LEVEL III ENVIRONMENTAL SITE ASSESSMENT
WEYERHAEUSER COMPANY
7001 396TH SOUTHEAST DRIVE
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106-2

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developed (using silica gel cleanup of the sample) which provide more accurate data. Soil and groundwater from Powerhouse and Sawmill areas that exceeded the MTCA Method A cleanup level in 1990 were reassessed during this Level III ESA using NWTPH-Dx analysis with silica gel cleanup. Groundwater samples were also collected from the existing monitoring well network in the Powerhouse and Sawmill areas.

Subareas within the Powerhouse and Sawmill area include the Sash Gang area; Log Haul area, and 50,000-gallon Aboveground Storage Tank (AST) area. Concentrations of diesel range organics (DRO), heavy oil, and polycyclic aromatic hydrocarbons (PAHs) detected in soil samples collected near the 50,000-gallon AST area and the Sash Gang Area were below the applicable MTCA Method A cleanup levels. One soil sample collected from a soil boring in the Log Haul area exceeded the Method A cleanup levels for DRO, and heavy oil range hydrocarbons. The analytical results for groundwater collected from the soil borings in the Powerhouse and Sawmill areas were below the MTCA Method A cleanup levels.

Depth to groundwater measured in the Powerhouse and Sawmill area monitoring wells ranged between 3 to 15 feet below ground surface (bgs). Groundwater flow appears to be toward the southwest, based on a review of the monitoring well logs and historic groundwater elevation data for the well system. Delta collected groundwater samples from monitoring wells MW-003-001, and MW-003-003 through MW-003-7. Monitoring well MW-003-2 could not be located and is presumed destroyed. The analytical results for groundwater collected from the Powerhouse and Sawmill area monitoring wells were below the MTCA Method A cleanup levels.

Since demolition activities associated with the powerhouse stack could damage the well casings, the Powerhouse and Sawmill monitoring well system was abandoned as part of the Level III ESA activities. Five of the six monitoring wells were abandoned on June 2, 2004 by over drilling and backfilling with bentonite chips. Monitoring well MW-003-007 could not be over drilled due to its proximity to overhead power lines. That monitoring well was abandoned by chipping in place with bentonite.

Morbark Area

Soil samples collected by EMCON in 1998 from the northeast sidewall of a remedial excavation in the Morbark area exceed the calculated site-specific MTCA Method B cleanup level of 4,418 mg/kg for heavy

oil. During this Level III ESA, Delta attempted to collect soil samples from the perimeter of the former remedial excavation using a Geoprobe™ rig.

Two soil borings were advanced near the northeast sidewall of the excavation. DRO and heavy oil range hydrocarbons were only detected in one soil sample from the Morbark area and were below the MTCA Method B cleanup levels.

Former Aboveground Road Oil Storage Tank Excavation and Lube Oil AST Areas

Available documents indicate that a release occurred at the Former Aboveground Road Oil Storage Tank area. This area is located west of the former Sawmill and approximately 40 feet north of the Lube Oil AST building. In 1989, approximately 600 cubic yards were excavated from the Aboveground Road Oil Storage Tank area. A MTCA Method B cleanup level was calculated for the former Aboveground Road Oil Storage Tank area at 3,600 mg/kg (DRO) and 3,200 mg/kg (heavy oil range hydrocarbons).

In 1998, EMCON conducted a soil and groundwater investigation that resulted in the detection of impacted soil above the Method B Site heavy oil range cleanup level of 3,200 mg/kg south and west of the Former Aboveground Road Oil Storage Tank remedial excavation and near the southeast corner of the current Lube Oil Storage building (approximately 75 feet south of the Former Aboveground Road Oil Storage Tanks). EMCON attributed the soil impacts observed at this location to the then current oil storage activities.

Delta's Level III activities included collecting soil and groundwater samples from the southern perimeter of the former remedial excavation of the Former Aboveground Road Oil Storage Tank area and the Lube Oil AST area to delineate the extent of soil and groundwater impacts.

The maximum DRO and heavy oil range hydrocarbons soil concentrations measured in the Former Aboveground Road Oil Storage Tank area are 4,400 mg/kg and 18,000 mg/kg respectively. Approximately 1.2 feet of free petroleum product was measured in a Geoprobe™ boring north of the Lube Oil Storage Tank building. Also, approximately 2-inches of free petroleum product was observed in borings south of the Lube Oil Storage Tank building. The maximum DRO and heavy oil range hydrocarbons concentrations in soil detected in the Lube Oil AST area were 18,000 mg/kg and 41,000 mg/kg respectively. TPH was

detected in one groundwater sample collected in 30 feet downgradient of the Lube Oil AST building at 2.6 mg/l for DRO and 9.6 mg/l for heavy oil range.

The MTCA Method A cleanup level for DRO and heavy oil range hydrocarbons in groundwater is 0.5 mg/l.

Transformer T-18 area

The Level II ESA conducted by Delta on November 24, 2003, identified DROs and heavy oil range hydrocarbons in near surface soil samples collected from the Transformer T-18 area at concentrations above the MTCA Method A cleanup level of 2,000 mg/kg. Delta's Level III activities included advancing three soil borings in the Transformer T-18 area to delineate the extent of potential soil and groundwater impacts.

The analytical results for soil and groundwater samples collected in the Transformer T-18 area during the Level III ESA did not detect petroleum hydrocarbons or polychlorinated biphenyls (PCBs) at concentrations above the method detection limit in subsurface soils or groundwater. The heavy oil impacts identified in the Level II ESA appear to be limited to near surface soils.

Lumber Strapping Area

The Level II ESA conducted by Delta in November 2003 identified DROs and heavy oil range hydrocarbons in a near surface soil sample collected at the Lumber Strapping area at concentrations above the MTCA Method A cleanup level of 2,000 mg/kg. Delta's Level III activities included advancing eight soil borings to evaluate the extent of potential soil and groundwater impacts in the Lumber Strapping area.

Four soil samples collected from five feet bgs in the Lumber Strapping area contain DRO and heavy oil range hydrocarbons at concentrations ranging from 30 mg/kg to 25,000 mg/kg. Soil samples collected at 10 feet bgs contained DRO and heavy oil range hydrocarbon concentrations below the Method A cleanup level. DRO was detected in groundwater at concentrations ranging from 2.1 mg/l to 26 mg/l, and heavy oil was detected in groundwater at concentrations ranging from 18 mg/l to 170 mg/l.

Former Vehicle Wash Pad Area

The Level II ESA conducted by Delta in November 2003 identified DROs and heavy oil range hydrocarbons in a near surface soil sample collected in the Former Vehicle Wash Pad area at

concentrations above the MTCA Method A cleanup level of 2,000 mg/kg. Three soil borings were advanced in this area during the Level III to evaluate the extent of potential soil and groundwater impacts.

DROs and heavy oil range hydrocarbons detections in the three soil borings collected during the Level III in the Former Vehicle Wash Pad area were below the Method A cleanup levels. DRO detections in groundwater samples collected near the Former Vehicle Wash Pad area ranged from 0.33 mg/l to 8.1 mg/l. Heavy oil range hydrocarbons were detected in the groundwater samples at levels ranging from 1.2 mg/l to 42 mg/l.

PCP Dip Tank Areas

Following employee interviews and a records review, Weyerhaeuser identified two areas where water-based pentachlorophenol (PCP) dip tanks may have existed at the Site. The first PCP Dip Tank area (Area 1) was apparently located near the Planer Mill and the Nulock Building. The second PCP Dip Tank area (Area 2) was apparently located south of the lumber dry kilns and west of the Sawmill. Two soil borings were advanced in each area to a depth of ten feet. Groundwater was encountered at approximately four feet bgs at both locations.

The soil samples collected in the PCP Dip Tank areas were analyzed for phenolic compounds using EPA Method 8151M. Phenolic compounds were not detected in Area 2. Pentachlorophenol (6.5 mg/kg), total tertrachlorophenols (15 mg/kg), and 2,4,5 trichlorophenol (0.018 mg/kg) were detected in the soil samples collected from Area 1 at 5 and 10 feet bgs. All phenolic compound results were below the Washington Department of Ecology (Ecology) CLARC table, Method B cleanup levels for unrestricted land use, ingestion pathway but exceed the United States Environmental Protection Agency (USEPA) Region 9 preliminary cleanup goals (PRGs) for migration to groundwater for pentachlorophenol (1.0E-03 mg/kg).

Boiler Ash

May 10, 2004, Delta visited the site to estimate the volume of boiler ash in the vicinity of Powerhouse and Sawmill area. Boiler ash thickness ranged from six inches to three feet deep. The total area covered by the boiler ash is approximately 1.4 acres. Delta estimated the volume of ash to be approximately 6,000 cubic yards.

Electrical Equipment Sampling

Delta sampled electrical switches containing cooling oil in the basement of the former Powerhouse on June 2, 2004. The oil was analyzed for PCBs by EPA Method 8082. PCBs were not detected at or above the method detection limit.

Conclusions

Analytical results from sampling activities conducted at the Site during this Level III ESA indicate there are soil and groundwater impacts at the site in excess of MTCA Method A cleanup levels or site-specific MTCA Method B cleanup levels. the following conclusions for each area is summarized below.

- **Powerhouse and Sawmill Area (50,000-Gallon AST and Sash Gang Areas).** Heavy oil detections in soil and groundwater were below the MTCA Method A cleanup level. No further assessment is required.
- **Powerhouse and Sawmill Area (Log Haul Area).** DRO and heavy oil impacted soil sampled in this area exceeds the MTCA Method A cleanup levels.
- **Morbark Area.** DRO and heavy oil range hydrocarbon concentrations in soil were below the MTCA Method A cleanup level. No further assessment is required.
- **Former Aboveground Road Oil Storage Tank and Lube Oil AST Areas.** DRO and heavy oil range hydrocarbon impacts were detected in soils at the Aboveground Road Oil Storage Tank and Lube Oil AST areas at concentrations above the calculated Method B cleanup levels. Free petroleum product was observed near the Lube Oil AST building.
- **Transformer T-18 Area.** DRO, heavy oil range hydrocarbons and PCBs were not detected in the soil or groundwater collected from the Transformer T-18 area. Limited petroleum hydrocarbon impacts above the MTCA Method A cleanup level were detected in surficial soil in the immediate vicinity of the transformer.
- **Lumber Strapping Area.** DRO and heavy oil range hydrocarbons were detected in soil and groundwater in the Lumber Strapping area above the MTCA Method A Cleanup Levels.

- **Former Vehicle Wash Pad.** DRO and heavy oil range hydrocarbons concentrations detected in soil samples collected in the Former Vehicle Wash Pad area were above the MTCA Method A cleanup level. Groundwater samples collected from this area exceeded the MTCA Method A cleanup levels for DRO and heavy oil range hydrocarbons.
- **PCP Dip Tank Areas.** Phenolic compounds were not detected in soil samples collected from PCP Dip Tank area 2 and no further assessment is required. Phenolic compounds were detected in soil samples collected from PCP Dip Tank area 1. The detections were below the MTCA Method B cleanup levels but exceeded the USEPA Region 9 PRGs for migration to groundwater.
- **Boiler Ash.** The approximate volume of boiler ash in the vicinity of the Sawmill and Powerhouse is approximately 6,000 cubic yards.
- **Powerhouse Oil Sampling.** Oil sampled from the electrical equipment in the Powerhouse did not have detectable concentrations of PCBs.

1.0 INTRODUCTION

1.1 Purpose

Delta Environmental Consultants, Inc. (Delta) performed a Level III Environmental Site Assessment (ESA) for Weyerhaeuser Company (Weyerhaeuser) at the former Cascade Lumber Mill site (the "Site") located in Snoqualmie, Washington. The activities were conducted to assess the nature and extent of potential soil and groundwater issues identified in Delta's March 12, 2004 Draft Level II Environmental Site Assessment (Level II ESA). Mr. Ed Surdyk of Weyerhaeuser was on site during the Level III activities. Areas examined during the Level III ESA include:

- Powerhouse and Sawmill area.
- Morbark area.
- Former Underground Storage Tank (UST), Aboveground Road Oil Storage Tank, and Lube Oil Aboveground Storage Tank (AST) areas.
- Transformer T-18 area.
- Lumber Strapping area.
- Former Vehicle Wash Pad area.
- Pentachlorophenol (PCP) Dip Tank areas.
- Powerhouse Boiler Ash area.

Another potential area of concern identified in previous investigations that was not examined during this Level III ESA was the Transformer T-12 area.

Field activities conducted by Delta on April 26 through May 4, 2004, included:

- Surveying and sampling the existing monitoring well network at the former Sawmill area.
- Abandoning the former Sawmill area monitoring wells by casing removal.
- Advancing 52 soil borings and collecting soil and groundwater samples from the seven areas identified during the Level II ESA.

Other activities included:

- Sampling oil containing electrical equipment located in the basement of the Powerhouse.
- Estimating the volume of boiler ash in the vicinity of the former Sawmill area.
- Preparation of this Level III Environmental Site Assessment Report.

2.0 BACKGROUND INFORMATION

2.1 Site Description

The former Snoqualmie (Cascade Lumber Mill) wood products manufacturing facility is located at 7001 396th Southeast Drive in Snoqualmie, King County, Washington. A Topographic Location Map is included as Figure 1. The Site encompasses 576 acres and is located in Section 29, Township 24 North, and Range 8 East. The sawmill and associated finishing operations started in the early 1900s. Historically, the Site primarily produced lumber from raw logs at the sawmill. Operations over the past 20 years were limited to lumber drying, finishing, shipping, and wood residuals recycling. Anti sap stain activities may have occurred at the Site using dip tanks and water based PCP. Surrounding properties consist of the Glacier Mining sand and gravel operations to the north, the City of Snoqualmie sewage treatment plant to the west, the Snoqualmie River to the south, and forest land to the east.

The Site is relatively flat. Storm water from surface runoff is directed into a ditch system that trends north to south. The ditch flows south to a setting pond equipped with an oil skimmer and floating boom system prior to discharging to the mill pond. A map of the Site and surrounding properties is included as Figure 2.

2.1.1 Regional Geology

The Snoqualmie area is located in the upland area along the eastern perimeter of the Puget Lowland, which is an elongated basin bordered by the Cascade Range to the east and the Olympic Mountains to the west. The central portion of the basin is largely filled by glacial and glaciofluvial sediments. The layer of glacial sediments in the Snoqualmie area is considerably thinner than in the basin. In the vicinity of the Site, Quaternary-age unconsolidated sediments predominate the surficial geology (Harding Lawson Associates, 1994).

2.1.2 Site Soils and Geology

Site soils, as described from past investigations, generally consist of fill material including wood debris and silty clay ranging from seven to 15 feet below ground surface (bgs). A fine to medium-grained saturated sand underlies the silty clay. A second clay layer beneath the sand is reportedly up to 22 feet thick. Bedrock may be as deep as 500 feet bgs (Harding Lawson Associates, 1994).

2.1.3 Site Hydrogeology

The hydrology of the Site was studied using monitoring wells in the Morbark area, the former Sawmill area, the former Underground Fuel Storage Tank area and the Aboveground Road Oil Storage Tank area. Based on existing data and general hydrologic conditions in the area, it is assumed that the Snoqualmie River influences the groundwater flow characteristics at the Site. Groundwater studies have suggested that shallow groundwater is perched within a silty clay unit. Depth to groundwater ranges between one to ten feet bgs. The groundwater flow direction apparently varies within the study area. At the Morbark area, groundwater flow direction was measured towards the north and northeast (IT Corporation 2000). The groundwater flow direction at the former Underground Fuel Storage Tank and former Aboveground Road Oil Storage areas was measured towards the south and southwest (Shaw Environmental 2002). The groundwater flow direction at the former Sawmill area, as measured during this Level III, is to the southwest and is discussed in Section 3.1 in this report.

2.2 Previous Investigation Activities/Site Observations

This sub-section provides a brief description of past investigations at the Site and the current regulatory status. Previous soil and groundwater assessment and remediation activities have been conducted as described below.

2.2.1 Level I ESA

Previous investigation activities at the Site are summarized in a Level I ESA prepared by ENSAFE (July 28, 2003). Various subsurface soil and groundwater assessments and remediation activities have occurred at the Site, including the former Sawmill area, Mobark area, former Underground Fuel Storage Tank area, Aboveground Road Oil Storage Tank area, current Lube Oil Storage Tank area, and PCB spill area.

