asphalt, gravel, or riprap. There are few areas with exposed surface soil, and few areas that could possibly support burrowing wildlife species (no burrows were observed). As a result, important terrestrial ecological receptors are unlikely to have significant contact with contaminates in surface or subsurface soil.

It is unlikely that ecological receptors can have direct contact with chemicals in groundwater. With the possible exception of a single tree located near the western property boundary, there are no deep-rooted plants at the site that may have roots within the shallow groundwater zone. Also, no burrowing animals were observed at the site that could potentially contact shallow groundwater or inhale volatile chemicals that migrate from groundwater into burrow air.

The dynamics of shallow groundwater flow at the site is not fully understood, but it is likely that groundwater is migrating to the Willamette River. Assuming that impacted groundwater discharges to the river, the possibility exists that aquatic ecological receptors could contact site-related chemicals. A variety of factors would cause substantial attenuation of chemicals that migrate from groundwater to surface water of the river. For example, organic chemicals such as PAHs may partition into the organic fraction of soil along the groundwater migration route. The actual mixing of impacted groundwater and ambient water from the Willamette River is likely to occur well below the bottom surface of the river (i.e., in hyporheic zone). As a result, concentrations of site-related chemicals in surface water of the river, or in sediment pore-water near the sediment/water interface (the most biologically active zone of river sediment), are expected to be much lower than concentrations in groundwater.

The site supports several active industrial operations. There are permitted facility-related discharges of stormwater runoff into the Willamette River. These facility-related discharges are managed under the National Pollutant Discharge Elimination System (NPDES) program. These stormwater discharges represent a potential pathway by which aquatic oranisms in the river could contact site-related chemicals. This scoping assessment was performed using guidance from the DEQ Environmental Cleanup and Spills program, the program that typically manages cleanup of

historical chemical releases. At present, it is unknown if stormwater contains chemicals from historical contaminant releases. Instead, chemicals in stormwater runoff may be limited to those associated with current and ongoing industrial operations.

4 RECOMMENDATIONS

At present, there are insufficient data to eliminate the possibility that site-related chemicals in groundwater or stormwater could migrate to surface water of the Willamette River where they could be encountered by aquatic ecological receptors. As a result, a Level 2 Screening Assessment (DEQ, 1999) may be required to evaluate the potential ecological risks associated with groundwater or stormwater discharge to the Willamette River. No further ecological evaluations are recommended for upland soil at the site. All available evidence indicates that there are no significant pathways by which important terrestrial ecological receptors could be exposed to site-related chemical that may be present in soil.

REFERENCES

DEQ. 1998. *Guidance for Ecological Risk Assessment: Level I Scoping.* Oregon Department of Environmental Quality. November.

DEQ. 1999. *Guidance for Ecological Risk Assessment: Level 2 Screening.* Oregon Department of Environmental Quality. October.

IT. 2000. Focused Remedial Investigation Workplan, McCall Oil and Chemical Corporation. November.

IT. 2001. Focused Remedial Action Investigation Interim Action Status Report, McCall Oil and Chemical Corporation. April.

Marshall, D.B., M.W. Chilcote, and H. Weeks. 1996. *Species at Risk: Sensitive, Threatened and Endangered Vertebrates of Oregon.* 2nd Edition. Oregon Department of Fish and Wildlife, Portland, Oregon.

