ENVISION ENVIRONMENTAL, INC.

VOLUNTARY CLEANUP PROGRAM APPLICATION

and

PROPOSED SITE INVESTIGATION WORKPLAN

for

REXAM BEVERAGE CAN COMPANY
1220 N 2nd STREET
KENT, WA 98032

Site No. 35918556

Prepared for:

STATE OF WASHINGTON
Department of Ecology
Northwest Regional Office
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ENVISION ENVIRONMENTAL, INC.

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ENVISION ENVIRONMENTAL, INC.

1.0 INTRODUCTION

ENVISION ENVIRONMENTAL, INC. (ENVISION) has been retained by REXAM INC. (REXAM) to enroll the REXAM BEVERAGE CAN COMPANY (RBCC) facility (formerly known as American National Can Company) located at 1220 North 2nd Street in Kent, King County, Washington (Site) into the Washington State Department of Ecology (WDE) Voluntary Cleanup Program (VCP). The VCP filing will address soil and groundwater contamination identified at the Site during previous Phase I and Phase II Environmental Site Assessments (ESA). These previous assessments include the following:

- Earth Tech, Inc. (EARTH TECH) of Bellevue, WA removed a 12,000-gallon fiberglass underground storage tank (UST) in October/November 1998 for the facility. The UST was used to store used lubrication oil generated from the onsite aluminum can production process. The UST was located within a concrete vault on the north side of the facility near South 228th Street. Based upon visual inspection of the UST and on laboratory analytical data from post-excavation soil samples, EARTH TECH concluded that the UST did not adversely impact soils at the Site and that no further action was necessary.

- Eckland Consultants Inc. (ECKLAND) of Bellevue, WA conducted a Phase I ESA in February 2000 for Sun Life of Canada (US). ECKLAND recommended that a Phase II ESA subsurface investigation be conducted to include the collection of soil and groundwater samples at select areas identified as Recognized Environmental Conditions (RECs).

- PRK Environmental Consulting Services (PRK) of Portland, OR conducted a Phase II ESA in May 2001 for Gorge Leasing. As part of the Phase II ESA, PRK advanced eleven (11) soil borings near RECs identified by ECKLAND during its Phase I ESA. Soil samples were collected from these borings, as were grab groundwater samples from those borings that encountered groundwater. The soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and total petroleum hydrocarbons (TPH) via NWTPH - HCID.

- EARTH TECH of Long Beach, CA conducted a Limited Phase II ESA in September 2001 for RBCC. EARTH TECH used the PRK report as a basis for its further investigation of the Site. As part of its Phase II, EARTH TECH advanced fourteen (14) soil borings and installed seven (7) groundwater monitoring wells onsite. Soil and groundwater samples were analyzed for VOCs via USEPA Method 8260 and for TPH via the North West Region Method for Total Petroleum Hydrocarbons (NWTPH) – Diesel Fuel Extended Range; which is reported as NWTPH – Kerosene/Jet Fuel, NWTPH – Diesel, and NWTPH – Heavy Oil.

This initial filing with the WDE to enroll the Site into the VCP includes copies of the referenced ESAs and this proposed Site Investigation Workplan (SIW). This SIW has been prepared with the intent to better define the vertical and horizontal extent of the soil and groundwater

contamination identified during the previous ESAs. After completion of the contaminant delineation, the necessary data can be collected and analyzed to evaluate remedial options for the Site. As part of the enrollment into the VCP, REXAM will initiate the tasks detailed within this SIW after receiving comments from the WDE.

2.0 SITE DESCRIPTION

The Site is located on approximately six (6) acres of land within an industrial park on the south side of the O'Brien section of Kent at the intersection of South 228th Street and North 2nd Avenue. The Site is located in an area principally zoned for industrial and commercial use. See Figure 1 for the Site location and Figure 2 for Site layout. Two (2) 1-story buildings are located onsite. A 130,615-square foot manufacturing building is located on the northern portion of the property and a 100,000-square foot warehouse is located on the southern portion of the property. The two (2) buildings are connected by a covered walkway. A covered (with roof overhang) drum/chemical storage and pallet staging area is located between the two (2) buildings. An asphalt parking lot is located on the west side of the property, along with truck loading bays, four (4) exterior aboveground storage tanks (ASTs) and a wastewater treatment plant. The ASTs reportedly include two (2) 5,000-gallon varnish tanks, a 2,000-gallon caustic soda tank, and a 3,000-gallon lime slurry tank. North 2nd Avenue is located to the west of the parking area. An unused railroad siding and the AMTRAK/Burlington Northern Railroad tracks border the east side of the Site. A marshy area (possibly wetlands) is located on the east side of the manufacturing building and east of the railroad siding. The south side of the Site is also paved and a small creek is located along the south end of the property. The small creek meanders northward through the possible wetlands area on the east side of the Site and across South 228th Street. South 228th Street borders the north side of the property, which is landscaped with grass and shrubs.

The Site was reportedly developed by American National Can Company (ANCC) in 1970. The manufacturing building was constructed at that time and used for the manufacturing of aluminum beverage cans. The warehouse building was constructed between 1977 and 1985. Prior to 1970, the Site was reportedly vacant marsh and farmland. In 2000, REXAM purchased ANCC and the Site now operates as RBCC, a manufacturer of aluminum beverage cans.

The Site is generally flat with a very gentle slope to the north-northwest. There is a ridge with approximately 100-feet of relief about one (1) mile west of the Site.

3.0 GEOLOGIC SETTING

3.1 Regional Geology

The Site is located within the Coastal Plain Physiographic Province in King County, WA and is mapped within the USGS Renton Quadrangle Topographical Map. The Site is located within the Green River Valley. The area has been predominantly shaped by processes related to the Pleistocene ice sheets that covered the area at different times from 1.9 million years to 12,000 years ago. Subsequent alluvial processes have reworked the glacial sediments.

According to the Geologic Map of Washington, Miocene-aged and younger unconsolidated deposits consisting of mainly coarse-grained sands and gravels underlie the area. In an unpublished USGS report, the Kent Valley (Duwamish River Valley) is designated as a zone of volcanic flooding.

3.2 Site Geology

Previous borings conducted onsite indicate that there appears to be 3-feet to 6-feet of fill material (silt and sand) overlaying fine to very fine-grained, well-sorted sands and silts. The thickness of the unconsolidated material at the Site has not been determined.

4.0 HYDROGEOLOGIC SETTING

4.1 Surface Water

The Site is located in the Green River Valley of western Washington. The Green River, located approximately 1.5-miles to the west of the Site, flows north, in a meandering channel, to the Duwamish River at the north end of the valley. The Duwamish River flows into Elliot Bay at the south end of Puget Sound. Puget Sound is approximately five (5) miles west of the Site.

There is a small creek located at the southern end of the property. It reportedly flows northward along the east side of the property, through the marshy area (possible wetlands) between the railroad siding and the AMTRAK/Burlington Northern Railroad tracks. Across South 228th Street, the creek is deepened and channelized. Reportedly, the creek eventually discharges into the Green River.

Stormwater runoff on paved areas of the Site is directed to catchbasins that are reportedly connected to the City of Kent stormwater system.

4.2 Groundwater

Regionally, soils reportedly have a high hydraulic conductivity and low water holding capacity. Depth to the water table is typically more than 6-feet. The regional aquifer system is a prolific valley filled unconfined water table system that extends over 100-miles from Vancouver, Canada to Olympia, WA. The average thickness of the aquifer is approximately 2,000-feet. The general groundwater flow direction in the area is north/northeast.

Groundwater, at the Site, has been encountered between 6-feet to 7-feet below grade. The groundwater flow direction has not been definitively identified. There appears to be perched water located to the north of the manufacturing building at a depth of approximately 3.5-feet below grade. In its 2001 Phase II ESA, EARTH TECH stated that the groundwater flows to the north. However, the contaminant distribution identified to date may suggest a south or southeast groundwater flow direction toward the creek.

5.0 PREVIOUS INVESTIGATIONS

The following reviews the previous ESAs conducted onsite.

February 3, 1999 UST Site Assessment Closure Report

EARTH TECH was retained to remove a 12,000-gallon fiberglass UST in accordance with Washington State guidelines in October/November 1998. The Washington Administrative Code (WAC) Chapter 173-360-385 through 173-360-398, Chapter 197-11, and the WDE "Guidance for Site Checks and Site Assessments for Underground Storage Tanks" were followed during the UST removal and Site assessment activities. The WDE Site identification number for this facility is 7481.

According to Site records, the 12,000-gallon UST was installed between 1980 and 1981 on the north side of the Site. The tank was used to store used lubrication oil generated from the aluminum can production process. The UST was approximately 32-feet in length by 8-feet in diameter and was installed within an 8-inch thick concrete vault that provided secondary containment. The dimensions of the vault were 12-feet deep by 14-feet wide by 4-feet in length.

According to EARTH TECH, visual observations of the backfill pea gravel within the concrete vault suggested overfill of the UST and/or spillage during removal of the used oil over the years. The upper surface of the pea gravel was observed to be oil stained in areas around the fill ports. However, there was no evidence of oil stains outside of the vault, and no visual evidence of product spills or leakage from the aboveground piping.

The concrete vault was reported to be in excellent condition with no apparent cracks. The walls of the vault appeared to be sealed with rubber lining to prevent leakage between the vault seams. Liquid material was observed in the vault and was primarily used lubrication oil and water (from rain infiltration through uncovered orifices on the top panels of the vault and not from groundwater infiltration).

Since the UST was located inside a concrete vault, soil samples could not be collected from directly below the UST. EARTH TECH discussed an alternative sampling plan with John Bails of WDE. The alternative sampling plan consisted of three (3) Geoprobe borings located outside of the vault area and to a depth equivalent to the bottom of the UST. A soil sample was collected from each boring at a depth of 12-feet below grade. Each sample was analyzed for total petroleum hydrocarbons (TPH) using WTPH-HCID and TCLP lead. In addition, all soil samples were field screened for volatile organic compounds using a PID instrument. No detections were noted on the PID. Laboratory analytical results indicated no detection of TPH or lead in any of the three (3) soil samples.

EARTH TECH removed the contaminated backfill material (approximately 180-tons) for disposal at Rabanco, Inc. in Roosevelt, WA. The interior of the vault was also cleaned and the residual waste material was disposed at Marine Vacuum Service in Seattle, WA.

EARTH TECH concluded that the removed UST did not adversely impact soils at the Site and no further action was necessary.

A complete copy of the EARTH TECH February 1999 UST Site Assessment Closure Report can be found in Appendix 1.

February 2000 Phase I ESA

Eckland Consultants Inc. (ECKLAND) of Bellevue, WA conducted a Phase I ESA in February 2000 for Sun Life of Canada (US). ECKLAND conducted the Phase I ESA in general accordance with ASTM E 1527-97 – Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Based on its Site observations, interviews, and review of available documents and the database records search, ECKLAND identified the following RECs at the Site:

- Based on the facility construction date of 1970, ECKLAND identified suspected asbestos containing materials (ACM) at the Site. ECKLAND recommended that an Asbestos Operations and Maintenance (O&M) Program be implemented.

- The adjoining property to the south (Protective Coatings Inc.) had three (3) concrete USTs, reportedly built in 1964, which contained hazardous substances. Considering the age of the tanks, the materials contained, and the fact that these tanks are upgradient from the Site, ECKLAND expressed concern that any leakage from the tanks may have impacted the Site. Due to this, ECKLAND recommended limited Phase II soil and groundwater testing near the property line to determine if contamination of the Site has occurred.

- Oil discharge was noted through the exterior walls of the manufacturing building via compressor bleed lines (blow down lines). These occurred at three (3) locations, two (2) on the east side of the building and one (1) on the north end of the west wall of the building. ECKLAND recommended that a limited Phase II subsurface investigation of soil and groundwater be conducted in all three (3) locations.

- Possible oil leakage from the concrete underground oil/water separator tanks, and from the cracks and bolt holes in the concrete floors near the cupping, baling, and body-maker machines were identified. ECKLAND recommended that a limited Phase II subsurface investigation of soil and groundwater be conducted in these areas.

- Several elements of the onsite wastewater treatment plant appeared to be corroded, damaged or leaking, possibly due to poor housekeeping. ECKLAND recommended that a maintenance plan be implemented for the wastewater treatment plant. An inspection of all equipment and structures within the wastewater treatment plant was recommended. Based on the inspection results, immediate repairs or replacement of affected equipment should be conducted.

- Reportedly, two (2) USTs were removed from the Site. A 12,000-gallon process oil tank was removed in 1997 and a 600-gallon waste oil tank was removed in 1998. The location of these tanks and documentation on the removal activities was not provided to ECKLAND. ECKLAND recommended that this information be obtained.

- ECKLAND did not receive any information from the facility regarding the procedures for hazardous materials storage, usage and disposal. ECKLAND recommended that this information be obtained.

- ECKLAND recommended that the metal shelving for ink storage be braced for seismic occurrences, and that vertical flanges be installed on the edges of the shelves and periodically across the shelving to more adequately restrain the 20-lbs. ink cans.

- The floor drains and trench drains in the acid and antimicrobial area reportedly connect to the onsite wastewater treatment plant. Concrete cracks and joints were observed nearby and some of the concrete within the storage area was damaged by corrosive chemicals. ECKLAND recommended that a limited Phase II subsurface investigation of soil and groundwater be conducted near the floor drains in the damaged trench drains.

- The acid and antimicrobial compound containers (tanks and drums) were stored near the center of the facility in a marked area that did not have any secondary containment. ECKLAND recommended that secondary containment be installed in this area.

A complete copy of the ECKLAND February 2000 Phase I ESA report can be found in Appendix 2.

It should be noted that the removal dates of the USTs provided in the ECKLAND report are not accurate. As reviewed in the EARTH TECH February 1999 UST Site Assessment Closure Report, a 12,000-gallon waste lubrication oil UST was removed in late-1998. It is believed that the 600-gallon (approximate capacity) UST referenced in the ECKLAND report is actually a WDE exempt (non-regulated) tank and is utilized as a spill tank for wastewater generated onsite.

May 2001 Phase II ESA

PRK Environmental Consulting Services (PRK) of Portland, OR conducted a Phase II ESA in May 2001 for Gorge Leasing. As part of the Phase II ESA, PRK advanced eleven (11) soil borings near RECs identified by ECKLAND during its Phase I ESA. Soil samples were collected from some of these borings, as were grab groundwater samples from those borings that encountered groundwater. The soil and groundwater samples were analyzed for VOCs, SVOCs, metals, and TPH via NWTPH-HCID.

Depth of the borings varied from 1-foot to ten 10-feet below grade (bg). The soil cores recovered were screened using a portable organic vapor analyzer equipped with a photo-ionization detector (PID). Six (6) borings were advanced below the water table and a temporary

well point was installed, allowing for a grab sample of the groundwater to be recovered. The location of each boring is shown on Figure 3. A summary of the key findings in the soil investigation is provided on Figure 5. Groundwater results are summarized on Figure 6. The following summary of each boring is provided:

B1 This boring was sited at the north end of the manufacturing facility near the waste oil processing area and terminated at 5-feet bg. Perched water was detected at approximately 3.5-feet bg. A soil sample was recovered above the water and a groundwater sample was recovered from the perched water, according to the boring log. However, it does not appear that the soil sample was transported to the laboratory and analyzed. The soil at 3.5-feet bg had a slight sheen. Elevated levels of diesel range (3.4 mg/l) and oil range (19 mg/l) TPHs were detected in the groundwater sample, along with a number of chlorinated volatile organic compounds, including vinyl chloride (3.0 µg/l); chloroethane (45 µg/l); 1,1,1-trichloroethane (170 µg/l); and trichloroethene (1.6 µg/l). The vinyl chloride, chloroethane and TPH concentrations exceeded their respective USEPA Region IX Preliminary Remediation Goals (PRGs) and WA Method A Cleanup Levels.

B2 This boring was also sited at the north end of the manufacturing facility and terminated at 3.5-feet. A soil sample was recovered from 3.5-feet bg, according to the boring log. However, it does not appear that the soil sample was transported to the laboratory and analyzed. No groundwater sample was recovered from this boring.

B3 This boring was located on the west side of the property near the wastewater treatment plant and terminated at 10-feet bg. There was a 4-inch thick zone of stained soil present at approximately 7- to 8-feet bg. A soil sample was recovered from 2- to 4-feet bg where the soil was green-gray in color. This soil sample reported slightly elevated concentrations of chloroethane (3.9 µg/Kg), 1,1-dichloroethane (11 µg/Kg), and phenol (1,200 µg/Kg), none of which are above the applicable standards. Chromium was reported as total chromium (41 mg/Kg). The total chromium result is above the Method A Cleanup Level for hexavalent chromium, but there was no data provided to differentiate the hexavalent chromium in the total chromium reported. No groundwater sample was recovered from this borehole.

B4 This boring was located next to a catchbasin in the parking lot west of the manufacturing building. The boring was terminated at 10-feet bg. Groundwater was encountered at approximately 6-feet. Soil from the 3- to 6-feet depth interval had an unidentified odor. No soil sample was recovered from the boring. A groundwater sample was recovered. The groundwater sample contained several chlorinated organics at concentrations above USEPA Region IX PRGs and WA Method A Cleanup Levels. These included vinyl chloride (700 µg/l); chloroethane (5,900 µg/l); 1,1-dichloroethene (1,800 µg/l); methylene chloride (73 µg/l); 1,1,1-trichloroethane (27,000 µg/l); 1,2-dichloroethane (87 µg/l); trichloroethene (83 µg/l); 1,1,2-trichloroethane (7.2 µg/l); tetrachloroethene (29 µg/l); 1,1-dichloroethane (24,000 µg/l); cis 1,2-dichloroethene (110 µg/l); and benzene (2.3 µg/l). Diesel range (0.84 mg/l) and oil range (1.9 mg/l) TPHs were also detected in

the sample. The diesel and oil range TPHs were reported above the respective MTCA Method A Cleanup Levels. These contaminant concentrations may be indicative of a dense non-aqueous phase liquid (DNAPL) near this sampling point.

B6 This boring was sited adjacent to the secondary containment area around two (2) ASTs. The tanks reportedly contained lime and caustic soda. There was a milky fluid observed in the containment area. When the boring was complete a PID reading of the vapors at the top of the boring fluctuated between 40 and 3,000 response units. The boring was terminated at 9-feet bg and groundwater was encountered at 5-feet bg. A soil sample was recovered from 3- to 5-feet bg. No VOCs were detected in this sample above applicable standards. Elevated levels of total chromium (25 mg/Kg), phenol (550 µg/Kg), and benzoic acid (310 µg/Kg) were reported. None of these concentrations were above cleanup levels except for the chromium concentration which was above the Method A Cleanup Level for hexavalent chromium, but there was no data provided to differentiate the hexavalent chromium in the total chromium reported. A groundwater sample was recovered and the only compound of concern above regulatory action levels was vinyl chloride (3.5 µg/l). A slight exceedance of arsenic (0.046 µg/l compared with 0.045 µg/l for the USEPA Region IX PRGs) was also noted.

B9 The boring was located in an area with two (2) concrete spill containment "trays". The total depth of the boring was 9-feet bg and groundwater was encountered at 7-feet bg. Fill material containing metal cuttings and organic carbonaceous material was found from 3- to 5-feet bg. A soil sample was recovered from 5- to 7-feet bg. No VOCs were detected in this sample above applicable standards. Elevated levels of total chromium (26 mg/Kg), phenol (420 µg/Kg), and benzoic acid (120 µg/Kg) were reported. None of these concentrations were above regulatory cleanup levels except for the total chromium concentration which was above the Method A Cleanup Level for hexavalent chromium, but there was no data provided to differentiate the hexavalent chromium in the total chromium reported. A groundwater sample was recovered and the only compounds of concern above regulatory action levels were vinyl chloride (0.36 µg/l) and oil range TPH (0.72 mg/l). Other VOCs that were detected but did not exceed respective cleanup levels included chloroethane (3.1 µg/l); 1,1-dichloroethene (2.4 µg/l); 1,1-dichloroethane (39 µg/l); cis 1,2-dichloroethene (0.086 µg/l); 1,1,1-trichloroethane (67 µg/l); trichloroethene (0.12 µg/l); toluene (0.22 µg/l); and 1,2,4-trimethylbenzene (0.15 µg/l).

B10 This boring was installed as the upgradient boring. It was located at the southwest margin of the property. Two (2) rectangular patches were present in the asphalt near the boring. The total depth of the boring was 9-feet bg. Groundwater was encountered at approximately 6-feet below grade. A PID reading of 200 response units was recorded above the boring. A soil sample was recovered from 6- to 9-feet bg. The soil sample contained very low levels of toluene (1.7 µg/Kg), and some minor concentrations of other VOCs and SVOCs. Total chromium was reported at a concentration of 22 mg/Kg, which was above the Method A Cleanup Level for hexavalent chromium, but there was no data provided to differentiate the hexavalent chromium in the total chromium reported. A groundwater sample contained trace amounts of benzene (0.1 µg/l), toluene (0.26 µg/l),

total xylenes (0.253 µg/l), and 1,1,1-trichloroethane (0.15 µg/l); all below the respective VOC regulatory levels. Bis (2-ethylhexyl) phthalate was reported at a concentration of 14 µg/l, which exceeded the respective USEPA Region IX PRG.

B13 This boring was located near the drum/chemical storage area, next to a catchbasin. A vapor reading, taken at the top of the boring after drilling, set the PID to "over-range" indicating elevated vapor concentrations in the boring. A soil sample was recovered from 6- to 9-feet bg. Low levels of VOCs were detected in the soil sample from this boring. No VOCs were reported above applicable standards. No other contaminants of concern were reported.

B15 The boring was sited on the east side of the manufacturing building adjacent to a pipe and hose protruding from the building. The pipe and hose were reportedly blow-down fittings from an air compressor system. The top 2-feet of the boring passed through crushed stone (ballast) of the railroad siding. Free product (oil) was detected in the ballast. The boring was advance to 7-feet bg. Groundwater was encountered at approximately 5-feet bg. A soil sample was recovered from 3- to 5-feet bg. Low levels of VOCs were detected in the soil sample; none of which exceeded applicable standards. Total chromium was also detected at 25 mg/Kg. The total chromium result is above the action level for hexavalent chromium, but there was no data provided to differentiate the hexavalent chromium in the total chromium reported. Several base neutral compounds including phenol (600 µg/Kg); 3- & 4-methylphenol (25 µg/Kg); naphthalene (190 µg/Kg); 2-methylnaphthalene (250 µg/Kg); 4-nitrophenol (230 µg/Kg); N-nitrosodiphenylamine (750 µg/Kg); phenanthrene (87 µg/Kg); fluoranthene (22 µg/Kg); pyrene (170 µg/Kg); bis(2-ethylhexyl)phthalate (14,000 µg/Kg); di-n-octhylphthalate (900 µg/l); and dibenz(a,h)anthracene (66 µg/Kg) were also detected in the soil sample. Only pyrene was reported to exceed its respective regulatory cleanup level. A groundwater sample was also recovered and analyzed. The detected oil range TPH value (0.74 mg/l) is above the MTCA Method A Cleanup Level. Low levels of several volatile organic compounds were also detected, none above regulatory limits except for vinyl chloride (0.63 µg/l) and chloroethane (5.8 µg/l). Several SVOCs were also detected in the groundwater sample, however only bis (2-ethylhexyl) phthalate reported at a concentration of 16 µg/l and pyrene reported at a concentration of 0.18 µg/l, exceeded the respective regulatory cleanup levels.

B17 This boring was located inside the manufacturing building near the northern end of the building adjacent to a subsurface oil/water containment/processing vault. The vault is used in the recovery of lubrication oil from the manufacturing process. The total depth of the boring was 2.1-feet. There was a strong petroleum odor and discoloration in the soil. A soil sample was recovered from 18- to 25-inches bg. Oil range (5,900 mg/Kg) and diesel range (1,800 mg/Kg) TPHs were detected. Only the oil range TPH was found in excess of the MTCA Method A Cleanup Levels. A wide range of VOCs was detected. Tetrachloroethene (110 µg/Kg) was detected at a level above the Method A Cleanup Levels. The sample also contained total chromium at 59 mg/Kg. The total chromium result is above the action level for hexavalent chromium, but there was no data provided

to differentiate the hexavalent chromium in the total chromium reported. Low levels of SVOCs were also detected including bis(2-ethylhexyl)phthalate (1,000 µg/Kg); 3 & 4-methylphenol (1,900 µg/Kg); and naphthalene (350 µg/Kg). No groundwater sample was collected at this location due to refusal.

B18 This boring was located within the manufacturing building near B17 but was unable to penetrate the floor and was abandoned without sampling.

PRK concluded that the Phase II Investigation consisted of a sampling program at selected locations of interest. Eleven (11) locations were sampled during the investigation, although additional locations were intended to be sampled but had to be eliminated due to time constraints. According to PRK, significant environmental impacts were encountered during the Phase II Site activities. Of primary concern to PRK were the following:

- High levels of chlorinated VOCs are present in the vicinity of the boring B4 in the asphalt-paved area. The source of the release may be the nearby catchbasin or other up-gradient location on the Site.

- Vinyl chloride was detected in several of the groundwater samples. PRK stated that because of its high toxicity and presence in concentrations exceeding MTCA standards and USEPA PRGs, additional characterization of its distribution is recommended.

- Free petroleum product is present at the east side of the Site, along the railroad spur. PRK stated that ground staining and apparent distressed vegetation suggest larger impacts are present in this area than indicated by the analytical data for B15.

- PRK added that significant TPH impacts were detected under the concrete slab floor of the facility.

PRK recommended additional delineation of the detected contamination. A complete copy of the PRK Phase II ESA report can be found in Appendix 3.

September 2001 Phase II ESA

Earth Tech, Inc. (EARTH TECH) of Long Beach, CA conducted a Limited Phase II ESA in September 2001 for RBCC. EARTH TECH used the PRK report as a basis for its further investigation of the Site. EARTH TECH commented that during the collection of groundwater samples during the PRK Phase II ESA, EARTH TECH observed poor QA/QC procedures in that proper decontamination was not performed between sampling locations by PRK. According to EARTH TECH, the potential was high for cross-contamination from one (1) sampling location to another during the PRK assessment, because the boring where the highest concentration of contaminants was measured was sampled first by PRK. Thus, all subsequent samples may have been contaminated by the sampling equipment.

As part of its Phase II, EARTH TECH advanced fourteen (14) soil borings and installed seven (7) groundwater monitoring wells onsite. Soil and groundwater samples were analyzed for VOCs via USEPA Method 8260 and for TPH via the North West Region Method for Total Petroleum Hydrocarbons (NWTPH) – Diesel Fuel Extended Range; which is reported as NWTPH – Kerosene/Jet Fuel, NWTPH – Diesel, and NWTPH – Heavy Oil.

The borings were clustered around four (4) PRK borings, B1, B4, B9, and B15. See Figure 4 for boring and well locations. The borings ranged in depth from 4-feet to 13-feet bg. Soil samples were recovered from 4.5- to 5-feet bg. The monitoring wells were drilled to either 15- or 18-feet bg.

Borings ETB-1 through ETB-4 were clustered around PRK Boring B9. The soil samples contained no detectable TPHs in the diesel, kerosene/jet fuel and oil ranges. The soil sample from ETB–1 contained elevated concentrations of toluene (17,000 µg/Kg), ethylbenzene (250 µg/Kg), and total xylenes (1,200 µg/Kg), all below the respective regulatory guidelines. Monitoring well ETMW-2 was completed in or adjacent to the former location of PRK Boring B9. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in the groundwater sample.

Borings ETB-5 through ETB-8 were clustered around PRK Boring B4. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in soil. Well ETMW-1 was installed in this area adjacent to the former location of PRK Boring B4. No detectable diesel, kerosene/jet fuel and oil range TPH levels were reported in the groundwater sample. However, the groundwater sample from this well did contained several VOCs. The following compounds were detected above regulatory guidelines: vinyl chloride (1,900 µg/l); 1,1-dichloroethene (2,550 µg/l); methylene chloride (120 µg/l); 1,1,1-trichloroethane (32,000 µg/l); 1,2-dichlorethane (120 µg/l); trichloroethene (110 µg/l); toluene (150 µg/l); 1,1,2-trichloroethane (12 µg/l); and tetrachloroethene (60 µg/l). Several compounds were detected that do not have values listed in either the WA MTCA Method A or USEPA MCLs, most notably, 1,1-dichloroethane (63,000 µg/l) and chloroethane (12,000 µg/l).

Borings ETB-9, ETB-10 and ETMW-6 were clustered around PRK Boring B1. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in soil. Well ETMW-6 was installed in this area. The groundwater sample from ETMW-6 contained methylene chloride (48 µg/l) above the regulatory standards. Several compounds were detected that do not have values listed in either the WA MTCA Method A or USEPA MCLs, most notably, chloroethane (6,300 µg/l).

Borings ETB-11 through ETB-14 were clustered around PRK Boring B15. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in soil. Monitoring well ETMW-4 was installed in this area. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in groundwater.

Monitoring well ETMW-3 was installed in an attempt to monitor upgradient groundwater quality. This well was installed south of the warehouse building. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in groundwater.

Monitoring well ETMW-5 was installed in an attempt to monitor downgradient groundwater quality. This well was installed on the north side of the manufacturing building, near the northern property boundary. No diesel, kerosene/jet fuel and oil range TPH levels were reported in groundwater. Several VOCs were detected that do not have values listed in either the WA MTCA Method A or USEPA MCLs, most notably, chloroethane (4,000 µg/l).

Monitoring well ETMW-7 was installed near the western property boundary in an attempt to monitor conditions upgradient of ETMW-1. No detectable VOCs or diesel, kerosene/jet fuel and oil range TPH levels were reported in groundwater.

EARTH TECH concluded the following:

- Petroleum hydrocarbon-impacted soil apparently is located in the vicinity of the oil/water separator beneath the slab at the north end of the manufacturing building (near B17). The impacted soil does not appear to extend beyond the building slab.

- The railroad base material (on the east side of the manufacturing building) is impacted with total petroleum hydrocarbons in the vicinity of the former compressor blow down line (the blow down line has been removed). These hydrocarbons do not appear to have penetrated the underlying soil, and appear to be confined to an area of approximately 20-feet by 10-feet. The railroad base is approximately 2-feet deep in this area. Note that no groundwater impact was identified in this area.

- Groundwater impacted with VOCs above the Washington State MTCA Method A and USEPA MCL levels is located west of the wastewater treatment facility (ETMW-1) and at the well downgradient of the aluminum bailer and former borehole B1 (ETMW-6).

- No current source of the VOCs identified in the groundwater was found, although historical onsite operations reportedly may have included the use of materials containing chlorinated compounds.

A complete copy of the EARTH TECH Phase II ESA report can be found in Appendix 4.

Based upon the Phase II data, it is apparent that the source of the chlorinated VOCs has not been determined. In addition, the extent of the petroleum hydrocarbons detected in B17 and B15 has not been fully evaluated. Lastly, the total chromium result detected in soil samples collected during the PRK Phase II activities is reported as being above the action level for hexavalent chromium. However, since there was no data provided to differentiate the hexavalent chromium in the total chromium reported, this possible exceedance must be further evaluated through additional sampling to differentiate between the chromium species.

Based on this information four (4) areas of contamination have been identified onsite. These areas include: free phase oil near PRK borings B17 and B15; chlorinated solvent contamination in the groundwater near B4 (possible DNAPL) and in the soil near B17; the high organic vapor reading and trace amounts of benzene, toluene and total xylenes in the groundwater near B10 and the rectangular patches in the asphalt; and the chlorinated groundwater contamination in and around the area of the manufacturing building.

6.0 PROPOSED INVESTIGATION

ENVISION has developed a phased investigation approach that will delineate the contamination at the Site. The phases are designed to focus quickly on the areas of concern while providing a more comprehensive evaluation of the Site.

6.1 Goals

The goals of the proposed investigation are to delineate the vertical and horizontal extent of contamination identified in the Phase II investigations performed by PRK and EARTH TECH; to determine the groundwater flow direction; and to gather the data necessary to evaluate the viable remediation options for the Site. To accomplish these goals in a cost-effective manner, ENVSION has developed a staged Site investigation program.

6.2 Stage 1 - Delineation Screening and Interim Remedial Measures

During this stage of the investigation ENVISION plans to update the status of all RECs identified during the February 2000 ECKLAND Phase I ESA; determine the extent of the chlorinated contamination; determine groundwater flow direction; determine the magnitude of the free phase oil contamination at the Site; address the free phase oil contamination detected near PRK Boring B15; determine Site-specific geology including the possibility of a confining layer at depth; and evaluate the potential for impact to deeper water-bearing zones. To accomplish these goals ENVISION will perform the following tasks:

- Inspect for integrity all floors, floor/wall joints and floor seams in all liquid usage/storage areas to determine if possible pathways to the subsurface exist for any material that may be released onto the floor.

- Inspect for integrity all subsurface structures including trenches, sumps, vessels, oil/water separators, etc. If integrity is questionable, subsurface sampling will be conducted for contaminants of concern in conjunction with the activities identified below.

- Install six (6) to eight (8) test areas at the Site through the use of either test pits, test trenches or clustered (multiple) soil borings (with a limited access geoprobe rig) extended to the top of groundwater to help evaluate the extent of free phase petroleum hydrocarbons found in PRK Borings B15 and B17 during the PRK Phase II. The proposed locations of these test areas are shown on Figure 7. All test areas will be cleared with Site personnel in order to avoid any disturbance to onsite operations. The presence or absence of free phase petroleum hydrocarbons will be evaluated in each area. As the surface penetrations progress, an ENVISION geologist will observe the recovered soil and screen the soil using a PID. Soil lithology logs will be prepared for each test area. At a minimum, one (1) soil sample will be recovered from each test area from a selected interval based on lithology, field observations, and readings on the PID. The sample will be analyzed for total petroleum hydrocarbons using the NW TPH Method, SVOCs using USEPA Method 8270, priority pollutant metals including

hexavalent and total chromium via applicable USEPA methods, and VOCs using USEPA Method 8260.

- In order to provide a cost-effective general delineation of the chlorinated solvent contamination, a passive soil gas survey will be performed at the Site. Gas collection samplers will be installed on a 50-foot on-center grid in the area of the manufacturing building and in the area near PRK Boring B10 and the two (2) rectangular patches in the asphalt highlighted by PRK. The proposed locations of the survey points are shown on Figure 8. Approximately one-hundred (100) samplers will be installed. The samplers will be installed at a depth of 2-feet below grade and will be recovered after one (1) week (or another specified timeframe based upon the type of samplers and collection media to be used). All sample locations will be cleared with Site personnel in order to avoid any disturbance to onsite operations. All locations will be flush-mount with grade and will not cause any obstructions to the manufacturing areas. The volatile organics that adsorb to the sampler will be extracted and analyzed for VOCs using USEPA Method 8260, providing a relative concentration and distribution of the contaminants. These data will be used to guide the installation of soil borings to recover soil samples as part of the second stage of the investigation.