2.2.2 Former Powerhouse and Sawmill Area

The former Powerhouse and Sawmill area is divided into three subareas for the purpose of this investigation. The subareas include the Sash Gang area, Log Haul area and the 50,000-gallon AST area. In 1989, Harding Lawson Associates (HLA) conducted independent soil and groundwater investigations in the former Powerhouse and Sawmill area and identified petroleum concentrations in soil and groundwater above the regulatory standards established at that time. The source of the petroleum was believed to be cooling and lubrication oils from Sawmill operations. Approximately

1,000 cubic yards of soil were excavated in January 1990. During the excavation, HLA estimated that the extent of the impacted soil was greater than originally believed and excavation activities were discontinued. After an additional soil investigation conducted by HLA in February 1990, an estimated 3,600 to 4,200 cubic yards of impacted soil were identified above the 1990 Washington Model Toxics Control Act (MTCA) cleanup level of 200 milligrams per kilogram (mg/kg). No further activities were conducted since January 1990. Current clean up levels for diesel range organics (DRO) and heavy oil range hydrocarbons are 2,000 mg/kg under the MTCA Method A criteria, therefore the anticipated volume of removal would be less than the previously calculated volume of 3,600 to 4,200 cubic yards.

The three subareas are located within a broad network of monitoring wells (MW-003-001 through MW-003-007). Historical total petroleum hydrocarbons (TPH) data from the monitoring well network indicated that TPH was not greater than the detection limit of 10 mg/l. The current MTCA Method A cleanup level for TPH is 0.5 mg/l.

During the Level II, Delta noted a 50,000-gallon AST that contained No. 6 fuel oil on the south site of the former Powerhouse. Delta observed standing water in the concrete secondary containment. A Weyerhaeuser employee also reported that there might be electrical equipment in the basement of the Powerhouse that contains PCB dielectric oils. The basement periodically floods and has been manually pumped since mill operations have ceased.

2.2.3 Morbark Area

The Morbark operations consisted of a debarker and chipper. Lube oil used in the machinery leaked, impacting the soil and groundwater in the area of operations. In 1998, EMCON conducted a soil and groundwater investigation in this area to characterize past releases. A cleanup level of 4,418 parts per million (ppm) was calculated by EMCON under the Washington Department of Ecology (Ecology's) interim TPH policy. Approximately 1,100 cubic yards of TPH impacted soil was excavated. Some soil exceeding the Method B cleanup level of 4,418 mg/kg in the northeastern portion of the chipper was not removed due to structural constraints associated with a nearby building. Subsequent testing revealed that the removal of the impacted soil reduced the TPH concentrations in groundwater below the MTCA Method A cleanup levels. Ecology does not appear to have issued a no further action (NFA) determination for this area.

2.2.4 Former Underground Storage Tank, Aboveground Road Oil Storage Tank, and Current Lube Oil Storage AST Areas

The current Lube Oil AST building is located in the southern portion of this area. The location of the former Aboveground Road Oil Storage Tank area is approximately 30 feet north of the existing Lube Oil Storage AST building. A former UST was located approximately 250 feet northeast of the former Aboveground Road Oil Storage Tank area

Available documents indicate that a release had occurred at the former UST and former Aboveground Road Oil Storage Tank areas. Approximately 1,000 cubic yards of soil were removed in 1989 in the former UST area and 600 cubic yards were excavated from the Aboveground Road Oil Storage Tank area. A MTCA Method B cleanup level was calculated for the former UST area at 3,600 mg/kg (DRO) and 3,200 mg/kg heavy oil range hydrocarbons for the aboveground oil storage area.

The results from sampling shallow groundwater near the former Aboveground Road Oil Storage Tank area have been less than the MTCA Method A cleanup levels.

The former UST area has one monitoring point (A1-9) that periodically detects the presence of benzene at concentrations slightly above the Method A level of 5 micrograms per liter (µg/L) (parts per billion).

In 1998, EMCON conducted a soil and groundwater investigation that detected soil concentrations above the Method B Site cleanup level of 3,200 mg/kg near the current Lube Oil Storage building (approximately 75 feet south of the former road oil storage tanks). EMCON attributed the soil impacts to the then current oil storage activities.

2.2.5 PCB Spill Area

Transformer T-12 released PCBs during a fire at the site on February 5, 1989. PCB-impacted soils were excavated to a depth of 10 feet bgs where a clay layer was encountered. A decision was made to discontinue the excavation activities to protect the shallow groundwater beneath the clay layer. The excavation was lined with a geotextile and back filled with 10 feet of clean imported clay. Prior to backfilling, the clay at the base of the excavation was assessed for the presence of PCBs. Concentrations of

PCBs in the clay ranged from 33 mg/kg to 34,000 mg/kg. Monitoring wells were subsequently installed and sampled. PCBs were not detected in the groundwater. The area remains fenced and is posted as a PCB spill area. In September 1995, Weyerhaeuser notified the U.S. Environmental Protection Agency (USEPA) Region 10 office that no further action would be taken at the time. No response was received from USEPA. The MTCA Industrial Method A cleanup level for PCBs in soils in 1.0 mg/kg and the US EPA Region 9 Preliminary Remedial Goals (PRGs) for PCBs is 0.22 mg/kg.

2.2.6 Level II ESA

Previous investigative activities by Delta are summarized in a June 29, 2003 Level II ESA. Delta conducted limited soil assessments in areas identified during the Level I at the Transformer T-18 area, Lumber Strapping area and a former Vehicle Wash Pad area.

2.2.6.1 Transformer T-18 Area

Delta advanced three hand auger borings to a depth of one foot bgs. Soils encountered were generally gravelly and stained with oil. Three soil samples (one from each location) were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by NWTPH-Dx with silica gel cleanup.

DROs and heavy oil range hydrocarbons were detected in samples and ranged from 120 mg/kg to 18,000 mg/kg. Heavy oil range hydrocarbons concentrations ranged from 400 mg/kg to 3,500 mg/kg. The MTCA Method A cleanup level for DRO and heavy oil range hydrocarbons is 2,000 mg/kg.

2.2.6.2 Lumber Strapping Area

The floor of the Lumber Strapping area is concrete. A concrete-sided trench containing hydraulic lines runs through the area. Delta noted a sheen in the backfill and surface water in the trench during the November 2003 site visit; therefore one soil sample was collected from the hydraulic line trench backfill, at a depth of 0.5 feet. It could not be determined at the time of the sampling if the hydraulic trench had a concrete bottom due to the numerous hydraulic conduits and pea gravel backfill. The soil sample was submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by NWTPH-Dx with silica gel cleanup.

DROs were detected at a concentration of 1,700 mg/kg and heavy oil range hydrocarbons were detected at a concentration of 8,300 mg/kg in the soil sample taken from the hydraulic line conduit trench. The MTCA Method A cleanup level for DROs and heavy oil range hydrocarbons is 2,000 mg/kg.

2.2.6.3 Former Vehicle Wash Pad Area

The former Vehicle Wash Pad consists of degraded concrete and is covered in some areas with soil. Debris dislodged during washing and wash water was collected on the pad and routed to a sump, which acted as an oil water separator, before discharging to a ditch. During Delta's November 2003 site visit staining was noted on the soil covered areas of the wash pad. One surface soil sample was collected from the soil on top of the Vehicle Wash Pad. Sampling around the sump area was not possible with hand tools because the sump is adjacent to a steep embankment and overgrown with heavy vegetation. The soil sample was submitted for laboratory analysis for DROs and heavy oil range hydrocarbons by NWTPH-Dx with silica gel cleanup.

DROs were detected at a concentration of 500 mg/kg and heavy oil range hydrocarbons were detected at a concentration of 4,400 mg/kg. The MTCA Method A cleanup level for DROs and heavy oil range hydrocarbons detection is 2,000 mg/kg.

2.2.7 PCP Dip Tank Areas

Following employee interviews and a records review, Weyerhaeuser identified two areas where water-based PCP dip tanks appear to have existed at the Site. The first PCP Dip Tank area (Area 1) was apparently located near the planer mill and the Nulock Building. The second PCP Dip Tank area (Area 2) was apparently located south of the lumber dry kilns and west of the Sawmill. These areas were investigated as part of this Level III.

3.0 SAMPLING ACTIVITIES/ANALYTICAL RESULTS

This section summarizes the field activities and laboratory results of the Level III ESA. The scope of work completed by Delta included:

- Sampling and surveying the existing monitoring well network at the former Sawmill area.
- Abandoning the former Sawmill area monitoring well network.
- Advancing 52 soil borings.
- Collecting soil samples for analysis from each boring and groundwater samples from selected borings to assess the extent of possible impacts of the former Site operations on soil and groundwater.

Delta prepared a site-specific health and safety plan before work was initiated. Prior to drilling, Delta contracted One-Call Utilities Notification and a private utility locator to assist in locating the utilities in the areas of the proposed Geoprobe™ borings.

Fifty-two soil borings were advanced from April 26 through May 4, 2004 using direct push Geoprobe™ equipment. Soil samples were collected continuously during drilling using a macrocore sampler. A Delta geologist examined the soil samples and described each sample on a boring log form using the Unified Soil Classification System and standard geologic techniques. Boring logs from this investigation are presented in Appendix A. The soil samples were screened using a photoionization detector (PID). Two soil samples (with exceptions of poor or no recovery) with maximum PID reading were retained from each boring for quantitative chemical analysis. The soil samples were placed in laboratory-prepared glass jars, labeled, logged onto chain-of-custody forms, and stored in a chilled cooler pending delivery to Weyerhaeuser Analytical and Testing Service (WATS) in Federal Way, Washington.

Delta personnel collected groundwater samples from selected soil borings using centrifugal pump and disposable polyethylene tubing. Groundwater samples were stored in laboratory-prepared glass containers, labeled, logged onto chain-of-custody forms, and placed in a chilled cooler pending delivery to WATS for quantitative chemical analysis.

The analytical results in the following sections were compared to the MTCA Method A cleanup level for industrial properties, the Ecology CLARC tables, and the United States Environmental Protection Agency (USEPA) Region 9 preliminary cleanup goals (PRGs).

3.1 Former Powerhouse and Sawmill Area

The former Powerhouse and Sawmill area is divided into three subareas for the purpose of this investigation. The subareas include the Sash Gang area, Log Haul area and the 50,000-gallon AST area. These subareas are within a broad monitoring well network (MW-003-001 through MW-003-007). The well network and subareas are presented in Figure 3.

3.1.1 Well Sampling

On April 22, 2004 Delta personnel collected groundwater samples from monitoring wells MW-003-001, MW-003-003 through MW-003-007. Delta personnel could not locate well MW-003-002 during field activities and it is assumed destroyed.

Prior to sample collection, Delta measured and recorded depth to water in each groundwater monitoring well with an electronic water level meter to calculate the volume of water standing in the well casing (casing volume). Depth to groundwater elevations was measured to an accuracy 0.01 feet. Wells were sampled after purging three casing volumes of water from the well (or until dry) with a disposable polyethylene bailer. After each well had recharged to approximately 80% of the original static level, samples were withdrawn using a disposable polyethylene bailer and placed into the appropriate laboratory-provided containers. Samples were labeled, placed into chilled coolers, logged onto chain-of-custody forms and transported to the laboratory. No separate-phase hydrocarbons were observed in any of the wells during this event.

Depth to water measurements ranged from 3.25 to 15.00 feet below the top of the well casing during this monitoring event. Delta personnel resurveyed the top of casing of the existing monitoring wells to an assumed datum. Top of casing survey results and relative groundwater elevation data is presented in Table 1. After reviewing the monitoring well boring logs and calculating the groundwater elevations the general flow direction is toward the southwest. The elevation data at monitoring wells MW-003-001 and MW-003-005 was not used to calculate the flow direction and they are screened deeper and in coarser grained material and may represent static water levels of the underlining sandy

gravel aquifer below the clayey silts. The groundwater elevations from wells MW-003-003, MW-003-004, MW-003-006 and MW-003-007 represent static water levels of the perched groundwater in the silt clay above the sandy gravel aquifer. The groundwater flow is illustrated on Figure 3B.

Groundwater samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup, polynuclear aromatic hydrocarbons (PAHs) by Environmental Protection Agency (EPA) Method 8270C and for benzene, toluene, ethyl benzene and total xylenes (BTEX) by EPA Method 8021B.

Analytical results indicate that groundwater collected from Monitoring Wells MW-003-001 and MW-003-003 through MW-003-007 do not contain detectable DRO and BTEX compounds. Heavy oil range hydrocarbons detected in groundwater from MW-003-003 were below the MTCA Method A cleanup levels of 0.5 mg/l. Heavy oil range hydrocarbons were not detected in the remaining wells MW-003-001 and MW-003-004 through MW-03-007. Naphthalene was the only PAH compound detected in groundwater, but at concentrations below the MTCA Method A cleanup level of 160 µg/l. Analytical data for groundwater samples are summarized in Table 2. A site map showing well locations is included as Figure 3. The analytical laboratory report and chain-of-custody documentation are included in Appendix B.

3.1.2 Well Abandonment

Delta directed abandonment of six existing monitoring wells to facilitate the demolition of the Powerhouse stack. Monitoring wells MW-003-001, MW-003-003 through MW-003-006 were abandoned by casing removal and over drilling the total depth of the wells. The well voids were backfilled with bentonite chips in accordance with Washington regulations. Monitoring well MW-003-007 was located under the power line and limited the access of the drilling rig. Monitoring well MW-003-007 was abandoned by filling the entire well casing with bentonite chips. Well abandonment records are included in Appendix C.

3.1.3 Sash Gang Area

Six soil borings (S-1.1-1 through S-1.1-6) were advanced in the Sash Gang area to a depth of ten feet bgs. Soil encountered in this area consisted of gravel-sand backfill material with an average thickness of three to four feet, underlain by grey plastic clay with orange oxidation staining. Groundwater is associated with a two-inch-thick gravel-sand layer on the top of clay. Depth to groundwater encountered ranged from 4.6 to 5.6 feet bgs. No free product was observed. A site map showing boring locations is included as Figure 3. Analytical data for soil are shown on Figure 3A and summarized in Table 3. The analytical laboratory report and chain-of-custody documentation are included in Appendix B.

Twelve soil samples (two from each location) were analyzed for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. Soil sample with highest concentration of TPH (sample S1.1-3.5) was also analyzed for PAHs by EPA Method 8270C, BTEX by EPA Method 8021B and PCBs by EPA Method 8080.

The DRO, heavy oil range hydrocarbons, BTEX , PCBs and PAHs soil results are below the MTCA Method A cleanup levels.

One groundwater sample collected from boring S-1.1-4 and was submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup, PAHs by EPA Method 8270C, BTEX by EPA Method 8021B and PCBs by EPA Method 8080.

BTEX and PCBs were not detected at or above the method detection limit for groundwater sample from boring S-1.1-4. PAH compounds results are below the MTCA Method A cleanup levels. Low-level concentrations of DROs and heavy oil range hydrocarbons were detected in groundwater at concentrations of 0.13 mg/l and 0.21 mg/l, respectively. The concentrations detected are below the MTCA Method A cleanup level of 0.5 mg/l. Groundwater data are shown on Figure 3B and summarized in Table 4.

3.1.4 Log Haul Area

Delta advanced four soil borings (S-1.2-1 through S-1.2-4) in the Log Haul area. The depth of soil borings ranged from 10 to 15 feet bgs and consisted of gravelly-sand fill material with an average thickness of five to six feet, underlain by clay with sand. Groundwater is associated with a one-foot thick sand layer at a depth of ranging from 3.8 to 4.3 feet bgs. No free phase hydrocarbons were observed. A site map showing boring locations is included as Figure 3. Analytical data for soil are shown on Figure 3A and summarized in Table 3. Groundwater data are shown on Figure 3B and summarized in Table 4. The analytical laboratory report and chain-of-custody documentation are included in Appendix B.

Eight soil samples (two from each location) were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. Two soil samples with highest concentration of TPH (samples S1.2-1-5 and S1.2-3-5) were also analyzed for PAHs by EPA Method 8270C, BTEX by EPA Method 8021B and PCBs by EPA Method 8080.

The soil sample collected at a depth of five feet from soil boring S1.2-3 exceeds the MTCA Method A cleanup level for DRO (2,600 mg/kg) and heavy oil (8,500 mg/kg). The MTCA Method A cleanup level for DRO and heavy oil range hydrocarbons is 2,000 mg/kg. With the exception of sample S1.2-3, all DRO and heavy oil range hydrocarbon results were below Method A cleanup level.

BTEX and PCBs were not detected at or above the method detection limit for sample S1.2-1-5 and S1.2-3-5. PAH compounds detected in soil samples are below the MTCA Method A cleanup level and below the EPA Region 9 PRGs for direct contact exposure pathways for industrial soil.

One groundwater sample collected from boring S-1.2-4 was submitted for laboratory analysis for BTEX by EPA Method 8021B. BTEX compounds were not detected above laboratory method reporting limits in the groundwater sample from boring S-1.2-4. Due to the low groundwater yield in this boring, insufficient groundwater was available for analysis of DRO and heavy oil, PAHs, and PCBs.