APPENDIX A

DEQ ECOLOGICAL CHECKLISTS

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
Terrestrial - Wooded	
Percentage of site that is wooded	0%
Dominant vegetation type (Evergreen, Deciduous, Mixed)	P *
Prominent tree size at breast height, i.e., four feet (<6", 6" to 12", >12")	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Terrestrial - Scrub/Shrub/Grasses	
Percentage of site that is scrub/shrub	<5%
Dominant vegetation type (Scrub, Shrub, Grasses, Other)	Scrub P
Prominent height of vegetation (<2', 2' to 5', >5')	2'-5'
Density of vegetation (Dense, Patchy, Sparse)	Patchy P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	Birds, mammals
Terrestrial - Ruderal	
Percentage of site that is ruderal	approx. 0%
Dominant vegetation type (Landscaped, Agriculture, Bare ground)	P
Prominent height of vegetation (0', >0' to <2', 2' to 5', >5')	
Density of vegetation (Dense, Patchy, Sparse)	P
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Aquatic - Non-flowing (lentic)	
Percentage of site that is covered by lakes or ponds	0%
Type of water bodies (Lakes, Ponds, Vernal pools, Impoundments, Lagoon, Reservoir, Canal)	
Size (acres), average depth (feet), trophic status of water bodies	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	P
Vegetation present (Submerged, Emergent, Floating)	P
Obvious wetlands present (Yes / No)	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	
Aquatic - Flowing (lotic) Willamette River is adjacent to Site	
Percentage of site that is covered by rivers, streams (brooks, creeks), intermittent streams, dry wash, arroyo, ditches, or channel waterway	0%
Type of water bodies (Rivers, Streams, Intermittent Streams, Dry wash, Arroyo, Ditches, Channel waterway)	River
Size (acres), average depth (feet), approximate flow rate (cfs) of water bodies	P
Bank environment (cover: Vegetated, Bare / slope: Steep, Gradual / height (in feet))	partially vegetated / 30° slope / 30' bank
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	River
Tidal influence (Yes / No)	No
Water discharge point (None, River, Stream, Groundwater, Wetlands impoundment)	River
Nature of bottom (Muddy, Rocky, Sand, Concrete, Other)	Sand
Vegetation present (Submerged, Emergent, Floating)	None P
Obvious wetlands present (Yes / No)	No
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds,	Birds, fish, macroinvertebrates

SPECIFIC EVALUATION OF ECOLOGICAL RECEPTORS / HABITAT	Finding
Mammals, Other)	
Aquatic - Wetlands	
Obvious or designated wetlands present (Yes / No)	No
Wetlands suspected as site is/has (Adjacent to water body, in Floodplain, Standing water, Dark wet soils, Mud cracks, Debris line, Water marks)	
Vegetation present (Submerged, Emergent, Scrub/shrub, Wooded)	P
Size (acres) and depth (feet) of suspected wetlands	
Source water (River, Stream, Groundwater, Industrial discharge, Surface water runoff)	
Water discharge point (None, River, Stream, Groundwater, Impoundment)	
Tidal influence (Yes / No)	
Evidence / observation of wildlife (Macroinvertebrates, Reptiles, Amphibians, Birds, Mammals, Other)	

* **P**: Photographic documentation of these features is highly recommended.

Part ❹

ECOLOGICALLY IMPORTANT SPECIES / HABITATS OBSERVED
The Willamette River is adjacent to the site. It is unknown if contaminated groundwater is reaching the Willamette River. The river supports threatened and endangered fish species and other important ecological receptors. No ecologically important terrestrial habitats are present at the site.

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in surface waters?			X
AND			
Are ecologically important species or habitats present? In Willamette River	X		
AND			
Could hazardous substances reach these receptors via surface water? (YES)	X		
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in surface waters. • Ability of hazardous substances to migrate to surface waters. • Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters. Aquatic receptors may be exposed through osmotic exchange, respiration or ventilation of surface waters. • Contaminants may be taken-up by terrestrial plants whose roots are in contact with surface waters. • Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.			
Are hazardous substances present or potentially present in groundwater?	X		
AND			
Are ecologically important species or habitats present? Willamette River	X		
AND			
Could hazardous substances reach these receptors via groundwater? (YES)			X
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in groundwater. • Ability of hazardous substances to migrate to groundwater. • Potential for hazardous substances to migrate via groundwater and discharge into habitats and/or surface waters. • Contaminants may be taken-up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1m depth). • Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in sediments?			X
AND			
Are ecologically important species or habitats present? Willamette River	X		
AND			
Could hazardous substances reach these receptors via contact with sediments? (YES)	X		
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in sediment. • Ability of hazardous substances to leach or erode from surface soils and be carried into sediment via surface runoff. • Potential for contaminated groundwater to upwell through, and deposit contaminants in, sediments. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods. Aquatic receptors may be directly exposed to sediments or may be exposed through osmotic exchange, respiration or ventilation of sediment pore waters. • Terrestrial plants may be exposed to sediment in an area that is only periodically inundated with water. • If sediments are present in an area that is only periodically inundated with water, terrestrial species may have direct access to sediments for the purposes of incidental ingestion. Aquatic receptors may regularly or incidentally ingest sediment while foraging.			
Are hazardous substances present or potentially present in prey or food items of ecologically important receptors?			X
AND			
Are ecologically important species or habitats present? Willamette River (YES)	X		
AND			
Could hazardous substances reach these receptors via consumption of food items?			X
When answering the above questions, consider the following: • Higher trophic level terrestrial and aquatic consumers and predators may be exposed through consumption of contaminated food sources. • In general, organic contaminants with log K_{ow} > 3.5 may accumulate in terrestrial mammals and those with a log K_{ow} > 5 may accumulate in aquatic vertebrates.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