- The free phase oil contamination detected within the railroad base material on the east side of the manufacturing building, near PRK Boring B15 will be addressed through an interim remedial measure. This interim measure will include the excavation of the impacted area, which was estimated by EARTH TECH to be confined to an area of approximately 20-feet by 10-feet by 2-feet deep. After excavating the impacted soil and base material, any free phase oil encountered will also be recovered. The appropriate number of post-excavation soil samples will be collected and analyzed for total petroleum hydrocarbons using the NW TPH Method, SVOCs using USEPA Method 8270, priority pollutant metals including hexavalent and total chromium via applicable USEPA methods, and VOCs using USEPA Method 8260. Based on the information collected through this interim remedial measure, additional remedial actions may be needed during the second stage of the investigation. All generated waste will be properly characterized and disposed of according to applicable local, state and federal requirements.

- Five (5) monitoring wells (four (4) shallow and one (1) deep) will be installed in the locations indicated on Figure 9. The elevation and location of all onsite wells will also be surveyed. The seven (7) wells installed by EARTH TECH and the five (5) proposed new wells will be sampled: to provide the data necessary to evaluate groundwater flow direction in the shallow groundwater zones; to provide a data point for evaluating deeper groundwater conditions; and to confirm the data recovered from the groundwater samples in the Phase II investigations. The wells will be installed by a State of Washington licensed well driller using a cone penetrometer with the capability to measure pore pressure. The four (4) shallow wells (MW-101 through MW-104) will be advanced to 15-feet below grade. A 2-inch diameter well will be constructed using a 10-foot long well screen (PVC material of construction) and sufficient riser to allow proper

construction of the wells. All wells will be completed as flush-mount structures. The annular space in the bottom 11-feet of the well will be filled with sand, sized to match the well screen and geology. Above the sand a 2-foot bentonite plug will be installed with neat grout to grade level. Well logs will be completed for each monitoring well. The wells will be developed until the water is free of sediment. The wells will be allowed to stabilize for a minimum of two (2) weeks prior to purging and sampling the groundwater. Purging will be performed according to the USEPA low-flow purging technique using a peristaltic pump set to recover no more than 0.5-liters per minute. Completion of the purging will be determined by recovery of a minimum of three (3) well volumes of groundwater and the stabilization of pH, dissolved oxygen (DO), turbidity, and temperature as measured in a flow-through chamber placed in-line with the pump. The groundwater samples will be recovered from the tubing prior to the chamber after the completion of the purging process. All groundwater samples recovered will be analyzed for VOCs using USEPA Method 624, priority pollutant metals (total and dissolved) plus hexavalent chromium, plus the following geochemical parameters: pH, Eh, DO, nitrates, nitrites, sulfates, sulfides, total iron, ferric iron, methane, and carbon dioxide.

The fifth well (MW-201) will be installed to sample groundwater from a second water-bearing zone. A 100-foot boring will be advanced to determine the Site-specific geology. If present, the second water-bearing zone will be determined using instrumentation on the cone penetrometer. Following completion of the boring, a well will be constructed to allow recovery of a representative groundwater sample from the second water-bearing zone. In general, the well will be constructed similarly to the shallow wells with the exception that the well screen depth and length will be selected in the field and the well will be constructed to allow for the sampling of only the second water-bearing zone. If necessary the bottom of the boring will be filled back to the bottom of the second water-bearing zone with neat cement via a tremmie pipe. Development, purging and sampling of the groundwater will be performed in the same manner as for the shallow wells.

6.3 Stage 2 Investigative Activities

Following implementation of the Stage 1 activities, the collected data will be evaluated and the work scope for Stage 2 activities will be developed. Based on the results of the previous Phase II investigations performed by others and ENVISION's experience with similar sites, some of the following Stage 2 Site investigation activities are anticipated:

- Recovery of soil samples to delineate VOC contamination detected in the soil gas survey.
- Installation of additional monitoring wells to complete the horizontal and vertical delineation of groundwater contamination.
- Obtain hydraulic parameters for the aquifer(s) containing elevated levels of contamination.

- Perform a receptor analysis (including a Terrestrial Ecological Evaluation) to determine the possible transport mechanism(s) and receptor(s) for contamination found at the Site.

At the conclusion of these Site investigation/data collection activities, valid remedial options will be evaluated and the most technically and economically feasible remediation approach for the Site will be selected for implementation.

7.0 REPORTING

Upon completion of the Stage 1 Site investigation activities, a report will be prepared which will present the findings of the investigation, and will provide recommendations for and describe the Stage 2 activities to be performed.

8.0 HEALTH AND SAFETY

A Site-specific health and safety plan (HASP) has been completed to cover the fieldwork proposed for Stage 1 of this SIW. The HASP is included as Appendix 5.

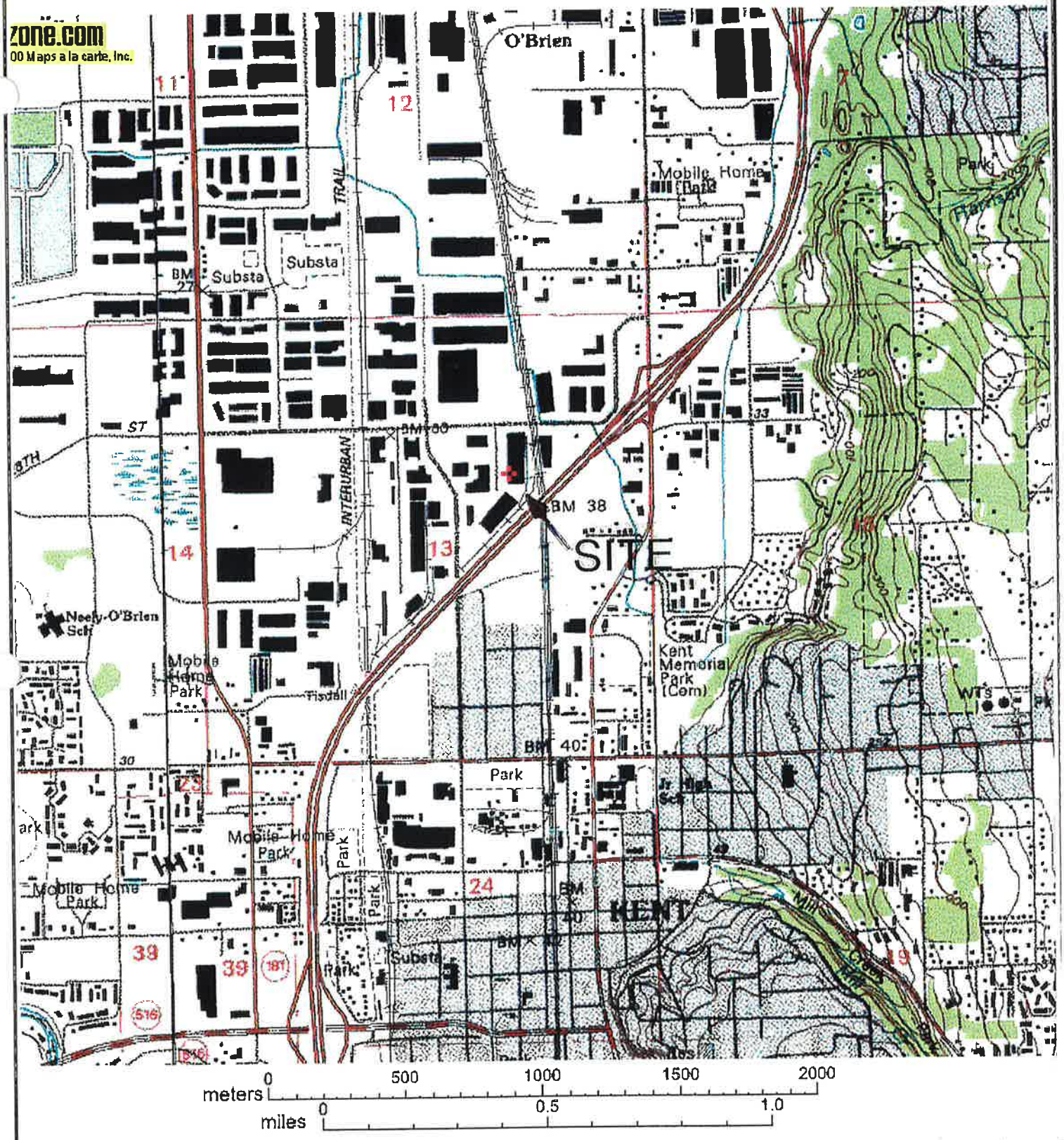
9.0 PROPOSED SCHEDULE

A proposed schedule for the implementation of the Site investigation activities is provided as Appendix 6.

ENVISION
ENVIRONMENTAL, INC.

FIGURES

Target is UTM 10 557845E 5249261N - **RENTON** quad [Quad Info]



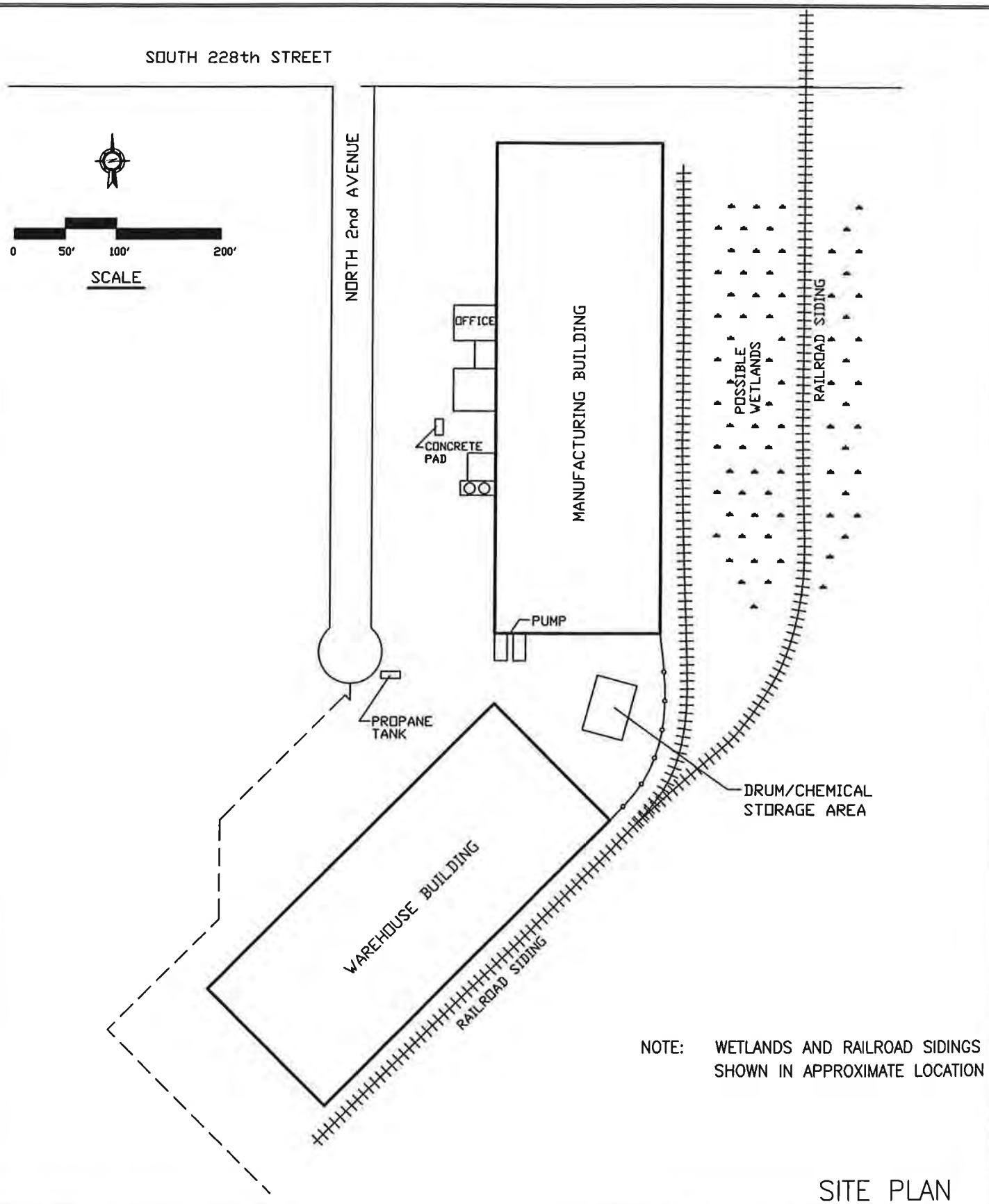
SITE LOCATION MAP

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 1



NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

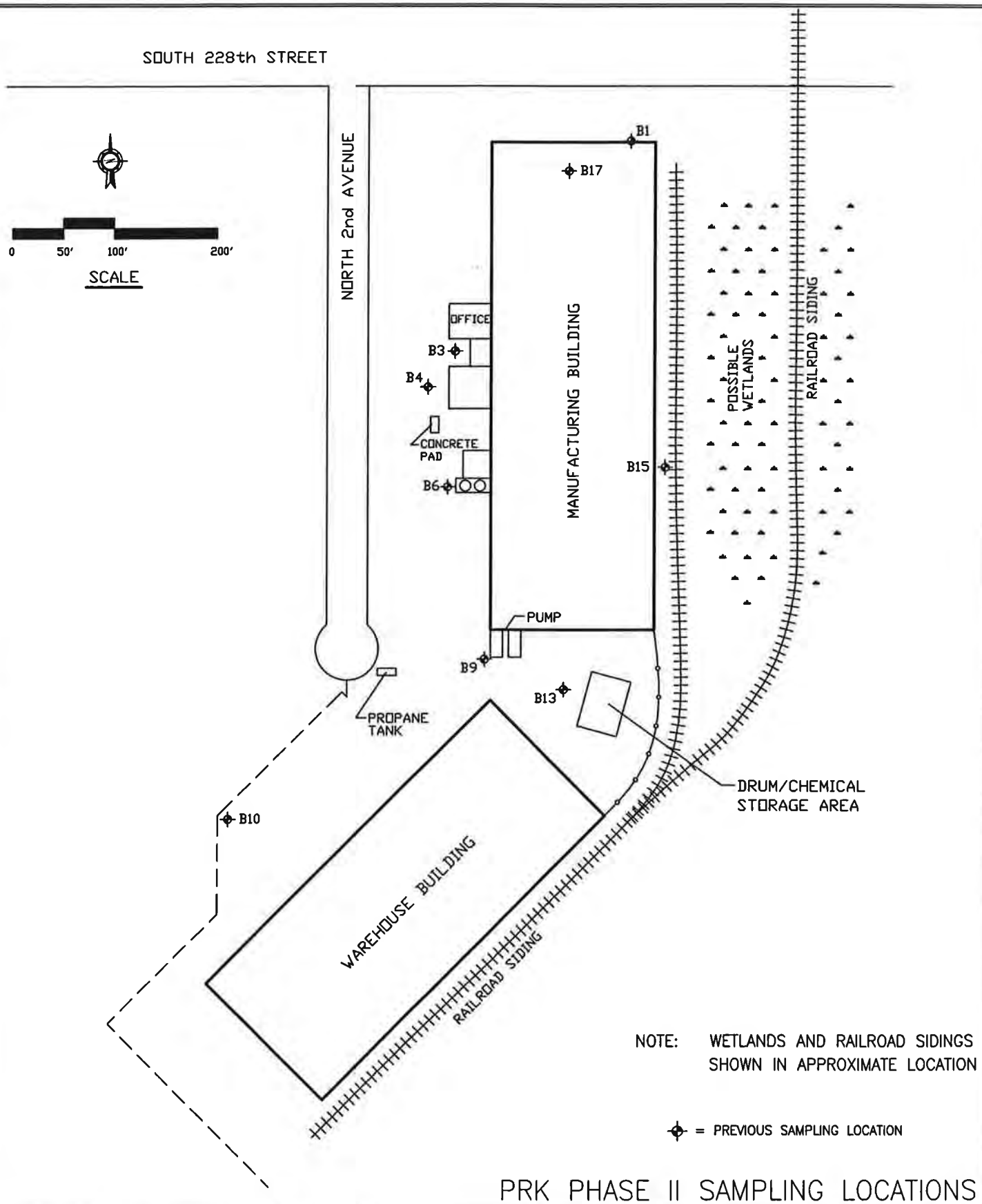
SITE PLAN

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 2



NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

= PREVIOUS SAMPLING LOCATION

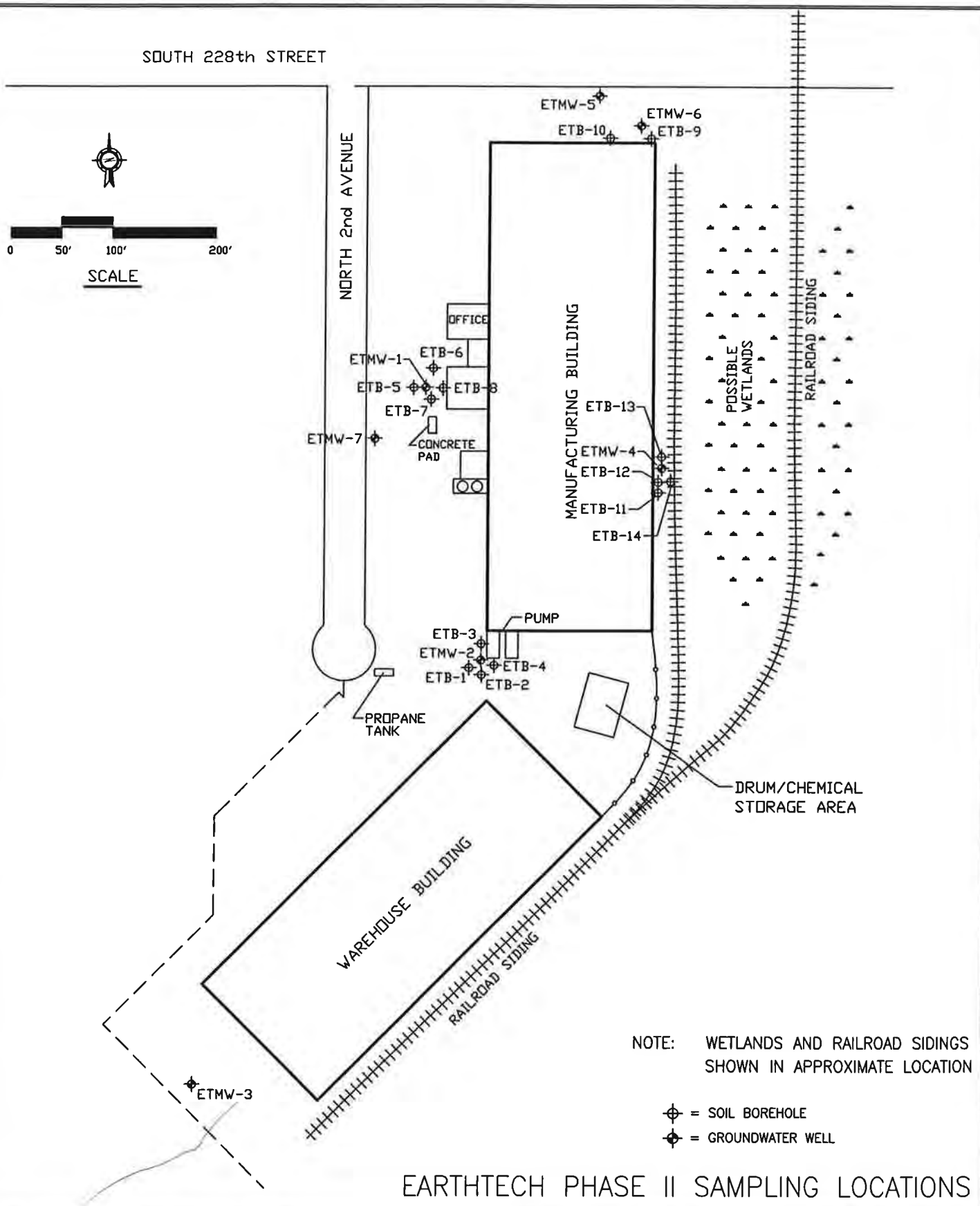
PRK PHASE II SAMPLING LOCATIONS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 3

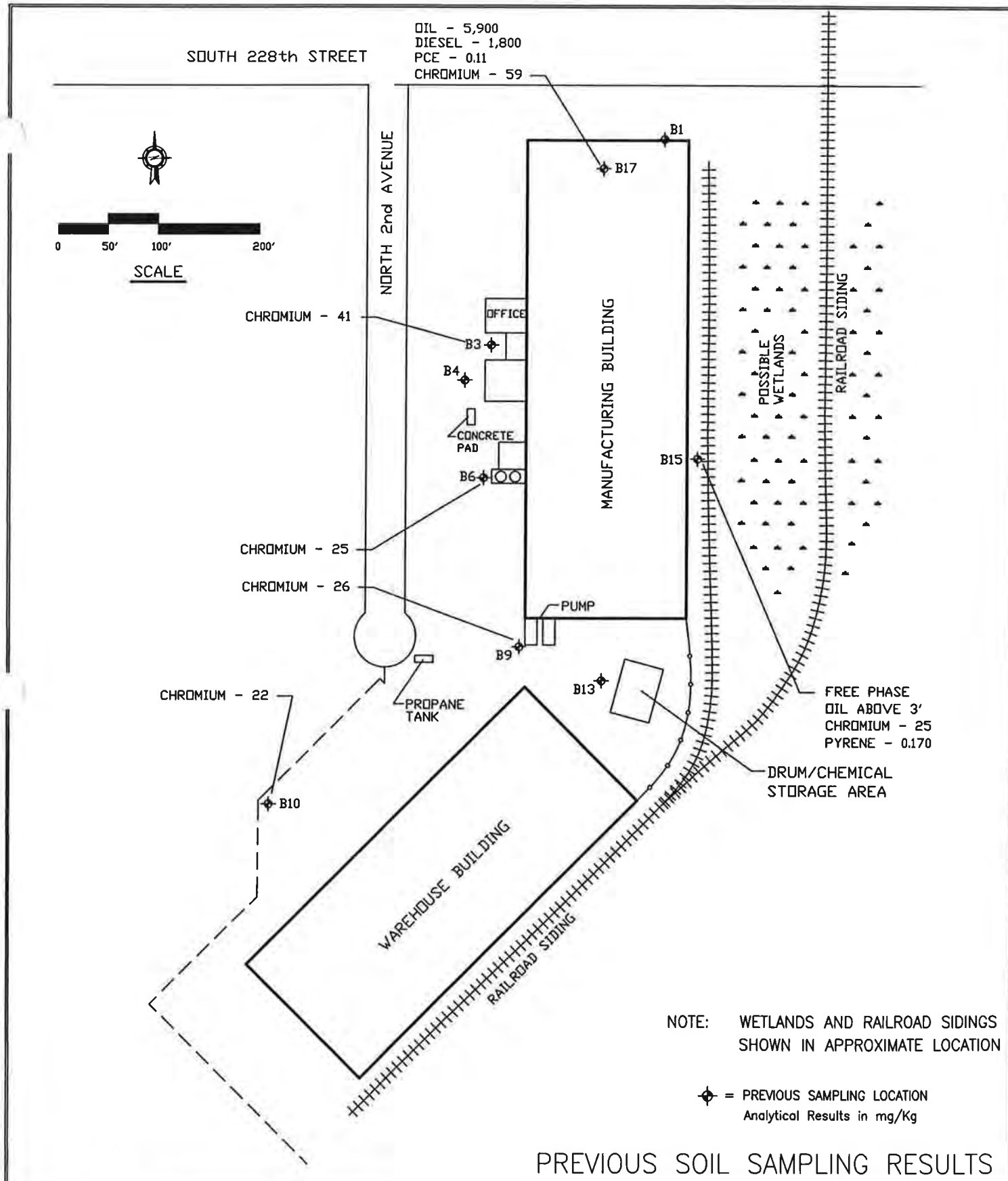


EARTHTECH PHASE II SAMPLING LOCATIONS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:	Project No. 302.REX
	Date: 06/06/02
	Scale: As Shown
	Drawing No. FIGURE 4



NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

= PREVIOUS SAMPLING LOCATION
Analytical Results in mg/Kg

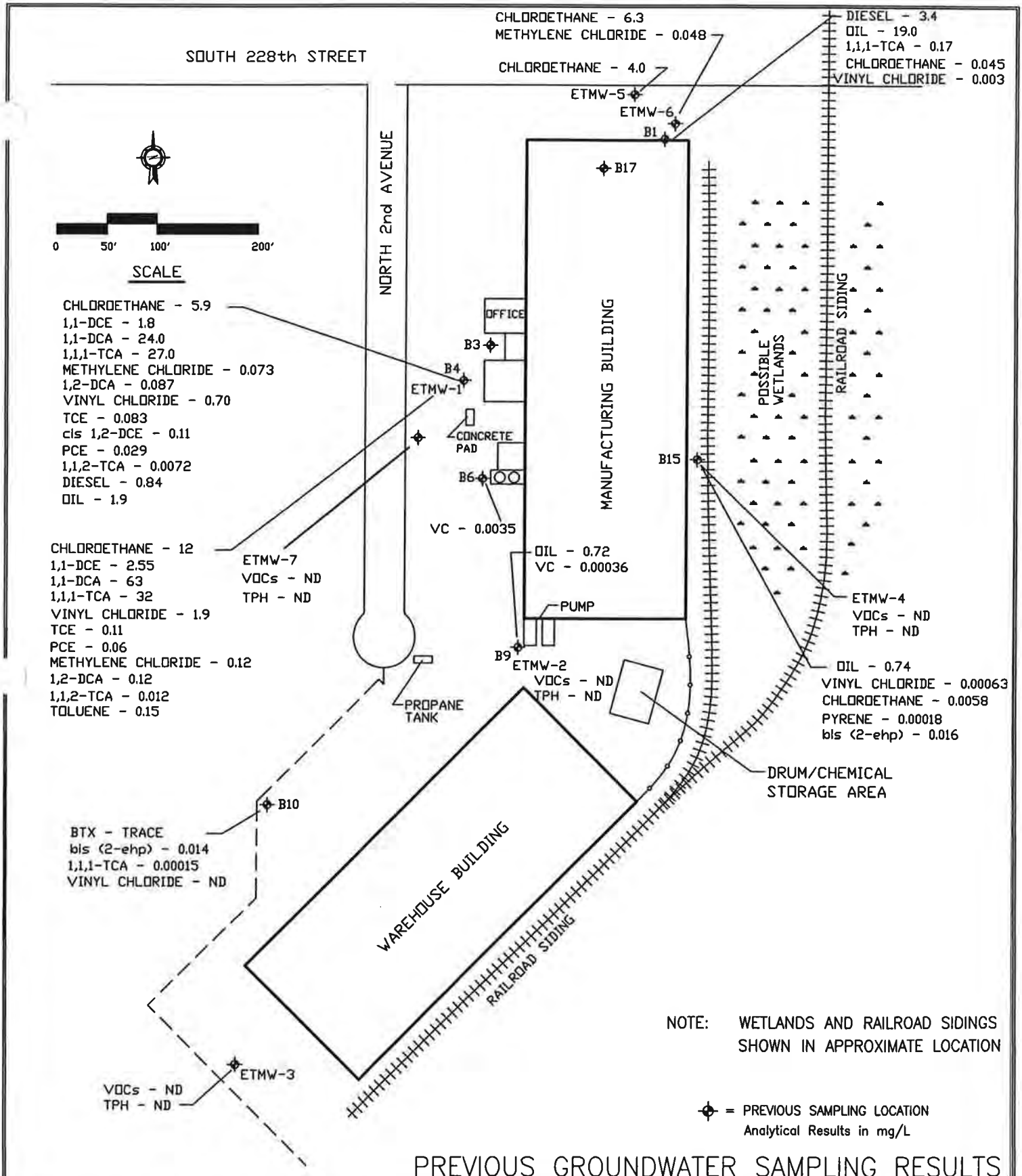
PREVIOUS SOIL SAMPLING RESULTS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 5



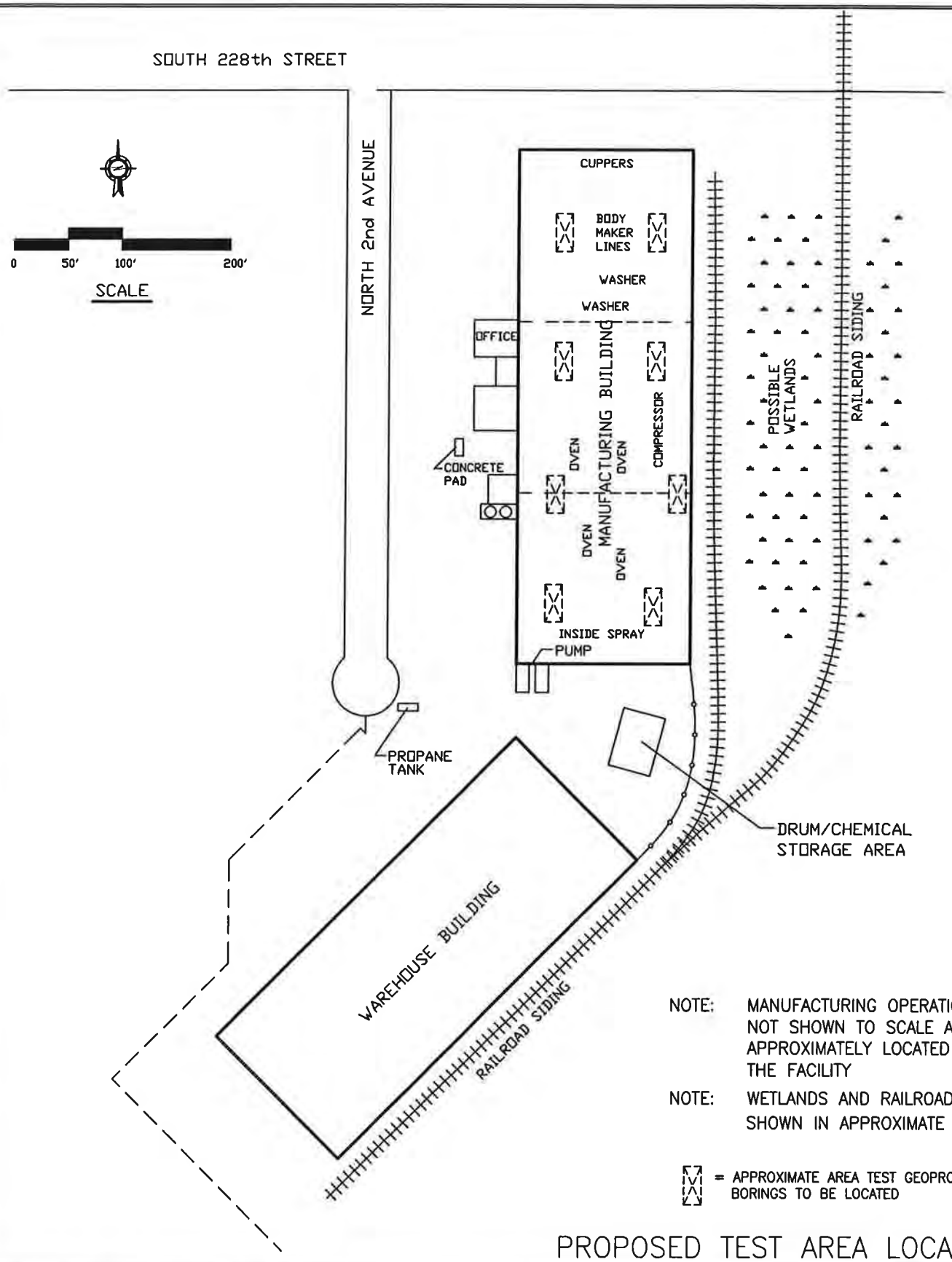
PREVIOUS GROUNDWATER SAMPLING RESULTS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 6



NOTE: MANUFACTURING OPERATIONS ARE NOT SHOWN TO SCALE AND ARE APPROXIMATELY LOCATED WITHIN THE FACILITY

NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

= APPROXIMATE AREA TEST GEOPROBE BORINGS TO BE LOCATED

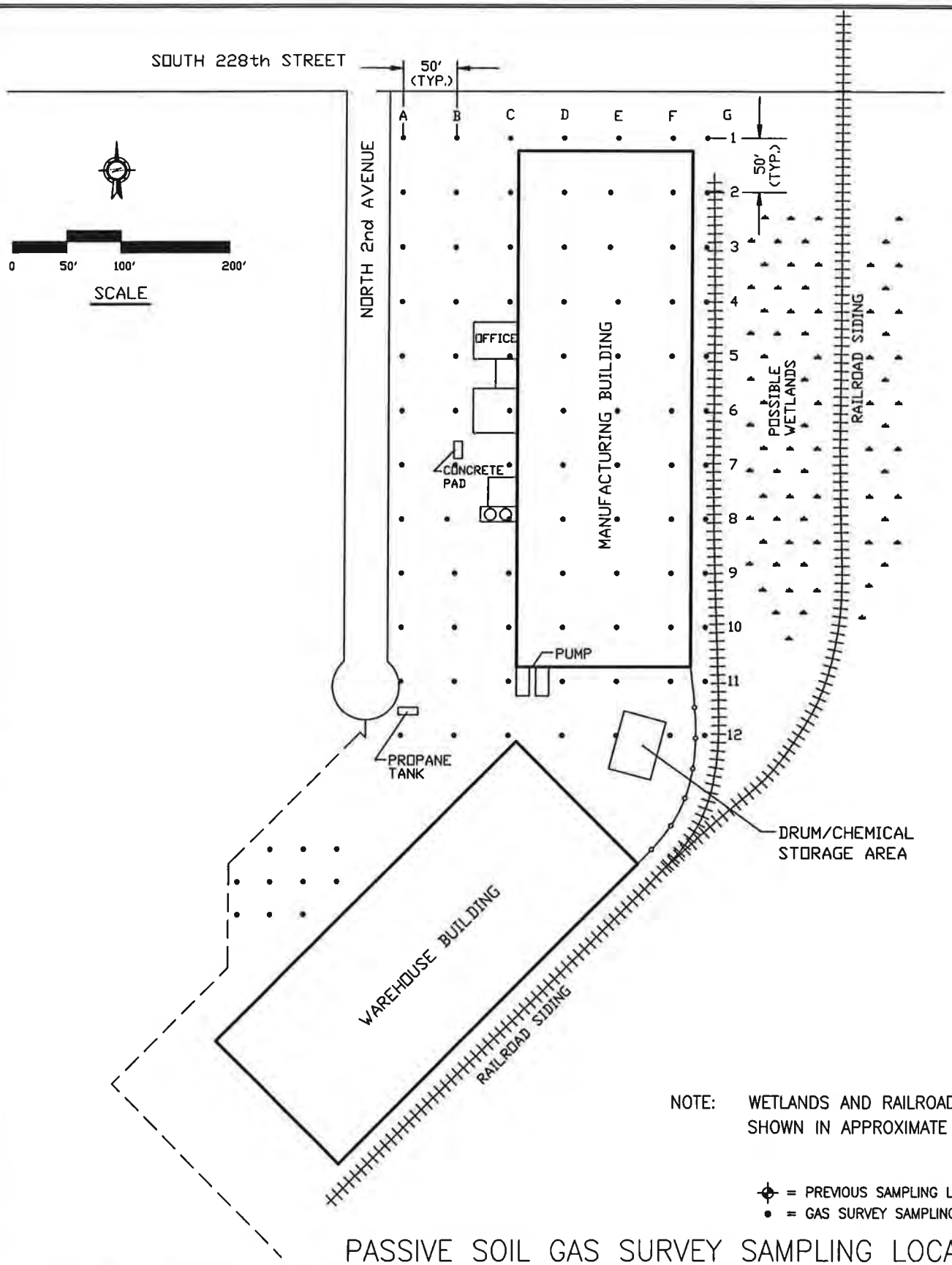
PROPOSED TEST AREA LOCATIONS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 7



NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

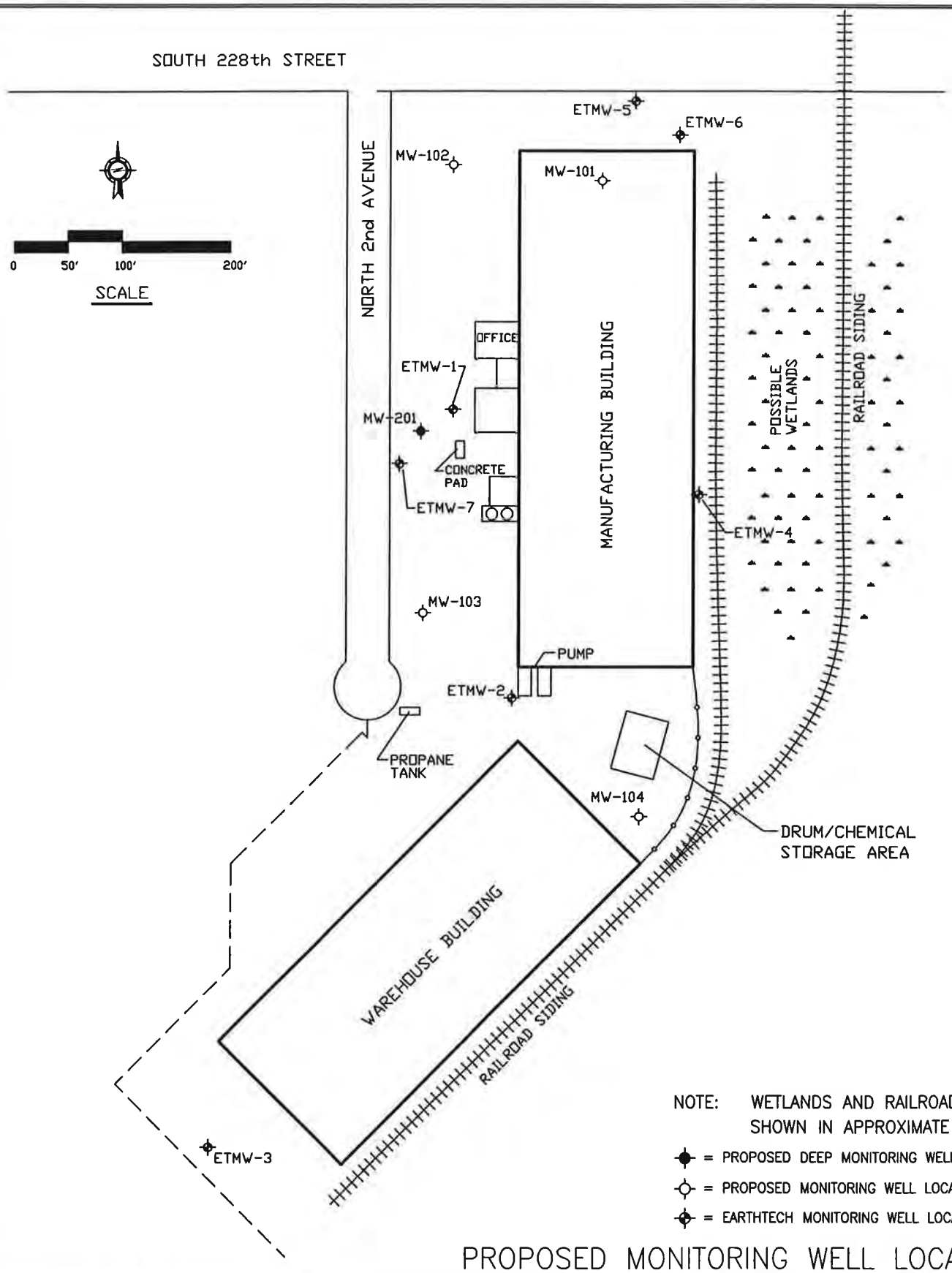
⊕ = PREVIOUS SAMPLING LOCATION
• = GAS SURVEY SAMPLING LOCATION

PASSIVE SOIL GAS SURVEY SAMPLING LOCATIONS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:	Project No. 302.REX
	Date: 06/06/02
	Scale: As Shown
	Drawing No. FIGURE 8



NOTE: WETLANDS AND RAILROAD SIDINGS SHOWN IN APPROXIMATE LOCATION

= PROPOSED DEEP MONITORING WELL LOCATION

= PROPOSED MONITORING WELL LOCATION

= EARTHTECH MONITORING WELL LOCATION

PROPOSED MONITORING WELL LOCATIONS

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 06/06/02
Scale: As Shown
Drawing No. FIGURE 9

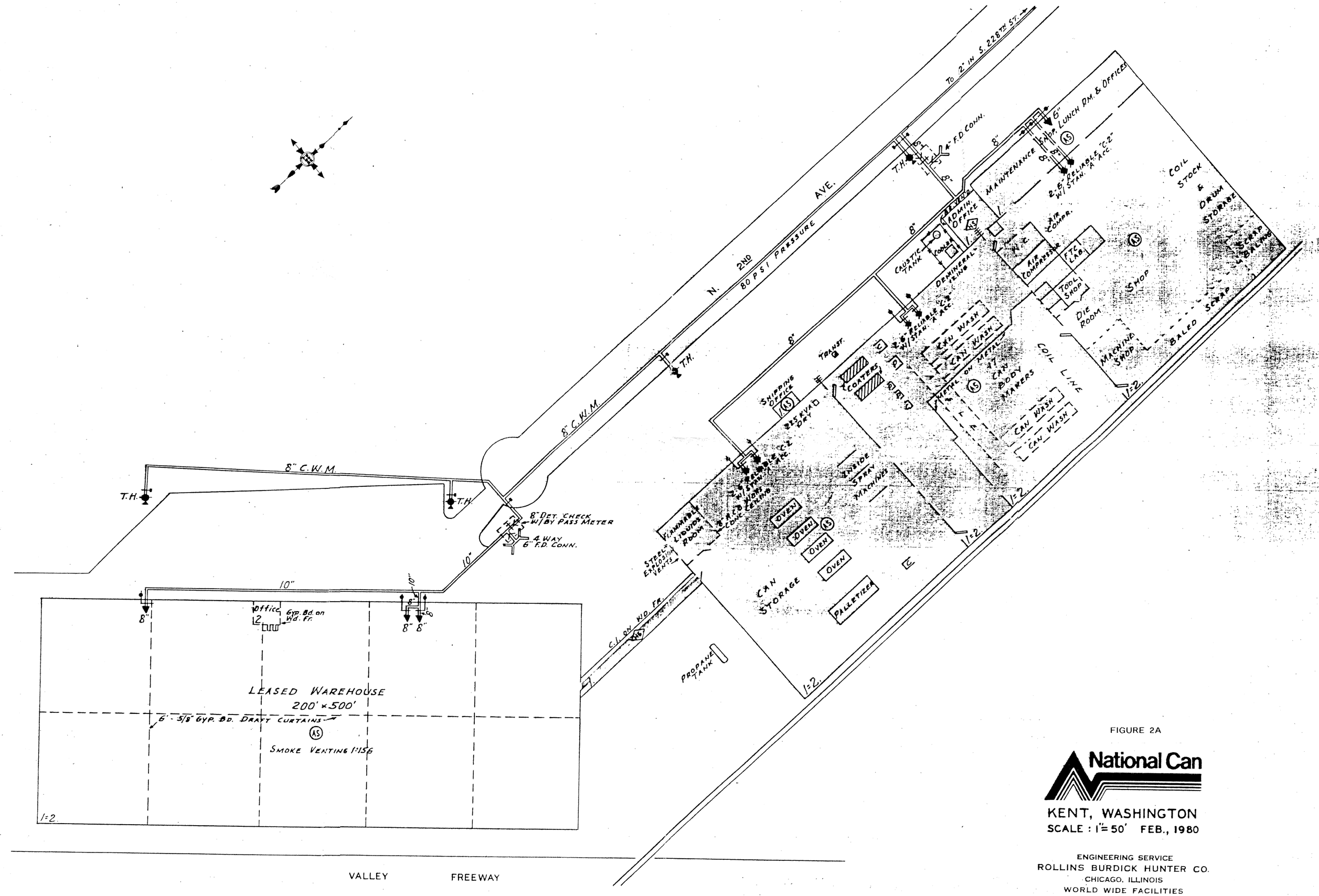


FIGURE 2A

National Can

KENT, WASHINGTON

SCALE : 1"= 50' FEB., 1980

ENGINEERING SERVICE
ROLLINS BURDICK HUNTER CO.
CHICAGO, ILLINOIS
WORLD WIDE FACILITIES

ENVISION
ENVIRONMENTAL, INC.

APPENDIX 1

EARTH TECH February 1999 UST Site Assessment Closure Report

MEMO

Date: February 22, 1999

To: Geoff Wortley
American National Can, Chicago, IL

cc: Ed Alusow
Earth Tech, Albany, NY

From: Terry McPhetridge
Earth Tech, Bellevue, WA

Subject: Agency Transmittal Letters

For your records, enclosed are copies of the transmittal letters from Earth Tech to the appropriate regulatory agencies regarding the submittal of the UST Site Assessment Closure Report for the ANC Kent, Washington facility. The closure report was submitted to the Washington Department of Ecology and the City of Kent Department of Public Works on Friday February 19, 1999. If you have any questions regarding this submittal please call me at (425) 455-9494.

Enclosure (2)

10800 Northeast 8th Street, Seventh Floor, Bellevue, Washington 98004

COPY

February 19, 1999

Mr. John Bails
Washington Department of Ecology
3190 160th Avenue SE
Bellevue, Washington 98008-5452

Subject: UST Site Assessment Closure Report
ANC Facility, Kent, Washington

Dear Mr. Bails:

On behalf of American National Can (ANC), Earth Tech is pleased to submit a copy of the UST Site Assessment Closure Report to the Washington Department of Ecology (Ecology). The ANC facility is located at 1220 N. 2nd Avenue, Kent, Washington. The Ecology site identification number for the ANC facility is 7481. If you have any questions regarding this submittal please call me at (425) 455-9494.

Telephone
425.455.9494
Facsimile
425.453.9470

Sincerely,

Earth Tech, Inc.

Terry R. McPhetridge, R.P.G.
Environmental Project Manager

Enclosure (1)

TRM/ecologycovtrmsmlet.doc

10800 Northeast 8th Street, Seventh Floor, Bellevue, Wa[illegible]gton 98004

COPY

February 19, 1999

Mr. Dean Falkner
Kent Department of Public Works
220 4th Avenue South
Kent, Washington 98032

Subject: UST Site Assessment Closure Report
ANC Facility, Kent, Washington

Dear Mr. Falkner:

On behalf of American National Can (ANC), Earth Tech is pleased to submit a copy of the UST Site Assessment Closure Report to the Kent Department of Public Works. The ANC facility is located at 1220 N. 2nd Avenue, Kent, Washington.

As part of the conditions/mitigating measures of the SEPA – City of Kent Determination of Nonsignificance (DNS), ANC is required to submit a copy of the closure report to the Kent Department of Public Works. All three conditions/mitigating measures of the City of Kent DNS were met. If you have any questions regarding this submittal please call me at (425) 455-9494.

Telephone
425-455-9494
Facsimile
425-453-9470

Sincerely,

Earth Tech, Inc.

Terry R. McPhetridge, R.P.G.
Environmental Project Manager

Enclosure (1)

TRM/kentcovtrnsmlet.doc

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

tech engineering & construction total water management

environmental services & remediation transportation

Report

UST SITE ASSESSMENT CLOSURE REPORT

Prepared for:

American National Can, Inc.
8770 W. Bryn Mawr Avenue
Chicago, Illinois 60631

Prepared by:

Earth Tech, Inc.
10800 NE 8th Street, Seventh Floor
Bellevue, Washington 98004

February 3, 1999

Report

UST SITE ASSESSMENT CLOSURE REPORT

Prepared for:

American National Can, Inc.
8770 W. Bryn Mawr Avenue
Chicago, Illinois 60631

Prepared by:

Earth Tech, Inc.
10800 NE 8th Street, Seventh Floor
Bellevue, Washington 98004

February 3, 1999

TABLE OF CONTENTS

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1.0 INTRODUCTION

Earth Tech, Inc. is pleased to present this underground storage tank (UST) site assessment closure report for the American National Can (ANC) facility at 1220 North 2nd Avenue, Kent, Washington (Figure 1). This UST closure report discusses in detail the UST removal activities and assessment results.

Earth Tech was retained by ANC to permanently remove a 12,000-gallon UST in accordance with Washington State guidelines. The Washington Administrative Code (WAC), Chapter 173-360-385 through 173-360-398, Chapter 197-11, and the Washington Department of Ecology (Ecology) "Guidance for Site Checks and Site Assessments for Underground Storage Tanks" (revised October, 1992) were followed during the UST removal and site assessment activities. The Ecology site identification number for the ANC facility is 7481.

The scope of services for this project was to:

- provide an International Fire Code Institute (IFCI)-certified subcontractor to remove and dispose of one 12,000-gallon fiberglass UST and associated above ground pipelines;
- provide a site assessment to include soil sampling for chemical analyses; and,
- prepare a UST closure report detailing the project activities, summarizing the chemical analysis results, and conclusions.

1.1 PERMITS AND NOTIFICATIONS

Since the UST storage capacity was in excess of 10,000 gallons, a State Environmental Policy Act (SEPA) application was submitted to the City of Kent Planning Department in accordance with WAC 197-11. On May 21, 1998, Earth Tech submitted a SEPA environmental checklist to the Kent Planning Department on behalf of ANC. The SEPA application was approved by the Kent Planning Department in July, 1998.

As part of the conditions of the approved SEPA, ANC was required to:

- Submit a Temporary Erosion/Sedimentation Control Plan (TESCP) and subsequently receive a street use permit from the Kent Public Works Department;
- Receive a UST removal Fire Permit from the Kent Fire Prevention Department;
- Submit a copy of the Site Assessment Closure Report to the Kent Public Works Department.

Earth Tech submitted the TESCP to the Kent Department of Public Works on September 21, 1998. The TESCP and associated street use permit were approved and in effect on October 1, 1998. On October 20, 1998 Earth Tech obtained a Fire Prevention Department Temporary Fire Permit (No. T-657B) from the Kent Fire Prevention Department. The Fire Permit is provided in Appendix A. Additionally, as required under WAC 173-360, Ecology was notified within 30 days of the UST removal. All other permits and associated documents are provided in Appendix D.

1.2 SITE HISTORY AND SURROUNDING LAND USE

According to site records, ANC installed the 12,000-gallon fiberglass UST system between 1980 and 1981. ANC stored used oil generated from the aluminum can production process in the UST until October 1998. The UST, manufactured by Owens Corning, was approximately 32 feet in length by 8 feet in diameter. During installation, the UST was placed inside an 8-inch thick concrete vault that provided secondary containment. Dimensions of the concrete vault were 12 feet deep by 14 feet wide by 44 feet in

length. Plastic product and steel vent piping were observed to be above ground at the tank location and leading into the ANC building. Tank vault backfill material consisted of pea gravel.

The direction of surface gradient surrounding the UST system is to the north towards South 228th Street and away from the ANC building. ANC contracted with Evergreen Environmental to remove and transport the used oil for subsequent recycling.

Earth Tech contacted the Kent Public Works Department regarding existing groundwater data to evaluate the seasonal fluctuation of groundwater near the vicinity of ANC. The nearest wells with groundwater data available were located a few miles from the ANC site. Data from these wells suggest seasonal groundwater fluctuations may occur between 10 feet and 15 feet below ground surface (bgs).

Visual observations of the backfill pea gravel within the concrete vault suggested overfill of the UST and/or spillage during removal of the used oil over the years. The upper surface of the pea gravel was observed to be oil stained in areas around the fill ports. However, there was no evidence of oil stains outside of the vault, and no visual evidence of product spills or leakage from the above ground product piping was noted.

The concrete vault was in excellent condition with no apparent cracks, holes, or separation that could allow fluids into or out of the structure. In addition, following removal of the top panels of the vault, it appeared the walls of the vault were sealed with rubber lining to help prevent leakage between the vault seams.

The surrounding land use is primarily industrial and undeveloped property parcels. Adjacent and nearby properties include Wasser High Grade Coating, Pro-Coat, Sicklesteel Crane Supply Company, and a gravel/concrete mix facility. UST's are not known to exist at these facilities.

2.0 UST REMOVAL ACTIVITIES

Earth Tech contracted with Lee Morse General Contractors (Lee Morse), Fife, Washington to perform the UST removal activities. Lee Morse is a Washington State licensed contractor (#LEEMOGC231B1). Mr. Neil Dennison, field supervisor for Lee Morse, supervised the UST removal activities. Mr. Dennison is certified by IFCI (No. 0878741-26) to decommission UST's in Washington State.

Prior to removal of the UST, ANC contracted with Evergreen Environmental to remove the used oil on October 26, 1998. Earth Tech and Lee Morse mobilized on-site to perform the UST removal on October 27, 1998. Lee Morse removed the top panels of the concrete vault to allow access and expose the UST fill ports. The UST location is shown on Figure 2.

Marine Vacuum Service (MVS), subcontractor to Lee Morse, removed the remaining used oil inside the UST for subsequent disposal at their facility in Seattle. The UST construction consisted of four straps around the tank connected to eyebolts that anchored the UST to the bottom of the concrete vault. On October 28, two of the four straps were cut and the UST began to rise to the top of the pea gravel, indicating a significant quantity of liquid existed inside the vault. As the UST was ascending to the top of the pea gravel, the two intact straps began to apply pressure on the tank and eventually fractured the fiberglass tank into two pieces.

MVS obtained oxygen measurements inside the fractured UST using a lower explosive limit (LEL) meter. The LEL oxygen measurements were consistently 21%. MVS began triple rinsing the inside of the UST

under a confined space entry permit. The outside of the UST was also triple rinsed for transportation and disposal purposes.

The UST was hoisted out of the concrete vault using a heavy-duty crane. Observing the on-site UST removal activities were Mr. Terry McPhetridge and Mr. Ed Alusow of Earth Tech, Mr. Neil Dennison of Lee Morse, and Mr. Jon Napier, Kent Fire Inspector. Mr. Napier approved the removal of the UST by signing the Temporary Fire Permit. The Fire Permit is provided in Appendix A.

Following removal, the UST and associated above ground piping were certified as non-RCRA hazardous waste solid and transported to Rabanco, Inc. for subsequent disposal at their landfill in Roosevelt, Washington. The Waste Disposal Record is provided in Appendix B.

As noted in Section 1.2, tank vault backfill material consisted of a large quantity of pea gravel which appeared to be coated with used oil, most likely the result of tank overfill and/or spillage during product removal over the years. To allow for temporary containment, the pea gravel was left inside the vault pending analysis to evaluate appropriate disposal methods.

Liquid material inside the vault was primarily used oil and to a lesser extent water resulting from rain infiltrating through uncovered orifices on the top panels of the concrete vault and not from groundwater infiltration through the vault. MVS removed the liquid material from the vault in October and November of 1998.

3.0 SITE ASSESSMENT ACTIVITIES

Site check and site assessment checklists are presented in Appendix E.

Since the UST was located inside a concrete vault and the sidewalls and bottom of the vault were to remain intact; soil samples could not be collected from directly below the UST. Therefore, an alternative sampling plan was discussed with Mr. John Bails of Ecology. The alternative sampling plan entailed using a Geoprobe system to drill three to four boreholes to a depth equivalent to the bottom of the UST system (i.e., 12 feet bgs). Samples were to be collected at depths equivalent to the bottom of the UST system. Mr. Bails agreed with the alternative sampling plan given the surrounding conditions of the UST system.

Earth Tech contracted Cascade Drilling of Bothell, Washington, to perform the geoprobe-drilling services. On November 2, 1998, Cascade Drilling advanced three geoprobe boreholes in areas north, west, and east of the concrete vault. Cascade Drilling was not able to safely maneuver the drill rig on the south side of the concrete vault without risking the health and safety of the crew and safety of the drilling equipment. Four other factors were involved in this decision: (1) the proximity to the ANC building; (2) several landscape features (shrubs) limiting access; (3) the vault was open and exposed at the time of drilling; and (4) local surface gradient and presumed subsurface gradient was estimated to be towards the north.

Boreholes GP-TR-01, GP-TR-02, and GP-TR-03 were located between 2 feet and 4 feet east, north, and west of the concrete vault, respectively. Borehole locations are shown on Figure 2. The target depth for obtaining soil samples was 12 feet bgs (bottom of the UST system). One soil sample was obtained between 11 feet and 12 feet bgs from each borehole. The soil samples were designated "GP-TR-01", GP-TR-02", and "GP-TR-03". In borehole GP-TR-01, increasingly damp soil was observed between 13 and 14 feet bgs; however, groundwater was not observed. All other boreholes were advanced to total depths of 12 feet bgs.

Soil samples were collected in 12-inch by 1.5-inch diameter plastic liners. Following retrieval of the sampler, samples were immediately sealed with teflon liners and plastic caps, and labeled for identification. The samples were placed in an iced chest until transport the same day for delivery to the analytical laboratory. Soil samples were submitted under appropriate chain-of-custody protocol to North Creek Analytical, 18939 120th Avenue N.E., Suite 101, Bothell, Washington. Each sample was analyzed for total petroleum hydrocarbons (TPH) using WTPH-HCID and subsequent specific TPH (i.e., gasoline, diesel, and heavy oil ranges) analysis if hydrocarbon concentrations were detected during the HCID. Each sample was also analyzed for TCLP for lead.

In addition, all soil samples were screened in the field for volatile organic compounds using a Photovac Portable 2020 photo-ionization detector (PID). No volatile organic compounds were detected from the samples using the PID instrument.

Soils encountered were typically fine-grained soils that range from a clayey silt, gravelly silt, and sandy silt. These soils are identified under the Uniform Soil Classification System as having group symbols SM or ML.

Since the pea gravel appeared to be coated with the used oil stored in the UST, a sample of the pea gravel was collected on November 2, 1998 for chemical analyses to help evaluate the proper disposal method. Following sample collection, the sample was transported the same day under chain-of-custody protocol to North Creek Analytical for specific chemical analysis (see Appendix F). Since the UST was located inside the concrete vault, groundwater was not encountered during the removal of the UST. Disposal of the tank vault backfill material is discussed further in Section 5.0.

4.0 SOIL SAMPLE ANALYTICAL RESULTS

Laboratory analytical results indicate no detection of total petroleum hydrocarbons using WTPH-HCID method or for lead using TCLP in any of the three soil samples. The analytical testing method detection limits and results are summarized in Table 1. The laboratory report and chain-of-custody documentation for the soil samples are included in Appendix C.

Table 1
Soil Sample Analytical Chemistry Results – UST Excavation
American National Can, Kent, Washington

Collection Date: 11/02/98		Sample Identification/Depth		
Parameter	**Detection Limit**	**GP-TR-01/ 11 – 12 feet bgs**	**GP-TR-02/ 11 – 12 feet bgs**	**GP-TR-03/ 11 – 12 feet bgs**
WTPH -HCID Gasoline Range (mg/kg)	20.0	ND	ND	ND
WTPH -HCID Diesel Range (mg/kg)	50.0	ND	ND	ND
WTPH -HCID Heavy Oil Range (mg/kg)	100.0	ND	ND	ND
TCLP Lead (mg/l)	0.200	ND	ND	ND

Notes:
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
ND = not detected at or above the method detection limit

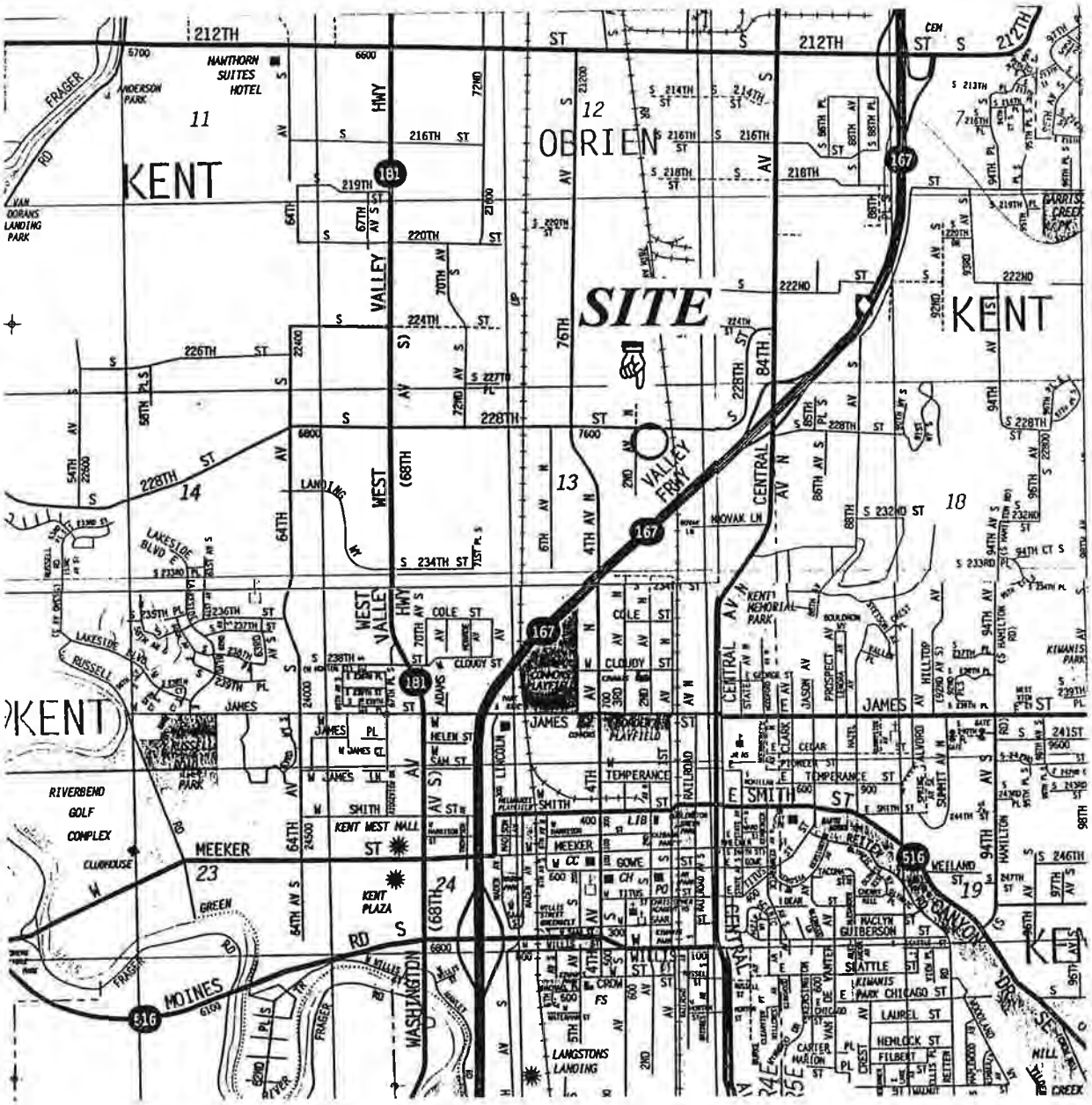
5.0 DISPOSAL OF TANK BACKFILL MATERIAL

The tank vault backfill material was removed from the vault with a backhoe and loaded onto trucks. The backfill material was transported to Rabanco, Inc. for subsequent disposal at their facility in Roosevelt, Washington. Approximately 180 tons of pea gravel were removed from the vault and transported to Rabanco. Following removal of the pea gravel, MVS cleaned the inside of the concrete vault with a high-pressure hot wash cleaner to remove the oily residual material. Rinse water and residual material generated during high pressure cleaning was removed by MVS for disposal at their facility.

6.0 CONCLUSIONS AND RECOMMENDATIONS

One 12,000-gallon fiberglass UST used previously to store used oil was removed from the site and transported off-site for disposal as a non-RCRA hazardous waste solid. No evidence of holes, pitting, or corrosion were identified by the representatives observing the UST removal. Analytical results for the soil samples obtained at each end and one side (downgradient) of the former UST location indicated non-detectable concentrations of petroleum hydrocarbons and lead. Based on the information contained in this report, Earth Tech concludes that the recently removed UST did not adversely impact soils at the site and no further action is necessary.

The site assessment activities were performed under the supervision of Mr. Rick Schaefer, State of Washington Professional Engineer.



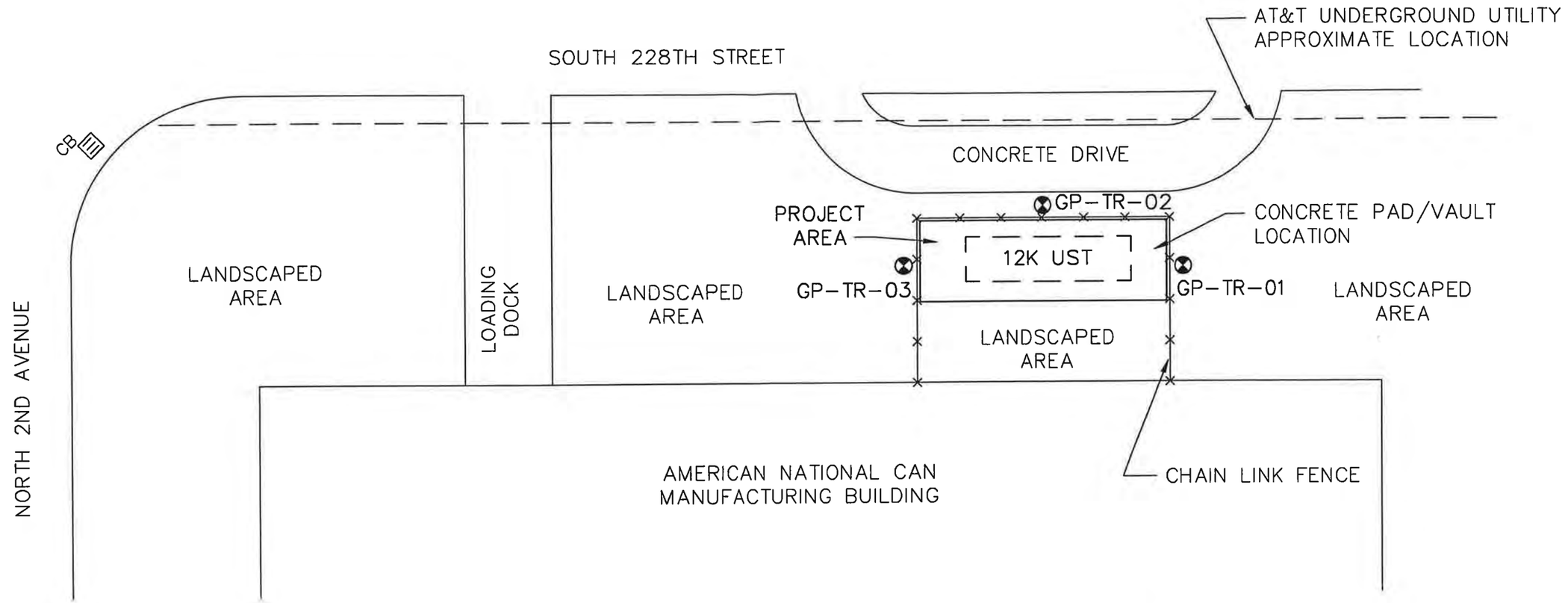
Detail Map Scale

1 Inch to 2400 Feet

FIGURE 1

SITE LOCATION MAP

AMERICAN NATIONAL CAN
1220 N. 2ND AVE.
KENT, WASHINGTON



LEGEND

⊗ GEOPROBE BOREHOLE LOCATION

NORTH

0 10' 20'

1" = 20'

FIGURE 2

SITE PLAN

AMERICAN NATIONAL CAN
1220 N. 2ND AVENUE
KENT, WASHINGTON

EARTH TECH

Amircan2.d -/2/99

APPENDIX A

CITY OF KENT FIRE PREVENTION
TEMPORARY FIRE PERMIT

CITY OF KENT
FIRE PREVENTION

220 4 Avenue S
Kent WA 98032 (206) 813-3000
mike. John

RECEIVED
MAY 2 1 1998
CITY OF KENT
PLANNING DEPARTMENT

TEMPORARY PERMIT

NO: T-657B

Project Name: AMERICAN NATIONAL CAN

Address of Site: 1220 N. 2 Ave.

Contractor/Installer: REST ENVIRONMENTAL

Phone: 206-575-9119

28475

Address: 651 STRANDER BLVD. #211

Date Issued: 20/Oct/98

Inspector:

Date Expired: 20 Nov 98

Inspection KFD

Finaled 10/28/98

- GRANTED FOR:
  - REMOVAL OF 1 X 12,000 U.S.T. IN VAULT — WASTE OILS.
  - CALL FOR INSPECTION PREVIOUS BUSINESS DAY 253-813-3000.
  - CONTACT FIRE PREVENTION FOR SIGNATURE & EFFECTIVE DATES WHEN S.E.P.A. COMPLET.
  - SEE ATTACHED HANDOUT. - H-36).

Any change in the use, occupancy or ownership of premises shall require new approval.