3.1.5 50,000 Gallon AST Area

Delta advanced four soil borings (S-1.3-1 through S-1.3-4) in the 50,000 gallon AST area. Soil borings ranged from 10 to 15 feet bgs. Soil encountered in this area consisted of gravel-sand fill material with wood debris to five to six feet bgs, underlain by interbedding clay, sand, and silt. Groundwater was associated with thin layers of sand and sandy silt. Groundwater was encountered in three borings ranging from 2.2 to 11.5 feet bgs. No free product was observed. A site map showing boring locations is included as Figure 3.

Eight soil samples (two from each location) were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. One soil sample with highest concentration of TPH (sample S1.3-1-5) was also analyzed for PAHs by EPA Method 8270C, and BTEX by EPA Method 8021B.

Results for DROs and heavy range oil hydrocarbons are below the MTCA Method A cleanup level for industrial properties of 2,000 mg/kg.

BTEX compounds were not detected at or above the method detection limit for the soil sample S1.3-1-5. PAH compounds are below the Method A cleanup level for industrial properties and below the EPA Region 9 PRGs for direct contact exposure pathways for industrial soil.

Delta collected one groundwater sample from boring S-1.3-2 for laboratory analysis of DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup, PAHs by EPA Method 8270C, BTEX by EPA Method 8021B and PCB by EPA Method 8080.

BTEX, PCBs, DRO and heavy oil results for groundwater from boring S-1.3-2 are below the MTCA Method A cleanup levels. PAH compounds were not detected in the groundwater sample at or above the method reporting limit.

3.2 Morbark Area

Delta advanced two soil borings (S-2-1 and S-2-2) in the Morbark Area to a depth of 10 and 15 feet bgs, respectively. Soil encountered consisted of gravel-sand fill material, of more than 15 feet.

Groundwater was encountered in borings at 6.2 and 1.5 feet bgs. No free product was observed. Figure 4 illustrates the sample locations. Analytical data for soil are summarized in Table 5.

Three soil samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. The DRO and heavy oil range hydrocarbons concentrations observed were below the MTCA Method B cleanup levels calculated by EMCON in 1998.

3.3 Former Aboveground Road Oil Storage Tank and Lube Oil AST Areas

3.3.1 Former Aboveground Road Oil Excavation

Delta advanced six soil borings (S3.2-1 through S3.2-6) in the former Aboveground Road Oil Storage Tank excavation on April 26 and May 3, 2004 to depths ranging from 10 to 15 feet bgs. Boring locations are presented on Figure 5. Soil encountered in this area consisted of gravel-sand fill material with wood ash with an average thickness of four to six feet, underlain by clay and silt. Groundwater was encountered in the six borings ranging from 5.4 to 7.8 feet bgs. Free phase hydrocarbons was measured in boring S-3.2-5 located three feet north of the Lube Oil Storage building at thickness of 1.2 feet. Analytical data for soil are shown on Figure 5A and summarized in Table 6. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Ten soil samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup.

DROs detected in samples ranged from 150 mg/kg (S3.2-3-10) to 4,400 mg/kg (S3.2-1-10). Heavy oil range hydrocarbons detected in samples ranged from 88 mg/kg (S3.2-4-5) to 18,000 mg/kg (S3.2-1-10). The concentrations of DRO and heavy oil range hydrocarbons in soil samples collected from soil borings S3.2-1 at a depth of 10 feet, S3.2-2 at a depth of 5 and 10 feet, and S3.2-6 at a depth of 5 and 10 feet respectively exceed the MTCA Method B cleanup level that was calculated by EMCON in 1998 for DRO and heavy oil of 3,200 mg/kg.

3.3.2 Lube Oil Storage Area

Delta advanced 12 soil borings (S3.1-1 through S3.1-12) in the Lube Oil Storage area on April 26, May 3 and May 4, 2004 to depths ranging from 10 to 18 feet bgs. Soil encountered in this area consisted of

gravel-sand fill material with wood ash at the bottom with an average thickness of four to six feet, underlain by interbedding clay, silt and silty sand. Groundwater was encountered in 12 borings ranging from 5.7 to 8.2 feet bgs and was associated with the thin layers of sandy silt. Free phase hydrocarbons were measured in borings S-3.1-1, S-3.1-4 through S-3.1-7 with thickness ranging from 0.01 to 0.33 feet. A site map showing boring locations is included as Figure 5. Analytical data for soil are shown on Figure 5A and summarized in Table 6. Groundwater data is summarized in Table 7. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Sixteen soil samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup.

DROs were detected in samples ranging from 40 mg/kg (S3.1-8-5) to 18,000 mg/kg (S3.1-1-10). Heavy oil range hydrocarbons ranged from 70 mg/kg (S3.1-12-5) to 34,000 mg/kg (S3.1-1-10). The concentrations of DRO and heavy oil range hydrocarbons in soil samples collected from soil borings S3.1-1 (10 feet bgs) and S3.1-11 (five and ten feet bgs) exceed the MTCA Method A cleanup level for DRO and heavy oil of 2,000 mg/kg.

One groundwater sample collected from boring S-3.1-10 (located approximately 30 feet down gradient of the Lube Oil building) and submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. DROs and heavy oil range hydrocarbons were detected in groundwater at concentrations of 2.6 mg/l and 9.6 mg/l, respectively which exceeds the MTCA Method A cleanup level of 0.5 mg/l.

A map showing the approximate limit of soil exceeding the MTCA cleanup levels in the former Aboveground Road Oil Tank excavation and Lube Oil storage building is shown on Figure 5A.

3.4 Transformer T-18

Delta advanced three soil borings (S4-1 through S4-3) in the Transformer T-18 area on April 27, 2004 to depths of ten feet bgs. Soil encountered in this area consisted of gravel-sand fill material with an average thickness of 5-7 feet, underlain by medium grey plastic clay with orange staining. Groundwater was encountered from 1.8 to 2.1 feet bgs. No free product was observed. A site map showing boring locations is included as Figure 6. Analytical data for soil are shown on Figure 6 and summarized in

Table 8. Groundwater data are shown on Figure 6A and summarized in Table 9. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Five soil samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. DRO and heavy oil range hydrocarbons were not detected in the soil samples at or above the method reporting limit.

Groundwater samples collected from borings S4-1 and S4-3 were submitted for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup, PCB by EPA Method 608/8082, and PAHs by EPA Method 8270C.

PCB and PAH compounds were not detected at or above the method reporting limits. Concentrations of DRO and heavy oil range hydrocarbons were not detected at or above method reporting limits in groundwater sample collected from boring S4-3 and were below the MTCA Method A cleanup levels for groundwater of 0.5 mg/l in the sample collected from boring S4-1.

3.5 Lumber Strapping Area

Delta advanced eight soil borings (S5-1 through S5-8) to a depth of 10 feet bgs in the Lumber Strapping area. Boring locations are presented on Figure 7. Soil encountered in this area consisted of gravel-sand fill material and wood debris with an average thickness of 4-5 feet, underlain by interbedded silty sand and clay. Groundwater was encountered in eight borings ranging from 0.85 to 1.3 feet bgs. No measurable free product was observed but an apparent product sheen was observed at borings S5-1, S5-2 and S5-8. Analytical data for soil are shown on Figure 7A and summarized in Table 10. Groundwater data are shown on Figure 7B and summarized in Table 11. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Fifteen soil samples were submitted for laboratory analysis for DRO and heavy oil range hydrocarbons by Northwest Method NWTPH-Dx with silica gel cleanup. Heavy oil range hydrocarbons concentrations ranged from 87 mg/kg (S5-7-5) to 25,000 mg/kg (S5-3-5). The concentrations of DRO and heavy oil range hydrocarbons in soil samples collected from soil borings S5-2, S5-3, S5-6, and S5-8 (five feet bgs) exceed the MTCA Method A cleanup level for DRO and heavy oil of 2,000 mg/kg.

Gasoline range hydrocarbons and BTEX compounds were not detected in the groundwater samples at or above the method reporting limit.

3.7 PCP Dip Tank Areas

3.7.1 PCP Dip Tank Area 1

Delta advanced two soil borings in PCP Dip Tank area 1 to a depth of ten feet bgs. Soil encountered in this area consisted of gravel-sand fill material with an average thickness of three-four feet, underlain by interbedded clay and silt. Groundwater associated with thin layers of sandy silt was encountered in borings at 4.0 and 4.5 feet bgs. No free product was observed. Analytical data for soil are shown on Figure 9 and summarized in Table 14. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Four soil samples (two from each location) were submitted for laboratory analysis for phenols compounds by EPA Method 8151M. Pentachlorophenol (6.5 mg/kg), total tertrachlorophenols (15 mg/kg), and 2,4,5 trichlorophenol (0.018 mg/kg) were detected in the soil samples collected from PCP Dip Tank area 1 at depths of 5 and 10 feet. All phenolic compound results were below the Ecology CLARC table, Method B cleanup levels for unrestricted land use, ingestion pathway but exceed the USEPA Region 9 PRGs for migration to groundwater for pentachlorophenol (1.0E-03 mg/kg).

3.7.2 PCP Dip Tank Area 2

Delta advanced two soil borings in PCP Dip Tank area 2 to a depth of 10 feet bgs. Soil encountered in this area consisted of gravel-sand fill material with an average thickness of six to seven feet, underlain by greenish gray clay. Groundwater associated with thin layer of sandy silt was encountered in borings at 4.0 and 3.5 feet bgs. No free product was observed. The boring locations are shown on Figure 10 and analytical data are summarized in Table 14. The analytical laboratory report and chain-of-custody documentation are included in Attachment B.

Four soil samples (two from each location) were submitted for laboratory analysis for phenols compounds by EPA Method 8151M.

Analytical results indicate that all compounds analyzed were not detected at or above the method reporting limits.

3.8 Boiler Ash

Delta personnel conducted a site visit on May 10, 2004 to estimate the volume of boiler ash in the vicinity of the former Powerhouse and Sawmill area. Boiler ash thickness ranged from six inches to three feet deep and is distributed over an area approximately 1.4 acres in size. Delta estimated the volume of ash to be approximately 6,000 cubic yards.

3.9 Electrical Equipment Sampling

Delta personnel sampled electrical switches containing cooling oil in the basement of the former Powerhouse on June 2, 2004. The oil was analyzed for PCBs by EPA Method 8082. PCBs were not detected at or above the method of detection. PCB results are presented on laboratory reports in Appendix B.

4.0 CONCLUSIONS

Analytical results from the sampling activities conducted at the Site for this Level III ESA indicate there are soil and groundwater impacts at the site in excess of MTCA Method A cleanup levels or site-specific MTCA Method B cleanup levels. Delta provides the following conclusions for each area.

- **Powerhouse and Sawmill Area (50,000-Gallon AST and Sash Gang Areas).** Heavy oil detections in soil and groundwater were below the MTCA Method A cleanup level. No further assessment is required.
- **Powerhouse and Sawmill Area (Log Haul Area).** DRO and heavy oil impacted soil observed in this area exceeds the MTCA Method A cleanup levels.
- **Morbark Area.** DRO and heavy oil range hydrocarbons in soil were below the MTCA Method A cleanup level. No further assessment is required.
- **Former Aboveground Road Oil Storage Tank and Lube Oil AST Area.** DRO and heavy oil range hydrocarbons impacts were observed in soils in the Aboveground Road Oil Storage Tank and Lube Oil AST areas at concentrations above the calculated Method B cleanup levels. Free petroleum product was observed near the Lube Oil AST building.
- **Transformer T-18 Area.** DRO, heavy oil range hydrocarbons and PCBs were not detected in the soil or groundwater in the Transformer T-18 area. Limited petroleum hydrocarbon impacts above the MTCA Method A cleanup level were observed in surficial soil in the immediate vicinity of the transformer.
- **Lumber Strapping Area.** DRO and heavy oil range hydrocarbons were observed in soil and groundwater in the Lumber Strapping area above of the MTCA Method A Cleanup Levels.
- **Former Vehicle Wash Pad.** DRO and heavy oil range hydrocarbons concentrations detected in soil samples collected in the former Vehicle Wash Pad area were below of the MTCA Method A cleanup level. Groundwater samples collected from this area were above the MTCA Method A cleanup levels for DRO and heavy oil range hydrocarbons.
- **PCP Dip Tank Areas.** Phenolic compounds were not detected in soil samples collected from PCP Dip Tank area 2 and no further assessment is required. Phenolic compounds were detected in soil samples collected from PCP Dip Tank area 1 below the MTCA Method B cleanup levels but above the USEPA Region 9 PRGs for migration to groundwater.

- **Boiler Ash.** The approximate volume of boiler ash in the vicinity of the former Sawmill is approximately 6,000 cubic yards.
- **Powerhouse Oil Sampling.** Oil sampled from the electrical equipment in the Powerhouse did not have detectable PCB concentrations.

5.0 REMARKS

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

This report was prepared by:

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Date 12/15/2004

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Date 12/15/04

6.0 REFERENCES

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Shaw Environmental, December 9, 2002, *2002 Annual Groundwater Sampling Report, Former Underground Fuel Storage Tank and Aboveground Road Oil Storage Tank Areas*

IT Corporation, October 20, 2000, *2000 Annual Groundwater Sampling Report, Former Morbark Log Chipper Area Weyerhaeuser Snoqualmie Mill*

TABLE 1
GROUND WATER ELEVATION DATA

FORMER SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL

SNOQUALMIE, WASHINGTON

PERIOD: From 04/22/2004 thru 04/22/2004 - Inclusive

WELL NUMBER	DATE	MP ELEVATION	TIME	DEPTH TO WATER	WATER ELEV.
		(feet)		(feet)	(feet)
MW003-001	4/22/2004	99.92	09:00	15.00	84.92
MW003-003	4/22/2004	99.78	09:05	6.61	93.17
MW003-004	4/22/2004	98.14	09:10	5.67	92.47
MW003-005	4/22/2004	99.18	09:15	14.20	84.98
MW003-006	4/22/2004	98.84	09:20	3.25	95.59
MW003-007	4/22/2004	98.38	09:25	11.00	87.38

Table 2
GROUNDWATER ANALYTICAL RESULTS
FORMER SAWMILL AREA MONITORING WELL DATA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/22/2004 thru 04/22/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	2-Methyl napthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzene (ug/l)	Benzo(a) anthracene (ug/l)	Benzo(a)pyrene (ug/l)
MTCA-METHA						5		
MW003-001	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1
MW003-003	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1
MW003-004	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1
MW003-005	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1
MW003-006	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1
MW003-007	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1

=Not analyze

Table 2
GROUNDWATER ANALYTICAL RESULTS
FORMER SAWMILL AREA MONITORING WELL DATA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/22/2004 thru 04/22/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Benzo(b) fluoranthene (ug/l)	Benzo(ghi) perylene (ug/l)	Benzo(k)fluor anthene (ug/l)	Chrysene (ug/l)	Dibenzo(a,h) anthracene (ug/l)	Dibenzofuran (ug/l)	Diesel (mg/l)
MTCA-METHA								0.50
MW003-001	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050
MW003-003	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050
MW003-004	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050
MW003-005	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050
MW003-006	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050
MW003-007	04/22/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.051

=Not analyzed

Table 2
GROUNDWATER ANALYTICAL RESULTS
FORMER SAWMILL AREA MONITORING WELL DATA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/22/2004 thru 04/22/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Ethylbenzene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno (1,2,3-cd) pyrene (ug/l)	m/p-xylene (ug/l)	Naphthalene (ug/l)	o-Xylene (ug/l)
MTCA-METHA		700				1000		1000
MW003-001	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	<0.1	<0.5
MW003-003	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	0.2	<0.5
MW003-004	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	<0.1	<0.5
MW003-005	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	<0.1	<0.5
MW003-006	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	0.10	<0.5
MW003-007	04/22/2004	<0.5	<0.1	<0.1	<0.1	<0.5	0.9	<0.5

=Not analyzed

Table 2
GROUNDWATER ANALYTICAL RESULTS
FORMER SAWMILL AREA MONITORING WELL DATA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/22/2004 thru 04/22/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Phenanthrene (ug/l)	Pyrene (ug/l)	Toluene (ug/l)	TPH (as motor oil) (E5030-8015) (mg/l)
MTCA-METHA				1000	0.50
MW003-001	04/22/2004	<0.1	<0.1	<0.5	<0.20
MW003-003	04/22/2004	<0.1	<0.1	<0.5	0.31
MW003-004	04/22/2004	<0.1	<0.1	<0.5	<0.20
MW003-005	04/22/2004	<0.1	<0.1	<0.5	<0.20
MW003-006	04/22/2004	<0.1	<0.1	<0.5	<0.20
MW003-007	04/22/2004	<0.1	<0.1	<0.5	<0.20