ATTACHMENT 2
Evaluation of Receptor-Pathway Interactions (cont'd)

EVALUATION OF RECEPTOR-PATHWAY INTERACTIONS	Y	N	U
Are hazardous substances present or potentially present in surficial soils? **AND** **Are ecologically important species or habitats present?** (No) **AND** **Could hazardous substances reach these receptors via incidental ingestion of or dermal contact with surficial soils?**	X	X	
When answering the above questions, consider the following: • Known or suspected presence of hazardous substances in surficial (~1m depth) soils. • Ability of hazardous substances to migrate to surficial soils. • Significant exposure via dermal contact would generally be limited to organic contaminants which are lipophilic and can cross epidermal barriers. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash). • Contaminants in bulk soil may partition into soil solution, making them available to roots. • Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil or while grooming themselves clean of soil.			
Are hazardous substances present or potentially present in soils? **AND** **Are ecologically important species or habitats present?** (No) **AND** **Could hazardous substances reach these receptors via vapors or fugitive dust carried in surface air or confined in burrows?**	X	X	
When answering the above questions, consider the following: • Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant > 10^{-5} atm-m^3/mol and molecular weight < 200 g/mol). • Exposure via inhalation is most important to organisms that burrow in contaminated soils, given the limited amounts of air present to dilute vapors and an absence of air movement to disperse gases. • Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that could be exposed to dust disturbed by their foraging or burrowing activities or by wind movement. • Foliar uptake of organic vapors would be limited to those contaminants with relatively high vapor pressures. • Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces.			

"Y" = yes; "N" = No, "U" = Unknown (counts as a "Y")

APPENDIX B

PHOTOGRAPHS

PHOTO 1: Photograph is oriented towards the northwest and looks down the south bank of the Willamette River. This is the only section of the property where a beach exists along the river. Several barges can be seen anchored a short distance off shore. Canada geese and mallards can be seen resting on the beach and in the river. The yellow booms in the river were placed to help contain a petroleum release associated with a nearby facility.

PHOTO 2: Photograph is oriented towards the west and shows the only portion of the site that is vegetated. The shrub that can be seen on the right is Scotch broom (an introduced species). The road in the photo is located along the top of the riprap-covered riverbank. A floating barge can be seen on the right.

PHOTO 3: This is another photograph of the most vegetated section of the site. As shown in the photo, plants such as Scotch broom and Himalaya berry grow along the bank and through the riprap. The photo is oriented towards the west.

PHOTO 4: This photograph is oriented towards the northwest and looks down the Willamette River. An approximately 25-foot strip of sparse vegetation can be observed growing along the top of the riverbank.

PHOTO 5: Taken from the same location as photograph No. 4, this photograph looks upstream and is oriented towards the southeast.

PHOTO 6: This photograph is oriented towards the northwest and looks down the Willamette River. As shown in the photo, very little vegetation grows along the riverbank over much of the property. Also, most of the riverbank has been stabilized with riprap. No beach areas can be seen along the river, and no quality upland habitats are present.

PHOTO 7: This photograph was taken near the northeast property boundary and looks up the Willamette River. The photo shows some of the conditions of surrounding properties because little of land shown in the photo is on the site.