THIS MUST BE POSTED IN A CONSPICUOUS PLACE ON THE PREMISES - NON TRANSFERRABLE

ASST. FIRE MARSHAL

APPENDIX B

WASTE DISPOSAL RECORD

REGIONAL DISPOSAL COMPANY

BLACK RIVER TRANSFER AND RECYCLING CENTER
501 Monster Road S.W.
Renton, Washington 98055
Transfer Station (425) 228-6137
Billing Inquiries:
A-L (425) 646-2428
M-Z (425) 646-2411

813

CKET NUMBER 245185

DATE: 10/28/98
TIME: 14:55:24

11083 - LEE MORSE GENERAL CONTRAC Job:
LEE MORSE JOB 813
TRUCK #: 7 DUMP TRUCK
PLACE: KENT
PRODUCT: CDL-KING (DEMO)

GROSS LBS:	39500.00
TARE LBS:	37800.00
NET LBS:	1700.00
NET TONS:	0.850
RATE PER TON: $	75.07*
TOTAL AMOUNT: $	63.81

* Includes applicable city, county, and state fees.

X
CUSTOMER SIGNATURE
I HAVE READ AND AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

Recycled

REGIONAL DISPOSAL COMPANY

BLACK RIVER TRANSFER AND RECYCLING CENTER
501 Monster Road S.W.
Renton, Washington 98055
Transfer Station (425) 228-6137
Billing Inquiries:
A-L (425) 646-2428
M-Z (425) 646-2411

813

CKET NUMBER 245217

DATE: 10/28/98
TIME: 17:10:36

11083 - LEE MORSE GENERAL CONTRAC Job:
LEE MORSE 813
TRUCK #: LM7 DUMP TRUCK
PLACE: KENT
PRODUCT: CDL-KING (DEMO)

GROSS LBS:	38960.00
TARE LBS:	37660.00
NET LBS:	1300.00
NET TONS:	0.650
RATE PER TON: $	75.07*
TOTAL AMOUNT: $	48.80

Includes applicable city, county, and state fees.

X
CUSTOMER SIGNATURE
I HAVE READ AND AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

Recycled

APPENDIX C

SOIL SAMPLE ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
GP-TR-01	B811034-01	Soil	11/2/98
GP-TR-02	B811034-02	Soil	11/2/98
GP-TR-03	B811034-03	Soil	11/2/98

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

Hydrocarbon Identification by Washington DOE Method WTPH-HCID
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
GP-TR-01			**B811034-01**				**Soil**	
Gasoline Range Hydrocarbons	1180169	11/5/98	11/5/98		20.0	ND	mg/kg dry	
Diesel Range Hydrocarbons	"	"	"		50.0	ND	"	
Heavy Oil Range Hydrocarbons	"	"	"		100	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*107*	%	
GP-TR-02			**B811034-02**				**Soil**	
Gasoline Range Hydrocarbons	1180169	11/5/98	11/5/98		20.0	ND	mg/kg dry	
Diesel Range Hydrocarbons	"	"	"		50.0	ND	"	
Heavy Oil Range Hydrocarbons	"	"	"		100	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*64.4*	%	
GP-TR-03			**B811034-03**				**Soil**	
]line Range Hydrocarbons	1180169	11/5/98	11/5/98		20.0	ND	mg/kg dry	
]el Range Hydrocarbons	"	"	"		50.0	ND	"	
Heavy Oil Range Hydrocarbons	"	"	"		100	ND	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*122*	%	

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

TCLP Metals by EPA 1311/6000/7000 Series Methods
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
GP-TR-01			**B811034-01**				**Soil**	
Lead	1180508	11/16/98	11/16/98	EPA 6010B	0.200	ND	mg/l	
GP-TR-02			**B811034-02**				**Soil**	
Lead	1180508	11/16/98	11/16/98	EPA 6010B	0.200	ND	mg/l	
GP-TR-03			**B811034-03**				**Soil**	
Lead	1180508	11/16/98	11/16/98	EPA 6010B	0.200	ND	mg/l	

North Creek Analytical - Bothell

Refer to end of report for text of notes and definitions

Kirk Gendron, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled:	11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received:	11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported:	11/17/98 11:55

Dry Weight Determination
North Creek Analytical - Bothell

Sample Name	Lab ID	Matrix	Result	Units
GP-TR-01	B811034-01	Soil	90.8	%
GP-TR-02	B811034-02	Soil	72.1	%
GP-TR-03	B811034-03	Soil	90.9	%

North Creek Analytical - Bothell

Kirk Genchron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

Hydrocarbon Identification by Washington DOE Method WTPH-HCID/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180169	**Date Prepared: 11/5/98**					**Extraction Method: HCID (WA)**				
Blank	**1180169-BLK1**									
Gasoline Range Hydrocarbons	11/5/98			**ND**	mg/kg dry	**20.0**				
Diesel Range Hydrocarbons	"			**ND**	"	**50.0**				
Heavy Oil Range Hydrocarbons	"			**ND**	"	**100**				
Surrogate: 2-FBP	"	*DET*		*DET*	"	*50.0-150*	*58.7*			

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

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180508	**Date Prepared: 11/16/98**					**Extraction Method: EPA 3010A TCLP**				
Blank	**1180508-BLK1**									
Lead	11/16/98			**ND**	mg/l	**0.200**				
LCS	**1180508-BS1**									
Lead	11/16/98	1.00		0.990	mg/l	80.0-120	99.0			
Matrix Spike	**1180508-MS1**		**B811250-01**							
Lead	11/16/98	1.00	ND	0.988	mg/l	80.0-120	**98.8**			
Matrix Spike Dup	**1180508-MSD1**		**B811250-01**							
Lead	11/16/98	1.00	ND	0.986	mg/l	80.0-120	**98.6**	20.0	**0.203**	

North Creek Analytical - Bothell

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

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/17/98 11:55

Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

RUST ENV.

CHAIN OF CUSTODY REPORT

Work Order # B811034

REPORT TO: EARTH TECH
ATTENTION: TERRY McPHERIDGE
ADDRESS: 10800 NE 8TH, SEVENTH FLOOR
BELLEVUE, WA 98004
PHONE: 425 455 9494 FAX: 425 453 9470
PROJECT NAME: AMERICAN NATIONAL CAN
PROJECT NUMBER: 202607
SAMPLED BY: TERRY McPHERIDGE

INVOICE TO: SAME
ATTENTION:
ADDRESS:
P.O. NUMBER: NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: [10] Standard | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: [5] Standard | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NCA SAMPLE ID (Laboratory Use Only)	Analysis Request: HCID	TPH	TCLP-Lead	MATRIX (W, S, A, O)	# OF CONTAINERS	COMMENTS
1. GP-TR-01 (11'-12')	11/2/98 9:00	B811034-01	✓	✓	✓	SOIL	1	
2. GP-TR-02 (11'-12')	9:30	02	✓	✓	✓	SOIL	1	
3. GP-TR-03 (11'-12')	10:10	03	✓	✓	✓	SOIL	1	
4.								
5.								
6.								
7.								
8.								
9.								
10.								

RELINQUISHED BY (Signature): [signature] DATE: 11/2/98
PRINT NAME: TERRY McPHERIDGE FIRM: EARTH TECH TIME: 11:40

RECEIVED BY (Signature): S. Wideen DATE: 11/2/98
PRINT NAME: S. Wideen FIRM: NCA TIME: 11:40

RELINQUISHED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY (Signature): DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

W/O 16.4

PAGE OF

APPENDIX D

OTHER PERMITS AND ASSOCIATED DOCUMENTS

RECEIVED

SEP 21 1998

RUST Rust Environment & Infrastructure Inc.

EARTH TECH
~~A Rust International Company~~
10800 NE 8th, 7th FLOOR ~~Park 651 Strander Boulevard~~
BELLEVUE, WA 98004 ~~Suite 211~~
~~Seattle, WA 98188~~

Phone ~~206.575.9119~~ 425 455-9494
Fax ~~206.575.9636~~ 425 453-9470

CITY OF KENT
ENGINEERING DEPT.

September 21, 1998

Mr. Dean Falkner
City of Kent, Department of Public Works
220 4th Avenue South
Kent, WA 98032

Re: Temporary Erosion/Sedimentation Control Plan
RUST Project No.: 202607

Dear Mr. Folkner:

Rust Environment & Infrastructure (Rust) is pleased to provide this Temporary Erosion/Sedimentation Control Plan (TESCP) to the City of Kent- Department of Public Works regarding the 12,000-gallon UST removal project (ENV-98-36) at the American National Can facility located at 1220 North 2nd Avenue. An Environmental Review Report - Decision Document was submitted to Rust by the City of Kent - Planning Department in which the City of Kent recommended a TESCP as a condition of the the issuance of the Determination of Nonsignificance (DNS) for the project.

The TESCP will address the following issues:

- A filter fabric fence or equivalent will be placed around the soils removed from the UST conrete vault and placed at ground surface in order to minimize the leaching of sediment into the nearby catch basin located approximately 400 feet west of the project location (Figure 1). The soils will be placed on plastic and covered with plastic to further reduce sediments from entering the catch basin.

APPROVED

SEP 17 1998

CITY OF KENT
ENGINEERING DEPARTMENT
BY: Dean Falkner

Quality through teamwork

- The TESCP facility will be inspected on a daily basis by the contractor.

The estimated project dutration is two to three days. If you have any questions or comments please call me at (206) 575-9119.

Sincerely,

Terry McPhetridge, RG
Project Manager

cc: Ed Alusow

City of Kent

Temporary Erosion/Sedimentation Control Plan and Associated Street Use Permit

Permit No. 2937

CITY OF KENT
STREET USE PERMIT

Date 10-01-98

PROJECT: American National Can - 12,000-Gallon UST Removal

TAX LOT 36-224-1181

LOCATION: 1220 North 2nd Avenue

APPLICANT: Name: American National Can | Address: 8770 West BRYN MAWR, Chicago, IL 60631 | Phone Number: (773)399-3000

Pursuant to the conditions of City of Kent Code, Chapter 6.07, the applicant is hereby authorized to use and travel City streets in conjunction with the construction activities at the specified location. Said permit is granted subject to the following conditions:

CONDITIONS

1. Applicant shall continuously keep the streets and storm drain system free from all debris attributed to the work performed under the respective building, grading and/or fill permit. Tracking mud, dirt, or any other substance onto the streets is specifically prohibited by City Ordinance No. 2154.

2. The Director of Public Works or designate may without advance notice and by posting the work site suspend or revoke a permit issued hereunder.

3. No new permit will be issued or the suspension lifted until above Condition No. 1 is met.

4. Where the Director of Public Works or designate determines that no immediate action has been taken to comply with the conditions of No. 1 above, and in his sole judgement determines that in the best interest of the City that immediate action should be taken, the City shall order the work done and cost thereof shall be deducted from the indemnity fund at the actual cost plus 15%.

5. The Director of Public Works or designate may in writing suspend or revoke a permit issued hereunder whenever the permit was issued in error or on the basis of incorrect information supplied or in violation of any other ordinance or regulation of the City.

6. When total inspection time exceeds two hours, an extra charge shall be invoiced to the applicant at a rate of $20.00 per hour.

7. All cleanup and performance shall be verified by and to the satisfaction of City of Kent inspectors. Notify 24 hours in advance before starting work. Call (253)859-3383.

8. Time Limit: Permit valid for **six (6) months** from date of issuance. Applicant must re-apply for extension prior to expiration of first permit.

HE CITY OF KENT, WASHINGTON

APPLICATION FOR STREET USE PERMIT

...suant to City of Kent Ordinance #2286, no building permit or grade and fill permit shall be issued without t obtaining a STREET USE PERMIT from the Public Works Department.

his ...plication must be completed and submitted to the City of Kent Engineering Department for approval prior : he issuance of a STREET USE PERMIT.

TYPE OF PROJECT: ☐ RESIDENTIAL ☐ OTHER (Explain) ☒ COMMERCIAL

OJECT LOCATION: AMERICAN NATIONAL CAN — 1220 NORTH 2nd AVENUE, KENT, WA (ADDRESS)

PROPERTY OWNER: AMERICAN NATIONAL CAN — 8770 W. BRYN MAWR, CHICAGO, IL 60631 (ADDRESS) — (773) 399-3000 (PHONE NUMBER)

NTRACTOR NAME: (INCLUDE SUBCONTRACTORS BELOW)	ADDRESS	PHONE NUMBER	WA. ST. CONTRACTOR'S NO.	CITY OF KENT BUS. LIC. #
RUST E & I	651 STRANDER BLVD, #211	206 575-9119		
B-CONTRACTOR	ADDRESS	PHONE NUMBER	WA. ST. CONTRACTOR'S NO.	CITY OF KENT BUS. LIC. #
TO BE DETERMINED				
SUB CONTRACTOR	ADDRESS	PHONE NUMBER	WA. ST. CONTRACTOR'S NO.	CITY OF KENT BUS. LIC. #

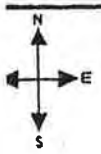
~~GAL DESCRIPTION OF PROPERTY: (attach if lengthy)~~

TAX LOT NO. 36-224-1181

SCRIPTION OF PROJECT: 12,000-GALLON UST REMOVAL

Approximate Quantity of Fill Material Required _____ Cubic Yards

UL ROUTE FOR GRADE & FILL OPERATIONS (if applicable) INCLUDE SKETCH OF PROPOSED ROUTE BELOW



SEE ATTACHED

APPROVED

SEP 17 1998

CITY OF KENT
ENGINEERING DEPARTMENT
BY: Dan Ohlson

I, the undersigned, certify that the information provided above is true and complete.

NAME (PLEASE PRINT)	SIGNATURE By

City of Kent

Determination of Nonsignificance

CITY OF KENT

DETERMINATION OF NONSIGNIFICANCE

Environmental Checklist No. #ENV-98-36 **Project** RUST E&I INC UST REMOVAL

ription A request to remove an UST from a site 800 square feet in size. The site is zoned M3, General Industrial.

Location The site is located at 1220 2nd Avenue North.

Applicant Mr. Terry McPhetridge
Rust E&I Inc.
651 Strander BLVD Suite 211
Seattle, WA 98188

Lead Agency City of Kent

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This Determination of Nonsignificance is specifically conditioned on compliance with the conditions and mitigating measures described below. This information is available to the public on request.

____ There is no comment period for this DNS.

__X__ This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by July 30, 1998.

Responsible Official James P. Harris

Position/Title Planning Director

ress 220 S. Fourth Avenue, Kent, WA 98032 Telephone: 859-3390

Dated July 14, 1998 **Signature** James P. Harris

APPEAL PROCESS: AN APPEAL OF A DETERMINATION OF NONSIGNIFICANCE (DNS) MUST BE MADE TO THE KENT HEARING EXAMINER WITHIN TEN (10) DAYS OF THE DATE THE DETERMINATION OF NONSIGNIFICANCE IS FINAL PER KENT CITY CODE 11.03.520. THE DETERMINATION OF NONSIGNIFICANCE (DNS) IS CONSIDERED FINAL FOLLOWING THE 15 DAY COMMENT PERIOD. AFTER THE DNS IS FINAL, THERE IS A 10 DAY APPEAL PERIOD. IF THERE IS NO APPEAL OR THE COMMENT PERIOD HAS NOT BEEN EXTENDED, THE DETERMINATION OF NONSIGNIFICANCE IS CONSIDERED TO BE COMPLETE 25 DAYS AFTER IT IS SIGNED BY THE RESPONSIBLE SEPA OFFICIAL.

CONDITIONS/MITIGATING MEASURES

1. The Applicant/Owner shall receive approval for a Temporary Erosion/Sedimentation Control Plan from the Department of Public Works prior to starting work for this project.

2. The Applicant/Owner shall submit a copy of Site Assessment Report for tank excavation and removal, as required by the Washington State Department of Ecology Leaking Underground Storage Tank Program, to the Kent Department of Public Works. Tank removal and site remediation shall comply with all applicable requirements of the Washington State Department of Ecology.

3. The applicant shall receive a Fire Department permit for the tank removal.

Department of Ecology

UST 30 Day Notice
and
Closure and Site Assessment Notice

UNDERGROUND STORAGE TANK
30 DAY NOTICE

See back of form for instructions

FOR OFFICE USE ONLY
Site ID #:
Owner ID #:

Once validated by Ecology, this form serves as your temporary permit for the tanks listed below.

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Both

Site Information

Site ID Number 7481
(Available from Ecology if the tanks are registered)

Site/Business Name American National Can

Site Address 1220 N. 2nd Avenue
Street

City/State Kent, WA

Zip Code 98032 Telephone (253) 854-9950

Owner Information
(This form will be returned to this address)

UST Owner/Operator American National Can

Mailing Address 8770 W. Bryn Mawr Ave.
Street

P.O. Box

City/State Chicago, IL

Zip Code 60631 Telephone (773) 399-3000

Tank Installation Company (if known). Fill out this section ONLY if tanks are being installed.

Service Company _____ Contact Name _____

Address _____ Telephone (___) _____
Street P.O. Box

City State Zip Code

Tank Permanent Closure Company (if known). Fill out this section ONLY if tanks are being closed.

Service Company Lee Morse Contractors Contact Name Lee Morse

Address 1401 52nd Avenue E. Telephone (800) 241-8280
Street P.O. Box

Fife, WA 98424
City State Zip Code

Tank Closure Information

Fill out this section ONLY if tanks are being closed.

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date Tank Last Used	Is There Product in the Tank (Yes/No)	If No, Date Tank Was Pumped
9323	10/26/98	12,000 GALS	Waste Oil	10/98	YES	

Tank Installation Information

Fill out this section ONLY if tanks are being installed.

Tank ID	Approx. Install Date

To receive this document in an alternative format, contact the TOXICS CLEANUP PROGRAM at 1-800-826-7716 (VOICE) OR (360) 407-6006 (TDD).

ECY 020-95 (Rev. 6/95)

UNDERGROUND STORAGE TANK
30 DAY NOTICE

See back of form for instructions

FOR OFFICE USE ONLY
Site ID #: F/S SV
Owner ID #:

Once validated by Ecology, this form serves as your temporary permit for the tanks listed below.
Work 30 days, 10/21/98
Requirements

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Both

Site Information

Site ID Number 7481 (Available from Ecology if the tanks are registered)
Site/Business Name AMERICAN NATIONAL CAN
Site Address 1220 N. 2nd AVENUE (Street)
City/State KENT, WA
Zip Code 98032 Telephone (253) 854-9950

Owner Information
(This form will be returned to this address)

UST Owner/Operator AMERICAN NATIONAL CAN
Mailing Address 8770 W. BRYN MAWR AVE. (Street)
(P.O. Box)
City/State CHICAGO, IL
Zip Code 60631 Telephone (773) 399-3000

Tank Installation Company (if known). Fill out this section ONLY if tanks are being installed.

Service Company
Contact Name
Address (Street) (P.O. Box)
Telephone ( )
(City) (State) (Zip Code)

Tank Permanent Closure Company (if known). Fill out this section ONLY if tanks are being closed.

Service Company LEE MOORE CONTRACTORS
Contact Name LEE MOORE
Address 1401 - 52nd AVENUE E (Street) (P.O. Box)
Telephone (800) 274-8280
City LIND, WA State 99341 Zip Code

Tank Closure Information
Fill out this section ONLY if tanks are being closed.

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date Tank Last Used	Is There Product in the Tank (Yes/No)	If No, Date Tank Was Pumped
9323	10/26/98	12,000 GAL	WASTE OIL	10/98	YES	

Tank Installation Information
Fill out this section ONLY if tanks are being installed.

Tank ID	Approx. Install Date

To receive this document in an alternative format, contact the TOXICS CLEANUP PROGRAM at 1-800-826-7716 (VOICE) OR (360) 407-6006 (TDD).
ECY 070-95 (Rev. 6/97)

UNDERGROUND STORAGE TANK
Closure and Site Assessment Notice

FOR OFFICE USE ONLY
Site ID #:
Owner ID #:

See back of form for instructions

Please ✓ the appropriate box(es)
☐ Temporary Tank Closure ☐ Change-In-Service ☒ Permanent Tank Closure ☐ Site Check/Site Assessment

Site Information

Site ID Number 7481 (Available from Ecology if the tanks are registered)
Site/Business Name American National Can
Site Address 1220 N 2nd Avenue (Street)
City/State Kent, WA
Zip Code 98032 Telephone (253) 854-9950
Owner's Signature

Owner Information

UST Owner/Operator American National Can
Mailing Address 8770 W. Bryn Mawr Avenue (Street)
(P.O. Box)
City/State Chicago, IL
Zip Code 60631 Telephone (773) 399-3000

Tank Closure/Charge-In-Service Company

Service Company Lee Morse General Contractors
Certified Supervisor Neil Denfison Decommissioning Certification No. 0878741-26
Supervisor's Signature
Address 1401 - 52nd Avenue East (Street) (P.O. Box) Telephone (253) 922-2000
Fife (City) WA (State) 98424 (Zip Code)

Site Check/Site Assessor

Certified Site Assessor Rick Schaefer
Address 10800 N E 8th Street, 7th Floor (Street) (P.O. Box) Telephone (425) 455-9494
Bellevue (City) WA (State) 98004 (Zip Code)

Tank Information

Tank ID	Closure Date	Closure Method	Tank Capacity	Substance Stored
9323	10/28/98	Removal	12,000gals	Used Oil

Contamination Present at the Time of Closure

☐ Yes ☒ No ☐ Unknown

Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

☐ Yes ☐ No

If contamination is present, has the release been reported to the appropriate regional office?

To receive this document in an alternative format, contact the TOXICS CLEANUP PROGRAM at 1-800-826-7716 (voice) OR (360) 407-6006 (TDD)
ECY 020-54 (Rev. 6/95)

APPENDIX E

SITE CHECK/SITE ASSESSMENT CHECKLIST

UNDERGROUND STORAGE TANK
Site Check / Site Assessment Checklist

FOR OFFICE USE ONLY	
Site #:	
Owner #:	

When a release has **not** been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person certified by IFCI or a Washington registered professional engineer who is competent, by means of examination, experience, or education, to perform site assessments. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSEMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
PO Box 47655
Olympia WA 98504-7655

Site ID Number (Available from Ecology if the tanks are registered): 7481

Site/Business Name: American National Can

Site Address: 1220 North 2nd Avenue (Street) Telephone: (253) 854-9950

City Kent State WA Zip Code 98032

Tank ID No.	Tank Capacity	Substance Stored
9323	12,000 Gallons	Used Oil

Check one:

- ____ Investigate suspected release due to on-site environmental contamination.
- ____ Investigate suspected release due to off-site environmental contamination.
- ____ Extend temporary closure of UST system for more than 12 months.
- ____ UST system undergoing change-in-service.
- ____ UST system permanently closed-in service.
- X UST system permanently closed with tank removed.
- ____ Abandoned tank containing product.
- ____ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ____ Other (describe): ____

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.	YES	NO
1. The location of the UST site is shown on a vicinity map.	X	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	X	
3. A summary of UST system data is provided. (see Section 3.1.)	X	
4. The soils characteristics at the UST site are described. (see Section 5.2)	X	
5. Is there any apparent groundwater in the tank excavation?		X
6. A brief description of the surrounding land use is provided. (see Section 3.1)	X	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	X	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	X	
- groundwater samples distinguished from soil samples (if applicable)	N/A	
- samples collected from stockpiled excavated soil	X	
- tank and piping locations and limits of excavation pit	X	
- adjacent structures and streets	X	
- approximate locations of any on-site and nearby utilities	X	
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	X	
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	X	
11. Any factors that may have compromised the quality of the data or validity of the results are described.	X	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.		X

[redacted]

Richard Schaefer
Person registered with Ecology

Earth Tech
Firm Affiliated with

Business Address: 10800 N E 8th Street, 7th Floor
Street

Telephone: (425) 455-9494

Bellevue
City

WA
State

98004
Zip Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173-360 WAC.

02.09.99
Date

Signature of Person Registered with Ecology

APPENDIX F

BACKFILL MATERIAL ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

NOV 18 1998

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project: American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number: 202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager: Terry McPhetridge	Reported: 11/16/98 10:27

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
TP Material	B811014-01	Other wet	11/2/98

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 481-9200 ▪ FAX 485-2992
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 643-9200 ▪ FAX 644-2202

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Hydrocarbon Identification by Washington DOE Method WTPH-HCID
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Gasoline Range Hydrocarbons	1180060	11/3/98	11/3/98		20.0	ND	mg/kg	
Diesel Range Hydrocarbons	"	"	"		50.0	**DET**	"	
Heavy Oil Range Hydrocarbons	"	"	"		100	**DET**	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*109*	*%*	

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

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Gasoline Range Hydrocarbons	1180071	11/3/98	11/5/98		5.00	**7.42**	mg/kg	
Benzene	"	"	"		0.0500	ND	"	
Toluene	"	"	"		0.0500	ND	"	
Ethylbenzene	"	"	"		0.0500	ND	"	
Xylenes (total)	"	"	"		0.100	ND	"	
Surrogate: 4-BFB (FID)	"	"	"	*50.0-150*		*103*	*%*	
Surrogate: 4-BFB (PID)	"	"	"	*50.0-150*		*120*	"	

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

orth Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Diesel Range Hydrocarbons	1180188	11/5/98	11/6/98		110	**1760**	mg/kg dry	
Heavy Oil Range Hydrocarbons	"	"	"		275	**8610**	"	
Surrogate: 2-FBP	"	"	"	*50.0-150*		*59.7*	*%*	

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

orth Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

TCLP Metals by EPA 1311/6000/7000 Series Methods
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Arsenic	1180126	11/4/98	11/4/98	EPA 6010B	0.200	ND	mg/l	
Barium	"	"	"	EPA 6010B	1.00	ND	"	
Cadmium	"	"	"	EPA 6010B	0.00500	ND	"	
Chromium	"	"	"	EPA 6010B	0.0100	ND	"	
Lead	"	"	"	EPA 6010B	0.200	ND	"	
Selenium	"	"	"	EPA 6010B	0.150	ND	"	
Silver	"	"	"	EPA 6010B	0.0500	ND	"	
Mercury	1180119	"	"	EPA 7470A	0.00100	ND	"	

North Creek Analytical - Bothell

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

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Polychlorinated Biphenyls by EPA Method 8082
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Aroclor 1016	1180065	11/3/98	11/3/98		550	ND	ug/kg	1
Aroclor 1221	"	"	11/4/98		550	ND	"	1
Aroclor 1232	"	"	"		550	ND	"	1
Aroclor 1242	"	"	"		550	ND	"	1
Aroclor 1248	"	"	"		550	ND	"	1
Aroclor 1254	"	"	"		550	ND	"	1
Aroclor 1260	"	"	"		550	ND	"	1
Aroclor 1262	"	"	"		550	ND	"	1
Aroclor 1268	"	"	"		550	ND	"	1
Surrogate: TCX	"	"	*11/3/98*	*40.0-130*		*95.8*	*%*	

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

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Acetone	1180397	11/11/98	11/12/98		10.0	ND	mg/kg	
Benzene	"	"	"		1.00	ND	"	
Bromobenzene	"	"	"		1.00	ND	"	
Bromochloromethane	"	"	"		1.00	ND	"	
Bromodichloromethane	"	"	"		1.00	ND	"	
Bromoform	"	"	"		1.00	ND	"	
Bromomethane	"	"	"		1.00	ND	"	
2-Butanone	"	"	"		10.0	ND	"	
n-Butylbenzene	"	"	"		1.00	ND	"	
sec-Butylbenzene	"	"	"		1.00	ND	"	
tert-Butylbenzene	"	"	"		1.00	ND	"	
Carbon disulfide	"	"	"		1.00	ND	"	
`rbon tetrachloride	"	"	"		1.00	ND	"	
ilorobenzene	"	"	"		1.00	ND	"	
Chloroethane	"	"	"		1.00	ND	"	
Chloroform	"	"	"		1.00	ND	"	
Chloromethane	"	"	"		5.00	ND	"	
2-Chlorotoluene	"	"	"		1.00	ND	"	
4-Chlorotoluene	"	"	"		1.00	ND	"	
Dibromochloromethane	"	"	"		1.00	ND	"	
1,2-Dibromo-3-chloropropane	"	"	"		1.00	ND	"	
1,2-Dibromoethane	"	"	"		1.00	ND	"	
Dibromomethane	"	"	"		1.00	ND	"	
1,2-Dichlorobenzene	"	"	"		1.00	ND	"	
1,3-Dichlorobenzene	"	"	"		1.00	ND	"	
1,4-Dichlorobenzene	"	"	"		1.00	ND	"	
Dichlorodifluoromethane	"	"	"		1.00	ND	"	
1,1-Dichloroethane	"	"	"		1.00	ND	"	
1,2-Dichloroethane	"	"	"		1.00	ND	"	
1,1-Dichloroethene	"	"	"		1.00	ND	"	
cis-1,2-Dichloroethene	"	"	"		1.00	ND	"	
trans-1,2-Dichloroethene	"	"	"		1.00	ND	"	
1,2-Dichloropropane	"	"	"		1.00	ND	"	
1,3-Dichloropropane	"	"	"		1.00	ND	"	
2,2-Dichloropropane	"	"	"		1.00	ND	"	
1,1-Dichloropropene	"	"	"		1.00	ND	"	
cis-1,3-Dichloropropene	"	"	"		1.00	ND	"	
trans-1,3-Dichloropropene	"	"	"		1.00	ND	"	

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North Creek Analytical - Bothell

Kirk Gendron, Project Manager

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material (continued)			**B811014-01**				**Other wet**	
Ethylbenzene	1180397	11/11/98	11/12/98		1.00	ND	mg/kg	
Hexachlorobutadiene	"	"	"		1.00	ND	"	
2-Hexanone	"	"	"		10.0	ND	"	
Isopropylbenzene	"	"	"		1.00	ND	"	
p-Isopropyltoluene	"	"	"		1.00	ND	"	
Methylene chloride	"	"	"		5.00	ND	"	
4-Methyl-2-pentanone	"	"	"		10.0	ND	"	
Naphthalene	"	"	"		1.00	ND	"	
n-Propylbenzene	"	"	"		1.00	ND	"	
Styrene	"	"	"		1.00	ND	"	
1,1,1,2-Tetrachloroethane	"	"	"		1.00	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		1.00	ND	"	
'rachloroethene	"	"	"		1.00	ND	"	
.uene	"	"	"		1.00	ND	"	
1,2,3-Trichlorobenzene	"	"	"		1.00	ND	"	
1,2,4-Trichlorobenzene	"	"	"		1.00	ND	"	
1,1,1-Trichloroethane	"	"	"		1.00	**3.57**	"	
1,1,2-Trichloroethane	"	"	"		1.00	ND	"	
Trichloroethene	"	"	"		1.00	ND	"	
Trichlorofluoromethane	"	"	"		1.00	ND	"	
1,2,3-Trichloropropane	"	"	"		1.00	ND	"	
1,2,4-Trimethylbenzene	"	"	"		1.00	ND	"	
1,3,5-Trimethylbenzene	"	"	"		1.00	ND	"	
Vinyl chloride	"	"	"		1.00	ND	"	
m,p-Xylene	"	"	"		2.00	ND	"	
o-Xylene	"	"	"		1.00	ND	"	
Surrogate: 2-Bromopropene	"	"	"	*70.0-130*		*87.0*	*%*	
Surrogate: 1,2-DCA-d4	"	"	"	*70.0-130*		*91.5*	"	
Surrogate: Toluene-d8	"	"	"	*70.0-130*		*92.5*	"	
Surrogate: 4-BFB	"	"	"	*70.0-130*		*87.5*	"	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Acenaphthene	1180388	11/11/98	11/15/98		0.500	ND	mg/kg dry	
Acenaphthylene	"	"	"		0.500	ND	"	
Aniline	"	"	"		0.500	ND	"	
Anthracene	"	"	"		0.500	ND	"	
Benzoic Acid	"	"	"		2.50	ND	"	
Benzo (a) anthracene	"	"	"		1.00	ND	"	2
Benzo (b) fluoranthene	"	"	"		1.00	ND	"	2
Benzo (k) fluoranthene	"	"	"		1.00	ND	"	2
Benzo (ghi) perylene	"	"	"		1.00	ND	"	2
Benzo (a) pyrene	"	"	"		1.00	ND	"	2
Benzyl alcohol	"	"	"		0.500	ND	"	
Bis(2-chloroethoxy)methane	"	"	"		0.500	ND	"	
s(2-chloroethyl)ether	"	"	"		0.500	ND	"	
s(2-chloroisopropyl)ether	"	"	"		0.500	ND	"	
Bis(2-ethylhexyl)phthalate	"	"	"		5.00	ND	"	2
4-Bromophenyl phenyl ether	"	"	"		0.500	ND	"	
Butyl benzyl phthalate	"	"	"		1.00	ND	"	2
Carbazole	"	"	"		2.50	ND	"	
4-Chloroaniline	"	"	"		0.500	ND	"	
2-Chloronaphthalene	"	"	"		0.500	ND	"	
4-Chloro-3-methylphenol	"	"	"		0.500	ND	"	
2-Chlorophenol	"	"	"		0.500	ND	"	
4-Chlorophenyl phenyl ether	"	"	"		0.500	ND	"	
Chrysene	"	"	"		1.00	ND	"	2
Dibenz (a,h) anthracene	"	"	"		1.00	ND	"	2
Dibenzofuran	"	"	"		0.500	ND	"	
Di-n-butyl phthalate	"	"	"		2.50	ND	"	
1,3-Dichlorobenzene	"	"	"		0.500	ND	"	
1,4-Dichlorobenzene	"	"	"		0.500	ND	"	
1,2-Dichlorobenzene	"	"	"		0.500	ND	"	
3,3'-Dichlorobenzidine	"	"	"		50.0	ND	"	2
2,4-Dichlorophenol	"	"	"		0.500	ND	"	
Diethyl phthalate	"	"	"		0.500	ND	"	
2,4-Dimethylphenol	"	"	"		0.500	ND	"	
Dimethyl phthalate	"	"	"		0.500	ND	"	
4,6-Dinitro-2-methylphenol	"	"	"		2.50	ND	"	
2,4-Dinitrophenol	"	"	"		2.50	ND	"	
2,4-Dinitrotoluene	"	"	"		0.500	ND	"	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TP Material (continued)			**B811014-01**				**Other wet**	
2,6-Dinitrotoluene	1180388	11/11/98	11/15/98		0.500	ND	mg/kg dry	
Di-n-octyl phthalate	"	"	"		2.50	ND	"	
Fluoranthene	"	"	"		0.500	ND	"	
Fluorene	"	"	"		0.500	ND	"	
Hexachlorobenzene	"	"	"		0.500	ND	"	
Hexachlorobutadiene	"	"	"		0.500	ND	"	
Hexachlorocyclopentadiene	"	"	"		0.500	ND	"	
Hexachloroethane	"	"	"		0.500	ND	"	
Indeno (1,2,3-cd) pyrene	"	"	"		1.00	ND	"	2
Isophorone	"	"	"		0.500	ND	"	
2-Methylnaphthalene	"	"	"		0.500	**2.24**	"	
2-Methylphenol	"	"	"		0.500	ND	"	
4-Methylphenol	"	"	"		0.500	ND	"	
ɔhthalene	"	"	"		0.500	ND	"	
2-Nitroaniline	"	"	"		2.50	ND	"	
3-Nitroaniline	"	"	"		2.50	ND	"	
4-Nitroaniline	"	"	"		2.50	ND	"	
Nitrobenzene	"	"	"		0.500	ND	"	
2-Nitrophenol	"	"	"		0.500	ND	"	
4-Nitrophenol	"	"	"		2.50	ND	"	
N-Nitrosodiphenylamine	"	"	"		1.00	ND	"	
N-Nitrosodi-n-propylamine	"	"	"		0.500	ND	"	
Pentachlorophenol	"	"	"		2.50	ND	"	
Phenanthrene	"	"	"		0.500	ND	"	
Phenol	"	"	"		0.500	ND	"	
Pyrene	"	"	"		1.00	ND	"	2
Pyridine	"	"	"		2.00	ND	"	
1,2,4-Trichlorobenzene	"	"	"		0.500	ND	"	
2,4,5-Trichlorophenol	"	"	"		2.50	ND	"	
2,4,6-Trichlorophenol	"	"	"		0.500	ND	"	
Surrogate: 2-FP	"	"	"	*19.0-141*		*75.4*	*%*	
Surrogate: Phenol-d6	"	"	"	*44.0-128*		*81.3*	"	
Surrogate: 2,4,6-TBP	"	"	"	*10.0-137*		*168*	"	*3*
Surrogate: Nitrobenzene-d5	"	"	"	*33.0-108*		*85.4*	"	
Surrogate: 2-FBP	"	"	"	*51.0-124*		*91.8*	"	
Surrogate: p-Terphenyl-d14	"	"	"	*48.0-149*		*111*	"	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Conventional Chemistry Parameters by APHA/EPA Methods
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	
Phenolics	1180461	11/11/98	11/11/98	EPA 420.1	0.500	**1.25**	mg/kg	
pH	1180467	11/12/98	11/12/98	EPA 9045B		**6.18**	pH Units	
Extractable Organic Halides	1180378	11/11/98	11/11/98	EPA 9076 mod.	50.0	ND	mg/kg	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Physical Parameters by APHA/ASTM/EPA Methods
North Creek Analytical - Bothell