=Not analyzed

TABLE 3
SOIL ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Benzene (ug/kg)	Benzo(a) anthracene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b) fluoranthene (ug/kg)	Benzo(ghi) perylene (ug/kg)
MTCA-METHA		30	2000	2000	2000	0
REG.9PRGS			2100	210	2100	
S1.1-1-10	04/29/2004					
S1.1-1-5	04/29/2004					
S1.1-2-10	04/29/2004					
S1.1-2-5	04/29/2004					
S1.1-3-10	04/29/2004					
S1.1-3-5	04/29/2004	<14	5.2	11	26	[12]
S1.1-4-10	04/29/2004					
S1.1-4-5	04/29/2004					
S1.1-5-10	04/29/2004					
S1.1-5-5	04/29/2004					
S1.1-6-10	04/29/2004					
S1.2-1-10	04/29/2004					
S1.2-1-5	04/29/2004	<12	59	88	120	[82]
S1.2-2-10	04/29/2004					
S1.2-2-5	04/29/2004					
S1.2-3-10	04/29/2004					
S1.2-3-5	04/29/2004	<12	<4.2	<4.2	7.7	[<4.2]
S1.2-4-10	04/29/2004					
S1.2-4-5	04/29/2004					
S1.3-1-10	04/30/2004					
S1.3-1-5	04/30/2004		<24	<24	22	[30]
S1.3-2-10	04/30/2004					
S1.3-2-5	04/30/2004					
S1.3-3-10	04/30/2004					
S1.3-3-5	04/30/2004					
S1.3-4-10	04/30/2004					
S1.3-4-5	04/30/2004					

[x]=Greater than Action Level =Not analyze

TABLE 3
SOIL ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Benzo(k)fluoranthene (ug/kg)	Chrysene (ug/kg)	Dibenzo(a,h)anthracene (ug/kg)	Dibenzofuran (ug/kg)	Diesel (mg/kg)
MTCA-METHA		2000	2000	2000		2000
REG 9PRGS		21000	210000	210		
S1.1-1-10	04/29/2004					<12
S1.1-1-5	04/29/2004					42
S1.1-2-10	04/29/2004					<15
S1.1-2-5	04/29/2004					110
S1.1-3-10	04/29/2004					<17
S1.1-3-5	04/29/2004	<4.6	23	4.3	<4.6	64
S1.1-4-10	04/29/2004					<17
S1.1-4-5	04/29/2004					88
S1.1-5-10	04/29/2004					<16
S1.1-5-5	04/29/2004					<15
S1.1-6-10	04/29/2004					<14
S1.2-1-10	04/29/2004					<20
S1.2-1-5	04/29/2004	36	80	13	14	190
S1.2-2-10	04/29/2004					<16
S1.2-2-5	04/29/2004					200
S1.2-3-10	04/29/2004					28
S1.2-3-5	04/29/2004	<4.2	<4.2	<4.2	<4.2	[2600]
S1.2-4-10	04/29/2004					<20
S1.2-4-5	04/29/2004					<13
S1.3-1-10	04/30/2004					<15
S1.3-1-5	04/30/2004	31	61	<24	<24	200
S1.3-2-10	04/30/2004					<15
S1.3-2-5	04/30/2004					<16
S1.3-3-10	04/30/2004					<15
S1.3-3-5	04/30/2004					<19
S1.3-4-10	04/30/2004					<20
S1.3-4-5	04/30/2004					28

[x]=Greater than Action Level =Not analyzed

TABLE 3
SOIL ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Ethylbenzene (ug/kg)	Fluoranthene (ug/kg)	Fluorene (ug/kg)	Indeno (1,2,3-cd) pyrene (ug/kg)	Naphthalene (ug/kg)
MTCA-METHA		6000			2000	5000
REG 9PRGS			22000000	26000000	2100	190000
S1.1-1-10	04/29/2004					
S1.1-1-5	04/29/2004					
S1.1-2-10	04/29/2004					
S1.1-2-5	04/29/2004					
S1.1-3-10	04/29/2004					
S1.1-3-5	04/29/2004	<14	6.6	<4.6	4.9	<4.6
S1.1-4-10	04/29/2004					
S1.1-4-5	04/29/2004					
S1.1-5-10	04/29/2004					
S1.1-5-5	04/29/2004					
S1.1-6-10	04/29/2004					
S1.2-1-10	04/29/2004					
S1.2-1-5	04/29/2004	<12	220	12	73	70
S1.2-2-10	04/29/2004					
S1.2-2-5	04/29/2004					
S1.2-3-10	04/29/2004					
S1.2-3-5	04/29/2004	<12	<4.2	<4.2	<4.2	<4.2
S1.2-4-10	04/29/2004					
S1.2-4-5	04/29/2004					
S1.3-1-10	04/30/2004					
S1.3-1-5	04/30/2004		<24	<24	<24	<24
S1.3-2-10	04/30/2004					
S1.3-2-5	04/30/2004					
S1.3-3-10	04/30/2004					
S1.3-3-5	04/30/2004					
S1.3-4-10	04/30/2004					
S1.3-4-5	04/30/2004					

=Not analyzed

TABLE 3
SOIL ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Phenanthrene (ug/kg)	Pyrene (ug/kg)	Toluene (ug/kg)	TPH (as motor oil) (E5030-8015) (mg/kg)	Xylene (total) (ug/kg)
MTCA-METHA				7000	2000	9000
REG 9PRGS			29000000			
S1.1-1-10	04/29/2004				<47	
S1.1-1-5	04/29/2004				230	
S1.1-2-10	04/29/2004				<59	
S1.1-2-5	04/29/2004				380	
S1.1-3-10	04/29/2004				<69	
S1.1-3-5	04/29/2004	6.2	8.0	<14	470	<14
S1.1-4-10	04/29/2004				<67	
S1.1-4-5	04/29/2004				240	
S1.1-5-10	04/29/2004				<62	
S1.1-5-5	04/29/2004				120	
S1.1-6-10	04/29/2004				69	
S1.2-1-10	04/29/2004				<79	
S1.2-1-5	04/29/2004	160	210	<12	1200	<12
S1.2-2-10	04/29/2004				<62	
S1.2-2-5	04/29/2004				890	
S1.2-3-10	04/29/2004				130	
S1.2-3-5	04/29/2004	6.1	<4.2	<12	[8500]	<12
S1.2-4-10	04/29/2004				<80	
S1.2-4-5	04/29/2004				<52	
S1.3-1-10	04/30/2004				<60	
S1.3-1-5	04/30/2004	<24	<24		830	
S1.3-2-10	04/30/2004				<59	
S1.3-2-5	04/30/2004				<66	
S1.3-3-10	04/30/2004				<61	
S1.3-3-5	04/30/2004				<75	
S1.3-4-10	04/30/2004				<79	
S1.3-4-5	04/30/2004				60	

[x]=Greater than Action Level =Not analyzed

TABLE 3
SOIL ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Acenaphthene (ug/kg)	Anthracene (ug/kg)
MTCA-METHA		0	
REG 9PRGS		29000000	100000000
S1.1-1-10	04/29/2004		
S1.1-1-5	04/29/2004		
S1.1-2-10	04/29/2004		
S1.1-2-5	04/29/2004		
S1.1-3-10	04/29/2004		
S1.1-3-5	04/29/2004	[<4.6]	<4.6
S1.1-4-10	04/29/2004		
S1.1-4-5	04/29/2004		
S1.1-5-10	04/29/2004		
S1.1-5-5	04/29/2004		
S1.1-6-10	04/29/2004		
S1.2-1-10	04/29/2004		
S1.2-1-5	04/29/2004	[9.5]	23
S1.2-2-10	04/29/2004		
S1.2-2-5	04/29/2004		
S1.2-3-10	04/29/2004		
S1.2-3-5	04/29/2004	[<4.2]	<4.2
S1.2-4-10	04/29/2004		
S1.2-4-5	04/29/2004		
S1.3-1-10	04/30/2004		
S1.3-1-5	04/30/2004	[<24]	<24
S1.3-2-10	04/30/2004		
S1.3-2-5	04/30/2004		
S1.3-3-10	04/30/2004		
S1.3-3-5	04/30/2004		
S1.3-4-10	04/30/2004		
S1.3-4-5	04/30/2004		

[x]=Greater than Action Level =Not analyzed

Table 4
GROUNDWATER ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	2-Methyl. naphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Benzene (ug/l)	Benzo(a) anthracene (ug/l)	Benzo(a)pyrene (ug/l)
MTCA-METHA						5		
S1.1-4	04/29/2004	<0.1	<0.1	0.1	<0.1	<0.5	<0.1	<0.1
S1.2-4	04/29/2004					<0.5		
S1.3-2	04/30/2004	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1

=Not analyze

Table 4
GROUNDWATER ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Benzo(b) fluoranthene (ug/l)	Benzo(ghi) perylene (ug/l)	Benzo(k)fluor anthene (ug/l)	Chrysene (ug/l)	Dibenzo(a,h) anthracene (ug/l)	Dibenzofuran (ug/l)	Diesel (mg/l)
MTCA-METHA								0.50
S1.1-4	04/29/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.13
S1.2-4	04/29/2004							
S1.3-2	04/30/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.11

=Not analyzed

Table 4
GROUNDWATER ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Ethylbenzene (ug/l)	Fluoranthene (ug/l)	Fluorene (ug/l)	Indeno (1,2,3-cd) pyrene (ug/l)	m/p-xylene (ug/l)	Naphthalene (ug/l)	o-Xylene (ug/l)
MTCA-METHA		700				1000		1000
S1.1-4	04/29/2004	<0.5	0.09	<0.1	<0.1	<0.5	1.0	<0.5
S1.2-4	04/29/2004	<0.5				<0.5		<0.5
S1.3-2	04/30/2004	<0.5	<0.1	<0.1	<0.1	0.3	<0.1	<0.5

=Not analyzed

Table 4
GROUNDWATER ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Phenanthrene (ug/l)	Pyrene (ug/l)	Toluene (ug/l)	TPH (as motor oil) (E5030-8015) (mg/l)	Aroclor 1016 (ug/l)	Aroclor 1221 (ug/l)	Aroclor 1232 (ug/l)
MTCA-METHA				1000	0.50	1	1	1
S1.1-4	04/29/2004	0.2	<0.1	<0.5	0.21	<0.040	<0.040	<0.040
S1.2-4	04/29/2004			0.4				
S1.3-2	04/30/2004	<0.1	<0.1	0.4	<0.20	<0.040	<0.040	<0.040

=Not analyzed

Table 4
GROUNDWATER ANALYTICAL RESULTS
AREA 1 POWERHOUSE/SAWMILL AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Aroclor 1242 (ug/l)	Aroclor 1248 (ug/l)	Aroclor 1254 (54% Cl) (ug/l)	Aroclor 1260 (ug/l)
MTCA-METHA		1	1	1	1
S1.1-4	04/29/2004	<0.040	<0.040	<0.040	<0.040
S1.2-4	04/29/2004				
S1.3-2	04/30/2004	<0.040	<0.040	<0.040	<0.040

=Not analyzed

TABLE 5
SOIL ANALYTICAL RESULTS
AREA 2 MORBARK AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/24/2004 thru 04/28/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Starting Depth (feet)	Ending Depth (feet)	TPH (as diesel) (mg/kg)	TPH (as motor oil; (E5030-8015) (mg/kg)
METHOD-B2				4418	4418
S2-1-10	04/28/2004	10.00	10.00	<11	<44
S2-1-5	04/28/2004	5.00	5.00	<12	<49
S2-2-5	04/28/2004	5.00	5.00	53	220

=Not analyzed

TABLE 6
SOIL ANALYTICAL RESULTS
AREA 3 FORMER AST ROAD OIL EXCAVATION/LUBE OIL STORAGE AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/26/2004 thru 05/04/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Starting Depth (feet)	Ending Depth (feet)	TPH (as diesel) (mg/kg)	TPH (as motor oil) (E5030-8015) (mg/kg)
METHOD-B				3200	3200
MTCA-METHA				2000	2000
S3.1-10-10	05/04/2004	10.00	10.00	<14	<54
S3.1-10-5	05/04/2004	5.00	5.00	<18	<73
S3.1-1-10	04/26/2004	10.00	10.00	[18000]	[34000]
S3.1-11-10	05/04/2004	10.00	10.00	[5200]	[14000]
S3.1-11-5	05/04/2004	5.00	5.00	[14000]	[41000]
S3.1-12-10	05/04/2004	10.00	10.00	<16	<64
S3.1-12-5	05/04/2004	5.00	5.00	<18	70
S3.1-1-5	04/26/2004	5.00	5.00	150	610
S3.1-2-10	04/26/2004	10.00	10.00	<17	<68
S3.1-2-5	04/26/2004	5.00	5.00	<20	100
S3.1-3-10	04/26/2004	10.00	10.00	<17	<68
S3.1-3-5	04/26/2004	5.00	5.00	<18	<72
S3.1-8-10	05/03/2004	10.00	10.00	<16	<65
S3.1-8-5	05/03/2004	5.00	5.00	40	140
S3.1-9-10	05/03/2004	10.00	10.00	50	230
S3.1-9-5	05/03/2004	5.00	5.00	140	380
S3.2-1-10	04/26/2004	10.00	10.00	[4400]	[18000]
S3.2-1-5	04/26/2004	5.00	5.00	320	1300
S3.2-2-10	04/26/2004	10.00	10.00	1500	[5500]
S3.2-2-5	04/26/2004	5.00	5.00	[4200]	[15000]
S3.2-3-10	04/26/2004	10.00	10.00	150	520
S3.2-3-5	04/26/2004	5.00	5.00	200	770
S3.2-4-10	04/26/2004	10.00	10.00	<16	<65
S3.2-4-5	04/26/2004	5.00	5.00	<17	88
S3.2-6-10	05/03/2004	10.00	10.00	[4000]	[12000]
S3.2-6-5	05/03/2004	5.00	5.00	[2400]	[7200]

[x]=Greater than Action Level =Not analyze

Table 7
GROUND WATER ANALYTICAL RESULTS
AREA 3 FORMER AST ROAD OIL EXCAVATION /LUBE OIL STORAGE AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 05/04/2004 thru 05/04/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	TPH (as diesel) (mg/l)	TPH (as motor oil' (E5030-8015) (mg/l)
MTCA-METHA		0.50	0.50
S3.1-10	05/04/2004	[2.6]	[9.6]

[x]=Greater than Action Level =Not analyze

TABLE 8
SOIL ANALYTICAL RESULTS
AREA 4 TRANSFORMER T-18
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/27/2004 thru 04/27/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Starting Depth (feet)	Ending Depth (feet)	TPH (as diesel) (mg/kg)	TPH (as motor oil) (E5030-8015) (mg/kg)
MTCA-METHA				2000	2000
S4-1-10	04/27/2004	10.00	10.00	<17	<67
S4-1-5	04/27/2004	5.00	5.00	<13	<52
S4-2-10	04/27/2004	10.00	10.00	<17	<66
S4-3-10	04/27/2004	10.00	10.00	<17	<66
S4-3-5	04/27/2004	5.00	5.00	<26	<100

=Not analyzed

Table 9
GROUND WATER ANALYTICAL RESULTS
AREA 4 TRANSFORMERS T-18
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/27/2004 thru 04/27/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	2-Methyl naphthalene (ug/l)	Acenaphthene (ug/l)	Acenaphthylene (ug/l)	Anthracene (ug/l)	Aroclor 1016 (ug/l)	Aroclor 1221 (ug/l)	Aroclor 1232 (ug/l)
MTCA-METHA						1	1	1
S4-1	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.040	<0.040	<0.040
S4-3	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.040	<0.040	<0.040

=Not analyzed

Table 9
GROUNDWATER ANALYTICAL RESULTS
AREA 4 TRANSFORMERS T-18
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/27/2004 thru 04/27/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Aroclor 1242 (ug/l)	Aroclor 1248 (ug/l)	Aroclor 1254 (54% Cl) (ug/l)	Aroclor 1260 (ug/l)	Benzo(a) anthracene (ug/l)	Benzo(a)pyrene (ug/l)	Benzo(b) fluoranthene (ug/l)
MTCA-METHA		1	1	1	1			
S4-1	04/27/2004	<0.040	<0.040	<0.040	<0.040	<0.1	<0.1	<0.1
S4-3	04/27/2004	<0.040	<0.040	<0.040	<0.040	<0.1	<0.1	<0.1

=Not analyzed

Table 9
GROUNDWATER ANALYTICAL RESULTS
AREA 4 TRANSFORMERS T-18
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/27/2004 thru 04/27/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Benzo(ghi) perylene (ug/l)	Benzo(k)fluor anthene (ug/l)	Chrysene (ug/l)	Dibenzo(a,h) anthracene (ug/l)	Dibenzofuran (ug/l)	Diesel (mg/l)	Fluoranthene (ug/l)
MTCA-METHA							0.50	
S4-1	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.1	0.11	<0.1
S4-3	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050	<0.1