PHOTO 8: Photograph is oriented towards the north and shows the width of the Willamette River. Also, a ship can be seen anchored and offloading.

PHOTO 9: Photograph is oriented towards the northeast and shows the southern property boundary. No quality upland ecological habitats are present.

PHOTO 10: Taken from the same location as photograph No. 9, this picture is oriented towards the northwest. No quality upland ecological habitats are present.

PHOTO 11: Taken from the same location as photographs No. 9 and No. 10, this picture is oriented towards the west. No quality upland ecological habitats are present.

PHOTO 12: Taken from the same location as photographs No. 9, No. 10, and No. 11, this picture is oriented towards the southwest and shows the southern property boundary. No quality upland ecological habitats are present.

PHOTO 13: Photograph is oriented towards the west and shows much of the facility. Again, no quality upland ecological habitats are present.

PHOTO 14: Photograph was taken from top of containment berm and looks towards the east. The photo shows the area inside the containment basin that surrounds the above ground storage tanks. Areas of unvegetated surface soil can be seen.

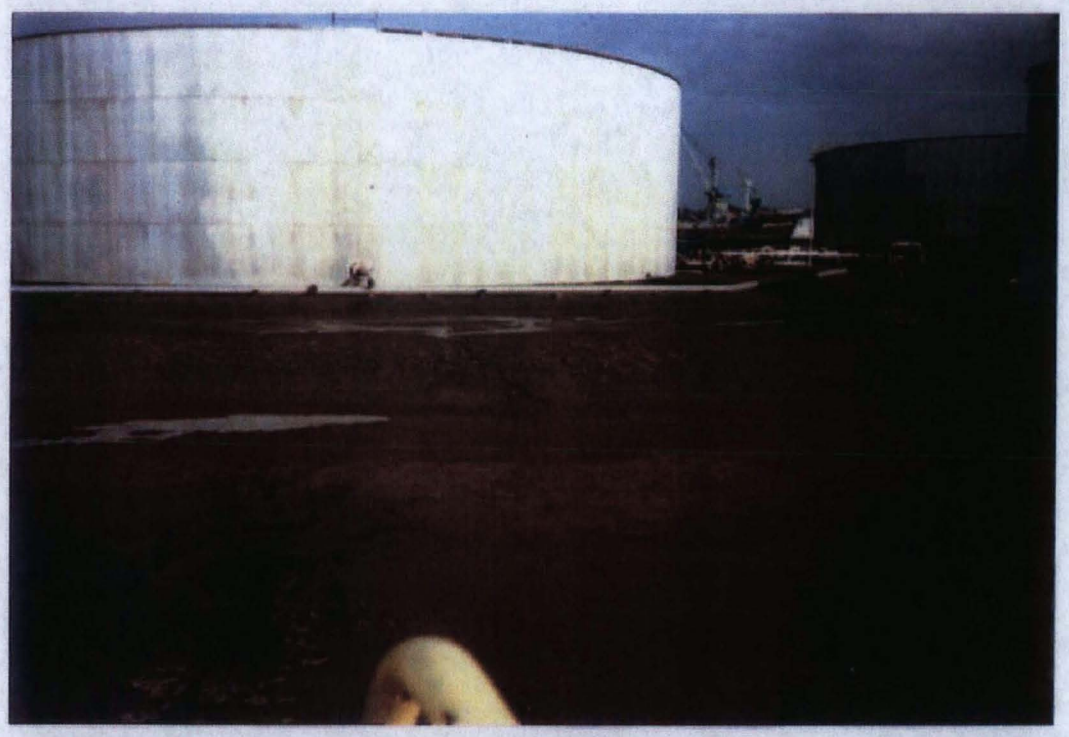


PHOTO 15: Photograph was taken from top of containment berm and looks towards the northeast.

PHOTO 16: Photograph was taken from top of containment berm and looks towards the west.

PHOTO 17: Photograph is oriented towards the west and shows a small section of upland area that is not covered with buildings, asphalt, or gravel. Although portions of this area are vegetated, no quality upland ecological habitats are present.