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
TP Material			**B811014-01**				**Other wet**	**4**
Flashpoint	1180462	11/12/98	11/12/98	EPA 1010	70.0	ND	°F	
Free Liquid	1180372	11/11/98	11/11/98	EPA 9095	1.00	ND	N/A	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Dry Weight Determination
North Creek Analytical - Bothell

Sample Name	Lab ID	Matrix	Result	Units
TP Material	B811014-01	Other wet	97.4	%

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Hydrocarbon Identification by Washington DOE Method WTPH-HCID/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180060	**Date Prepared: 11/3/98**					**Extraction Method: HCID (WA)**				
Blank	**1180060-BLK1**									
Gasoline Range Hydrocarbons	11/3/98			**ND**	mg/kg	**20.0**				
Diesel Range Hydrocarbons	"			**ND**	"	**50.0**				
Heavy Oil Range Hydrocarbons	"			**ND**	"	**100**				
Surrogate: 2-FBP	"	*DET*		*DET*	"	*50.0-150*	*97.5*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180071	**Date Prepared: 11/3/98**					**Extraction Method: EPA 5030B (MeOH)**				
Blank	**1180071-BLK1**									
Gasoline Range Hydrocarbons	11/4/98			**ND**	mg/kg	**5.00**				
Benzene	"			**ND**	"	**0.0500**				
Toluene	"			**ND**	"	**0.0500**				
Ethylbenzene	"			**ND**	"	**0.0500**				
Xylenes (total)	"			**ND**	"	**0.100**				
Surrogate: 4-BFB (FID)	"	*4.00*		*3.48*	"	*50.0-150*	*87.0*			
Surrogate: 4-BFB (PID)	"	*4.00*		*4.30*	"	*50.0-150*	*108*			
LCS	**1180071-BS1**									
Gasoline Range Hydrocarbons	11/4/98	25.0		21.6	mg/kg	70.0-130	86.4			
Surrogate: 4-BFB (FID)	"	*4.00*		*3.70*	"	*50.0-150*	*92.5*			
LCS	**1180071-BS2**									
Benzene	11/5/98	0.500		0.546	mg/kg	60.0-140	109			
Toluene	"	0.500		0.556	"	60.0-140	111			
Ethylbenzene	"	0.500		0.536	"	60.0-140	107			
Xylenes (total)	"	1.50		1.64	"	60.0-140	109			
Surrogate: 4-BFB (PID)	"	*4.00*		*4.73*	"	*50.0-150*	*118*			
LCS Dup	**1180071-BSD1**									
Gasoline Range Hydrocarbons	11/4/98	25.0		26.2	mg/kg	70.0-130	105	25.0	19.4	
Surrogate: 4-BFB (FID)	"	*4.00*		*4.30*	"	*50.0-150*	*108*			
LCS Dup	**1180071-BSD2**									
Benzene	11/5/98	0.500		0.534	mg/kg	60.0-140	107	20.0	1.85	
Toluene	"	0.500		0.546	"	60.0-140	109	20.0	1.82	
Ethylbenzene	"	0.500		0.531	"	60.0-140	106	20.0	0.939	
Xylenes (total)	"	1.50		1.63	"	60.0-140	109	20.0	0	
Surrogate: 4-BFB (PID)	"	*4.00*		*4.78*	"	*50.0-150*	*120*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Diesel Hydrocarbons (C12-C24) and Heavy Oil (C24-C40) by WTPH-D (extended)/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180188	**Date Prepared: 11/5/98**					**Extraction Method: EPA 3550B**				
Blank	**1180188-BLK1**									
Diesel Range Hydrocarbons	11/5/98			**ND**	mg/kg dry	**10.0**				
Heavy Oil Range Hydrocarbons	"			**ND**	"	**25.0**				
Surrogate: 2-FBP	"	*10.7*		*6.12*	"	*50.0-150*	*57.2*			
LCS	**1180188-BS1**									
Diesel Range Hydrocarbons	11/5/98	66.7		68.4	mg/kg dry	60.0-140	103			
Surrogate: 2-FBP	"	*10.7*		*8.39*	"	*50.0-150*	*78.4*			
Duplicate	**1180188-DUP1**		**B811014-01**							
Diesel Range Hydrocarbons	11/5/98		1760	1280	mg/kg dry			50.0	**31.6**	
Heavy Oil Range Hydrocarbons	"		8610	5850	"			50.0	**38.2**	
rogate: 2-FBP	"	*11.0*		*5.65*	"	*50.0-150*	*51.4*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180119	**Date Prepared: 11/4/98**					**Extraction Method: EPA 7470A**				
Blank	**1180119-BLK1**									
Mercury	11/4/98			**ND**	mg/l	**0.00100**				
LCS	**1180119-BS1**									
Mercury	11/4/98	0.00500		0.00500	mg/l	70.0-130	100			
Matrix Spike	**1180119-MS1**		**B811014-01**							
Mercury	11/4/98	0.0100	ND	0.0101	mg/l	75.0-125	**101**			
Matrix Spike Dup	**1180119-MSD1**		**B811014-01**							
Mercury	11/4/98	0.0100	ND	0.0100	mg/l	75.0-125	**100**	20.0	**0.995**	
tch: 1180126	**Date Prepared: 11/4/98**					**Extraction Method: EPA 3010A TCLP**				
ank	**1180126-BLK1**									
Arsenic	11/4/98			**ND**	mg/l	**0.200**				
Barium	"			**ND**	"	**1.00**				
Cadmium	"			**ND**	"	**0.00500**				
Chromium	"			**ND**	"	**0.0100**				
Lead	"			**ND**	"	**0.200**				
Selenium	"			**ND**	"	**0.150**				
Silver	"			**ND**	"	**0.0500**				
LCS	**1180126-BS1**									
Arsenic	11/4/98	1.00		1.09	mg/l	80.0-120	109			
Barium	"	5.00		5.09	"	80.0-120	102			
Cadmium	"	1.00		1.00	"	80.0-120	100			
Chromium	"	1.00		1.01	"	80.0-120	101			
Lead	"	1.00		1.04	"	80.0-120	104			
Selenium	"	1.00		1.02	"	80.0-120	102			
Silver	"	0.500		0.488	"	80.0-120	97.6			
Matrix Spike	**1180126-MS1**		**B811014-01**							
Arsenic	11/4/98	1.00	ND	1.09	mg/l	80.0-120	**109**			
Barium	"	5.00	ND	5.19	"	80.0-120	**104**			
Cadmium	"	1.00	ND	0.979	"	80.0-120	**97.9**			
Chromium	"	1.00	ND	0.981	"	80.0-120	**98.1**			
Lead	"	1.00	ND	1.00	"	80.0-120	**100**			
Selenium	"	1.00	ND	1.09	"	80.0-120	**109**			

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Kirk Gendron, Project Manager

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**1180126-MS1**		**B811014-01**							
Silver	11/4/98	0.500	ND	0.466	mg/l	80.0-120	**93.2**			
Matrix Spike Dup	**1180126-MSD1**		**B811014-01**							
Arsenic	11/4/98	1.00	ND	1.10	mg/l	80.0-120	**110**	20.0	**0.913**	
Barium	"	5.00	ND	5.17	"	80.0-120	**103**	20.0	**0.966**	
Cadmium	"	1.00	ND	0.993	"	80.0-120	**99.3**	20.0	**1.42**	
Chromium	"	1.00	ND	0.979	"	80.0-120	**97.9**	20.0	**0.204**	
Lead	"	1.00	ND	1.00	"	80.0-120	**100**	20.0	**0**	
Selenium	"	1.00	ND	0.970	"	80.0-120	**97.0**	20.0	**11.7**	
Silver	"	0.500	ND	0.475	"	80.0-120	**95.0**	20.0	**1.91**	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Polychlorinated Biphenyls by EPA Method 8082/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180065	**Date Prepared: 11/3/98**					**Extraction Method: EPA 3550B**				
Blank	**1180065-BLK1**									
Aroclor 1016	11/4/98			**ND**	ug/kg	**50.0**				
Aroclor 1221	"			**ND**	"	**50.0**				
Aroclor 1232	"			**ND**	"	**50.0**				
Aroclor 1242	"			**ND**	"	**50.0**				
Aroclor 1248	"			**ND**	"	**50.0**				
Aroclor 1254	"			**ND**	"	**50.0**				
Aroclor 1260	11/3/98			**ND**	"	**50.0**				
Aroclor 1262	"			**ND**	"	**50.0**				
Aroclor 1268	"			**ND**	"	**50.0**				
Surrogate: TCX	"	*6.67*		*7.28*	"	*40.0-130*	*109*			
LCS	**1180065-BS1**									
Aroclor 1260	11/3/98	333		215	ug/kg	37.0-98.0	64.6			
Surrogate: TCX	"	*6.67*		*8.09*	"	*40.0-130*	*121*			
LCS Dup	**1180065-BSD1**									
Aroclor 1260	11/3/98	333		225	ug/kg	37.0-98.0	67.6	38.0	4.54	
Surrogate: TCX	"	*6.67*		*8.31*	"	*40.0-130*	*125*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Volatile Organic Compounds by EPA Method 8260B/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180397	**Date Prepared: 11/11/98**					**Extraction Method: EPA 5030B [MeOH]**				
Blank	**1180397-BLK1**									
Acetone	11/12/98			ND	mg/kg	10.0				
Benzene	"			ND	"	1.00				
Bromobenzene	"			ND	"	1.00				
Bromochloromethane	"			ND	"	1.00				
Bromodichloromethane	"			ND	"	1.00				
Bromoform	"			ND	"	1.00				
Bromomethane	"			ND	"	1.00				
2-Butanone	"			ND	"	10.0				
n-Butylbenzene	"			ND	"	1.00				
sec-Butylbenzene	"			ND	"	1.00				
tert-Butylbenzene	"			ND	"	1.00				
·bon disulfide	"			ND	"	1.00				
/bon tetrachloride	"			ND	"	1.00				
Chlorobenzene	"			ND	"	1.00				
Chloroethane	"			ND	"	1.00				
Chloroform	"			ND	"	1.00				
Chloromethane	"			ND	"	5.00				
2-Chlorotoluene	"			ND	"	1.00				
4-Chlorotoluene	"			ND	"	1.00				
Dibromochloromethane	"			ND	"	1.00				
1,2-Dibromo-3-chloropropane	"			ND	"	1.00				
1,2-Dibromoethane	"			ND	"	1.00				
Dibromomethane	"			ND	"	1.00				
1,2-Dichlorobenzene	"			ND	"	1.00				
1,3-Dichlorobenzene	"			ND	"	1.00				
1,4-Dichlorobenzene	"			ND	"	1.00				
Dichlorodifluoromethane	"			ND	"	1.00				
1,1-Dichloroethane	"			ND	"	1.00				
1,2-Dichloroethane	"			ND	"	1.00				
1,1-Dichloroethene	"			ND	"	1.00				
cis-1,2-Dichloroethene	"			ND	"	1.00				
trans-1,2-Dichloroethene	"			ND	"	1.00				
1,2-Dichloropropane	"			ND	"	1.00				
1,3-Dichloropropane	"			ND	"	1.00				
2,2-Dichloropropane	"			ND	"	1.00				
1,1-Dichloropropene	"			ND	"	1.00				
cis-1,3-Dichloropropene	"			ND	"	1.00				

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Volatile Organic Compounds by EPA Method 8260B/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**1180397-BLK1**									
trans-1,3-Dichloropropene	11/12/98			ND	mg/kg	1.00				
Ethylbenzene	"			ND	"	1.00				
Hexachlorobutadiene	"			ND	"	1.00				
2-Hexanone	"			ND	"	10.0				
Isopropylbenzene	"			ND	"	1.00				
p-Isopropyltoluene	"			ND	"	1.00				
Methylene chloride	"			ND	"	5.00				
4-Methyl-2-pentanone	"			ND	"	10.0				
Naphthalene	"			ND	"	1.00				
n-Propylbenzene	"			ND	"	1.00				
Styrene	"			ND	"	1.00				
1,1,1,2-Tetrachloroethane	"			ND	"	1.00				
1,1,2,2-Tetrachloroethane	"			ND	"	1.00				
Tetrachloroethene	"			ND	"	1.00				
Toluene	"			ND	"	1.00				
1,2,3-Trichlorobenzene	"			ND	"	1.00				
1,2,4-Trichlorobenzene	"			ND	"	1.00				
1,1,1-Trichloroethane	"			ND	"	1.00				
1,1,2-Trichloroethane	"			ND	"	1.00				
Trichloroethene	"			ND	"	1.00				
Trichlorofluoromethane	"			ND	"	1.00				
1,2,3-Trichloropropane	"			ND	"	1.00				
1,2,4-Trimethylbenzene	"			ND	"	1.00				
1,3,5-Trimethylbenzene	"			ND	"	1.00				
Vinyl chloride	"			ND	"	1.00				
m,p-Xylene	"			ND	"	2.00				
o-Xylene	"			ND	"	1.00				
Surrogate: 2-Bromopropene	"	*20.0*		*20.9*	"	*70.0-130*	*104*			
Surrogate: 1,2-DCA-d4	"	*20.0*		*18.4*	"	*70.0-130*	*92.0*			
Surrogate: Toluene-d8	"	*20.0*		*19.2*	"	*70.0-130*	*96.0*			
Surrogate: 4-BFB	"	*20.0*		*17.7*	"	*70.0-130*	*88.5*			
LCS	**1180397-BS1**									
Benzene	11/12/98	10.0		7.72	mg/kg	70.0-130	77.2			
Chlorobenzene	"	10.0		8.13	"	70.0-130	81.3			
1,1-Dichloroethene	"	10.0		7.22	"	70.0-130	72.2			
Toluene	"	10.0		7.21	"	70.0-130	72.1			
Trichloroethene	"	10.0		8.13	"	70.0-130	81.3			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Volatile Organic Compounds by EPA Method 8260B/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS (continued)	**1180397-BS1**									
Surrogate: 2-Bromopropene	*11/12/98*	*20.0*		*19.3*	*mg/kg*	*70.0-130*	*96.5*			
Surrogate: 1,2-DCA-d4	"	*20.0*		*18.2*	"	*70.0-130*	*91.0*			
Surrogate: Toluene-d8	"	*20.0*		*17.5*	"	*70.0-130*	*87.5*			
Surrogate: 4-BFB	"	*20.0*		*18.1*	"	*70.0-130*	*90.5*			
LCS Dup	**1180397-BSD1**									
Benzene	11/12/98	10.0		7.33	mg/kg	70.0-130	73.3	15.0	5.18	
Chlorobenzene	"	10.0		7.64	"	70.0-130	76.4	15.0	6.21	
1,1-Dichloroethene	"	10.0		7.51	"	70.0-130	75.1	15.0	3.94	
Toluene	"	10.0		6.85	"	70.0-130	68.5	15.0	5.12	5
Trichloroethene	"	10.0		7.16	"	70.0-130	71.6	15.0	12.7	
Surrogate: 2-Bromopropene	"	*20.0*		*19.5*	"	*70.0-130*	*97.5*			
Surrogate: 1,2-DCA-d4	"	*20.0*		*17.8*	"	*70.0-130*	*89.0*			
Surrogate: Toluene-d8	"	*20.0*		*17.3*	"	*70.0-130*	*86.5*			
Surrogate: 4-BFB	"	*20.0*		*16.6*	"	*70.0-130*	*83.0*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180388	**Date Prepared: 11/11/98**					**Extraction Method: EPA 3550B**				
Blank	**1180388-BLK1**									
Acenaphthene	11/14/98			ND	mg/kg dry	0.100				
Acenaphthylene	"			ND	"	0.100				
Aniline	"			ND	"	0.100				
Anthracene	"			ND	"	0.100				
Benzoic Acid	"			ND	"	0.500				
Benzo (a) anthracene	"			ND	"	0.100				
Benzo (b) fluoranthene	"			ND	"	0.100				
Benzo (k) fluoranthene	"			ND	"	0.100				
Benzo (ghi) perylene	"			ND	"	0.100				
Benzo (a) pyrene	"			ND	"	0.100				
Benzyl alcohol	"			ND	"	0.100				
(2-chloroethoxy)methane	"			ND	"	0.100				
(2-chloroethyl)ether	"			ND	"	0.100				
Bis(2-chloroisopropyl)ether	"			ND	"	0.100				
Bis(2-ethylhexyl)phthalate	"			ND	"	0.500				
4-Bromophenyl phenyl ether	"			ND	"	0.100				
Butyl benzyl phthalate	"			ND	"	0.100				
Carbazole	"			ND	"	0.500				
4-Chloroaniline	"			ND	"	0.100				
2-Chloronaphthalene	"			ND	"	0.100				
4-Chloro-3-methylphenol	"			ND	"	0.100				
2-Chlorophenol	"			ND	"	0.100				
4-Chlorophenyl phenyl ether	"			ND	"	0.100				
Chrysene	"			ND	"	0.100				
Dibenz (a,h) anthracene	"			ND	"	0.100				
Dibenzofuran	"			ND	"	0.100				
Di-n-butyl phthalate	"			ND	"	0.500				
1,3-Dichlorobenzene	"			ND	"	0.100				
1,4-Dichlorobenzene	"			ND	"	0.100				
1,2-Dichlorobenzene	"			ND	"	0.100				
3,3'-Dichlorobenzidine	"			ND	"	5.00				
2,4-Dichlorophenol	"			ND	"	0.100				
Diethyl phthalate	"			ND	"	0.100				
2,4-Dimethylphenol	"			ND	"	0.100				
Dimethyl phthalate	"			ND	"	0.100				
4,6-Dinitro-2-methylphenol	"			ND	"	0.500				
2,4-Dinitrophenol	"			ND	"	0.500				

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank (continued)	**1180388-BLK1**									
2,4-Dinitrotoluene	11/14/98			ND	mg/kg dry	0.100				
2,6-Dinitrotoluene	"			ND	"	0.100				
Di-n-octyl phthalate	"			ND	"	0.500				
Fluoranthene	"			ND	"	0.100				
Fluorene	"			ND	"	0.100				
Hexachlorobenzene	"			ND	"	0.100				
Hexachlorobutadiene	"			ND	"	0.100				
Hexachlorocyclopentadiene	"			ND	"	0.100				
Hexachloroethane	"			ND	"	0.100				
Indeno (1,2,3-cd) pyrene	"			ND	"	0.100				
Isophorone	"			ND	"	0.100				
2-Methylnaphthalene	"			ND	"	0.100				
Methylphenol	"			ND	"	0.100				
4-Methylphenol	"			ND	"	0.100				
Naphthalene	"			ND	"	0.100				
2-Nitroaniline	"			ND	"	0.500				
3-Nitroaniline	"			ND	"	0.500				
4-Nitroaniline	"			ND	"	0.500				
Nitrobenzene	"			ND	"	0.100				
2-Nitrophenol	"			ND	"	0.100				
4-Nitrophenol	"			ND	"	0.500				
N-Nitrosodiphenylamine	"			ND	"	0.200				
N-Nitrosodi-n-propylamine	"			ND	"	0.100				
Pentachlorophenol	"			ND	"	0.500				
Phenanthrene	"			ND	"	0.100				
Phenol	"			ND	"	0.100				
Pyrene	"			ND	"	0.100				
1,2,4-Trichlorobenzene	"			ND	"	0.100				
2,4,5-Trichlorophenol	"			ND	"	0.500				
2,4,6-Trichlorophenol	"			ND	"	0.100				
Surrogate: 2-FP	"	*1.67*		*1.34*	"	*19.0-141*	*80.2*			
Surrogate: Phenol-d6	"	*1.67*		*1.30*	"	*44.0-128*	*77.8*			
Surrogate: 2,4,6-TBP	"	*1.67*		*1.63*	"	*10.0-137*	*97.6*			
Surrogate: Nitrobenzene-d5	"	*1.67*		*1.25*	"	*33.0-108*	*74.9*			
Surrogate: 2-FBP	"	*1.67*		*1.19*	"	*51.0-124*	*71.3*			
Surrogate: p-Terphenyl-d14	"	*1.67*		*1.34*	"	*48.0-149*	*80.2*			

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS	**1180388-BS1**									
Acenaphthene	11/14/98	3.33		2.18	mg/kg dry	48.0-110	65.5			
4-Chloro-3-methylphenol	"	6.67		5.63	"	34.0-115	84.4			
2-Chlorophenol	"	6.67		5.45	"	57.0-110	81.7			
1,4-Dichlorobenzene	"	3.33		3.09	"	39.0-110	92.8			
2,4-Dinitrotoluene	"	3.33		2.96	"	50.0-110	88.9			
4-Nitrophenol	"	6.67		5.07	"	26.0-116	76.0			
N-Nitrosodi-n-propylamine	"	3.33		2.96	"	28.0-147	88.9			
Pentachlorophenol	"	6.67		7.09	"	46.0-120	106			
Phenol	"	6.67		6.01	"	35.0-110	90.1			
Pyrene	"	3.33		2.10	"	35.0-143	63.1			
1,2,4-Trichlorobenzene	"	3.33		2.89	"	39.0-110	86.8			
Surrogate: 2-FP	"	*1.67*		*1.45*	"	*19.0-141*	*86.8*			
Surrogate: Phenol-d6	"	*1.67*		*1.61*	"	*44.0-128*	*96.4*			
Surrogate: 2,4,6-TBP	"	*1.67*		*1.84*	"	*10.0-137*	*110*			
Surrogate: Nitrobenzene-d5	"	*1.67*		*1.30*	"	*33.0-108*	*77.8*			
Surrogate: 2-FBP	"	*1.67*		*1.24*	"	*51.0-124*	*74.3*			
Surrogate: p-Terphenyl-d14	"	*1.67*		*1.18*	"	*48.0-149*	*70.7*			
Matrix Spike	**1180388-MS1**		**B811014-01**							
Acenaphthene	11/14/98	3.42	ND	2.74	mg/kg dry	34.0-122	**80.1**			
4-Chloro-3-methylphenol	"	6.85	ND	4.89	"	26.0-129	**71.4**			
2-Chlorophenol	"	6.85	ND	5.07	"	43.0-131	**74.0**			
1,4-Dichlorobenzene	"	3.42	ND	3.12	"	34.0-131	**91.2**			
2,4-Dinitrotoluene	"	3.42	ND	1.51	"	10.0-126	**44.2**			
4-Nitrophenol	"	6.85	ND	4.14	"	10.0-111	**60.4**			
N-Nitrosodi-n-propylamine	"	3.42	ND	2.73	"	29.0-160	**79.8**			
Pentachlorophenol	"	6.85	ND	6.23	"	46.0-120	**90.9**			
Phenol	"	6.85	ND	4.96	"	41.0-118	**72.4**			
Pyrene	"	3.42	ND	3.39	"	44.0-122	**99.1**			
1,2,4-Trichlorobenzene	"	3.42	ND	3.15	"	10.0-176	**92.1**			
Surrogate: 2-FP	"	*1.71*		*1.14*	"	*19.0-141*	*66.7*			
Surrogate: Phenol-d6	"	*1.71*		*1.12*	"	*44.0-128*	*65.5*			
Surrogate: 2,4,6-TBP	"	*1.71*		*2.30*	"	*10.0-137*	*135*			
Surrogate: Nitrobenzene-d5	"	*1.71*		*1.17*	"	*33.0-108*	*68.4*			
Surrogate: 2-FBP	"	*1.71*		*1.35*	"	*51.0-124*	*78.9*			
Surrogate: p-Terphenyl-d14	"	*1.71*		*1.73*	"	*48.0-149*	*101*			

North Creek Analytical - Bothell

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

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

BOTHELL ▪ (425) 420-9200 ▪ FAX 420-9210
SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Semivolatile Organic Compounds by EPA Method 8270C/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup	**1180388-MSD1**		**B811014-01**							
Acenaphthene	11/14/98	3.42	ND	1.51	mg/kg dry	34.0-122	**44.2**	56.0	**57.8**	6
4-Chloro-3-methylphenol	"	6.85	ND	3.34	"	26.0-129	**48.8**	29.0	**37.6**	6
2-Chlorophenol	"	6.85	ND	3.22	"	43.0-131	**47.0**	27.0	**44.6**	6
1,4-Dichlorobenzene	"	3.42	ND	1.75	"	34.0-131	**51.2**	23.0	**56.2**	6
2,4-Dinitrotoluene	"	3.42	ND	1.11	"	10.0-126	**32.5**	22.0	**30.5**	6
4-Nitrophenol	"	6.85	ND	3.47	"	10.0-111	**50.7**	43.0	**17.5**	
N-Nitrosodi-n-propylamine	"	3.42	ND	1.78	"	29.0-160	**52.0**	25.0	**42.2**	6
Pentachlorophenol	"	6.85	ND	3.60	"	46.0-120	**52.6**	29.0	**53.4**	6
Phenol	"	6.85	ND	3.65	"	41.0-118	**53.3**	29.0	**30.4**	6
Pyrene	"	3.42	ND	2.11	"	44.0-122	**61.7**	31.0	**46.5**	6
1,2,4-Trichlorobenzene	"	3.42	ND	1.71	"	10.0-176	**50.0**	24.0	**59.3**	6
Surrogate: 2-FP	"	*1.71*		*0.794*	"	*19.0-141*	*46.4*			
Surrogate: Phenol-d6	"	*1.71*		*0.866*	"	*44.0-128*	*50.6*			
Surrogate: 2,4,6-TBP	"	*1.71*		*1.33*	"	*10.0-137*	*77.8*			
Surrogate: Nitrobenzene-d5	"	*1.71*		*0.917*	"	*33.0-108*	*53.6*			
Surrogate: 2-FBP	"	*1.71*		*0.856*	"	*51.0-124*	*50.1*			3
Surrogate: p-Terphenyl-d14	"	*1.71*		*0.962*	"	*48.0-149*	*56.3*			

North Creek Analytical - Bothell

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

Kirk Gendron, Project Manager

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SPOKANE ▪ (509) 924-9200 ▪ FAX 924-9290
PORTLAND ▪ (503) 906-9200 ▪ FAX 906-9210

Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Conventional Chemistry Parameters by APHA/EPA Methods/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180378	**Date Prepared: 11/11/98**					**Extraction Method: General Preparation**				
Blank	**1180378-BLK1**									
Extractable Organic Halides	11/11/98			**ND**	mg/kg	**50.0**				
LCS	**1180378-BS1**									
Extractable Organic Halides	11/11/98	2000		1920	mg/kg	71.0-115	96.0			
Duplicate	**1180378-DUP1**		**B811014-01**							
Extractable Organic Halides	11/11/98		ND	ND	mg/kg			24.0		
Matrix Spike	**1180378-MS1**		**B811014-01**							
Extractable Organic Halides	11/11/98	1640	ND	1650	mg/kg	75.0-125	**101**			
tch: 1180461	**Date Prepared: 11/11/98**					**Extraction Method: General Preparation**				
ank	**1180461-BLK1**									
Phenolics	11/11/98			**ND**	mg/kg	**0.500**				
LCS	**1180461-BS1**									
Phenolics	11/11/98	2.00		1.96	mg/kg	60.0-134	98.0			
Duplicate	**1180461-DUP1**		**B811014-01**							
Phenolics	11/11/98		1.25	1.15	mg/kg			25.0	**8.33**	
Matrix Spike	**1180461-MS1**		**B811014-01**							
Phenolics	11/11/98	1.99	1.25	3.99	mg/kg	75.0-125	**138**			7
Batch: 1180467	**Date Prepared: 11/12/98**					**Extraction Method: General Preparation**				
Duplicate	**1180467-DUP1**		**B811129-02**							
pH	11/12/98		8.44	8.36	pH Units			10.0	**0.952**	

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Physical Parameters by APHA/ASTM/EPA Methods/Quality Control
North Creek Analytical - Bothell

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 1180372	**Date Prepared: 11/11/98**				**Extraction Method: General Preparation**					
Duplicate	**1180372-DUP1**		**B811014-01**							
Free Liquid	11/11/98		ND	ND	N/A					
Batch: 1180462	**Date Prepared: 11/12/98**				**Extraction Method: General Preparation**					
Duplicate	**1180462-DUP1**		**B811014-01**							**4**
Flashpoint	11/12/98		ND	ND	°F			10.0		

North Creek Analytical - Bothell

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

Kirk Gendron, Project Manager

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Earth Tech	Project:	American National Can	Sampled: 11/2/98
10800 NE 8th, Seventh Floor	Project Number:	202607	Received: 11/2/98
Bellevue, WA 98004	Project Manager:	Terry McPhetridge	Reported: 11/16/98 10:27

Notes and Definitions

#	Note
1	The reporting limit for this analyte has been raised to account for matrix interference.
2	The reporting limit for this analyte has been raised due to matrix interference with the associated internal standard.
3	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
4	No flash detected up to 212 °F
5	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
6	The RPD for this matrix spike compound is outside of the control limit, possibly due to matrix interference or non-homogeneity of the sample.
	Analyses are not controlled on RPD values from sample concentrations less than 5 times the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

North Creek Analytical - Bothell

Kirk Gendron, Project Manager

NORTH CREEK ANALYTICAL
Environmental Laboratory Services

18939 120th Avenue N.E., Suite 101, Bothell, WA 98011-9508 (425) 420-9200 FAX 420-9210
East 11115 Montgomery, Suite B, Spokane, WA 99206-4779 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210

CHAIN OF CUSTODY REPORT

Work Order # B811014

REPORT TO: EARTH TECH
ATTENTION: TERRY McPHERIDGE
ADDRESS: 10800 NE 8th, SEVENTH FLOOR
BELLEVUE, WA 98004
PHONE: 425 455 9494 FAX: 425 453 9470
PROJECT NAME: AMERICAN NATIONAL CAN
PROJECT NUMBER: 202607
SAMPLED BY: TERRY

INVOICE TO:
ATTENTION: SAME
ADDRESS:
P.O. NUMBER: NCA QUOTE #:

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (Standard) | 7 | 5 | 4 | 3 | 2 | 1 | Same Day
Fuels & Hydrocarbon Analyses: 5 (Standard) | 3-4 | 2 | 1 | Same Day
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NCA SAMPLE ID (Laboratory Use Only)	Analysis Request: HCID	TPH	BTEX	PCB	TCLP-Metals (8)	8260	8270	TOX	Paint Filter	Flash Pt	TPH Ignitability	MATRIX (W, S, A, O)	# OF CONTAINERS	COMMENTS
1	TP MATERIAL (COATED GRAVEL)	11/2/98 9:15		✓	✓	✓	✓	✓	X	X	X	X	+	+	SOLID	2	IF TPH >10000ppm RUN: 1) TOTAL ORGANIC HALOGENS 2) SEMI-VOLATILES
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

RUSH
RELOG
RP 11/11/98

Relog
Due Friday @ 2:00 PM
FIRM

RELINQUISHED BY:	DATE: 11/2/98	RECEIVED BY: S. Wideen	DATE: 11/2/98
PRINT NAME: TERRY McPHERIDGE	FIRM: EARTH TECH TIME: 11:43	PRINT NAME: S. Wideen	FIRM: NCA TIME: 11:43
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM: TIME:	PRINT NAME:	FIRM: TIME:

ADDITIONAL REMARKS:

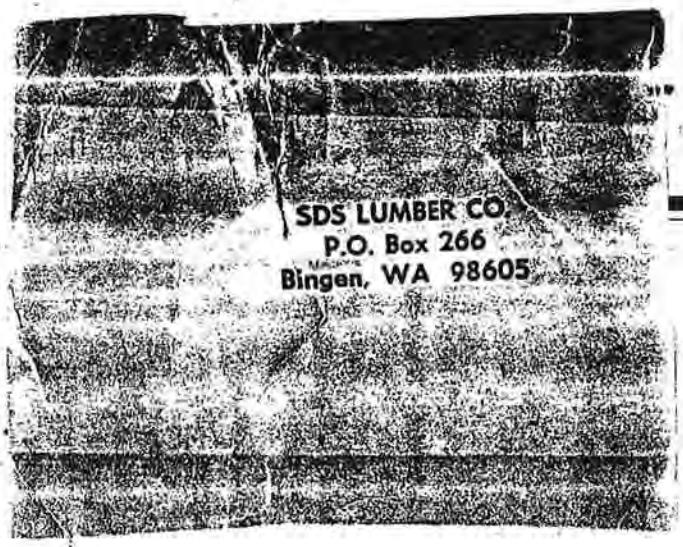
W/O 16.9

PAGE OF

ENVISION
ENVIRONMENTAL, INC.