=Not analyzed

Table 9
GROUNDWATER ANALYTICAL RESULTS
AREA 4 TRANSFORMERS T-18
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/27/2004 thru 04/27/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	Fluorene (ug/l)	Indeno (1,2,3-cd) pyrene (ug/l)	Naphthalene (ug/l)	Phenanthrene (ug/l)	Pyrene (ug/l)	TPH (as motor oil) (E5030-8015) (mg/l)
MTCA-METHA							0.50
S4-1	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.1	0.28
S4-3	04/27/2004	<0.1	<0.1	<0.1	<0.1	<0.1	<0.20

=Not analyzed

TABLE 10
SOIL ANALYTICAL RESULTS
AREA 5 LUMBER STRAPPING AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/27/2004 thru 05/04/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Starting Depth (feet)	Ending Depth (feet)	TPH (as motor oil) (E5030-8015) (mg/kg)	TPH (as diesel) (mg/kg)
MTCA-METHA				2000	2000
S5-1-10	04/27/2004	10.00	10.00	830	94
S5-1-5	04/27/2004	5.00	5.00	<56	<14
S5-2-10	04/28/2004	10.00	10.00	240	37
S5-2-5	04/28/2004	5.00	5.00	[5400]	1100
S5-3-5	04/27/2004	5.00	5.00	[25000]	[4800]
S5-4-10	05/04/2004	10.00	10.00	120	<29
S5-4-5	05/04/2004	5.00	5.00	120	30
S5-5-10	05/04/2004	10.00	10.00	140	<30
S5-5-5	05/04/2004	5.00	5.00	<75	130
S5-6-10	05/04/2004	10.00	10.00	640	140
S5-6-5	05/04/2004	5.00	5.00	[12000]	1900
S5-7-10	05/04/2004	10.00	10.00	400	55
S5-7-5	05/04/2004	5.00	5.00	87	46
S5-8-10	05/04/2004	10.00	10.00	430	62
S5-8-5	05/04/2004	5.00	5.00	[15000]	[2300]

[x]=Greater than Action Level =Not analyze

Table 11
GROUND WATER ANALYTICAL RESULTS
AREA 5 LUMBER STRAPPING AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/27/2004 thru 05/04/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	TPH (as motor oil) (E5030.8015) (mg/l)	TPH (as diesel) (mg/l)
MTCA-METHA		0.50	0.50
S5-1	04/27/2004	[18]	[2.1]
S5-3	04/27/2004	[18]	[3.4]
S5-8	05/04/2004	[170]	[26]

[x]=Greater than Action Level =Not analyze

TABLE 12
SOIL ANALYTICAL RESULTS
AREA 6 FORMER VEHICLE WASHPAD
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/24/2004 thru 04/28/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Starting Depth (feet)	Ending Depth (feet)	TPH (as diesel) (mg/kg)	TPH (as motor oil) (E5030-8015) (mg/kg)	Benzene (ug/kg)
MTCA-METHA				2000	2000	30
S6-1-10	04/24/2004	10.00	10.00	<12	<46	<14
S6-1-5	04/27/2004	5.00	5.00	<16	<62	<15
S6-2-10	04/28/2004	10.00	10.00	230	1400	
S6-2-5	04/28/2004	5.00	5.00	<11	<45	
S6-3-10	04/28/2004	10.00	10.00	<12	<47	<15
S6-3-5	04/28/2004	5.00	5.00	180	1700	<12

=Not analyzed

TABLE 12
SOIL ANALYTICAL RESULTS
AREA 6 FORMER VEHICLE WASHPAD
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/24/2004 thru 04/28/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	Ethylbenzene (ug/kg)	Toluene (ug/kg)	Xylene (total) (ug/kg)	TPH (as gasoline) (mg/kg)
MTCA-METHA		6000	7000	9000	100
S6-1-10	04/24/2004	<14	<14	<14	<7.0
S6-1-5	04/27/2004	<15	<15	<15	<6.8
S6-2-10	04/28/2004				<4.9
S6-2-5	04/28/2004				<4.4
S6-3-10	04/28/2004	<15	<15	<15	<7.0
S6-3-5	04/28/2004	<12	<12	<12	<5.4

=Not analyzed

Table 13
GROUNDWATER ANALYTICAL RESULTS
AREA 6 FORMER VEHICLE WASHPAD
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/28/2004 thru 04/28/2004 - Inclusiv
SAMPLE TYPE: Water

SITE	DATE	Benzene (ug/l)	Diesel (mg/l)	Ethylbenzene (ug/l)	m/p-xylene (ug/l)	o-Xylene (ug/l)	Toluene (ug/l)	TPH (as motor oil) (E5030-8015) (mg/l)
MTCA-METHA		5	0.50	700	1000	1000	1000	0.50
S6-2	04/28/2004	<0.5	[8.1]	<0.5	<0.5	<0.5	0.3	[42]
S6-3	04/28/2004	0.2	0.33	<0.5	<0.5	<0.5	0.7	[1.20]

[x]=Greater than Action Level =Not analyz e

Table 13
GROUNDWATER ANALYTICAL RESULTS
AREA 6 FORMER VEHICLE WASHPAD
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. MOO3-106

PERIOD: From 04/28/2004 thru 04/28/2004 - Inclusive
SAMPLE TYPE: Water

SITE	DATE	TPH (as gasoline) (mg/l)
MTCA-METHA		0.80
S6-2	04/28/2004	<0.050
S6-3	04/28/2004	<0.050

=Not analyzed

TABLE 14
SOIL ANALYTICAL RESULTS
PCP DIP TANK AREA
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON
DELTA PROJECT NO. M003-106

PERIOD: From 04/29/2004 thru 04/30/2004 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	DEPTH	2,4,5-Trichloro phenol (ug/kg)	Pentachloro phenol (ug/kg)	Total Tetrachloro phenols (ug/kg)
MTCA-METHA					
S7.1-1-10	04/29/2004	10.00	<7.6	200	67
S7.1-1-5	04/29/2004	5.00	<9.0	820	310
S7.1-2-10	04/29/2004	10.00	18	6500	15000
S7.1-2-5	04/29/2004	5.00	<8.7	21	94
S7.2-1-10	04/30/2004	10.00	<9.6	<9.6	<19
S7.2-1-5	04/30/2004	5.00	<6.1	<6.1	<12
S7.2-2-10	04/30/2004	10.00	<8.7	<8.7	<17
S7.2-2-5	04/30/2004	5.00	<7.1	<7.1	<14

=Not analyzed

FIGURES

N

0 1000 2000

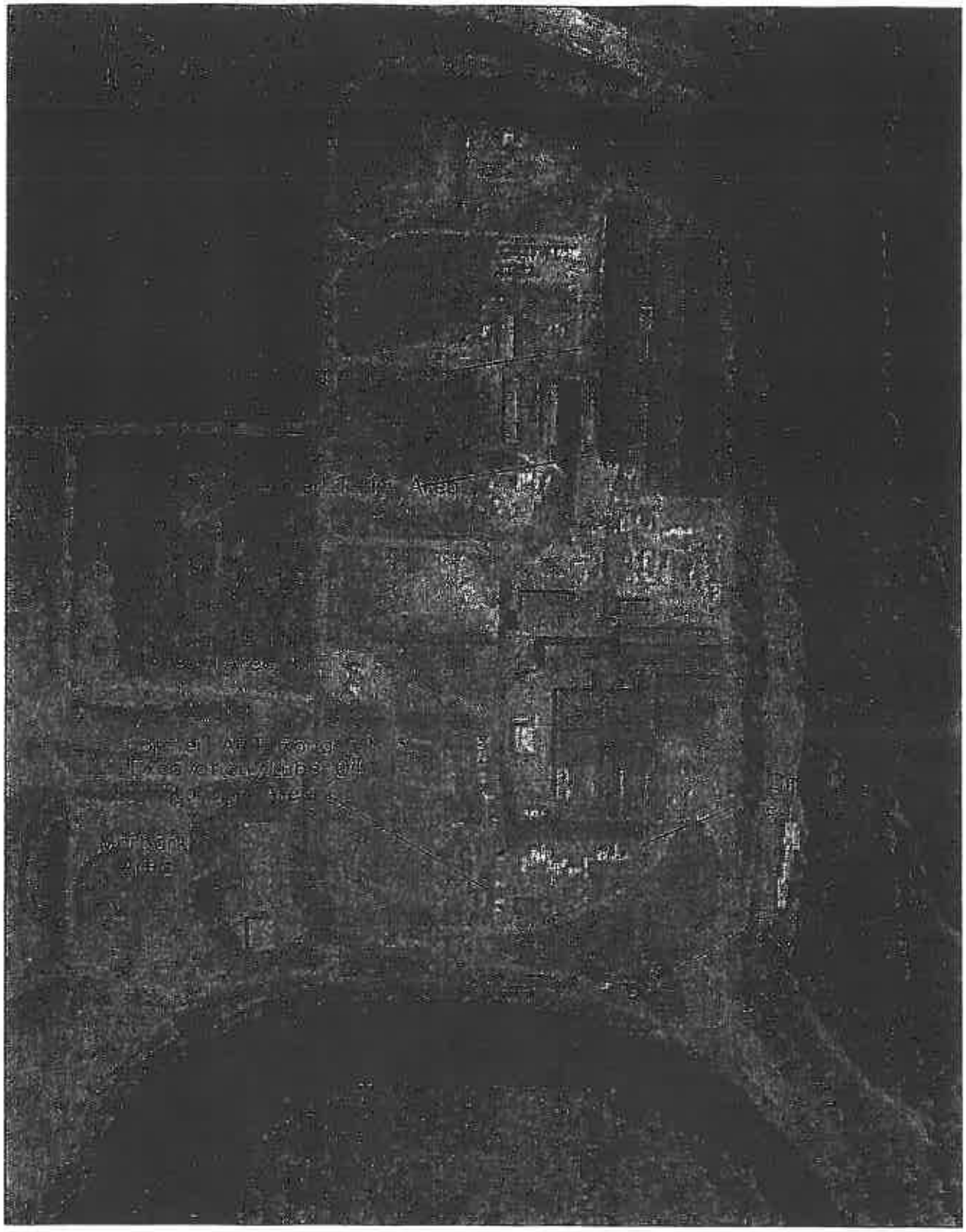
FEET

SNOQUALMIE, WASHINGTON
7.5 MINUTE QUAD
1993
ISBN# 0607576715

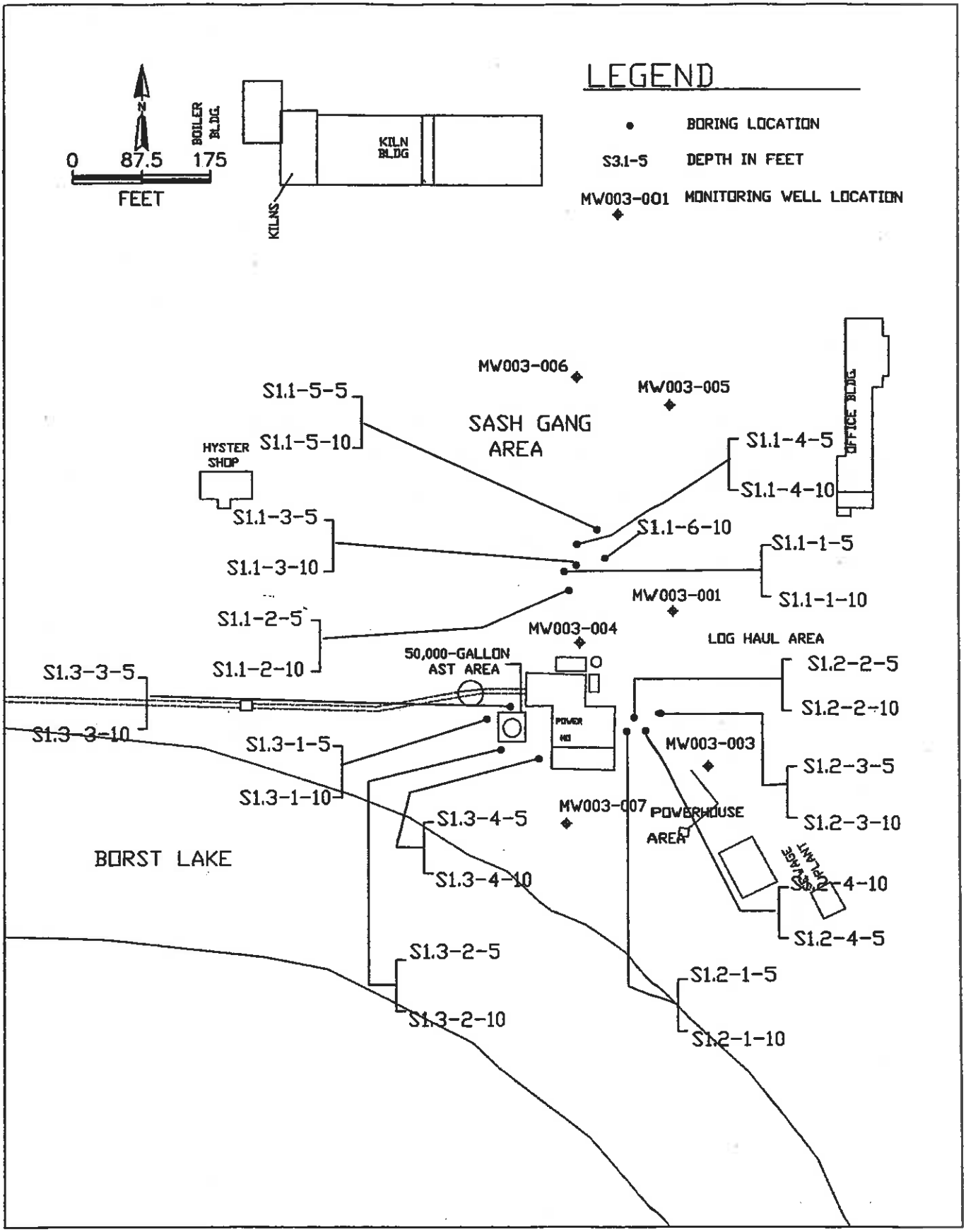
Delta Environmental Consultants, Inc.

TITLE:
TOPOGRAPHIC LOCATION MAP
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE. WASHINGTON

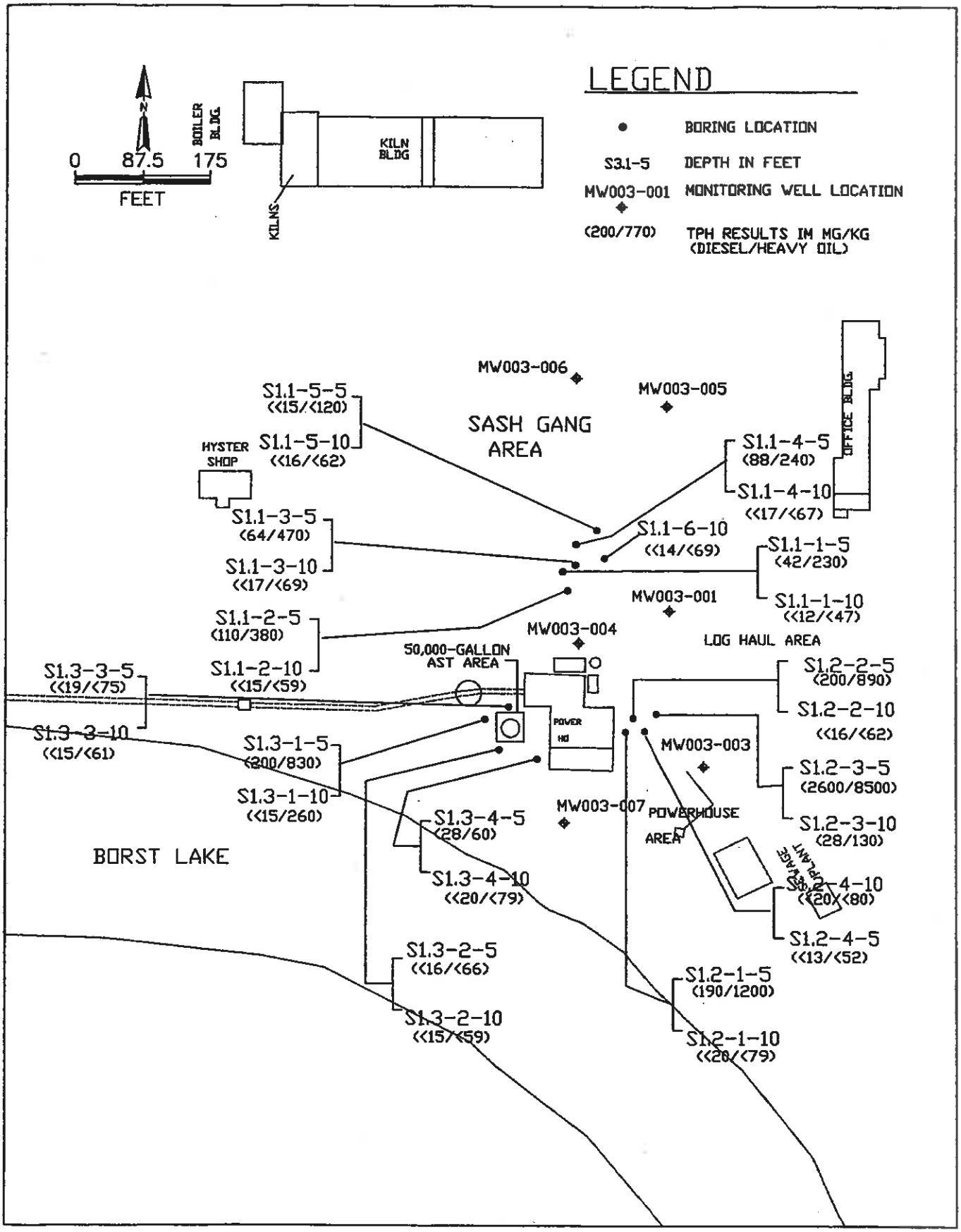
DWN: NLJ	DES.:	PROJECT NO.: M003-106
CHKD:	APPD:	FIGURE NO.: 1
DATE:	REV.:	