PHOTO 18: Photograph is oriented towards the northeast. The small beach shown in photograph No. 1 can be seen from a different angle.

ATTACHMENT 1

THREATENED AND ENDANGERED SPECIES OF OREGON

OREGON LIST OF THREATENED AND ENDANGERED FISH AND WILDLIFE SPECIES

COMMON NAME	SCIENTIFIC NAME	CATEGORY
Fishes		
Hutton Spring Tui Chub	*Gila bicolor* ssp.	*T
Borax Lake Chub	*Gila boraxobius*	*E
Foskett Spring Speckled Dace	*Rhinichthys osculus* ssp.	*T
Warner Sucker	*Catostomus warnerensis*	*T
Lahontan Cutthroat Trout	*Oncorhynchus clarki henshawi*	*T
Snake River Chinook Salmon (Spring/Summer)	*Oncorhynchus tshawytscha*	*T
Snake River Chinook Salmon (Fall)	*Oncorhynchus tshawytscha*	*T
Lower Columbia River Coho Salmon	*Oncorhynchus kisutch*	E
Lost River Sucker	*Deltistes luxatus*	*E
Shortnose Sucker	*Chasmistes brevirostris*	*E
Amphibians and Reptiles		
Green Sea Turtle	*Chelonia mydas*	*E
Leatherback Sea Turtle	*Dermochelys coriacca*	*E
Loggerhead Sea Turtle	*Caretta caretta*	*T
Pacific Ridley Sea Turtle	*Lepidochelys olivacea*	*T
Birds		
Short-tailed Albatross	*Diomeda albatrus*	*E
Brown Pelican	*Pelecanus occidentalis*	*E
Aleutian Canada Goose	*Branta canadensis leucopareia*	E(*T)
Bald Eagle	*Haliaeetus leucocephalus*	*T
American Peregrine Falcon	*Falco peregrinus anatum*	E
Arctic Peregrine Falcon	*Falco peregrinus tundrius*	E
Western Snowy Plover	*Charadrius alexandrinus nivosus*	T(*T)1

California Least Tern	*Sterna antillarum browni*	*E
Marbled Murrelet	*Brachyramphus marmoratus*	*T
Northern Spotted Owl	*Strix occidentalis caurina*	*T
Mammals		
Gray Wolf	*Canis lupus*	*E
Kit Fox	*Vulpes macrotis*	T
Sea Otter	*Enhydra lutris*	*T
Wolverine	*Gulo gulo*	T
Sei Whale	*Balaenoptera borealis*	*E
Blue Whale	*Balaenoptera musculus*	*E
Fin Whale	*Balenoptera physalus*	*E
Gray Whale	*Eschrichtius robustus*	E
Black Right Whale	*Balaena glacialis japonica*	*E
Humpback Whale	*Megaptera novaeangliae*	*E
Sperm Whale	*Physeter macrocephalus*	*E
Washington Ground Squirrel	*Spermophilus washingtoni*	E

*=Denotes those species listed by the federal government (also see following table)
T=Threatened
E=Endangered
1=Coastal population only

FISH AND WILDLIFE SPECIES LISTED UNDER THE FEDERAL ENDANGERED SPECIES ACT* BUT *NOT* UNDER THE OREGON ENDANGERED SPECIES ACT

Common Name	SCIENTIFIC NAME	CATEGORY
Oregon Chub	*Oregonichthys crameri*	E
Umpqua River Cutthroat	*Oncorhynchus clarki clarki*	E
Columbia River Chum	*Oncorhynchus keta*	T
Southern Oregon Coho	*Oncorhynchus kisutch*	T
Oregon Coast Coho	*Oncorhynchus kisutch*	T
Upper Willamette River Steelhead	*Oncorhyncus mykiss irideus*	T
Lower Columbia River Steelhead	*Oncorhyncus mykiss irideus*	T
Middle Columbia River Steelhead	*Oncorhyncus mykiss gairdneri*	T
Snake River Steelhead	*Oncorhyncus mykiss gairdneri*	T
Snake River Sockeye Salmon	*Oncorhyncus nerka*	E
Lower Columbia River Chinook	*Oncorhyncus tshawytscha*	T
Upper Willamette River Chinook	*Oncorhyncus tshawytscha*	T
Bull Trout	*Salvelinus confluentus*	T