APPENDIX 2

ECKLAND February 2000 Phase I Environmental Site Assessment



ECKLAND

Eckland Consultants Inc.
Architectural/Engineering and Environmental Consultants

Phase I Environmental Site Assessment

for

Sun Life of Canada (US)

American National Can Manufacturing Facility
1220 North 2nd Street
Kent, King County, Washington
Comm. No. 2000-02734-0019

February 22, 2000

SL#5408

Eckland Consultants Inc.
515 116th Ave. NE, Suite 160
Bellevue, WA 98004

(425) 990-0400 - Telephone
(425) 990-5415 - Fax

TABLE OF CONTENTS

Executive Summary

American National Can Manufacturing Facility
1220 North 2nd Street
Kent, Washington 98055
Comm. No. 2000-02734-0019

Project Environmental Overview						
Assessment Section	Phase I Findings			Additional Work Recommended		
	Acceptable	Acceptable Requires O&M	Additional Action, Research or FOIA Request Required	Phase II Investigation Required	Phase III Remediation Required	Estimated Cost
Historical Review			X			
Regulatory Review	X					
ACM		X				$750
UST/AST			X			
PCBs	X					
LBP	X					
Radon	X					
Lead in Water	X					
On-Site Operations				X		$10,000(1)
On-Site Chemical Storage				X		$10,000(1)
REC on Adjoining Sites			X			

Note (1): The Phase II work consists of subsurface soil and ground water testing in several areas at the subject site where environmental concerns were observed. The costs include the purchase and installation of secondary containment devices in the chemical storage areas.

TABLE KEY:
ACM - Asbestos-Containing Materials
UST/AST - Underground Storage Tank/Aboveground Storage Tank
PCBs - Polychlorinated Biphenyls
LBP - Lead-Based Paint
REC - Recognized Environmental Condition as defined in this Report.
O&M - Operations and Maintenance Program
FOIA - Freedom of Information Act

I. PROJECT IDENTIFICATION

Subject Site:	Land lease for American National Can Factory
Location:	1220 North 2nd Street Kent, King County Washington 98055
Observation Date:	February 15, 2000
Weather Conditions:	Cloudy with light rainfall in the preceding 72 hours Temperature: 45°F
Observed By:	James T. Brown
Report Prepared By:	James T. Brown Architect
Report Reviewed By:	Craig A. McCammack Professional Geologist
Site Contact Names:	Ms. Carey Worden Human Resources Representative Mr. Lee Scheafer Plant Maintenance Representative
Contact Telephone:	253/854-9950

II. OBJECTIVE AND SCOPE

Objective

The purpose of this Phase I Environmental Site Assessment is to identify recognized environmental conditions that may have an impact on the site, using readily available sources of information, interviews and field observations.

Procedures

This Report is a Phase I Environmental Site Assessment for the American National Can Manufacturing Facility Building located at 1220 North 2nd Street in Kent, Washington, performed in general accordance with ASTM Designation E 1527-97, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and following the Scope of Work outlined in Eckland Consultants Inc.'s proposal dated January 31, 2000. Eckland Consultants Inc. (Eckland) conducted on-site observations on February 15, 2000, interviewed site operations personnel and observed adjacent properties. Database searches were conducted following ASTM guidelines by E Data Resources ("EDR"). Such searches are generally limited to a radius of one mile from the subject site. No sampling or analytical testing was performed.

Limitations

Eckland Consultants Inc. does not warrant or guarantee the environmental conditions of the site or the Client's ability to assert a defense under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or any comparable state or local law.

Documents

Our Report represents our professional experience and judgement, and a good faith effort to obtain all available information. Documents and data provided by the Client, its designated representatives, or other interested parties, and consulted in the preparation of this Report, have been reviewed and may be referenced herein, with the understanding that Eckland Consultants Inc. assumes no responsibility or liability for their accuracy or for the withholding by any of the involved parties of any reports or other information that could affect the transaction.

Intended Use

This Report is intended to be used in its entirety. No portion of it may be deleted or used out of context without the written consent of Eckland. The opinions and information contained in this Report are time sensitive and are intended to be relied upon for a limited period, generally not

to exceed six months. This Report was prepared for a limited use involving a single transaction, as set forth herein, and may not be used for any other purpose without the written consent of Eckland Consultants Inc.

Proprietary Information

Field data, field notes, calculations, and other data and documents assembled by Eckland to produce this Report represent the work product of Eckland's training, experience and professional skill. This information belongs to and remains the property of Eckland Consultants Inc.

Reliance

This Report is for the exclusive use of Sun Life of Canada (US). No other party shall have any right to rely on any service provided by Eckland Consultants Inc. without prior written consent.

Definition

For the purposes of this Report, a "Recognized Environmental Condition" is defined as the presence or likely presence of any hazardous substances, hazardous waste or petroleum products (as defined by ASTM E 1527-97, Sections 3.2.15, 3.2.16 and 3.2.25) on the subject site under conditions that indicate a past release, existing release or a material threat of a release into the structures, ground, ground water or surface water of the subject site. The term is not intended to include *de minimis* conditions, but it does include issues of environmental significance to commercial real estate.

III. SITE DESCRIPTION

Site Visit and Interviews

On February 15, 2000, Eckland visited the subject site and reviewed the fixed facility. James T. Brown of Eckland was accompanied by Ms. Carey Worden, Human Resources Representative of American National Can Company, and Mr. Lee Scheafer, Plant Maintenance Manager. Mr. Scheafer answered questions concerning the current and historical use, operations and improvements at the subject site.

Eckland did not receive a completed copy of an Environmental Site Assessment Questionnaire regarding the subject site. A copy of a blank Questionnaire is appended to this Report.

Eckland observed the interiors and contents of representative occupied tenant spaces, common areas and maintenance areas and noted operations and activities at the subject site. Eckland looked for suspect asbestos-containing building materials, stored chemicals, underground and aboveground storage tanks, unusual surface appearance, wetlands and other issues that may indicate environmental conditions on the subject site. Eckland noted the location of on-site electrical power transformers and storm drainage structures where these were encountered. Eckland observed sites adjoining the subject site and areas within the immediate vicinity of the subject site.

Eckland photographed selected features at or near the subject site to support this written Report. The photographs are identified, described and appended to this Report.

Subject Site

The subject site is a rectangularly shaped parcel that contains a total area of approximately 6.01 acres. The subject site is landlocked along two boundaries, has street frontage along North 2nd Street, and has direct access from North 2nd Street.

The topography of the site is relatively flat and slopes to the east, with a maximum surface elevation difference of approximately 2 feet. On-site storm water drainage is by sheet flow to storm water drainage ditches along the site boundary. There are no private well or septic systems at the subject site.

The parking and driveway areas are asphalt paved. Entry driveway aprons, rubbish dumpster pads, and public and private sidewalks are concrete paved.

Electric service is provided by one pad-mounted electrical transformer. Puget Sound Energy is the electrical supplier and is responsible for transformer-related incidents. Natural gas service

is provided by Puget Sound Energy. The site is provided with City of Kent municipal water and sanitary sewer services from buried utilities along the adjacent thoroughfares.

Buildings

The American National Can Manufacturing Facility Building consists of one, one-story building, which is reported to contain a total of approximately 130,615 square feet. The subject site is indicated to have been developed by American National Can Company in 1970. The name of the Architect who provided the plans and specifications is not available. No plans or specifications were provided for our review.

The building is constructed of tilt-wall precast-concrete framing supported on a shallow foundation. The building exterior is precast-concrete panels. No basement is provided. The building has built-up asphaltic membrane roofing. Heating is provided by gas-fired space heaters with rooftop air-conditioning compressors for the office and lunch area. No elevators are on the subject site. Floor drains were observed in several places in the facility. Interview remarks by Mr. Scheafer indicated that the floor drains are connected to the on-site wastewater treatment system.

Adjoining Properties

Properties immediately adjoining the subject site are listed in the following table. All adjoining properties are located in Kent, Washington.

Adjoining Properties			
Name	Operation	Direction from Site	Concerns
American National Can Company	Can Storage Warehouse	South	None
Protective Coatings Inc.	Light Manufacturing	Southwest	Volatile Organic Chemicals in USTs, RCRA Violator
Burlington Northern RR tracks then Wasser Corporation	Transportation and Manufacturing	East	Large RCRA Quantity Generator
7820 Distribution Center	Storage and Distribution	North	None
Hermanson Corporation	Unknown	West	None

Although the majority of the adjoining properties do not, in our opinion, engage in environmentally significant activities, the Wasser Corporation has been noted in the federal database as being a large quantity generator of hazardous wastes. Because of the controlled nature of this activity, the distance between the properties because of the intervening railroad right-of-way, and the fact that the assumed ground water flow is north, away from the subject property, we do not believe that the Wasser Corporation impacts the subject site; therefore further action is required.

Protective Coatings Inc. has three underground storage tanks containing hazardous materials. The tanks were constructed in 1964 and the assumed ground water flow is toward the subject

site. Eckland recommends gathering further information about the tanks, their sizes, and distances from the subject site in order to determine if subsurface investigations at the property line are warranted.

Vicinity

Eckland observed other properties located near the subject site for current uses or conditions that may be environmentally significant. Several local area properties observed by Eckland are engaged in environmentally significant activities. However, they are either at a substantial distance or are down gradient from the subject site and therefore do not constitute an environmental threat to the subject site.

Topography and Hydrogeology

Eckland reviewed the United States Geological Survey (USGS) Topographic Map, which indicates that the subject site is approximately 33 feet above mean sea level. Eckland observed that the general drainage flows in an easterly direction across the surface of the site. No substantial grade changes appear to have been made to the subject site when compared to the topography of surrounding sites. A copy of the USGS topographic map that covers the subject site is appended.

Eckland interviewed Mr. Scheafer regarding soil grading activities at the subject site. Mr. Scheafer stated that no such activities were taking place at the time of the site visit.

Geology and Surficial Soils

The subject site is located above Quaternary-age sediments, predominantly glacial drift, including alluvium. The depth to bedrock is not known.

According to the Soil Survey for King County, Washington, the subject site is located in an area of Alderwood series soils. These soil types have moderate permeability and would be expected to have moderate susceptibility to ground water contamination as a result of surface spreading of wastes, depending upon local soil conditions.

Surface and Ground Water Flow

The regional surface water flows in an easterly direction toward the Union Pacific Railroad right-of-way and then northerly toward Springbrook (Mill) Creek. The facility is located in a valley that generally drains northerly toward Elliott Bay and the ground-water flow in the area is therefore assumed to be to the north. The depth to ground water is estimated to be 5-10 feet with seasonal fluctuations.

Wetlands

Eckland did not observe ponded water, flowing water, saturated soils or hydrophytic vegetation at the subject site. Eckland reviewed the King County Soil Conservation District Wetlands Map, which showed that the subject site does not contain identified wetlands. Detailed delineation of wetlands is, however, beyond the scope of services for this Phase I Environmental Site Assessment.

IV. SITE HISTORY

The following summarizes Eckland's review of readily available historical records, photographs, and maps gathered from government agencies and commercial enterprises regarding the subject site history and use. This should not be considered a listing of all available information.

Interviews

According to Mr. Scheafer, he believes the subject site was vacant marsh and farmland prior to the construction of the current improvements in 1970, although he has been at the site only 15 years. Review of available information, interview comments by others and aerial photographs generally confirmed Mr. Scheafer's interview remarks for the area, but a farmhouse appears to have been on the site sometime prior to construction of the current building.

Building Department Records Review

According to City of Kent Building Department records, the property was developed in 1970. City of Kent building permits were issued for improvements to the subject site in 1970 and Certificates of Occupancy were issued in 1970. No other permits were noted.

Aerial Photograph Review

Aerial photographs are reviewed to identify past site use and areas of environmental concern on the subject site. Eckland reviewed aerial photographs of the subject site for the years 1956, 1965, 1977, 1985 and 1990. The photographs were obtained from EDR. Copies of aerial photographs obtained and reviewed by Eckland are appended.

The 1956 aerial photograph shows the subject site to have had a farmhouse on a portion of it. The remainder appears to be fields. Except for the Union Pacific mainline tracks to the east, the surrounding properties are shown to be farmland.

The 1965 aerial photograph shows the subject site to be vacant; the farmhouse is not evident. The surrounding properties are shown to be farmland and the 167 freeway now skirts the property to the south.

The 1977 aerial photograph shows the subject site to include the current building. The surrounding properties are shown to be farmland, except to the west, where a manufacturing or warehouse building appears, and to the south, where a railroad spur now appears.

The 1985 aerial photograph shows the subject site to have the current building constructed on it. The building is connected to the current can facility warehouse to the south with an enclosed walkway. The properties to the west now include more buildings. The property to the north is

vacant. The property to the east, across the tracks, shows a gravel plant.

The 1990 aerial photograph shows the subject site to be same as in 1985. The surrounding properties are shown to be essentially the same, except that a new building is shown between the tracks and the gravel plant.

Based on Eckland's interpretation of the available aerial photographs, the past site use is shown to be farmland with the likely farmhouse on a portion of it. No evidence of long-term fill activity, surface scarring, staining or other issue of environmental concern was identified by Eckland during the aerial photograph review.

Fire Insurance Map Review

Beginning in the 1860s, the Sanborn Fire Insurance Company, and others, prepared maps that depict site improvements and commercial activities in many metropolitan areas of the United States. Eckland attempted to obtain fire insurance maps, specific to the site, to review as part of this Phase I Environmental Site Assessment. However, no fire insurance maps were found regarding the subject site.

Map and Directory Review

Historical maps and city directories provide information concerning historical site boundaries, ownership, improvements and use. Eckland obtained a USGS topographic map for the subject site.

The subject site is shown to include the current facility in 1977.

Based on Eckland's interpretation of the available topographic map reviewed, the subject site history is shown to include the current building. A Copy of the document obtained and reviewed is appended.

Title Records Review

A title records review, or chain-of-title, can be used to identify prior ownership of a property and to evaluate previous activities or operations in terms of environmental significance. Significant easements, covenants, restrictions and environmental liens may be indicated in title records. A title records review was not requested by the Client, nor was a chain-of-title regarding the subject site reviewed by Eckland as part of this Phase I Environmental Site Assessment.

Document Review

No documents or reports by others were obtained or reviewed by Eckland as part of this Phase I Environmental Site Assessment.

V. ENVIRONMENTAL SITE ASSESSMENT

Fixed Facilities Review

The improvements observed by Eckland on February 15, 2000, were reported to have been completed in 1970. According to Mr. Scheafer, there has been some remodeling and renovation since construction, primarily in equipment and in the addition of the outside storage area and warehouse connection. Minor repair activities to meet maintenance requirements are ongoing. Interview remarks by Mr. Scheafer indicated that the most recent maintenance and repair activities have included the following:

1) Painting

Mr. Scheafer stated that no ACM or lead-based paints were utilized in the above-mentioned maintenance and repairs.

Mr. Scheafer stated that landscape maintenance and snow removal services are performed by outside contractors; no equipment is stored on the subject site and no automotive maintenance is performed at the subject site. Major can facility equipment maintenance is accomplished on site.

Site Tenant Activities

Eckland reviewed the current tenant for operations that may use regulated materials or generate waste products. Eckland observed the accessible interior and exterior common areas and maintenance areas. Interview remarks by Mr. Scheafer indicated that the site is occupied by a single tenant.

Eckland confirmed the nature of on-site tenant activities with Mr. Scheafer during the site visit. Based on current tenant-use operations, Eckland entered and observed the activities at the following locations:

TENANT SPACES VISITED			
Name	Address	Operation	Concerns
American National Can Manufacturing Facility	1220 2nd Avenue North	Manufacture of aluminum cans	Oil discharge through the exterior walls via compressor bleed lines. Possible leakage from concrete underground oil-water separator tanks. Storage and containment of corrosive chemicals. Documentation for reported removal of two underground storage tanks. Documentation of the procedures for hazardous chemicals storage, usage, and recycling.

Upon review of the activities at the above locations, Eckland identified five environmental concerns.

The first of these, oil discharge through the exterior walls via compressor bleed lines, occurs at three locations, two on the east side of the building and one on the north end of the west wall. One of the east-side locations is of the greatest concern. Each of the bleed lines appears to have been depositing oil on the ground for many years. It is not possible to quantify amounts, but they are significant, have certainly affected the surrounding soil and have possibly entered the shallow ground water in the area. Eckland recommends that Limited Phase II subsurface investigations of soil and ground water be conducted in all three locations.

The second of these concerns, possible leakage from concrete, underground oil-water separator tanks, is discussed in the Underground Storage Tanks section below, where our recommendation is to perform Limited Phase II subsurface investigations for possible tank leakage.

The third item of concern, storage and containment of corrosive chemicals, is discussed in the On-Site Chemical and Petroleum Product Storage section below, where our recommendation is to perform Limited Phase II subsurface investigations for possible storage container/tank leakage.

The fourth item of concern, documentation for reported removal of two underground storage tanks, is discussed in the Underground Storage Tanks section below, where our recommendation is to obtain the closure documents for removal of both tanks, documentation for soil and/or ground water testing, and documentation for disposal of any soil removed or remediation required.

The fifth item, documentation of the procedures for hazardous chemicals storage, usage and recycling, has been requested from the operator of the facility, American National Can Company.

On-Site Chemical and Petroleum Product Storage

Eckland looked for chemicals, hazardous substances, petroleum-based fuels and lubricants, and janitorial and cleaning supplies stored on the subject site. In addition to shelf quantities of commonly available janitorial and cleaning supplies, significant amounts of corrosive chemicals and hazardous substances were observed on the subject site. These include one 6,000-gallon steel aboveground tank of "cupper oil", one 6,000-gallon steel AST of "coolant oil", one 6,000-gallon AST of "gear oil", one 6,000-gallon AST of "waste, or reclaimed oil", one 300-gallon day AST of cupper oil, one 50-gallon day AST for reclaimed "tramp oil", and one (approximately) 500-gallon AST of sulfuric acid, all housed within the building. Located adjacent, but outside the building, one 5,000-gallon AST of "varnish 1", one 5,000-gallon AST of "varnish 2", one (approximately) 2,000-gallon AST of caustic soda, and one (approximately) 3,000-gallon AST of lime slurry. In addition, approximately five 275-gallon canisters of sulfuric acid, ten drums of sulfuric acid, six drums of hydrofluoric acid, three drums of fluorozirconic acid, eight drums of aladine (anti-microbial, poisonous) compounds, and 200 20-pound "kits"

(cans) of colored, flammable inks are stored inside the building in various areas. Also, there is one (approximately) 500-gallon tank located on the roof of the building that reportedly contains process water.

The most obvious immediate issue is that of the wasting and collection of the various oils used in the can-making process. Most of the waste oil from the cupping, cooling and baling (gear) processes ends up on the concrete floor of the facility, where it runs freely until it is either pushed or propelled by gravity flow to a maze of grated-floor trenches and then run to an underfloor oil-water separator system. The oil-water separator system is composed of several large, interconnected, concrete tanks of undetermined capacity. The cooling oil is ultimately separated from the other oils and is reused. The other oils are returned to the recycle tank, where they are reportedly picked up by a recycling company. Most of the oil piping was noted to be leaking, but the amount, although in the gallons, is insignificant compared to the wasted oils on the floors and under the machinery. The concrete floor is reportedly 8 inches thick, but obvious cracks and some joints do not appear to be "oil tight". The forming machines are anchored to the floor with steel bolts that may form conduits for oil seepage to the soil. Eckland surmises that the oil-water separation tanks could also have similar cracks and joints, and that over the 30 years since construction they have had some movement or settlement due to soil consolidation or ground water erosion, which may have caused further cracking. It is Eckland's recommendation to perform Limited Phase II subsurface investigations for possible oil-water separator tank leakage into the soil and ground water near each of these tanks, and to perform Limited Phase II Subsurface Investigations for possible seepage into the soil and ground water near the cupping and forming machines.

Some of the oils from the various processes evaporate into the air and are expelled in various ways, mostly as fugitive emissions to the outside. An air emissions permit for the facility has been issued and a check of the records indicates that some previous violations have occurred, although none are currently shown as outstanding. Eckland recommends no further action regarding air emissions. Some of the inside air is used by large air compressors for vacuum and other uses. The oil-laden air emanating from the east-side bleed air pipes is from these sources. The air from the north end of the west side of the building comes from an air-conditioning compressor for the lunchroom. We are recommending limited Phase II subsurface investigations for these locations.

Once the cans are formed, they are put through a cleansing process where the oil is removed by washing them first in a sulfuric acid solution, then in a hydrofluoric acid solution, and then in an aladine (antimicrobial) solution. The wastewater containing the acids and antimicrobial compounds are run to the on-site wastewater treatment plant, where they are neutralized with lime and caustic soda and mixed with a flocculant (Palmer). The process also requires a further introduction of sulfuric acid to assist in maintaining the proper pH and in the removal of the lime, metals, flocculant and soda solids that are then filtered out and placed in special dumpsters and reportedly collected by a recycling contractor. The relatively large lime tank and the caustic soda tanks are located outside the building in areas diked sufficiently to contain minor leaks or spills. Eckland noted that the housekeeping throughout the water treatment plant is poor and that some of the equipment and structures are damaged. Some of the steel elements are severely

maintenance of bldg?

corroded and need replacement. The support for the exterior lime-slurry tank is severely rusted and may be in jeopardy of failing, allowing the tank to tip and spill. The raised sulfuric acid tank inside the building is leaking and may be hazardous to those around or under it, and the leaking acid may be contributing to other structural degradations in the area. The inground mixing tanks appear to have spalling or flaking concrete on their interior surfaces. The concrete floor has been damaged by corrosive chemical attack, and sediments and caked materials abound. Eckland recommends that if a maintenance plan and schedule for the water treatment plant does not exist, that one be created, and that if one does exist, that it be reviewed, updated and implemented. We recommend inspection of all equipment and structures, immediate repairs or replacement to the currently damaged, poorly functioning and potentially dangerous elements in the plant, and general cleaning of inside and outside areas. The potential threats to the environment if these steps are not taken include significant spills of acids or bases sufficient to damage the sewage treatment downstream or direct deposits into the Green River via the storm sewer system (both a storm drain catch basin and a sanitary system manhole lie within 20 feet of the water treatment chemical storage tanks). There is also possible contamination to the on-site soil or ground water in such a scenario. Eckland believes that the concrete tanks in this area may be damaged either by direct action of the processed chemicals and/or by general age and settlement cracking and that they should be repaired or replaced as required. However, there is no evidence to suggest that large amounts of untreated acids, bases, oils or antimicrobial compounds have escaped into the surrounding soil or ground water and we do not recommend subsoil testing in this area.

The cleansed water from the treatment plant is finally directed to the municipal sewer system run by Metro/King County. Prior to exiting the water treatment plant, the water is periodically tested, both by Metro and by on-site personnel. A check with the Metro personnel in charge of monitoring this facility indicated that a water discharge permit is in effect for American National Can Company in Kent and that there have been some minor violations, although none are outstanding. Eckland recommends no further action regarding the discharge water.

After the cans are cleaned, they are then dried in large, gas-fired furnaces and conveyed to the printing machines where inks of various hues are applied and the outside varnish is applied. They are then conveyed through another gas-fired drying process, subsequent to which the inside varnish is applied, and they are again dried. The ink kits (20 pound cans) are stored on nonseismically secured metal shelving near the printing machines. Eckland recommends that the shelving be braced for seismic occurrences, and that vertical flanges be installed on the edges of the shelves, to more adequately restrain the cans. The varnishes are stored in large tanks outside the building and the varnishes are piped to the spray machines. The air from this process is filtered and expelled to the outside. The varnish tanks are located within an area adequately diked for minor spills or leaks. There is no evidence of spills or leaks from this system. We recommend no further action with regard to the varnish system.

During the forming process, the cans are trimmed and some cans are ruined. These stray aluminum pieces are collected and sent to a large baling machine where they are pressed into two-foot cubes that are then sent to a recycler. This machine wastes a considerable amount of gear oil, which ends up on the floor and is picked up and recycled similarly to the cooling and cupping oils. The concrete in the baler area has sufficient holes (for anchoring the machinery),

seams and cracks to suggest that oil has migrated to the soil below. It is Eckland's recommendation to perform Limited Phase II subsurface investigations for possible oil leakage into the soil and ground water near the baler machinery.

The acid and antimicrobial compound containers are stored near the center of the plant in a marked area that does not have secondary containment. Some very corroded trench drains are located in the same area. The floor drains from the trench drains are reported to run to the water treatment plant. A large number of concrete cracks and joints also occur nearby and some of the concrete within the storage area has been severely damaged by corrosive chemicals. It is Eckland's recommendation to perform Limited Phase II subsurface investigations for corrosive chemicals and/or antimicrobial contamination into the soil and ground water at the locations of the floor drains from the damaged trench drains. We also recommend secondary containment of the chemicals stored in this area.

Three drums of acids and two drums of antimicrobial compounds are in use to treat the cooling-tower water. The drums are located inside the building near the central west wall. The cooling tower is located outside. The drums are not within a secondary containment area and are not secured. Eckland recommends that secondary containment be installed and that the drums be restrained against seismic events or other accidental tipping.

Waste Disposal Practices

Eckland identified the current wastes generated at the subject site. According to Mr. Scheafer and Eckland's observations, these include: general municipal solid waste that is disposed of on a weekly basis from the subject site by Rabanco; solid wastes (cakes) from the water treatment plant that are placed in special dumpsters and periodically removed by Waste Management; recaptured oil that is held on site in a 6,000-gallon AST and in a 500-gallon AST and is periodically picked up by Waste Management; wastewater from the water treatment plant that is piped to the Metro sewage treatment plant; cubes of aluminum that are stored on site until picked up and recycled by an undetermined metal recycler; air emissions filters, the disposal of which was not specified; oil filter material from the baling area that is placed in a special dumpster and removed from the site by Waste Management; waste ink kits that are dried and placed in the general municipal waste dumpsters; and waste chemicals and some empty storage containers that are stored in the chemical receiving area and removed from the site by Waste Management. Areas of waste storage did not appear to be particularly well kept, but in our opinion they do not pose an environmental threat to the subject property.

Eckland requested, but has not received, any written information regarding waste management and recycling from American National Can Company. We recommend that all information regarding management and disposal of hazardous wastes be provided. Should any information that constitutes a recognized environmental condition come to light, we shall notify the Client.

Underground and Aboveground Storage Tanks

Owners and operators of certain USTs are required to register those USTs with the state agency responsible for administering the federally mandated UST program. A search of the list of registered USTs in Washington, prepared by E Data Resources, did not show registered USTs currently located, or previously located, on the subject site.

Eckland interviewed Mr. Scheafer regarding the presence of USTs and ASTs on the subject site. Mr. Scheafer stated that several ASTs containing regulated or hazardous substances are located on the subject site. He also indicated where the USTs were, near the oil-water separator and water treatment systems. Eckland interviewed Inspector Bill Johnson of the Kent Fire Department regarding USTs and ASTs at the site. The fire department has records of two USTs being removed from the site, one 12,000-gallon process oil tank in 1997 and one 600-gallon waste oil tank in 1998. Information regarding the removal of the tanks, testing of nearby soils and ground water, and/or soil/ground water remediation has been requested from American National Can Company, but has not been received. Since we have not yet received the information, we consider these removals to constitute a recognized environmental condition and recommend that the tenant provide information regarding the UST removals. Eckland will review it and notify the Client whether, in our opinion, the proper procedures for tank mitigation were followed. If the information is incomplete or is not received in a timely manner, we recommend that a limited Phase II Subsurface Investigation be conducted to determine possible contamination of soil and ground water at the locations of the former tanks.

Eckland interviewed Mr. Scheafer regarding the past use of heating fuels on the subject site to ascertain whether USTs or ASTs may have been utilized on site for the storage of heating fuels or oils. Mr. Scheafer stated that the building has always been heated by natural gas. Eckland's observations confirmed the nature of the current heating systems at the subject site. The likely presence of a farmhouse, prior to the construction of the current facility, that a heating oil UST or AST, commonly used in rural areas during the period, was present on the site. Considering the period of the possible use (prior to 1965), the likely small size of the tank and/or spills, and the fact that considerable ground work was accomplished in order to build the current facility, we do not consider the potential former presence of a residential heating oil tank at the site to pose a significant environmental threat to the subject property.

Eckland visually observed the subject site for surficial evidence of USTs and ASTs. Eckland observed evidence of several USTs and ASTs at the subject site. The USTs include the concrete oil-water separation tanks and the mixing tanks in the water treatment plant that are discussed in the On-site Chemical and Petroleum Product Storage section above. The ASTs include one 6,000-gallon aboveground steel tank of "cupper oil", one 6,000-gallon aboveground steel tank of "coolant oil", one 6,000-gallon aboveground tank of "gear oil", one 6,000-gallon aboveground tank of "waste, or reclaimed oil", one 300-gallon day tank of cupper oil, one 50-gallon day tank for reclaimed "tramp oil", and one (approximately) 500-gallon tank of sulfuric acid, all housed within the building. Located adjacent, but outside the building, one 5,000-gallon tank of "varnish 1", one 5,000-gallon tank of "varnish 2", one (approximately) 2,000-gallon tank of caustic soda, and one (approximately) 3,000-gallon tank of lime slurry. In addition, there is one

(approximately) 500-gallon tank located on the roof of the building that reportedly contains process water. These tanks are discussed in the Chemical and Petroleum Storage section above.

Polychlorinated Biphenyls (PCBs)

Federal regulations put into effect following the Toxic Substances Control Act (TSCA) require that electrical transformers be labeled to identify their PCB content. Manufacture and distribution of PCBs was banned in 1970. Transformer owners are responsible for compliance with all applicable regulations governing those transformers, including maintenance of the transformer and any remediation work resulting from a transformer-related incident.

Eckland observed one pad-mounted exterior electrical transformer during the site visit. The observed electrical transformer appeared to be in good condition with no visible leaks. Areas around the electrical transformer exhibited no visible staining or abnormal appearance. Eckland did not observe any labels on the electrical transformer identifying the PCB content.

Based on utility ownership and no observed leaks, Eckland recommends no further action with regard to PCBs in transformers.

Asbestos

During the site visit, Eckland observed reasonably accessible interior areas of the building for the existence and condition of suspect ACM. Design drawings and specifications were not available for review. Asbestos can be identified only by specialized equipment and not by the unaided human eye. The site visit was not intended to be a comprehensive search for all ACM at the subject site.

Eckland notes that the construction date of the building was prior to the date the U.S. EPA acted to eliminate friable asbestos from building materials (1977). The United States Occupational health and Safety Administration (OSHA) now requires untested materials to be presumed to contain asbestos for buildings constructed prior to 1981. Friable materials are defined as those which can be crushed or reduced to powder by hand pressure.

Based on the construction date of 1970, the present building is suspected of containing asbestos. These suspect materials may include resilient floor covering, mastic and suspended ceiling tiles, although these materials were observed to be present in limited quantities. The suspect materials are considered to be nonfriable and friable. The observed suspect ACM appeared to be in good condition.

Materials that are identified as containing asbestos, and are not damaged, can be maintained in place with an Asbestos Operations and Maintenance Program (O & M) Program. This O & M Program is a formal guidance manual with specific instructions on regulatory compliance and construction methods to avoid potential exposure to asbestos fibers. The estimated cost of an O & M Program is $750.

Lead-Based Paint

In 1978, the Consumer Product Safety Commission banned the use of lead as an additive in paint. During the site visit, accessible areas were observed for evidence of damaged and/or peeling paint. In general, the painted surfaces appeared to be in good condition. Based on the construction date of 1970, the present building is suspected of containing lead-based paint. The suspect areas include wall and trim surfaces.

Although the presence of lead-based paint is suspected, considering that the building is not residential and the painted surfaces are in good condition, no further action with regard to lead-based paint is recommended at this time.

Potable Water Supply

The subject site is serviced by a municipally operated, public water system, which is regulated by the Safe Drinking Water Act of 1974. This Act requires that public water supplies be tested for the presence of lead in water. Eckland contacted the local water utility company, the City of Kent, regarding the results of water tests. The utility company reports that the lead content of the water is below the U.S. EPA action level of 0.015 milligrams per liter.

Radon Gas

Radon gas is a naturally occurring, colorless, odorless gas that is the by-product of the decay of radioactive materials found within bedrock and soil. Radon gas enters buildings through cracks, structural joints, and plumbing openings in floor levels that are in direct contact with the soil. Radon gas, when inhaled, has been found to be carcinogenic in some humans. The U.S. EPA recommended action level for radon gas is 4.0 pCi/L (picoCuries per liter).

The State of Washington, in conjunction with the U.S. EPA, has conducted residential screening tests in King County. The results of that screening indicate that King County is predicted to have an average indoor radon screening level of 0.300 pCi/L, with 98% of tests less than 4.0 pCi/L. Radon information for ZIP Code 98055 is 0.200 pCi/L for one test site.

Eckland reviewed the U.S. EPA's "Map of Radon Zones for Washington," which identifies King County as being within radon zone 3. Counties within radon zone 3 have a predicted average indoor radon gas screening level of less than 2.0 pCi/L.

Based on the literature reviewed, and considering that the building is nonresidential and has no basement, it is our opinion that the risk of radon gas accumulation is not a significant environmental concern at the subject site.

Exterior Surface Condition

Eckland observed the exterior surface of the subject site. It is estimated that 95% of the subject site surface was covered by improvements and pavement. Eckland's observation of the site soil surfaces was therefore limited to the landscaped areas.

Interview remarks by Mr. Scheafer indicated that he did not know how the subject site was utilized prior to the can factory operations. Additionally, Mr. Scheafer stated that he did not know if the subject site has ever been the location of a petroleum spill, chemical spill, fire or other environmental incident.

No pits, ponds or lagoons were observed at the subject site during the site visit. There was one small area of distressed or dead vegetation near the north end of the west wall of the building, and both surface depressions and surface stains attributed to chronic oil leaks from bleed pressure-release pipes on the east side of the building were observed during the site visit. Eckland believes that these constitute a recognized environmental condition and recommends limited Phase II subsurface investigations at these sites. These are further discussed in the Site Tenant Activities section above.

Interior Surface Condition

Eckland observed portions of the interior surfaces of the building for evidence of unusual conditions. We found no evidence of unusual conditions in any of the areas we observed other than those discussed above under the Environmental Site Assessment portion of this Report.

Environmental Records Review

An environmental records database search report dated February 4, 2000, was provided by EDR. A copy of EDR's report is appended. The following discussion excerpts specific items from the report that are deserving of additional description.

In addition to the mapped sites in the EDR report, there may also be a list of unmapped sites, known as "orphans." These are reported database sites that, due to incomplete addressing information, could not be accurately plotted by EDR. In an attempt to locate all orphan sites, Eckland compared each address provided on the orphan site list to known addresses of the site and vicinity, attempted to locate orphan sites during reconnaissance of the vicinity, and reviewed the orphan site list with Mr. Scheafer. Eckland concludes that no mappable orphan site was identified that met the search radius criteria of the scope of work and is considered to be environmentally significant to the subject site.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)

Since 1982, the U.S. EPA has maintained lists of contaminated sites under the federal Superfund

Program in accord with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The U.S. EPA discovers these sites from citizen reports, routine inspection of hazardous waste generators, treatment, storage and disposal facilities, and reporting requirements.

Review of the most recent CERCLIS list identifies no CERCLA site within the approximate minimum search distance of ½ mile from the subject site.