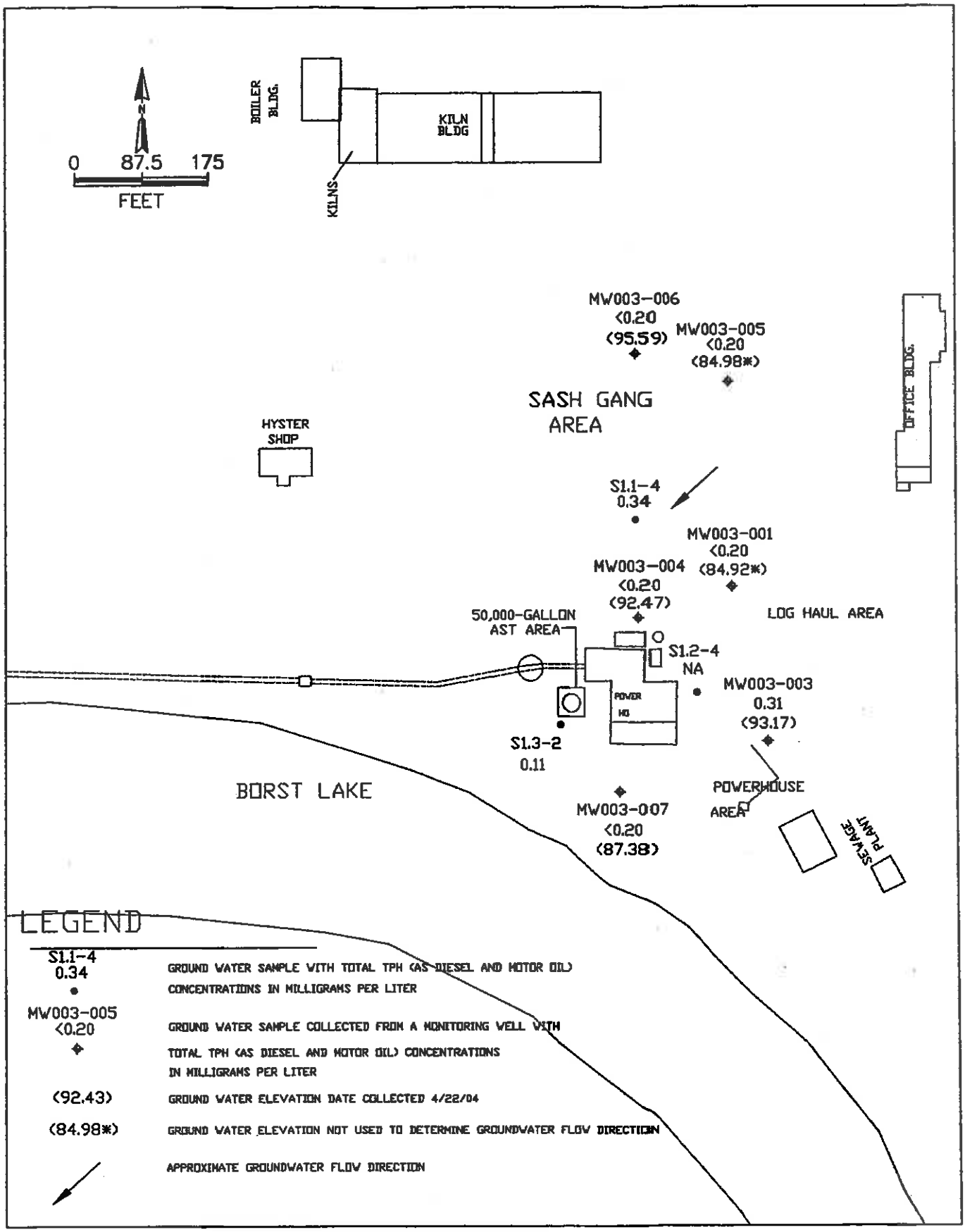
Delta Environmental Consultants, Inc.	TITLE: SITE MAP WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	
		DATE: 06/24/04	REV.:	FIGURE NO.: 2



Delta Environmental Consultants, Inc.	TITLE: POWERHOUSE/SAWMILL AREA WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.: MRC	PROJECT NO.: M003-106
		CHKD: BP	APPD:	FIGURE NO.: 3
		DATE: 09/08/04	REV.:	



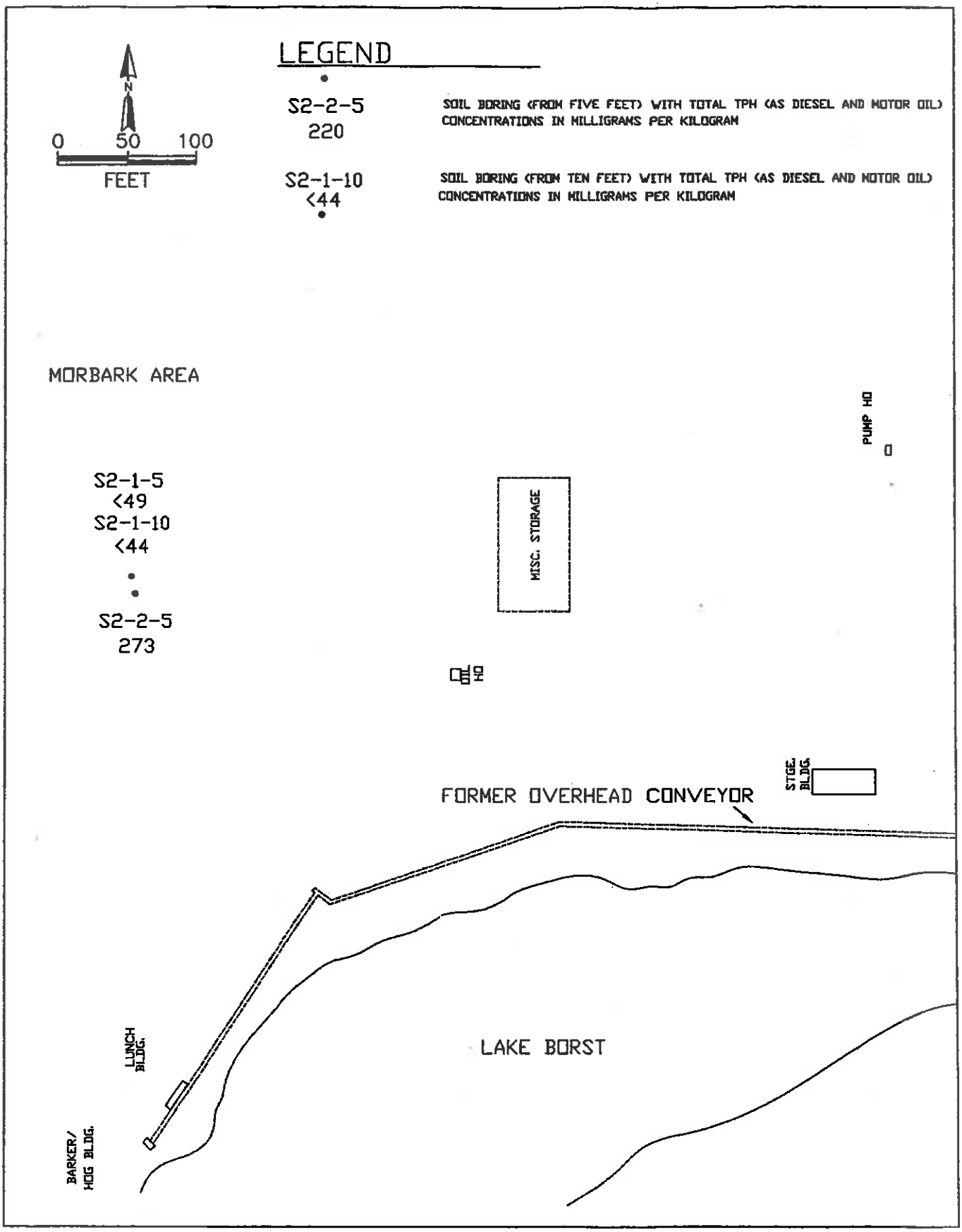
De Environmental Consultants, Inc.	TITLE: POWERHOUSE/SAWMILL AREA (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.: MRC	PROJECT NO.: M003-106
		CHKD: BP	APPD:	
		DATE: 09/08/04	REV.:	FIGURE NO.: 3A



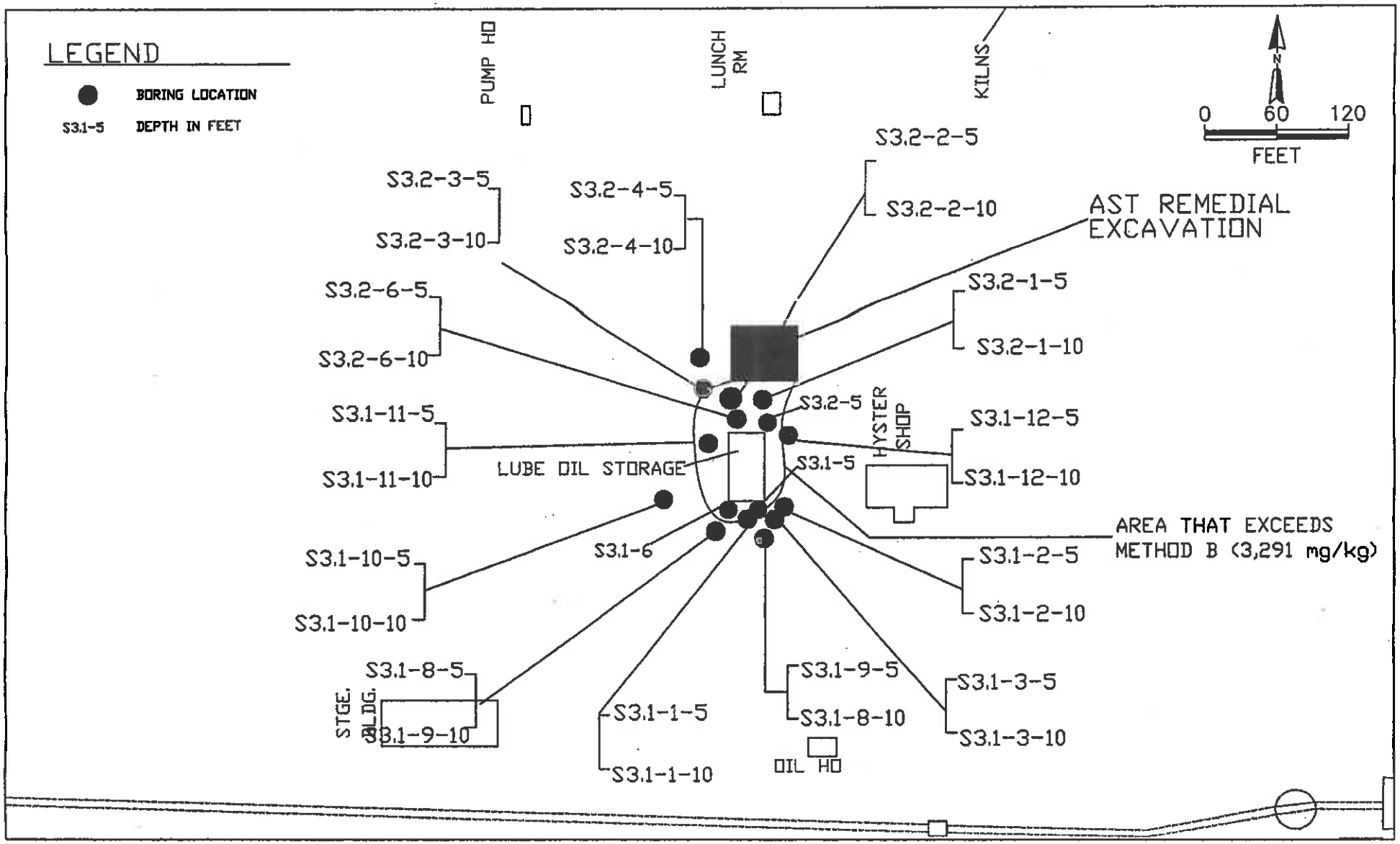
Delta Environmental Consultants, Inc.

TITLE:
POWERHOUSE/SAWMILL AREA (GROUND WATER)
WEYERHAEUSER CASCADE LUMBER MILL
SNOQUALMIE, WASHINGTON

DWN:	DES.:	PROJECT NO.:
MRC	MRC	M003-106
CHKD:	APPD:	
BP		FIGURE NO.:
DATE:	REV.:	3B
06/24/04		



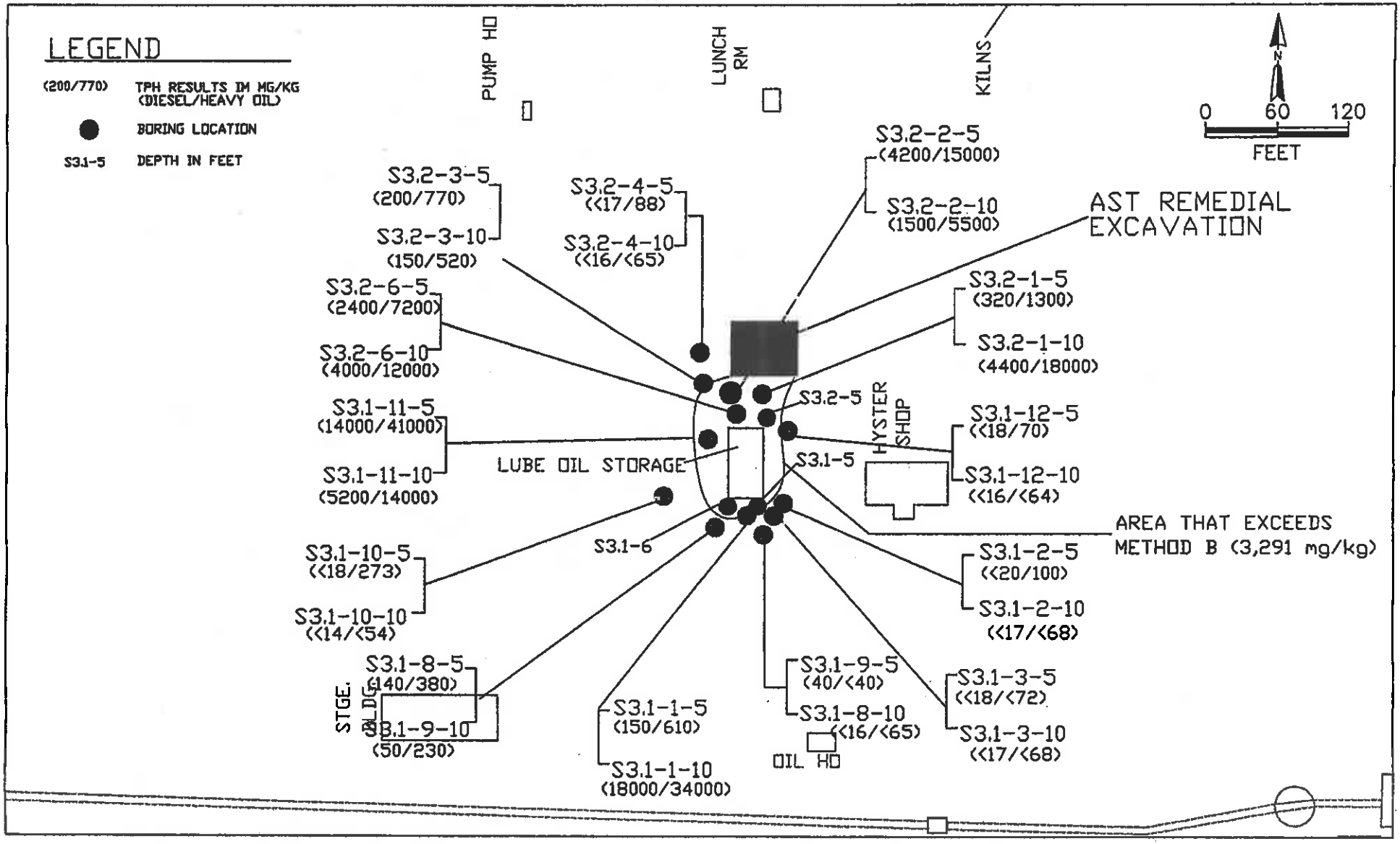
Landau Associates Environmental Consultants, Inc.	TITLE: MORBARK AREA (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.: MRC	PROJECT NO.: M003-106
		CHKD: BP	APPD:	
		DATE: 09/08/04	REV.:	FIGURE NO.: 4



Delta Environmental Consultants, Inc.