Northern (Steller) Sea Lion	*Eumetoias jubatus*	T
Columbian White-tailed Deer	*Odocoileus virginianus leucurus*	E

***For more information contact the US Fish and Wildlife Service or the National Marine Fisheries Service**

BACK TO TOP

Updated 02/04/00
Oregon Department of Fish and Wildlife Martin Nugent
Back to ODFW Home Page

ATTACHMENT 2

OREGON NATURAL HERITAGE PROGRAM LIST OF THREATENED AND ENDANGERED SPECIES NEAR THE SITE

Oregon NATURAL HERITAGE PROGRAM

RECEIVED
FEB 2 2 2001
IT Corp. EUGENE

A Cooperative Project of :

February 21, 2001

821 SE 14th Avenue
Portland, Oregon 97214-2537
(503) 731-3070
FAX (503) 230-9639

Jeff Peterson
IT Corporation
1475 Westec Drive, Suite 121
Eugene, OR 97402

Dear Mr. Peterson:

Thank you for requesting information from the Oregon Natural Heritage Program (ONHP). We have conducted a data system search for rare, threatened and endangered plant and animal records for your DEQ Level 1 Ecological Scoping Assessment in Portland, Oregon (T01N R01E, Section 17).

Nine (9) records were noted within a two-mile radius of your project and are included on the enclosed computer printout. A key to the fields is also included.

Please remember that the lack of rare element information from a given area does not mean that there are no significant elements there, only that there is no information known to us from the site. To assure that there are no important elements present, you should inventory the site, at the appropriate season.

Please note that at this time ONHP does not have computerized records available for all anadromous fish in Oregon. I have listed below the species that may be present within the waterways contained in the project area. I have also included their listing by the National Marine Fisheries Service (NMFS). For more information on anadromous fish you may wish to contact NMFS at: 525 NE Oregon Street; Portland, Oregon 97232-2737.

Coastal cutthroat trout	*Oncorhynchus clarki clarki*	Candidate
Columbia River cutthroat trout	*Oncorhynchus clarki*	Proposed Threatened
Chum salmon (Lower Columbia River)	*Oncorhynchus keta*	Threatened
Coho salmon (Lower Columbia River)	*Oncorhynchus kisutch*	Candidate
Steelhead (Lower Columbia River)	*Oncorhynchus mykiss*	Threatened
Steelhead (Upper Willamette River)	*Oncorhynchus mykiss*	Threatened
Chinook salmon (Lower Columbia River)	*Oncorhynchus tshawytscha*	Threatened
Chinook salmon (Upper Willamette River)	*Oncorhynchus tshawytscha*	Threatened

This data is confidential and for the specific purposes of your project and is **not to be distributed.**

If you need additional information or have any questions, please do not hesitate to contact me.

Sincerely,

Cliff Alton
Conservation Information Assistant

encl.: invoice
computer printout and data key

NAME: FALCO PEREGRINUS ANATUM
COMMON NAME: AMERICAN PEREGRINE FALCON
EO-CODE: ABNKD06071*013 LAST OBS: 1997 FED STATUS:
COUNTY(s): MULTNOMAH FIRST OBS: 1994 STATE STATUS: LE
QUAD NAMES: PORTLAND LAT: xxxxxxN SIZE:
PHYSIOGRAPHIC PROV: WV LONG: xxxxxxxW MINELEV (Feet): 50
T-R-S: 001N001E xx QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: Data Blocked, see "DIRECTIONS" PRECISION: S
EO-RANK/COMM: D :
DIRECTIONS: Contact Oregon Natural Heritage Program (503) 731-3070
DESCRIPTION:
EO-DATA: NEST SITE. SEE ANNOBS.
EOTYPE: BREEDING SITE
COMMENTS:
ANNUAL OBSERVATION: 1997-NESTING OBSERVED
1996-2 ADULTS, AT LEAST 2 CHICKS
1995-2 ADULTS, 1 YOUNG FLEDGED
1994-2 ADULTS, 1 YOUNG FLEDGED
OWNER: STATE
MANAGED AREA: STATE HIGHWAY MAINTENANCE DIST 2B
MANAGE COMM:
PROT COMM:
BEST SOURCE: NUGENT, MARTIN. ODFW.