CERC-NFRAP List

As of February 1995, CERCLA sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. CERC-NFRAP sites may be where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the National Priorities List (NPL), or the contamination was not serious enough to require Federal Superfund action or NPL consideration. CERC-NFRAP sites, however, may continue to represent a concern to local or state regulators.

Review of the most recent CERC-NFRAP identifies no CERC-NFRAP site within the approximate minimum search distance of ½ mile from the subject site.

National Priorities List

The U.S. EPA maintains this list as a subset of CERCLIS, identifying over 1,200 CERCLA sites for priority cleanup under the Superfund Program. Once sites have been designated on the CERCLIS list, the U.S. EPA uses its Hazard Ranking System to determine the potential risks of those sites to human health and the environment. Only the sites that present the greatest risk are added to the NPL, which qualifies the sites to receive CERCLA remedial funding.

Review of the most recent NPL list identifies no NPL site within the approximate minimum search distance of 1 mile from the subject site.

RCRA - Generators

The U.S. EPA's RCRA (Resource Conservation and Recovery Act, 42 U.S.C. §6991 *et seq.*) Program identifies and tracks hazardous waste from the point of generation to the point of disposal.

Review of the most recent RCRA-Generator facility list identifies one RCRA generator facility on the subject site and two RCRA generator facilities on adjoining properties.

Reported RCRA-Generator Facilities					
Facility Name and Address	Location			Small Generator (Y/N)	Large Generator (Y/N)
	Distance	Direction	Gradient		
American National Can Company 1220 2nd Avenue North	On site			No	Yes
Wasser High Tech Coatings	Adjacent	East	Cross	No	Yes
Protective Coatings Inc. 1215 2nd Avenue North	Adjacent	Southwest	Up	No	Yes

The above RCRA facilities were evaluated based on violator status, area geology, gradient relationship and separation distances from the buildings to the subject property lines. Based on this evaluation, and due to their regulated natures, these RCRA facilities are not currently considered to be of significant environmental concern to the subject site.

RCRA - Treatment, Storage, Disposal Facilities (TSD)

The Resource Conservation and Recovery Act Information System (RCRIS) is a compilation of selective information on facilities that generate, store, transport, treat or dispose of hazardous waste. Inclusion of a facility on the RCRIS database is not necessarily an indication of an environmental problem.

Review of the most recent RCRA-TSD facility list identifies no RCRA-TSD facilities within the approximate minimum search distance of 1 mile from the subject site.

RCRA - Violators

Three administrative systems track violations of the RCRA Act: the RCRA Administration Action Tracking System (RAATS), which contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA; the CORRACTS listing, which identifies hazardous waste handlers with RCRA corrective activity; and the RCRIS-LQG (Large Quantity Generator) Violator list, which is reported as part of the EDR RCRA listing.

Review of the most recent RAATS, CORRACTS and RCRIS-LQG Violator lists identifies no RCRA-Violator facility on the subject site and one on adjoining properties. The violator noted is Protective Coatings Inc. All of the violations shown have a completed date of compliance. We do not recommend any further actions with regard to the RCRA violation on the adjoining site.

Emergency Response Notification System (ERNS)

The ERNS is a compilation of reported releases of hazardous substances into the environment. The database contains information from Spill Reports made to federal authorities, including the U.S. EPA, the U.S. Coast Guard, the National Response Center, and the U.S. Department of

Transportation.

Review of the most recent ERNS list found no ERNS records concerning the subject site.

Underground Storage Tanks

Certain USTs are regulated under the RCRA Act, and must be registered with the state agency responsible for administering the UST program. Inclusion of a facility on the UST database is not necessarily an indication of an environmental problem.

Review of the most recent UST list identifies no registered UST facilities on the subject site and one registered UST facility on adjoining properties.

Registered UST Facilities				
Facility ID No.	Facility Name and Address	Location		
		Distance	Direction	Gradient
S103625780	Protective Coatings Inc. 1215 North 2nd Avenue	Adjacent	Southwest	Up

The Protective Coatings three USTs are concrete and contain volatile organic compounds classified as hazardous substances. The tanks were installed in 1964 and are reported to have an exempt status. Given the nature of the stored materials, the date of construction, and the likely direction of the ground water being toward the subject site from this off-site facility, Eckland recommends limited Phase II soil and ground water testing near the property line to determine if contamination of the subject site has occurred.

Leaking Underground Storage Tanks (LUSTs)

Review of the most recent LUST list identifies no registered LUST facilities on the subject site and ten registered LUST facilities within the approximate minimum search distance of ½ mile from the subject site. However, none of the sites was closer than 3/8 mile from the subject site and each has had some on-site remediation.

The above LUST facilities were evaluated based on status of the incident, area geology, assumed ground water flow direction and separation distances. Based on this evaluation, it is Eckland's opinion that the above LUST facilities do not represent an environmental concern to the subject site.

Solid Waste Facilities/Landfills (SWF/LS)

Solid waste records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Review of the most recent SWF/LS list identified no SWF/LS facilities within the approximate

minimum search distance of ½ mile from the subject site.

State Hazardous Wastes Sites (SHWS)

State Hazardous Wastes Sites records are the state's equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds are identified along with sites for which cleanup will be paid for by potentially responsible parties.

Review of the most recent SHWS list identified no SHWS facilities within the approximate minimum search distance of 1 mile from the subject site.

Manufactured Gas Plants (MGP)

Manufactured Gas Plants produced combustible gas for urban use prior to the widespread use and pipeline distribution of natural gas in the 1950s. The main fuels used in production of this gas were coke, coal and oil; the by-products of this manufacturing process include a variety of tars, sludge and other chemicals.

MGP sites tend to have subsurface contamination due to the common practice of disposing of the waste products on site. The EDR report identified no MGP sites within the approximate minimum search distance of 1 mile from the subject site.

Conclusions & Recommendations

VI. CONCLUSIONS AND RECOMMENDATIONS

Based on site observations, interviews, and review of available documents and the database records search, Eckland concludes that recognized environmental conditions were identified at the subject site as indicated below:

1) Based on the facility construction date of 1970, Eckland identified suspected ACM at the subject site.

2) Protective Coatings Inc. has three underground storage tanks, reportedly built in 1964, containing hazardous substances and located adjacent to and southwest of the subject property. Considering the age of the tanks, the materials contained, and the fact that these tanks are upgradient from the subject property, Eckland is concerned that any leakage from the tanks may have impacted the subject site.

3) Oil discharge was noted through the exterior walls via compressor bleed lines. These occur at three locations, two on the east side of the building and one on the north end of the west wall of the building.

4) There is possible oil leakage from the concrete, underground oil-water separator tanks and from cracks and bolt holes in the concrete floors near the cupping, baling and forming machinery.

5) Several elements of the water treatment plant are corroded, damaged or leaking and the housekeeping in the area is generally poor.

6) Eckland has not received documentation for the reported removal of two underground storage tanks that reportedly contained hazardous or controlled substances. Since we have not yet received the information, we consider the possible contamination of the soil and ground water to constitute a recognized environmental condition.

7) Eckland has not received documentation of the procedures for hazardous materials storage, usage and disposal.

8) The ink kits (20 pound cans) are stored on nonseismically secured metal shelving near the printing machines.

9) The floor drains from the trench drains in the acid and antimicrobial storage area are reported to connect to the water treatment plant. A large number of concrete cracks and joints also occur nearby and some of the concrete within the storage area has been severely damaged by corrosive chemicals.

10) The acid and antimicrobial compound containers (tanks and drums) are stored near the center of the plant in a marked area that does not have secondary containment.

Based on the recognized environmental conditions identified at the subject site, Eckland recommends the following on a point-by-point basis:

1) Eckland recommends that an Asbestos Operations and Maintenance Program (O & M) Program be implemented. The estimated cost to prepare an O & M Program is $750.

2) Given the nature of the stored materials, the dates of construction, and the likely direction of the ground water being toward the subject site, Eckland recommends limited Phase II soil and ground water testing near the property line to determine if contamination of the subject site has occurred.

3) Eckland recommends that Limited Phase II Subsurface Investigations of soil and ground water be conducted in all three locations.

4) Eckland recommends Limited Phase II Subsurface Investigations for possible oil-water separator tank leakage and to assess possible seepage into the soil and ground water near the baling, cupping and forming machines.

5) Eckland recommends a maintenance plan and schedule for the water treatment plant. We also recommend inspection of all equipment and structures, immediate repairs or replacement to the currently damaged, poorly functioning and potentially dangerous elements in the plant, and general cleaning of inside and outside areas.

6) Eckland recommends that the tenant provide information for our review regarding the UST removals. Eckland will review it and notify the Client whether, in our opinion, the proper procedures for tank mitigation were followed. If this information is not received in a timely manner or if the data are incomplete, we may recommend limited soil and ground water testing to determine if contamination is present in the former UST locations.

7) Eckland recommends that the operator of the facility, American National Can Company, provide documentation for our review regarding the storage, handling and disposal of all hazardous materials.

8) Eckland recommends that the metal shelving for the ink storage be braced for seismic occurrences, and that vertical flanges be installed on the edges of the shelves and periodically across the shelving, to more adequately restrain the cans.

9) It is Eckland's recommendation to perform Limited Phase II Subsurface Investigations for corrosive chemicals and/or antimicrobial contamination into the soil and ground water at the floor drains in the damaged trench drains.

10) Eckland recommends secondary containment of the chemicals stored in the acid and antimicrobial tank/drum storage area.

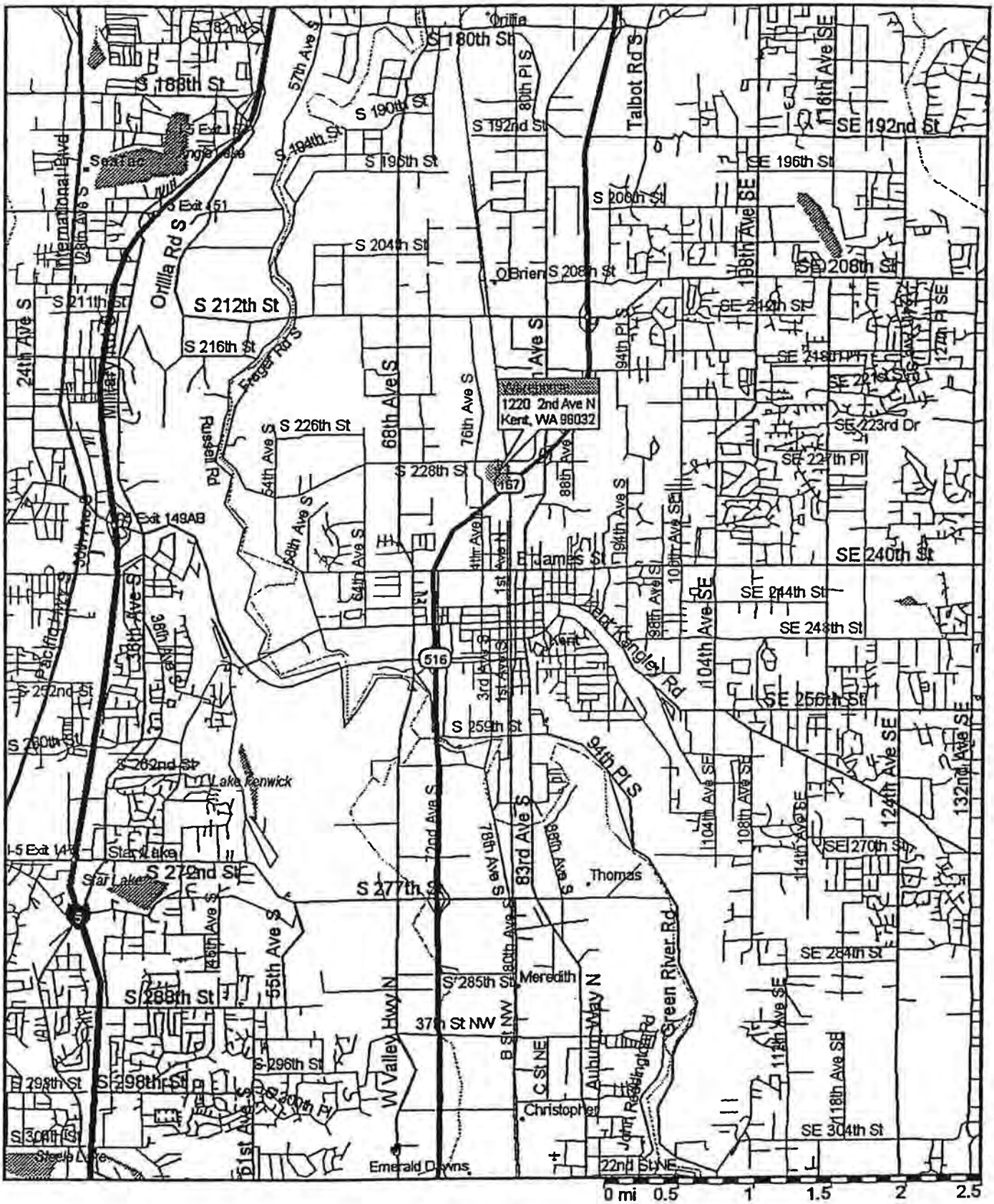
VII. INTERVIEWS

Name	Title/Affiliation	Phone
Ms. Carey Worden	Human Resources Representative American National Can Company	253/854-9950
Mr. Lee Scheafer	Plant Maintenance Manager American National Can Company	253/854-9950
Lt. Bill Johnson	Inspector Kent Fire Department	253/856-4444
Mr. Brad Hazeltine	Planner City of Kent	253/856-5454
Mr. Larry Holyoke	Hazardous Waste Accounts King County/Metro	206/689-3077

Attachments

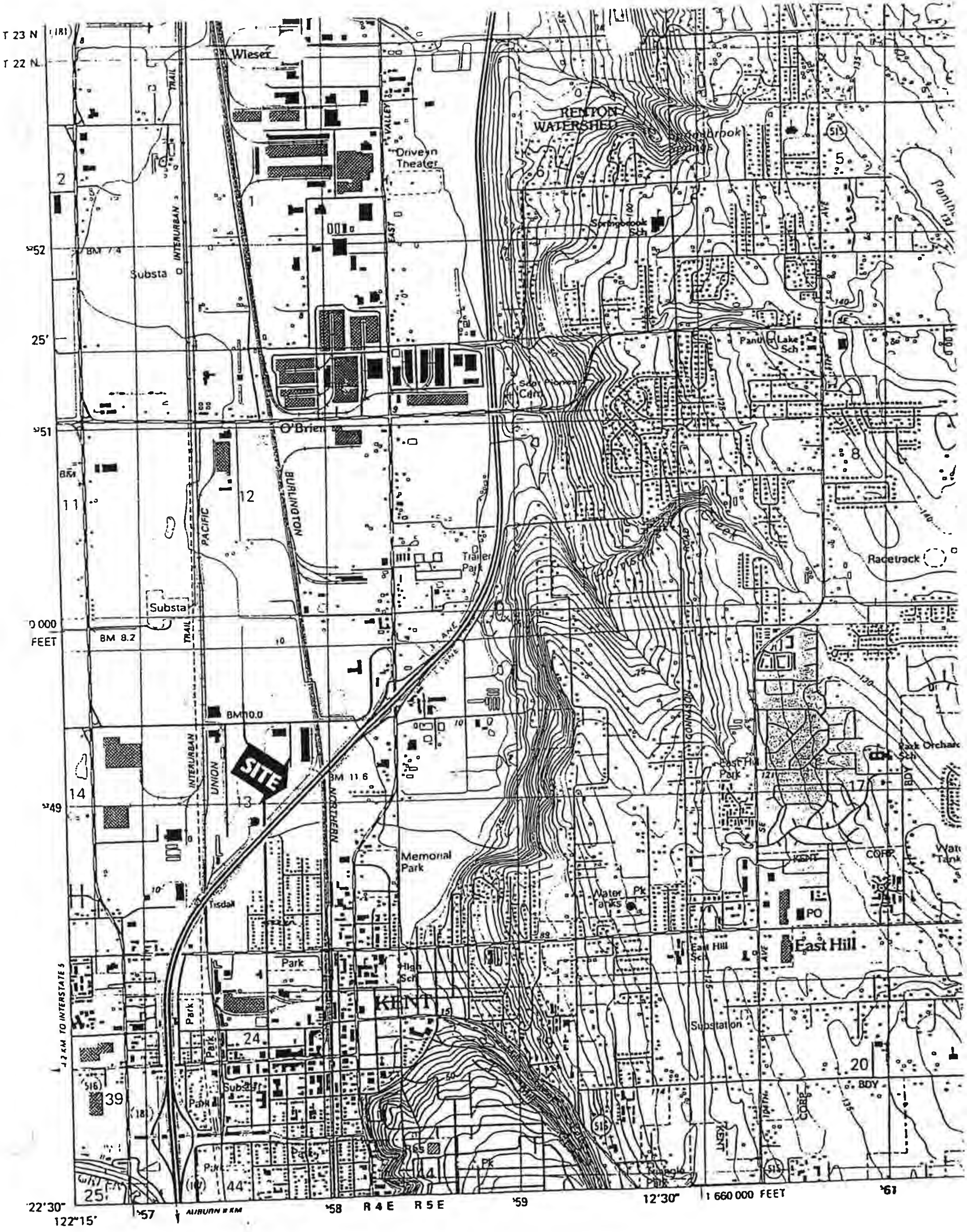
SITE VICINITY MAP

Warehouse



Streets98

USGS TOPOGRAPHIC MAP



T 23 N
T 22 N
Wieser
TRAIL
INTERURBAN
EAST VALLEY
Drive-in Theater
RENTON WATERSHED
Springbrook Springs
Springbrook Sch
Substa
BM 7.4
O'Brien
BURLINGTON
NORTHERN
PACIFIC
UNION
Panther Lake Sch
Racetrack
Trailer Park
Substa
BM 8.2
FEET
BM 10.0
SITE
BM 11.6
Memorial Park
Tisdall
Water Tanks
East Hill Park
Park Orchard Sch
KENT
CORP
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East Hill
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Park
Substation
Triangle Park
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AUBURN
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22'30"
122°15'
12'30"
R 4 E
R 5 E

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Architectural/E[illegible]ering and
Environmental Consultants

515 116th A[illegible] NE
Suite 160
Bellevue, WA 98004

425.990.5415 fx
Client Service
1.888.324.8881

Environmental Site Assessment Questionnaire

ECKLAND

To be completed by a "key site manager" or someone knowledgeable about the subject site.

Site Name:

Site Address: 1220 NORTH SECOND STREET

Date Provided: Comm. No.:

The following Environmental Questionnaire must be completed in its entirety. Do not leave any question unanswered. If a question is not applicable to the site, answer NA

General Facility Information

Key Personnel

Position	Name	Telephone Number	Years at Site
Owner			
Building Manager			
Other			

In the following tables describe the physical property, on-site services provided, and tenants. Please include a map showing the subject site location and physical location of on-site facilities. Use additional sheets as required.

Property area: Acres:

Building Description (for each building)

Address/Number	Age	Square Footage	No. of Floors	Elevator	Number of Tenants

Current Tenant List (Attach extra sheets if required)

Tenant name	Operation	Dates

Former Tenant List (Attach extra sheets if required)

Tenant name	Operation	Dates

Do any of the following specific conditions exist on site? If Yes, please describe the condition.

Site Specific Conditions

Type	Yes	No	If Yes, Describe Location and Identify
Landfill, Dump Area, Junkyard			
Surface Impoundment or Retention Ponds			
Asbestos Containing Materials			
Asbestos O&M Plan			
Polychlorinated Biphneyls (PCBs)			
Radon			
Lead-based Paint (LBP)			
Aboveground or Underground Storage Tank(s) (including septic)			
Dry Cleaning			
Container/Drum Storage Area(s)			
Surface Staining			
Wetlands			
Flood Zone or Areas Subject to Flooding			
Wells (on-site monitoring, water supply, or injection)			
Incinerator or Open Burning			

Has any fire, demolition or construction activity been conducted during the current tenancy(ies)?
☐ Yes ☐ No If Yes, date and describe:

Site History

Property purchase date (current owner):

Building construction, date: By:

Building remodeling and addition dates:

List the previous owner(s): Date:

Date:

Describe past uses of the site and approximate dates of each use.

Date:

Date:

Has any environmental work or reporting been conducted at the subject site? Yes No

Type of activity?

Date: By:

Date: By:

Has any environmental work or reporting been conducted at neighboring properties? Yes No

Type of Activity?

Date: Address:

Was any demolition or construction activity required prior to the construction of the current improvements? Yes No

If Yes, date and describe:

Is there any past existence or operation of any underground storage tanks or aboveground storage tanks on the subject site? Yes No

If yes please complete the following table:

UST/AST information

Material Stored	Size	Age	Leak Detection	Corrosion Protection	Overfill Prevention

Is there any past existence or operation of an emergency electrical generator and/or fire pump on the subject site? Yes No

Fuel Type?

Describe fuel storage and location:

Is there any past existence or operation of automotive fueling, servicing, repairing, painting, or washing activities on the subject site? Yes No

Describe operations and disposition of waste products:

Is there any past existence or operation of hydraulically operated elevators, automobile hoists, or truck dock levelers on the subject site? Yes No

Describe Location?

Have any historic operations on the subject site involved the generation, manufacture, processing, transportation, treatment, storage, or handling of any of the following?

Petroleum products (fuels, solvents, waste oils, etc.)	Yes	No
Asbestos	Yes	No
Lead-based Paint	Yes	No
Hazardous Materials	Yes	No
Biohazardous Materials	Yes	No
Polychlorinated Biphenyls (PCBs)	Yes	No

If Yes, describe the operations:

Solid/Hazardous Waste Generation and Disposal

Identify all waste materials that the existing facility generates. In addition to general municipal waste (garbage), please identify recycled, hazardous or special waste products including, but not limited to, paper, cardboard, grease, solvents, waste oil, dry-cleaning solvents, medical wastes, photographic and x-ray development chemicals, lead-acid storage batteries, metals, tires, etc.

Waste Generation and Disposal

Waste Category	Description of Waste	Method of Storage	When Removed	Disposal Contractor
General				
Construction Debris				
Recyclable*				
Dry Cleaning*				
Other Hazardous*				
Waste Oil*				
Solvents*				
Other *				

*Provide a copy of the most recent waste disposal records

Are any former tenants generators of hazardous waste? Yes No

If yes, describe the waste and their operation:

Does the current owner or operator (or previous owner/operator) perform the following activities?

Discharge wastewater (including storm water, process and nonprocess water, or sanitary waste? Identify what is released and quantities:	Yes	No
Store solid waste?	Yes	No
Store hazardous waste?	Yes	No
Waste water treatment?	Yes	No
Waste disposal operations?	Yes	No

Chemical and Material Storage

Chemical and Material Storage

Material/Chemical	Yes	No	MSDS	Quantity Stored	Description and Supplier
Flammable Material					
Gasoline and Fuel					
Dry Cleaning Solvent					
Hydraulic Oil					
Waste Oil					
Automotive Oil					
Grease					
Paints					
Solvents					
Corrosives					

Notification and Compliance

Has the owner of the property taken any of the following actions relative to the subject site? Prepared a Chemical Safety Contingency Plan	Yes	No
Filed an Emergency and Hazardous Chemical Inventory Form pursuant to the Federal Emergency Planning and Community Right-to-Know Act of 1986.	Yes	No
Filed a Toxic Chemical Release Form pursuant to the Federal Emergency Planning and Community Right-to-Know Act of 1986.	Yes	No
Maintained Material Safety Data Sheets (MSDS) on site.	Yes	No

Prepared a Spill Prevention Control and Countermeasure (SPCC) plan?	Yes No
Conducted leak testing of storage tank piping and piping systems?	Yes No

Please include copies of the above documents with the Questionnaire.

Has the owner or operator of any facility on the subject site or the subject site itself been the subject of any of the following state or federal governmental actions?

Written notification regarding known, suspected or alleged contamination on or emanating from the subject site.	Yes No
Environmental enforcement case or lawsuit.	Yes No
Environmental Notice of Violation for any activities.	Yes No
Named as a Potentially Responsible Party (PRP) or Responsible Party in any environmental action.	Yes No

If yes to any of the above, include documentation of the action and its resolution.

Environmental Releases during Ownership

Has any situation occurred at this site or neighboring sites that resulted in a reportable "release" of any hazardous substances or petroleum as required under state or federal laws. Yes No
If Yes, please describe:

Have any hazardous substances or petroleum come into direct contact with the ground, ground water or surface water at this site? Yes No
If Yes, please describe:

If the answers to questions above are "Yes" have any of the following actions or events been associated with a release on the subject site or neighboring sites?

Use of a cleanup contractor to remove or treat materials including soils, pavement, or other surficial materials.	Yes No
Designation, by the State or Federal EPA of the release as "significant."	Yes No
Sampling and analysis of soils, ground water or surface water.	Yes No
Temporary or more long-term monitoring of ground water at or near the site.	Yes No
Impaired usage of an on-site or nearby water well because of offensive characteristics of the water.	Yes No
Coping with fumes from subsurface storm drains, sumps, or inside basements, etc.	Yes No
Signs of unusual stains, or damaged vegetation, or substances leaching out of the ground along the base of slopes or at other low points on or immediately adjacent to the site,.	Yes No
Is the facility currently operating under an environmental variance granted by a state or federal regulatory agency?	Yes No
Do you have any environmental concerns regarding the past or current use of the subject site or adjoining sites?	Yes No

If Yes, describe:

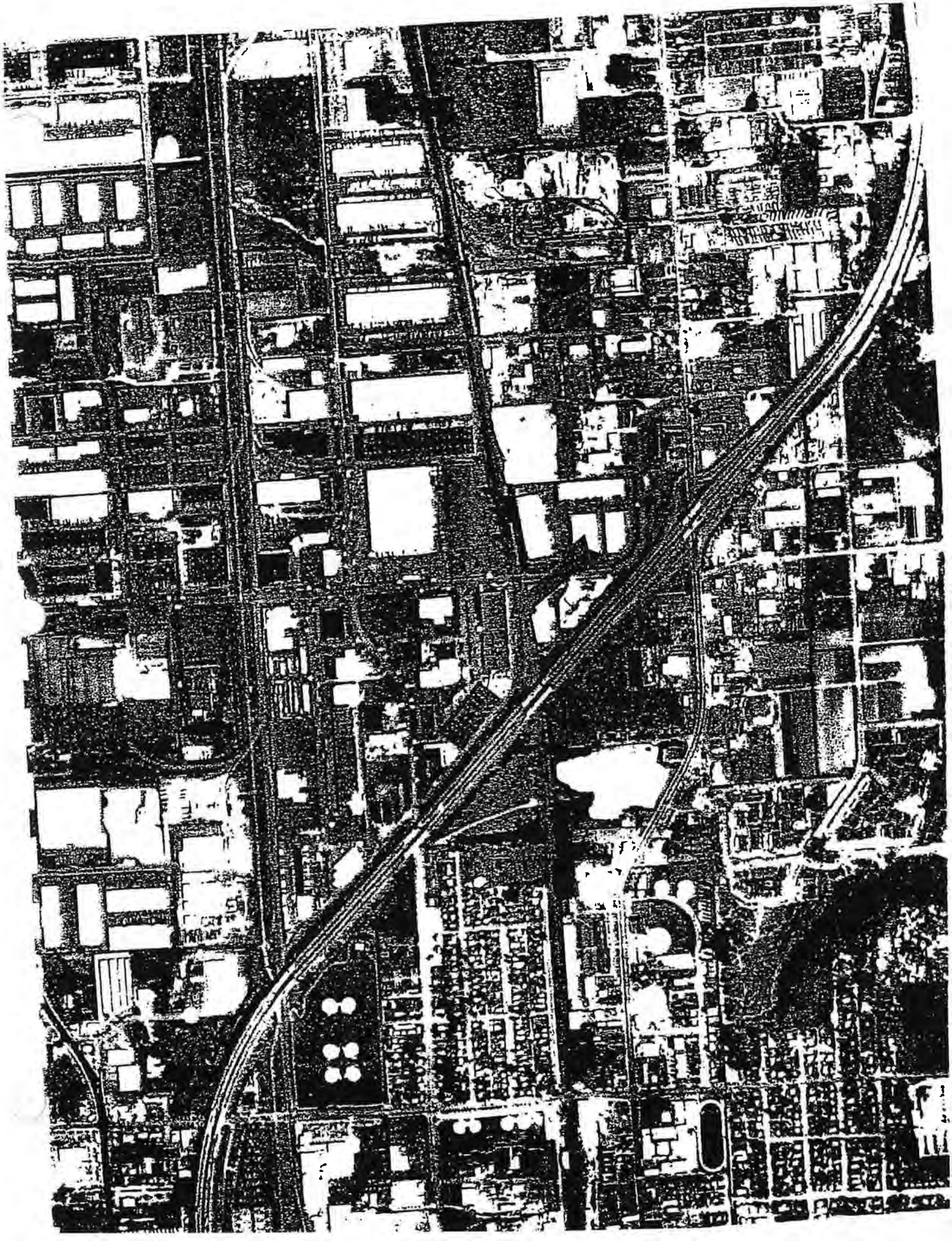
Signed: Date:

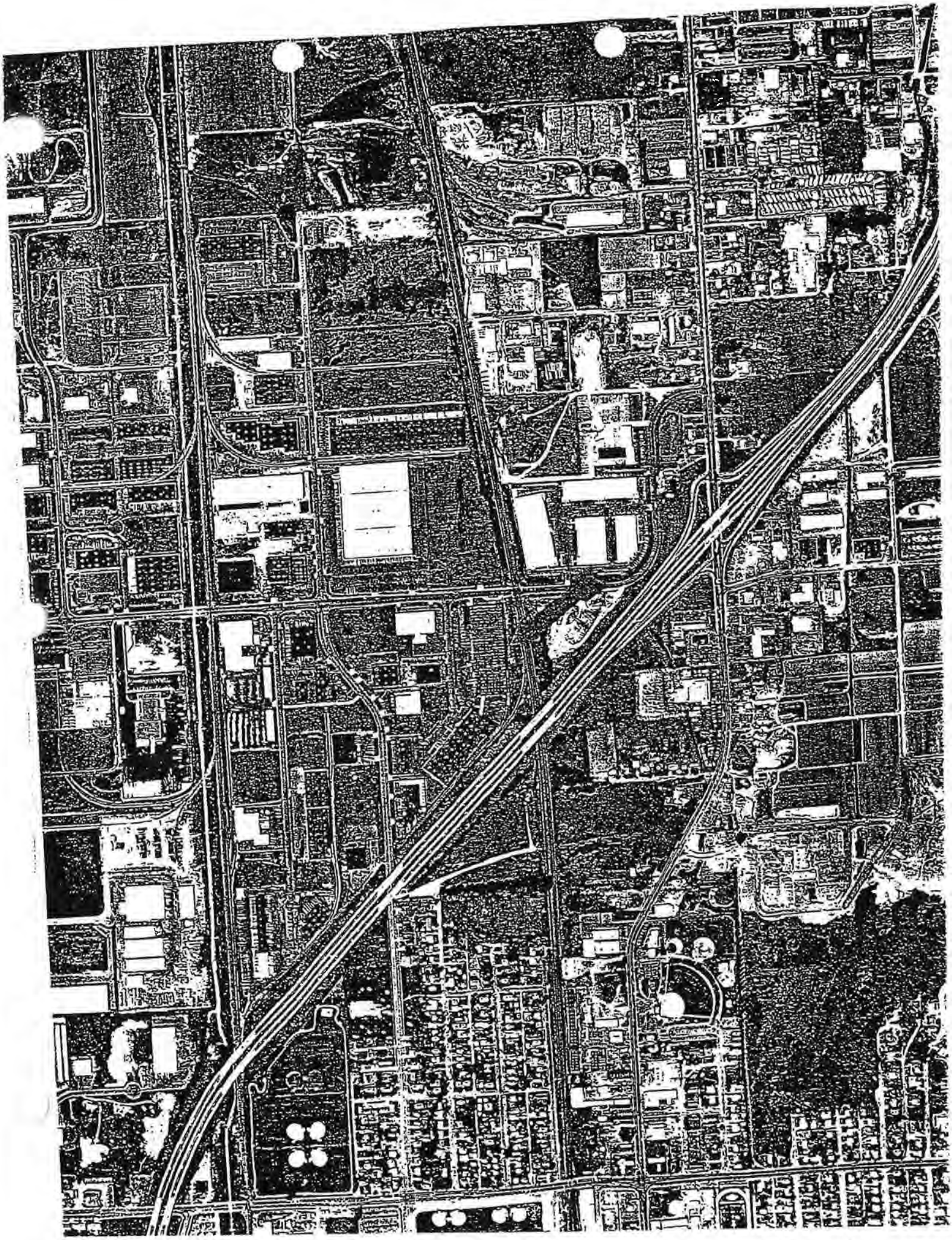
Name: Title:

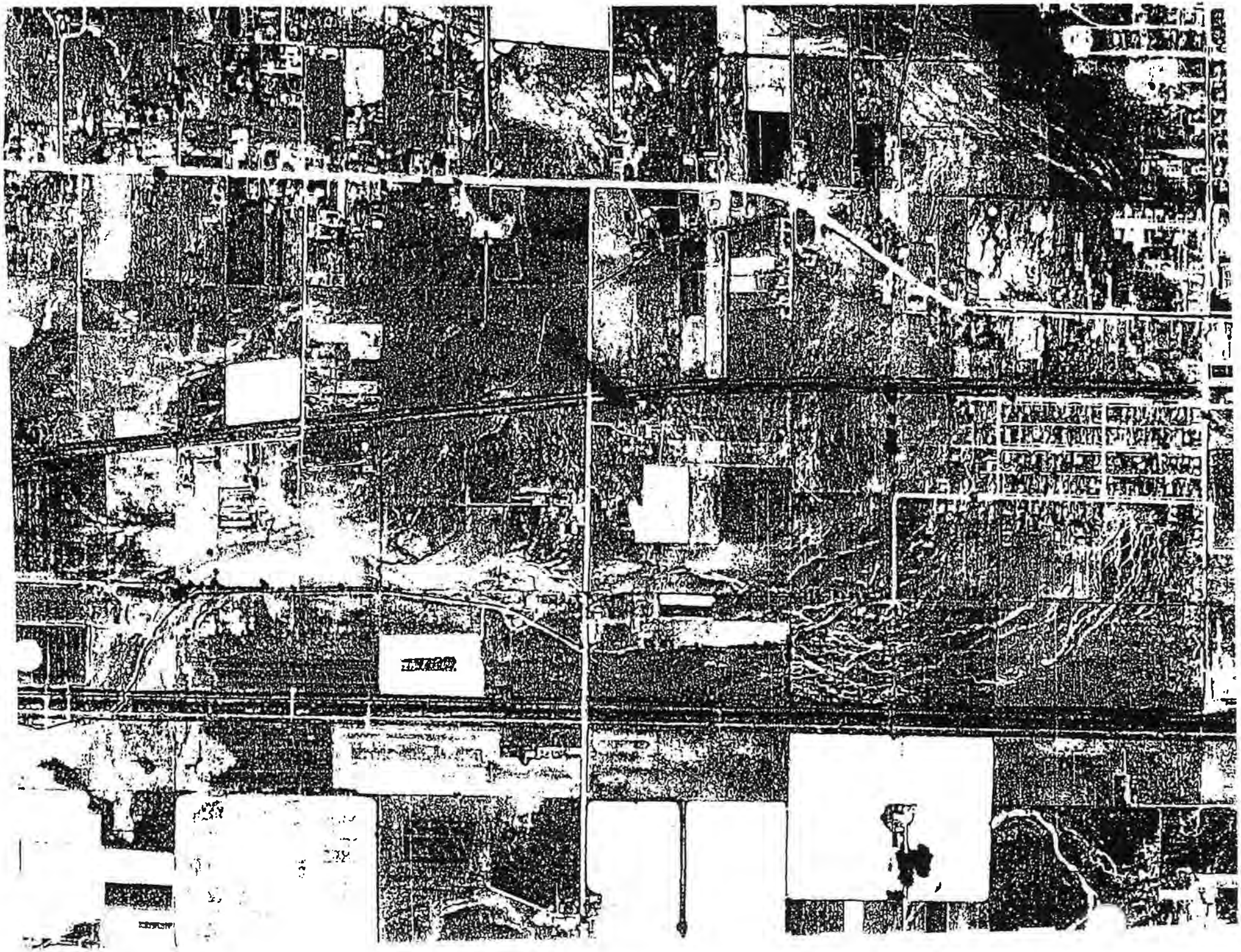
Company:

Please return completed Questionnaire ASAP via facsimile or next day delivery to:

Eckland Consultants Inc.
515 116th Ave NE, Suite 160
Bellevue, WA 98004
425.990.0400 phone
425.990.5415 fax







The EDR-Radius Map
with GeoCheck®

Project: 00-02734-0019

Warehouse Building
1220 North 2nd Street
Kent, WA 98055

Inquiry Number: 1460178.1p

February 04, 2000

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-97. Search distances are per ASTM standard or custom distances requested by the user.