TITLE:
FORMER AST ROAD OIL EXCAVATION
& LUBE OIL AREA
WEYERHAEUSER CASCADE LUMBERMILL- SNOQUALMIE, WA

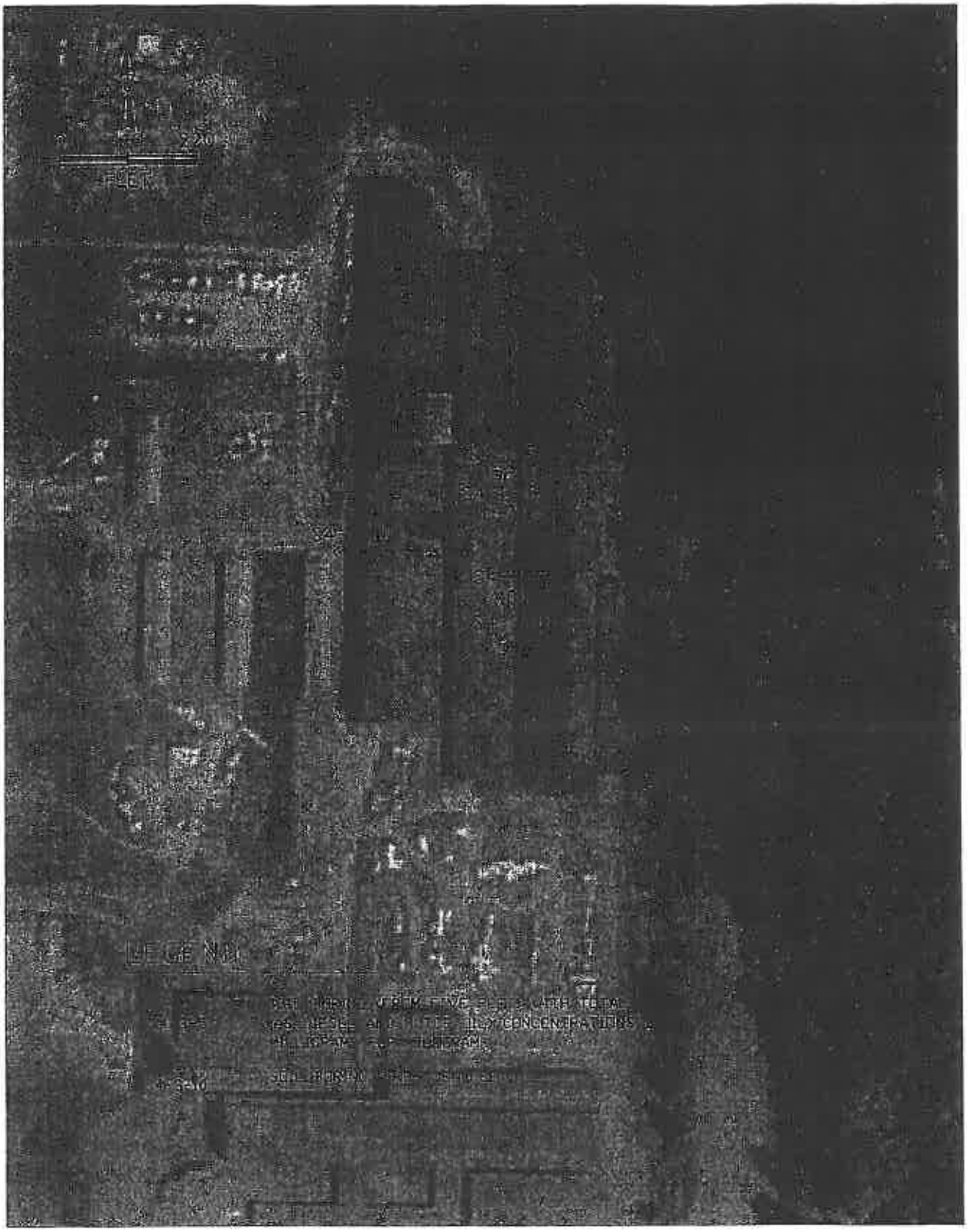
DWN:	DES.:	PROJECT NO.:
MRC	MRC	M003-106
CHKD:	APPD:	FIGURE NO.:
BP		5
DATE:	REV.:	
9/08/04		



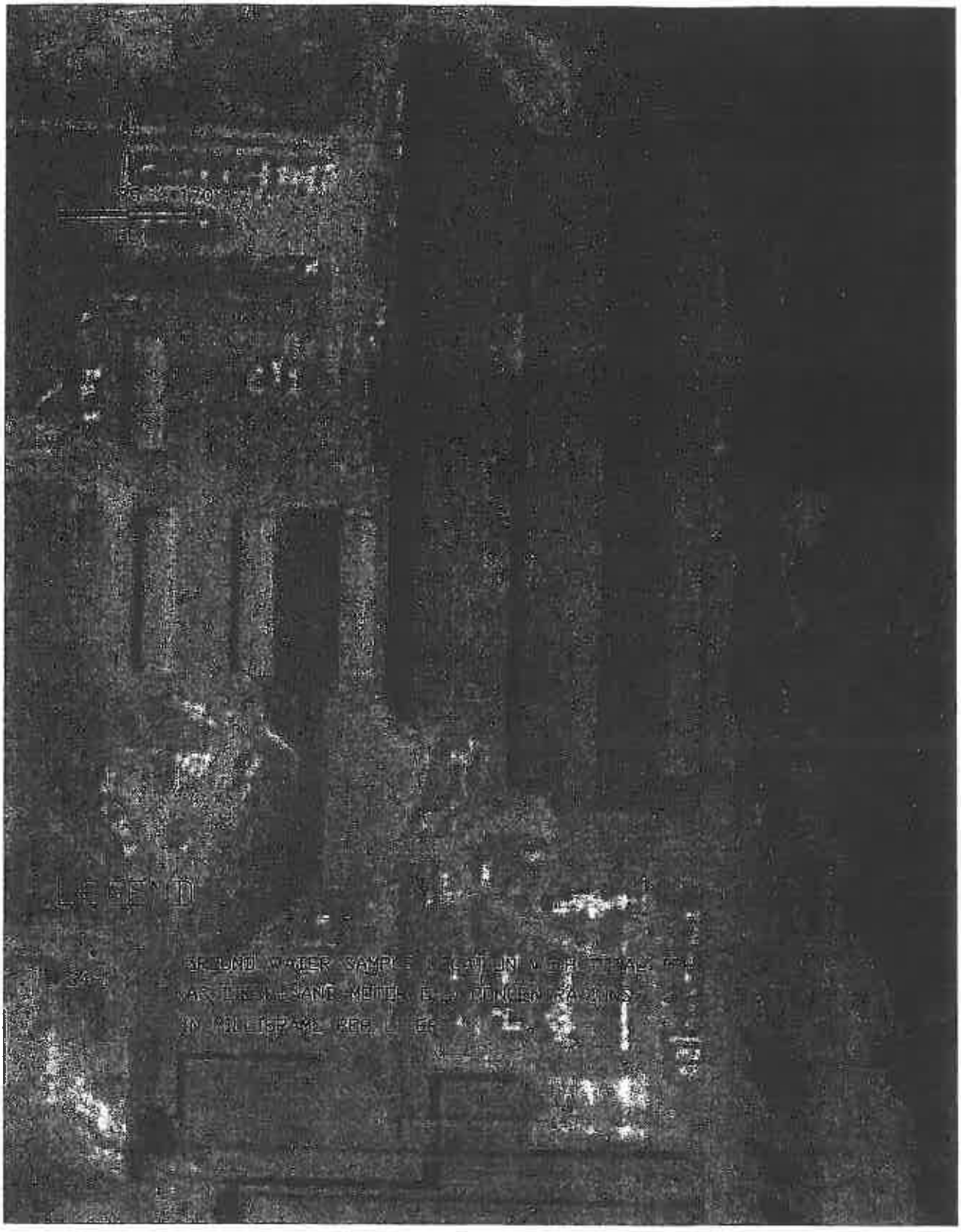
Delta Environmental Consultants, Inc.

TITLE:
FORMER AST ROAD OIL EXCAVATION
& LUBE OIL AREA (SOIL)
WEYERHAEUSER CASCADE LUMBERMILL- SNOQUALMIE, WA

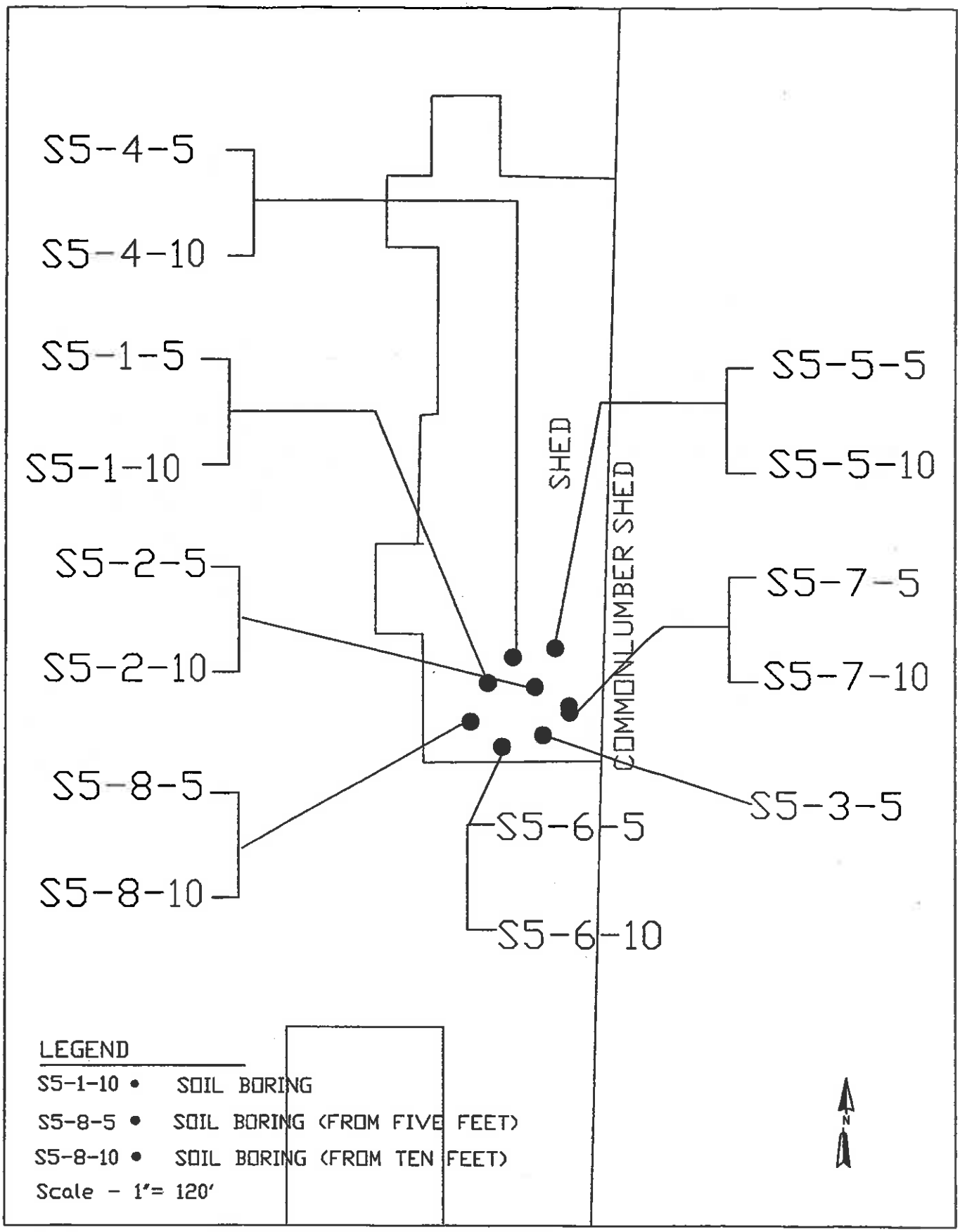
DWN:	DES.:	PROJECT NO.:
MRC	MRC	M003-106
CHKD: BP	APPD:	FIGURE NO.: 5A
DATE: 9/08/04	REV.:	



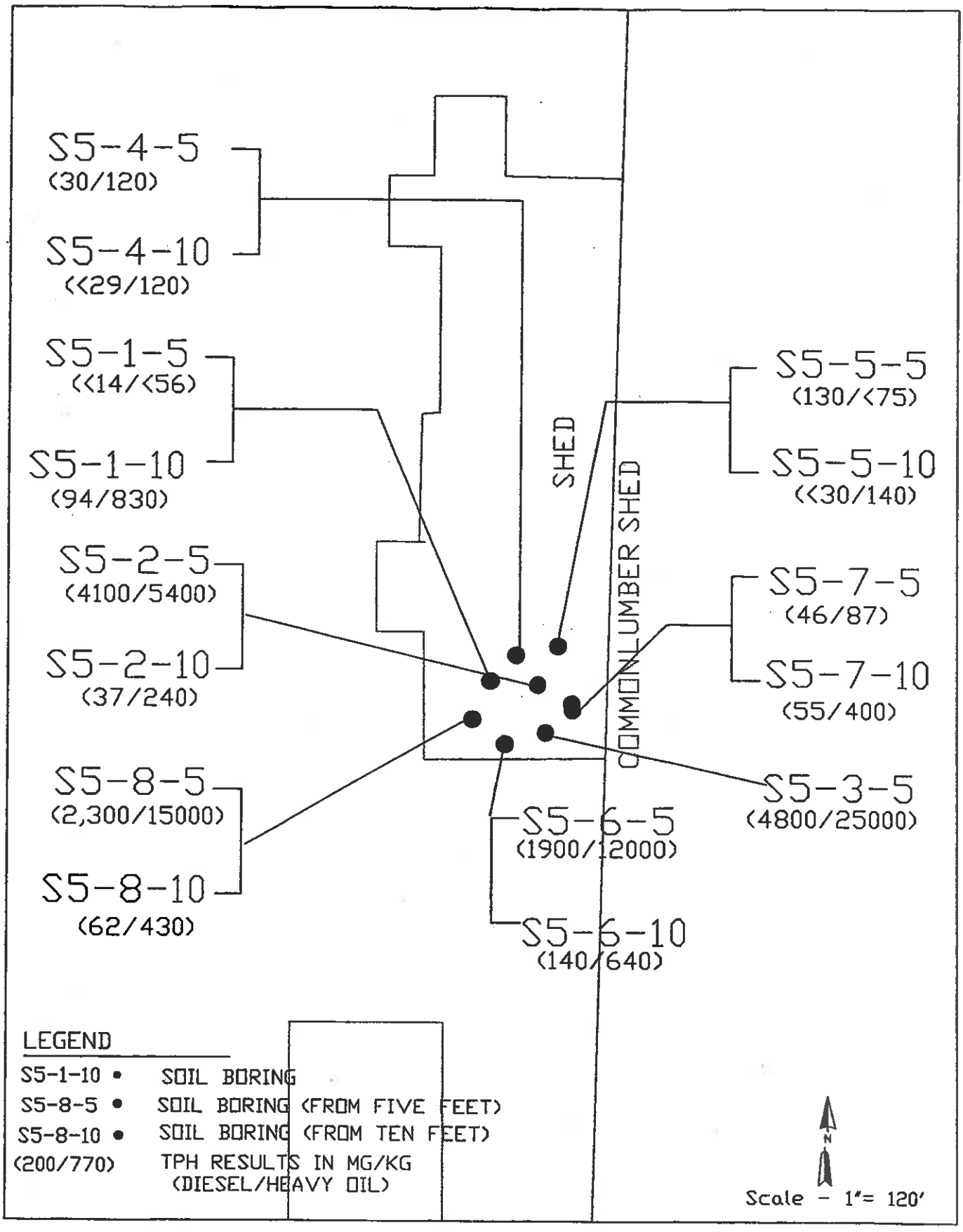
Delta Environmental Consultants, Inc.	TITLE: TRANSFORMER T-18 AREA (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	FIGURE NO.: 6
		DATE: 06/24/04	REV.:	