NAME: COCCYZUS AMERICANUS
COMMON NAME: YELLOW-BILLED CUCKOO
EO-CODE: ABNRB02020*026 LAST OBS: 1985 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1923-06-08 STATE STATUS: SC
QUAD NAMES: PORTLAND LAT: 453712N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1224300W MINELEV (Feet): 10
T-R-S: 002N001E 32 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: G
EO-RANK/COMM: D :
DIRECTIONS: PORTLAND-ALONG THE COLUMBIA RIVER FROM THE MOUTH OF THE WILLAMETTE N TO WHAT IS NOW THE PORTLAND AIRPORT
DESCRIPTION: COLUMBIA RIVER BOTTOMLANDS
EO-DATA: 1985: 1 CUCKOO HEARD. 1940: 2 BIRDS ON 7-27. 1923: AT LEAST 12 BIRDS ON 6-8.
EOTYPE:
COMMENTS: OBSERVERS: MIKE HOUCK (1985), W.H. TELFER (1940), GABRIELSON AND JEWETT (1923).
ANNUAL OBSERVATION:
OWNER: PRIVATE
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: HOUCK, MIKE. PORTLAND AUDUBON SOCIETY.

NAME: AGELAIUS TRICOLOR
COMMON NAME: TRICOLORED BLACKBIRD
EO-CODE: ABPBXB0020*002 LAST OBS: 1985 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1983 STATE STATUS: SP
QUAD NAMES: PORTLAND LAT: 453550N SIZE: 0
PHYSIOGRAPHIC PROV: WV LONG: 1224305W MINELEV (Feet): 20
T-R-S: 001N001E 05 QUADCODE: 4512256 MAXELEV (Feet):
T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: C :
DIRECTIONS: ST. JOHNS LANDFILL IN PORTLAND
DESCRIPTION: DENSE HIMALAYAN BLACKBERRIES ADJACENT TO A BLIND SLOUGH W/ SPARSE TREE COVER ALONG THE SLOUGH MARGINS
EO-DATA: 1985: A COLONY OF 20-30 BIRDS PRESENT DURING THE NESTING SEASON. 1983: 36 BIRDS OBSERVED 6/25-7/31, APPARENTLY NESTING.
EOTYPE:
COMMENTS: REPORTED BY HOUCK ET AL. THIS COLONY WOULD BE ABOUT 250 MI N OF THE CLOSEST NESTING AREAS IN THE ROGUE RIVER VALLEY

4512257
4512267

T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: SCAPPOOSE BAY & TRIBUTARIES, WILLAMETTE RIVER & TRIBUTARIES
DESCRIPTION:
EO-DATA: FALL RUN; ODFW DISTRIBUTION MAPS USED TO CREATE THE 1:24,000 COVERAGE
EOTYPE: REARING & MIGRATION - fish
COMMENTS: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF CHINOOK IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.
ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: 2000 ODFW GEOGRAPHIC RESOURCES DATA; MASSEY, JAY; BENNETT, DON; CALDWELL, DICK.

NAME: ONCORHYNCHUS MYKISS POP 27
COMMON NAME: STEELHEAD - LOWER COLUMBIA RIVER WINTER RUN
EO-CODE: AFCHA02132*001 LAST OBS: 1999-PRE FED STATUS: LT
COUNTY(s): CLACKAMAS FIRST OBS: STATE STATUS: SC
MULTNOMAH
COLUMBIA
QUAD NAMES: OREGON CITY LAT: SIZE:
GLADSTONE
LAKE OSWEGO
PORTLAND
LINNTON
SAUVIE ISLAND
ST HELENS
PHYSIOGRAPHIC PROV: LONG: MINELEV (Feet):
T-R-S: QUADCODE: 4512235 MAXELEV (Feet):
4512245
4512246
4512256
4512257
4512267
4512277
T-R-S COMMENTS: PRECISION: M
EO-RANK/COMM: :
DIRECTIONS: SCAPPOOSE BAY, MULTNOMAH CHANNEL, WILLAMETTE RIVER
DESCRIPTION:
EO-DATA: WINTER RUN: ODFW DISTRIBUTIION MAPS USED TO CREATE THE 1:24,000 COVERAGE
EOTYPE: REARING & MIGRATION - fish
COMMENTS: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFW'S DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF STEELHEAD IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.
ANNUAL OBSERVATION:
OWNER:
MANAGED AREA:
MANAGE COMM:
PROT COMM:
BEST SOURCE: 2000 ODFW GEOGRAPHIC RESOURCES DATA; MASSEY, JAY; BENNETT, DON.

NAME: CORYNORHINUS TOWNSENDII TOWNSENDII
COMMON NAME: PACIFIC WESTERN BIG-EARED BAT
EO-CODE: AMACC08015*071 LAST OBS: 1928-09-05 FED STATUS: SOC
COUNTY(s): MULTNOMAH FIRST OBS: 1914 STATE STATUS: SC

KEY TO PRINTOUT

NAME AND COMMON NAME: The scientific and common name of the species.

EO-CODE (element occurrence code): Unique Heritage Program code for this occurrence. The first 10 characters are the code for the species, and the last 3 are the occurrence number.

STATE STATUS: For animals, Oregon Department of Fish and Wildlife status; **LE**=listed endangered, **PE**=proposed endangered, **PT**=proposed threatened, **SC** or **C**=sensitive-critical, **SV** or **V**=sensitive-vulnerable, **SP** or **P**=sensitive peripheral or naturally rare, **SU** or **U**=sensitive-undetermined.

FED STATUS: US Fish and Wildlife Service status. **LE**=listed endangered, **LT**=listed threatened, **PE** or **PT**=proposed endangered or threatened, **C**=candidate for listing with enough information available for listing, **SOC**=species of concern.

LASTOBS: Last reported sighting date, in the form YYYY-MM-DD

FIRSTOBS: First reported sighting date for this occurrence in the form YYYY-MM-DD

COUNTY(S): County name(s)

QUAD NAMES: Name of the USGS topographic quadrangle map(s) where the record is mapped.

DIRECTIONS: Site name and direction to site

LAT: latitude, North

LONG: longitude, West

T-R-S: Township, Range and Section, with township first, range second and section third (a space appears between range and section). 004S029E 32 = Township 4S, Range 29E, Section 32. Fractional townships and ranges are further defined in the T-R COMMENTS field.

T-R-S COMMENTS: Comments relating to township, range or section(s), e.g. SE4NE4 or SENE=SE 1/4 of the NE 1/4.

PHYSIOGRAPHIC PROVINCE: Code for physiographic province. **CR**=Coast Range, **WV**=Willamette Valley, **KM**=Klamath Mountains, **WC**=West slope and crest of the Cascades, **EC**=East slope of the Cascades, **BM**=Ochoco, Blue and Wallowa Mts., **BR**=Basin and Range, **HP**=High Lava Plains, **OU**=Owyhee uplands, **CB**=Columbia Basin.

WATERSHED: Hydrologic unit code

EO-DATA: Species and population biology - numbers, age, nesting success, vigor, phenology, disease, etc.

ANNUAL OBSERVATIONS: Summary of yearly observations

DESCRIPTION: Habitat information, e.g. aspect, slope, soils, associated species, community type, etc.

MINELEV: Minimum elevation, in feet.

SIZE: in acres, whole numbers. 0=unknown

COMMENTS: Miscellaneous comments

PROT COMM (Protection Comments): Comments regarding protectibility and threats.

MANAGE COMM: Comments on how the site is managed.

MANAGED AREA: BLM district, USFS Forest, Private Preserve, etc.

OWNER: federal, state, private, etc.

BEST SOURCE: Best source of information for this occurrence.

SOURCE CODE: Code for sources