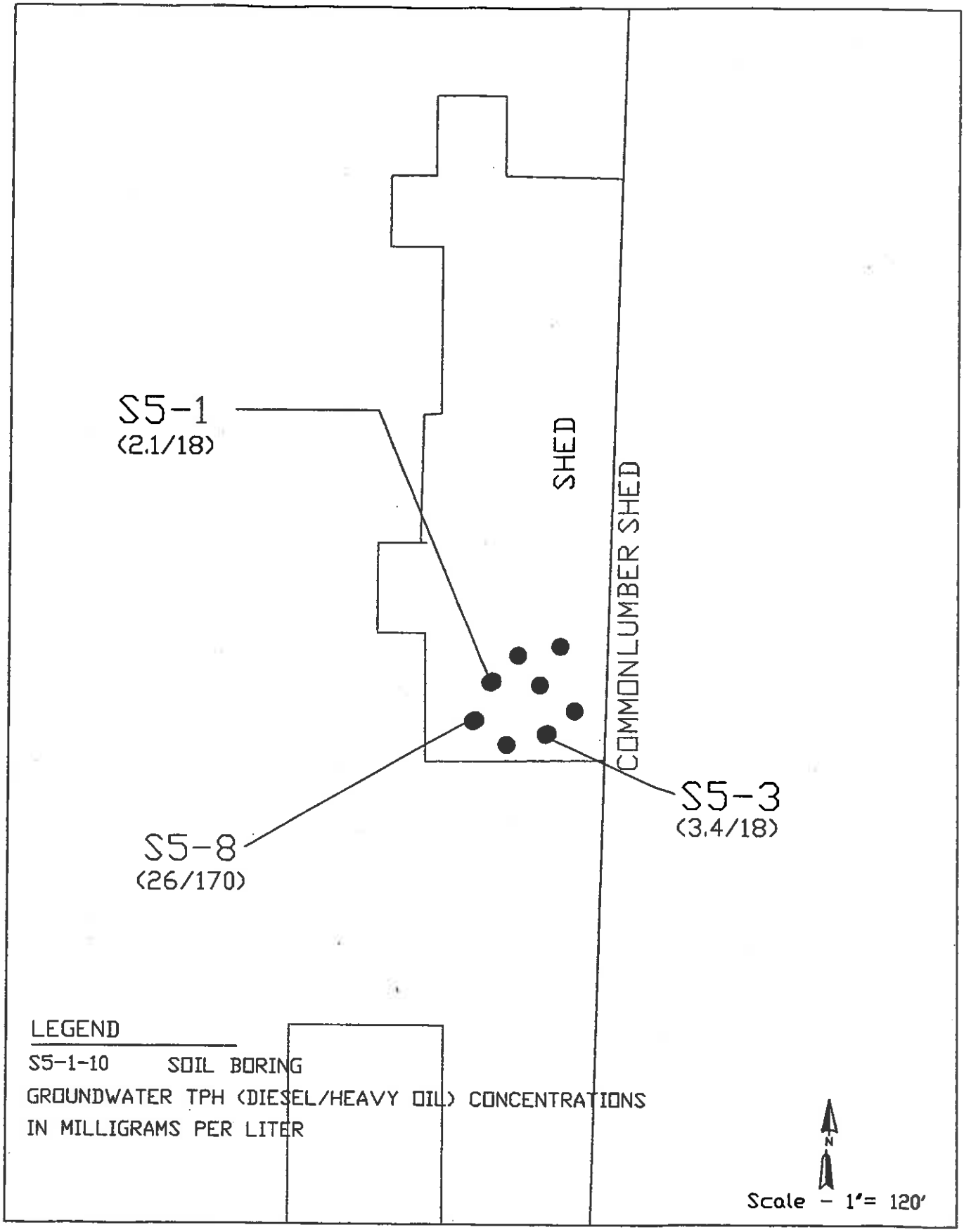
Delta Environmental Consultants, Inc.	TITLE: TRANSFORMER T-18 AREA (GROUND WATER) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	FIGURE NO.: 6A
		DATE: 06/24/04	REV.:	



Environmental Consultants, Inc.	TITLE: LUMBER STRAPPING AREA WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	
		DATE: 9/10/04	REV.:	FIGURE NO.: 7



Delta Environmental Consultants, Inc.	TITLE: LUMBER STRAPPING AREA WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	FIGURE NO.: 7A
		DATE: 9/10/04	REV.:	



Delta Environmental Consultants, Inc.	TITLE: LUMBER STRAPPING AREA WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: MRC	DES.:	PROJECT NO.: M003-106	
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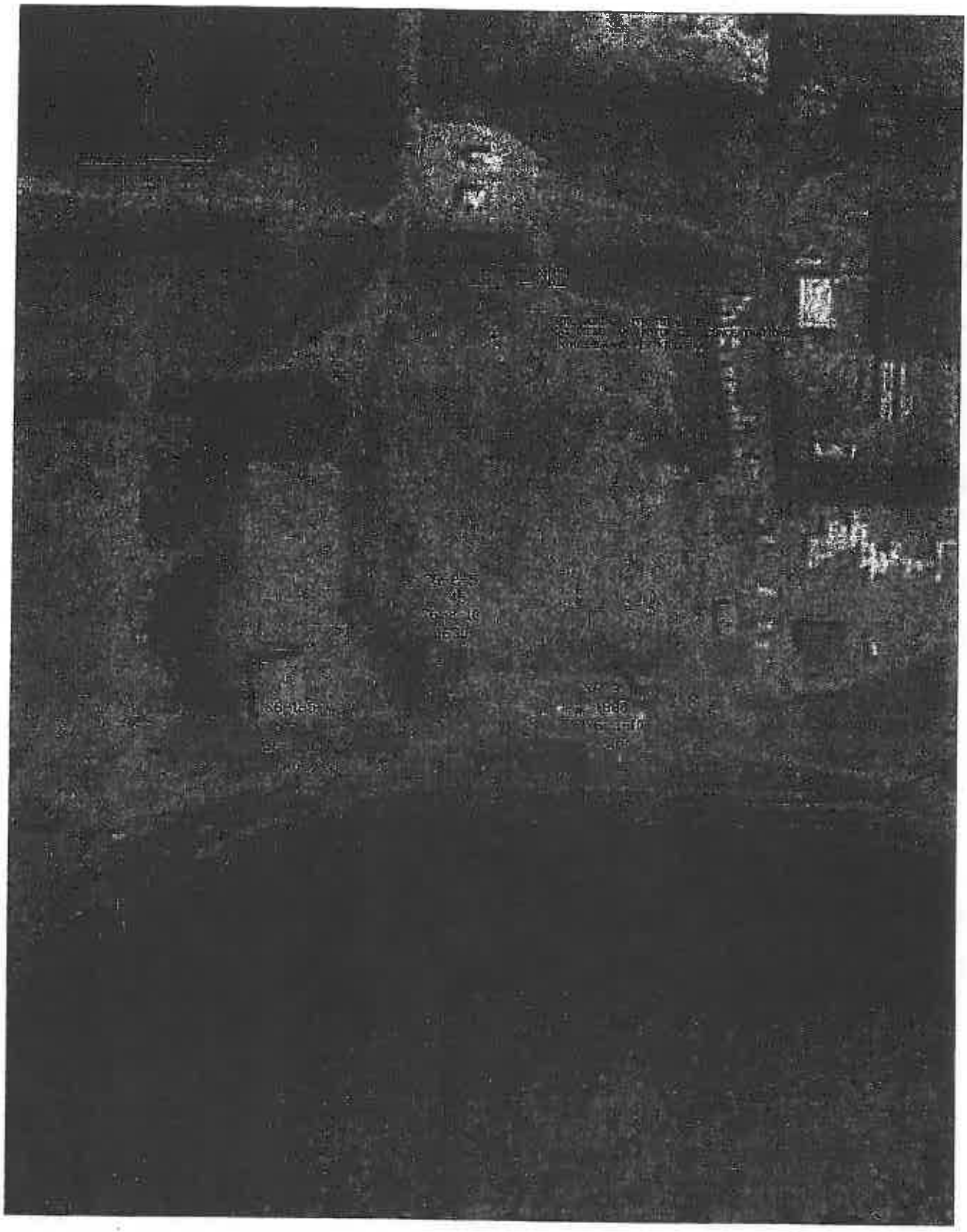

Delta Environmental Consultants, Inc.	TITLE: FORMER VEHICLE WASHPAD AREA (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
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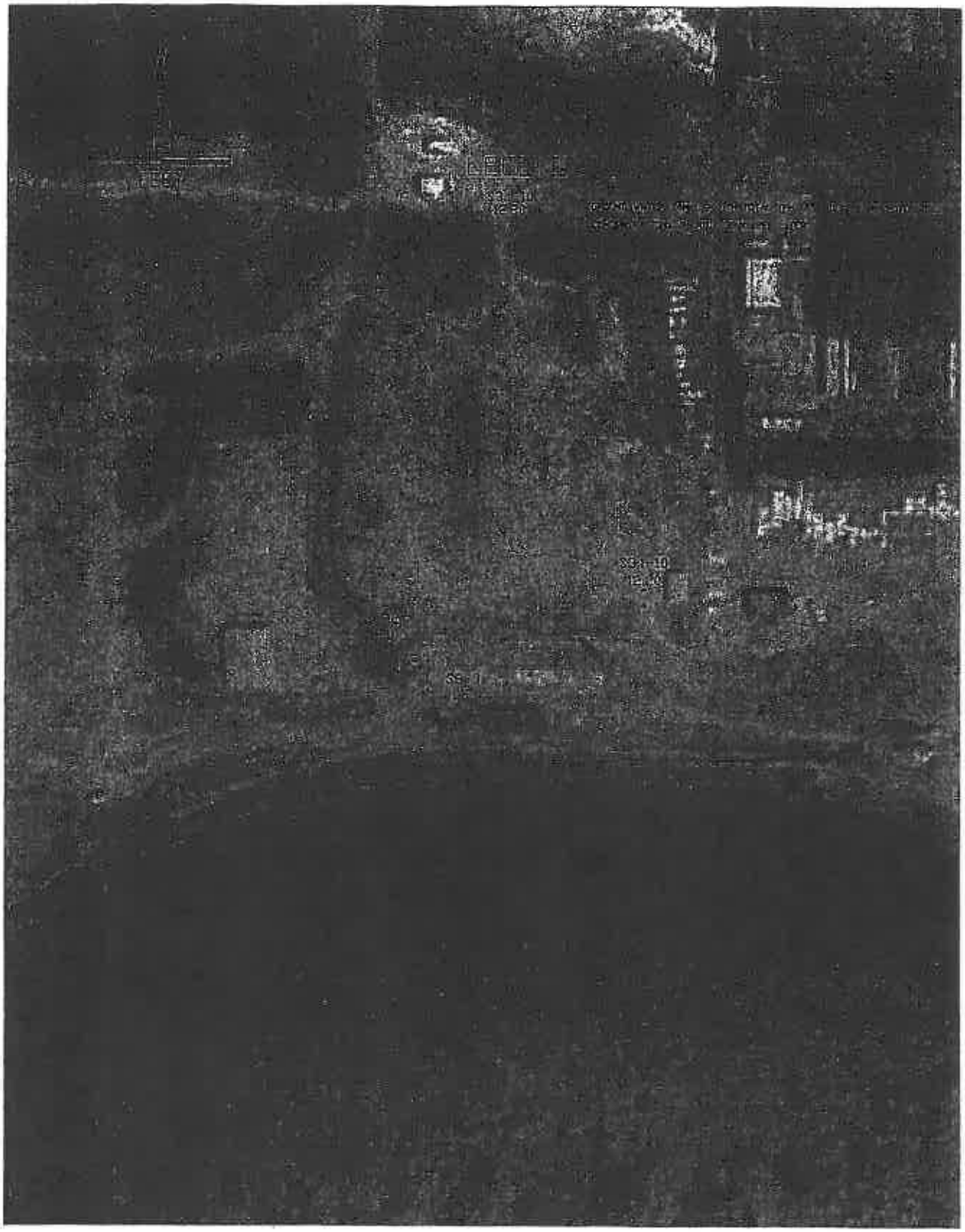
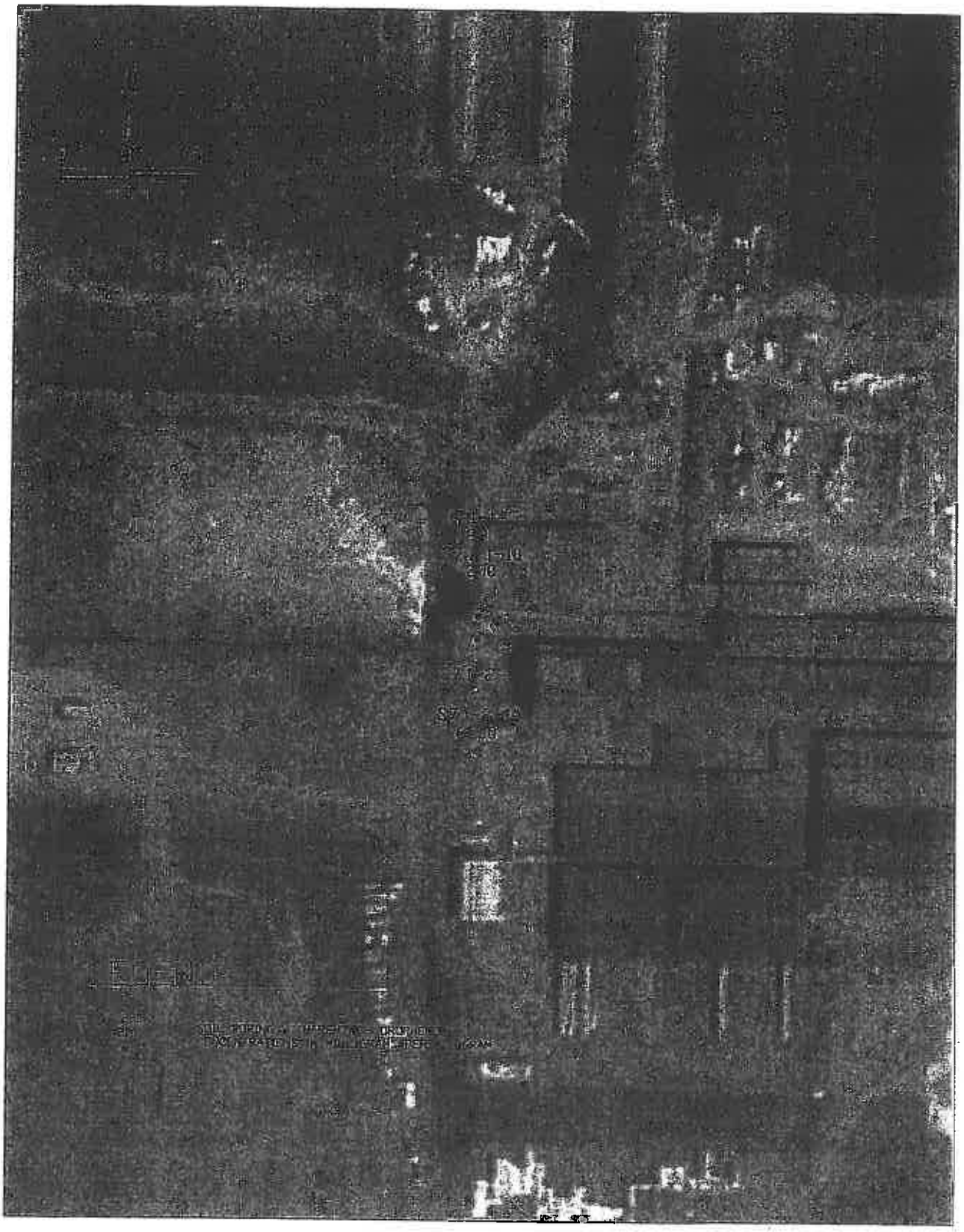


Delta Environmental Consultants, Inc.	TITLE: FORMER VEHICLE WASHPAD/LUBE OIL AST AREA (GROUND WATER) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	
		DATE: 06/24/04	REV.:	FIGURE NO.: 8B



Delta Environmental Consultants, Inc.	TITLE: DIP TANK AREA (1) (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	
		DATE: 06/24/04	REV.:	FIGURE NO.: 9

Delta Environmental Consultants, Inc.	TITLE: DIP TANK AREA (2) (SOIL) WEYERHAEUSER CASCADE LUMBER MILL SNOQUALMIE, WASHINGTON	DWN: AZ	DES.:	PROJECT NO.: M003-106
		CHKD:	APPD:	
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