The address of the subject property for which the search was intended is:

1220 NORTH 2ND STREET
KENT, WA 98055

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-97 search radius around the subject property for the following Databases:

NPL:	National Priority List
Delisted NPL:	NPL Deletions
RCRIS-TSD:	Resource Conservation and Recovery Information System
CSCSL:	CSCSL
CERCLIS:	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP:	Comprehensive Environmental Response, Compensation, and Liability Information System
SWF/LF:	Solid Waste Facility Database
RAATS:	RCRA Administrative Action Tracking System
HMIRS:	Hazardous Materials Information Reporting System
PADS:	PCB Activity Database System
ERNS:	Emergency Response Notification System
NPL Lien:	NPL Liens
TSCA:	Toxic Substances Control Act
MLTS:	Material Licensing Tracking System
ROD:	ROD
CONSENT:	Superfund (CERCLA) Consent Decrees
WA ICR:	WA ICR
Coal Gas:	Former Manufactured gas (Coal Gas) Sites.
MINES:	Mines Master Index File

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was identified in the following government records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
AMERICAN NATIONAL CAN CORP KENT 1220 2ND AVE N KENT, WA 98032	HAZNET	N/A

EXECUTIVE SUMMARY

AMERICAN NATIONAL CAN CO
1220 2ND AVE N
KENT, WA 98032

FINDS
RCRIS-LQG
TRIS
Air Emissions

WAD053823571

EXECUTIVE SUMMARY

Surrounding Properties:

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the subject property includes a tolerance of -10 feet. Sites with an elevation equal to or higher than the subject property have been differentiated below from sites with an elevation lower than the subject property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 09/07/1999 has revealed that there is 1 CORRACTS site within approximately 1 mile of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
BOEING KENT BENAROYA	*20651 84TH AVE S*	*1/2 - 1 NNE*	*24*	*24*

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, and dated 11/01/1999 has revealed that there are 9 LUST sites within approximately 0.5 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
KENT SHELL	*1208 CENTRAL AVE N*	*1/4 - 1/2 E*	*15*	*15*
THE ROBBINS CO	*22445 76TH AVE S*	*1/4 - 1/2 NNW*	*17*	*18*
CARPINITO BROTHERS, INC.	*1148 CENTRAL AVE N*	*1/4 - 1/2 ESE*	*18*	*18*
CENTRAL LAWN & GARDEN	*1002 CENTRAL AVE N*	*1/4 - 1/2 SE*	*19*	*19*
AIR LIQUIDE AMERICA CORPORATIO	*8008 S 222ND ST*	*1/4 - 1/2 NNE*	*20*	*20*
PACIFIC NORTH EQUIPMENT KENT	*22431 83RD AVE S*	*1/4 - 1/2 NE*	*21*	*21*
J.P.FRANCIS AND ASSOC. INC	*8223 S 222ND ST*	*1/4 - 1/2 NNE*	*22*	*23*
WEYERHAEUSER COMPANY	*7401 S 228TH ST*	*1/4 - 1/2 W*	*23*	*24*

Lower Elevation	Address	Dist / Dir	Map ID	Page
GENERAL ELECTRIC COMPANY	*1031 4TH AVE N*	*1/4 - 1/2 SSW*	*16*	*17*

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 11/01/1999 has revealed that there are 5 UST sites within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
BOYD COFFEE COMPANY,KENT WAREH	1221 2ND AVE N	0 - 1/8 SSW	B6	10
PROTECTIVE COATINGS INC	*1215 N 2ND AVE*	*0 - 1/8 SSW*	*B8*	*11*

neighboring land

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
LUSK METALS NORTHWEST, INC.	1208 4TH AVE N	1/8 - 1/4 WSW	C11	13
BOTHELL N. REMOTE RADIO SITE (	CORNER 228TH ST & 4TH A	1/8 - 1/4 W	12	13
TEXACO STAR MART # 63--232-143	22588 84TH AVE S	1/8 - 1/4 ENE	14	14

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 09/01/1999 has revealed that there are 4 RCRIS-SQG sites within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
FISHER SCIENTIFIC BRANCH 44	*8030 S 228TH ST*	*0 - 1/8 NW*	*A3*	*9*
SEALED AIR CORP KENT	*8030 S 228TH ST BLDG A*	*0 - 1/8 NE*	*4*	*9*
CUTTER PRECISION METALS INC	*1208 N 4TH AVE*	*1/8 - 1/4 WSW*	*C10*	*13*
ERSKINE JOHNS CO	*1121 4TH AVE N*	*1/8 - 1/4 SW*	*13*	*14*

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 09/01/1999 has revealed that there are 2 RCRIS-LQG sites within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WASSER HIGH TECH COATINGS	*8041 S 228TH ST*	*0 - 1/8 ESE*	*5*	*9*
PROTECTIVE COATINGS INC	*1215 N 2ND AVE*	*0 - 1/8 SSW*	*B8*	*11*

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 10/13/1999 has revealed that there are 7 FINDS sites within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
FISHER SCIENTIFIC BRANCH 44	*8030 S 228TH ST*	*0 - 1/8 NW*	*A3*	*9*
SEALED AIR CORP KENT	*8030 S 228TH ST BLDG A*	*0 - 1/8 NE*	*4*	*9*
WASSER HIGH TECH COATINGS	*8041 S 228TH ST*	*0 - 1/8 ESE*	*5*	*9*
PROTECTIVE COATINGS INC	*1215 N 2ND AVE*	*0 - 1/8 SSW*	*B8*	*11*
MILES SAND AND GRAVEL	8200 S 228TH	1/8 - 1/4 E	9	12
CUTTER PRECISION METALS INC	*1208 N 4TH AVE*	*1/8 - 1/4 WSW*	*C10*	*13*
ERSKINE JOHNS CO	*1121 4TH AVE N*	*1/8 - 1/4 SW*	*13*	*14*

neighbors

EXECUTIVE SUMMARY

TRIS: The Toxic Chemical Release Inventory System identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the U.S. EPA.

A review of the TRIS list, as provided by EDR, and dated 12/31/1997 has revealed that there are 2 TRIS sites within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WASSER HIGH TECH COATINGS	*8041 S 228TH ST*	*0 - 1/8 ESE*	*5*	*9*
PROTECTIVE COATINGS INC	*1215 N 2ND AVE*	*0 - 1/8 SSW*	*B8*	*11*

Wa Air Emissions: State of Washington, Department of Ecology, Washington Emissions Data System.

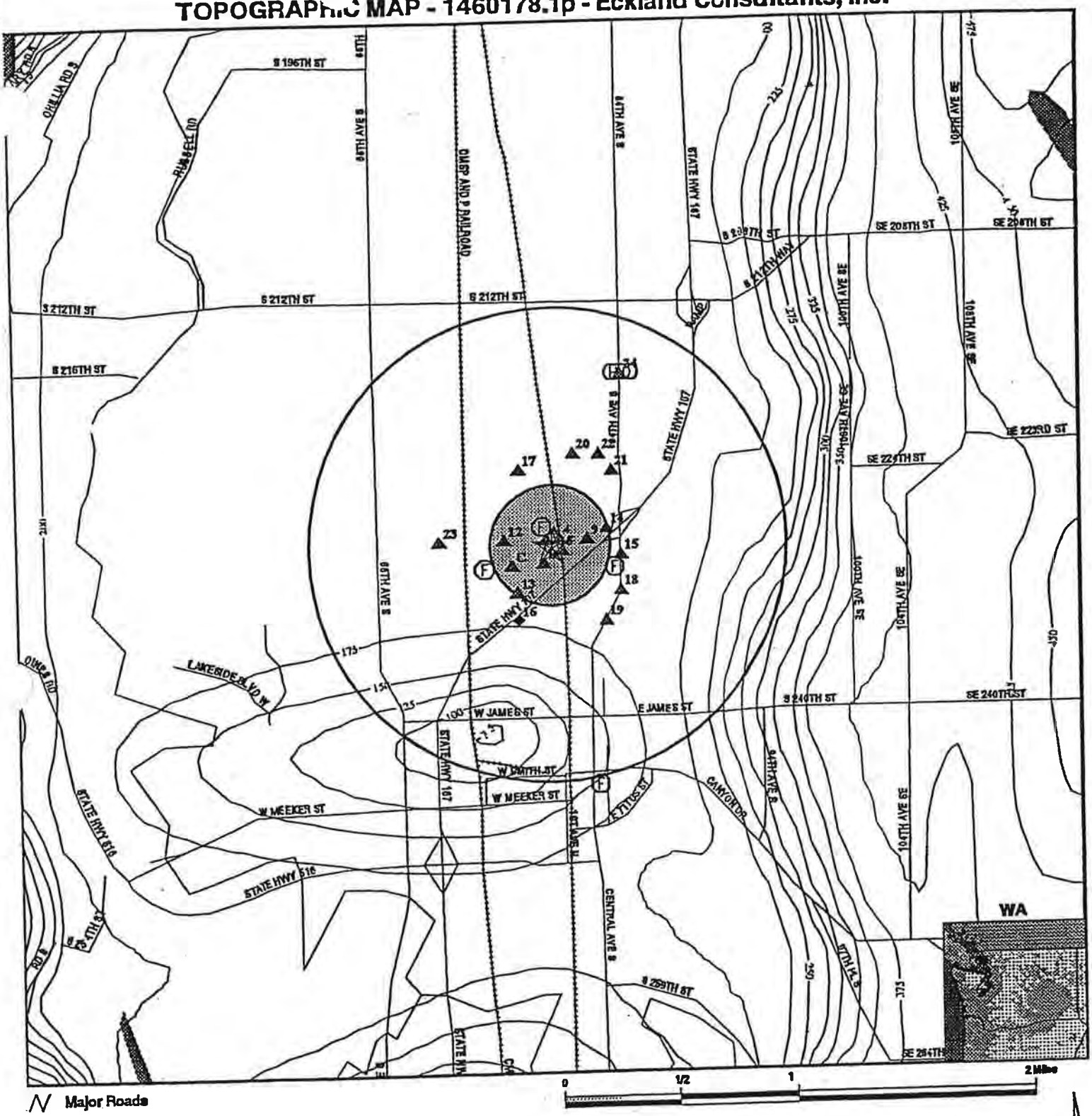
A review of the Air Emissions list, as provided by EDR, has revealed that there is 1 Air Emissions site within approximately 0.25 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
PROTECTIVE COATINGS INC	*1215 N 2ND AVE*	*0 - 1/8 SSW*	*B8*	*11*

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
EAST VALLEY CROSSINGS PROPERTY	CSCSL
KING CNTY REGIONAL JUSTICE	CSCSL
BOEING S&CS SPACE CENTER	CSCSL
BORDEN CHEMICAL CO	CSCSL
BORDEN CHEMICAL CO	CSCSL
KING CNTY REGIONAL JUSTICE	CSCSL
KING CNTY REGIONAL JUSTICE	CSCSL
KING CNTY REGIONAL JUSTICE	CSCSL
ORILLIA INDUSTRIAL DISTRICT II	CSCSL
BLACK RIVER CORP PARK TRACT A	CSCSL
BLACK RIVER CORP PARK TRACT A	CSCSL
BLACK RIVER CORP PARK TRACT A	CSCSL
BLACK RIVER CORP PARK TRACT A	CSCSL
FUDS YOUNGS LAKE NIKE 32 33	CSCSL
BNRR QUENDALL LOADING RACKS FORMER	CSCSL
BNRR QUENDALL LOADING RACKS FORMER	CSCSL
ACTION AVIATION INC	CSCSL
ACTION AVIATION INC	CSCSL
ACTION AVIATION INC	CSCSL
T & S AUTOMOTIVE SALES	CERC-NFRAP,WA ICR
STERNOFF METALS CORP	UST
TEXACO KENT	UST
STATE FARM	RCRIS-SQG,FINDS
HWY 167 WILLIS KENT	RCRIS-SQG,FINDS
WDOT BRIDGE 127 SR167	ERNS
20403 68TH AVE SOUTH BUILDING 18241	Air Emissions
KENWORTH TRUCK COMPANY - RENTON	

TOPOGRAPHIC MAP - 1460178.1p - Eckland Consultants, Inc.



- Major Roads
- Contour Lines
- Waterways
- Earthquake epicenter, Richter 5 or greater
- (F) Closest Federal Well in quadrant
- [S] Closest State Well in quadrant
- (P) Closest Public Water Supply Well
- (HD) Closest Hydrogeological Data

TARGET PROPERTY:	Warehouse Building	CUSTOMER:	Eckland Consultants, Inc.
ADDRESS:	1220 North 2nd Street	CONTACT:	Jim Brown
CITY/STATE/ZIP:	Kent WA 98055	INQUIRY #:	1460178.1p

GEOCHECK VERSION 2.1 SUMMARY

TARGET PROPERTY COORDINATES

Latitude (North):	47.397449 - 47° 23' 50.8"
Longitude (West):	122.233299 - 122° 13' 59.9"
Universal Transverse Mercator:	Zone 10
UTM X (Meters):	557856.8
UTM Y (Meters):	5249399.0

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property:	2447122-D2 RENTON, WA

GEOLOGIC AGE IDENTIFICATION†

Geologic Code:	Q
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary

ROCK STRATIGRAPHIC UNIT†

Category:	Stratifed Sequence

GROUNDWATER FLOW INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, including well data collected on nearby properties, regional groundwater flow information (from deep aquifers), or surface topography.‡

General Topographic Gradient at Target Property: General SSW

General Hydrogeologic Gradient at Target Property: No hydrogeologic data available.

Site-Specific Hydrogeological Data*:

Search Radius:	2.0 miles
Location Relative to TP:	1/2 - 1 Mile NNE
Site Name:	BOEING COMPANY KENT BENAROYA
Site EPA ID Number:	WAD000711622
Groundwater Flow Direction:	NOT AVAILABLE
Inferred Depth to Water:	5 feet
Hydraulic Connection:	The uppermost aquifer is located in the White River alluvium. Near-surface soils are gravelly sand, silt, and clay with moderate to high permeabilities.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

FEDERAL DATABASE WELL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
Northern	0 - 1/8 Mile	Not Reported	Not Reported
Eastern	1/4 - 1/2 Mile	Not Reported	Not Reported

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

‡ U.S. EPA Ground Water Handbook, Vol I: Ground Water and Contamination, Office of Research and development EPA/625/6-90/016a,Chapter 4, page 78, September 1990.

GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
Southern	1 - 2 Miles	Not Reported	Not Reported
Western	1/4 - 1/2 Mile	Not Reported	Not Reported

STATE DATABASE WELL INFORMATION

WELL QUADRANT	DISTANCE FROM TP

NO WELLS FOUND

PUBLIC WATER SUPPLY SYSTEM INFORMATION

No wells found within 1.000 miles.

AREA RADON INFORMATION

EPA Radon Zone for KING County: 3

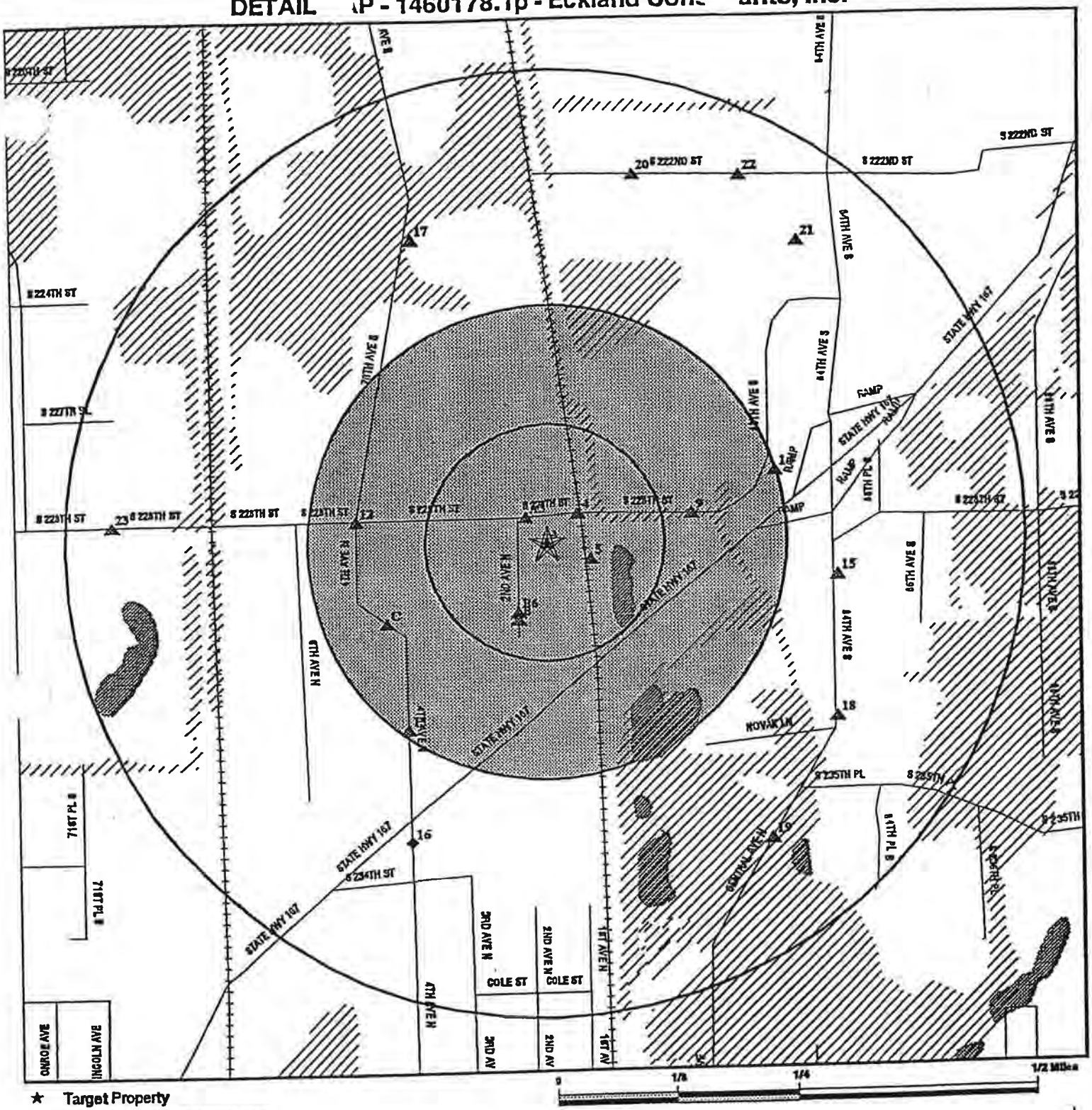
Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Zip Code: 98055

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 pCi/L	100%	0%	0%

DETAIL MAP - 1460178.1p - Eckland Consultants, Inc.



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites (if requested)

Sensitive Receptors

National Priority List Sites

Landfill Sites

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

Wetlands per National Wetlands Inventory (1994)

TARGET PROPERTY:	Warehouse Building	CUSTOMER:	Eckland Consultants, Inc.
ADDRESS:	1220 North 2nd Street	CONTACT:	Jim Brown
CITY/STATE/ZIP:	Kent WA 98055	INQUIRY #:	1460178.1p
LAT/LONG:	47.3974 / 122.2333	DATE:	February 04, 2000 5:34 pm

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
CSCSL		0.250	0	0	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	1	NR	1
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	9	NR	NR	9
UST		0.250	2	3	NR	NR	NR	5
RAATS		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	2	2	NR	NR	NR	4
RCRIS Lg. Quan. Gen.	X	0.250	2	0	NR	NR	NR	2
HMIRS		0.250	0	0	NR	NR	NR	0
PADS		0.250	0	0	NR	NR	NR	0
ERNS		0.250	0	0	NR	NR	NR	0
FINDS	X	0.250	4	3	NR	NR	NR	7
TRIS	X	0.250	2	0	NR	NR	NR	2
NPL Liens		1.000	0	0	0	0	NR	0
TSCA		0.250	0	0	NR	NR	NR	0
MLTS		0.250	0	0	NR	NR	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
Wa Air Emissions (EMI)	X	0.250	1	0	NR	NR	NR	1
WA ICR		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0
MINES		TP	NR	NR	NR	NR	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS SUMMARY SHOWING ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
CSCSL		0.250	0	0	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	1	NR	1
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	8	NR	NR	8
UST		0.250	2	3	NR	NR	NR	5
RAATS		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	2	2	NR	NR	NR	4
RCRIS Lg. Quan. Gen.	X	0.250	2	0	NR	NR	NR	2
HMIRS		0.250	0	0	NR	NR	NR	0
PADS		0.250	0	0	NR	NR	NR	0
ERNS		0.250	0	0	NR	NR	NR	0
FINDS	X	0.250	4	3	NR	NR	NR	7
TRIS	X	0.250	2	0	NR	NR	NR	2
NPL Liens		1.000	0	0	0	0	NR	0
TSCA		0.250	0	0	NR	NR	NR	0
MLTS		0.250	0	0	NR	NR	NR	0
ROD		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
Wa Air Emissions (EMI)	X	0.250	1	0	NR	NR	NR	1
WA ICR		TP	NR	NR	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0
MINES		TP	NR	NR	NR	NR	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Map ID / Direction / Distance / Distance (ft.) / Elevation — Site | Database(s) | EDR ID Number / EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

A2 Target Property — AMERICAN NATIONAL CAN CORP KENT
1220 2ND AVE N
KENT, WA 98032

Database(s): HAZNET | EDR ID Number: S103625889 | EPA ID Number: N/A

HAZNET:

Gepaid:	WAD053823571	Tepaid:	Not reported
Contact:	Not reported	Telephone:	(000) 000-0000
Gen County:	0	Tsd County:	0
Tons:	3.8989		
Category:	Alkaline solution without metals (pH > 12.5)		
Disposal Method:	Disposal, Other		
Mailing Address:	1220 2ND AVE N KENT, WA 98032 - 2946		
County	99		

A1 Target Property — AMERICAN NATIONAL CAN CO
1220 2ND AVE N
KENT, WA 98032

Database(s): FINDS, RCRIS-LQG, TRIS, Air Emissions | EDR ID Number: 1000360890 | EPA ID Number: WAD053823571

RCRIS:

Owner:	AMERICAN NATIONAL CAN CO (773) 399-3162
Contact:	JOHN NOCK (360) 854-9950
Record Date:	12/31/1997
Classification:	Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	1360.00	D008	5205.90
D018	5205.90	D039	5205.90
D040	5205.90	F003	14034.00

Used Oil Recyc: No

Violation Status: Violation information exist

There are 3 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	11/04/1996
	Generator-All Requirements	11/04/1996
	Generator-All Requirements	11/04/1996

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	AMERICAN NATIONAL CAN CO (Continued)		1000360890

WA AIR EMISSIONS:

Facility ID:	Not reported	Local ID:	Not reported
SO2 Chemical:	Not reported	NO2 Chemical:	Not reported
VOC Chemical:	Not reported	CO Chemical:	Not reported
PM10 Chemical:	Not reported		
Mailing Name:	AMERICAN NATIONAL CAN CO 1220 N 2ND AVE KENT, 53		
Year Of Info:	Not reported		
Facility Contact:	Not reported		
Mail Add Zip 2:	Not reported		

A3 NW < 1/8 191 Higher	FISHER SCIENTIFIC BRANCH 44 8030 S 228TH ST KENT, WA 98032	RCRIS-SQG FINDS	1000240732 WAD980983761

RCRIS:

Owner:	FISHER SCIENTIFIC CO (360) 555-1212
Contact:	ELIGHA BURKS JR (253) 852-9030
Record Date:	Not reported
Classification:	Not reported
Used Oil Recyc:	No
Violation Status:	No violations found

---

4 NE < 1/8 239 Higher	SEALED AIR CORP KENT 8030 S 228TH ST BLDG A KENT, WA 98032	RCRIS-SQG FINDS	1001234063 WAH000004754

RCRIS:

Owner:	SEALED AIR CORP (360) 555-1212
Contact:	JOEL ARNOLD (206) 885-9648
Record Date:	04/02/1998
Classification:	Small Quantity Generator
Used Oil Recyc:	No
Violation Status:	No violations found

---

5 ESE < 1/8 264 Higher	WASSER HIGH TECH COATINGS 8041 S 228TH ST KENT, WA 98032	FINDS RCRIS-LQG TRIS	1000474062 WAD988481461

WASSER HIGH TECH COATINGS (Continued) 1000474062

RCRIS:
Owner: WILLIAM BRINTON SR
(253) 850-2967
Contact: EARL VAN AKEN
(253) 850-2967
Record Date: 12/31/1997
Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)
D001	6000.00

Used Oil Recyc: No

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Enforcement Docket System (DOCKET)
National Compliance Database (NCDB)

B6 BOYD COFFEE COMPANY,KENT WAREHOUSE UST U001127378
SSW 1221 2ND AVE N N/A
< 1/8 KENT, WA 98032
420
Higher

UST:
Facility ID: 12773
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

B7 PROTECTIVE COATINGS INC HAZNET S103625780
SSW 1215 2ND AVE N N/A
< 1/8 KENT, WA 98032
457
Higher

HAZNET:
Gepaid: WAD063341424
Contact: STEPHEN H ROWE
Gen County: 41
Tons: 0.9174
Category: ***
Disposal Method: Disposal, Other
Mailing Address: 1215 N 2ND AVE
KENT, WA 98032 - 2993
County 99
Tepaid: CAD009452657
Telephone: (253) 854-9330
Tsd County: San Mateo

MAP FINDINGS

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B8 / SSW / < 1/8 / 457 / Higher	PROTECTIVE COATINGS INC 1215 N 2ND AVE KENT, WA 98032	FINDS RCRIS-LQG TRIS UST Air Emissions	1000398220 WAD063341424

RCRIS:

Owner: STEPHEN ROWE
(253) 854-9330

Contact: PETER SCHMALTZ
(253) 854-9330

Record Date: 12/31/1997

Classification: Large Quantity Generator

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)
D001	36330.00
D003	1950.00
D007	34045040.60
D040	12850.00
F003	32800.00
F006	33955265.60
F009	10275.00
U057	4965.00
U220	4965.00

Waste	Quantity (Lbs)
D002	21750.00
D006	33955265.60
D035	37765.00
F001	12850.00
F005	32800.00
F008	1950.00
F019	31300.00
U159	4965.00
U239	4965.00

Used Oil Recyc: No

Violation Status: Violation information exist

There are 14 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	05/14/1999
	Generator-All Requirements	04/16/1999
	Generator-All Requirements	05/14/1999
	Generator-All Requirements	05/14/1999
	Generator-All Requirements	05/14/1999
	Generator-All Requirements	04/26/1999
	Generator-All Requirements	04/26/1999
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	07/04/1994

FINDS:

Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

1000398220

PROTECTIVE COATINGS INC (Continued)

WA AIR EMISSIONS:

Facility ID: Not reported
SO2 Chemical: Not reported
VOC Chemical: Not reported
PM10 Chemical: Not reported
Mailing Name: PROTECTIVE COATINGS INC
1215 N 2ND
KENT, 53
Year Of Info: Not reported
Facility Contact: Not reported
Mail Add Zip 2: Not reported

Local ID: Not reported
NO2 Chemical: Not reported
CO Chemical: Not reported

Facility ID: 0163
SO2 Chemical: 0
VOC Chemical: 27
PM10 Chemical: 0
Mailing Name: PROTECTIVE COATINGS INC
1215 N 2ND
KENT, 53 98032
Year Of Info: 96
Facility Contact: Not reported
Mail Add Zip 2: Not reported

Local ID: C
NO2 Chemical: 0
CO Chemical: 0

UST:

Facility ID: 9795
Install Date: 12/31/1964
Capacity: Not reported
Status: Exempt
Tank Name: 1
Tank Material: Concrete
Substance: HAZARDOUS SUBSTANCE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9795
Install Date: 12/31/1964
Capacity: Not reported
Status: Exempt
Tank Name: 2
Tank Material: Concrete
Substance: HAZARDOUS SUBSTANCE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9795
Install Date: 12/31/1964
Capacity: Not reported
Status: Exempt
Tank Name: 3
Tank Material: Concrete
Substance: HAZARDOUS SUBSTANCE
Compartment #: 1
Ecology Region: North Western

9
East
1/8-1/4
818
Higher

MILES SAND AND GRAVEL
8200 S 228TH
KENT, WA

FINDS 1001537725
0000-0795-44

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	MILES SAND AND GRAVEL (Continued)		1001537725
	FINDS: Other Pertinent Environmental Activity Identified at Site: Permit Compliance System (PCS)		
C10 WSW 1/8-1/4 975 Higher	CUTTER PRECISION METALS INC 1208 N 4TH AVE KENT, WA 98032	RCRIS-SQG FINDS	1000401609 WAD981770647
	RCRIS: Owner: CUTTER PRECISION METALS INC (360) 555-1212 Contact: TOM BEDFORD (206) 575-4120 Record Date: Not reported Classification: Not reported Used Oil Recyc: No Violation Status: No violations found		
C11 WSW 1/8-1/4 975 Higher	LUSK METALS NORTHWEST, INC. 1208 4TH AVE N KENT, WA 98032	UST	U003029054 N/A
	UST: Facility ID: 97432 Install Date: 12/31/1964 Capacity: Not reported Status: REMOVED Tank Name: #2 Tank Material: Not reported Substance: Not reported Compartment #: 1 Ecology Region: North Western Facility ID: 97432 Install Date: 12/31/1964 Capacity: Not reported Status: REMOVED Tank Name: #1 Tank Material: Not reported Substance: UNLEADED GASOLINE Compartment #: 1 Ecology Region: North Western		
12 West 1/8-1/4 1050 Higher	BOTHELL N. REMOTE RADIO SITE (21 CORNER 228TH ST & 4TH AVE W BOTHELL, WA 0	UST	U003025818 N/A

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	BOTHELL N. REMOTE RADIO SITE (21 (Continued)		U003025818

UST:
- Facility ID: 12294
- Install Date: 9/1/1979
- Capacity: 111 to 1,100 Gallons
- Status: REMOVED
- Tank Name: 2139-X01-1
- Tank Material: Not reported
- Substance: Not reported
- Compartment #: 1
- Ecology Region: North Western

---

13 SW 1/8-1/4 1280 Higher	ERSKINE JOHNS CO 1121 4TH AVE N KENT, WA 98032	RCRIS-SQG FINDS	1001490657 WAD988484820

RCRIS:
- Owner: CMI COMPOSITE MATERIALS INC (360) 435-5501
- Contact: DAVID ELLSWORTH (360) 435-5501
- Record Date: 05/03/1996
- Classification: Not reported
- Used Oil Recyc: No
- Violation Status: No violations found

---

14 ENE 1/8-1/4 1315 Higher	TEXACO STAR MART # 63--232-1434 22588 84TH AVE S KENT, WA 98032	UST	U003029160 N/A

UST:
- Facility ID: 97666
- Install Date: 1/1/1988
- Capacity: 10,000 TO 19,999 GALLONS
- Status: Operational
- Tank Name: 1
- Tank Material: Fiberglass Reinforced Plastic
- Substance: DIESEL
- Compartment #: 1
- Ecology Region: North Western

- Facility ID: 97666
- Install Date: 1/1/1988
- Capacity: 10,000 TO 19,999 GALLONS
- Status: Operational
- Tank Name: 2
- Tank Material: Fiberglass Reinforced Plastic
- Substance: LEADED GASOLINE
- Compartment #: 1
- Ecology Region: North Western

TEXACO STAR MART # 63-232-1434 (Continued) U003029160

Facility ID: 97666
Install Date: 1/1/1988
Capacity: 10,000 TO 19,999 GALLONS
Status: Operational
Tank Name: 3
Tank Material: Fiberglass Reinforced Plastic
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 97666
Install Date: 1/1/1988
Capacity: 10,000 TO 19,999 GALLONS
Status: Operational
Tank Name: 4
Tank Material: Fiberglass Reinforced Plastic
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

15
East
1/4-1/2
1603
Higher

KENT SHELL
1208 CENTRAL AVE N
KENT, WA 98032

UST U001125924
LUST N/A

LUST:

Facility ID: 9520
Release ID: 1412
Release Status: AWAITING CLEANUP
Alternate Name: EXXON STATION # 7-7149
Affected Media: SOIL
Ecology Region: North Western
Release Date: 6/1/1989
Status Date: 12/18/1997

Facility ID: 9520
Release ID: 1412
Release Status: CLEANUP STARTED
Alternate Name: EXXON STATION # 7-7149
Affected Media: SOIL
Ecology Region: North Western
Release Date: 6/1/1989
Status Date: 6/1/1995

Facility ID: 9520
Release ID: 1412
Release Status: AWAITING CLEANUP
Alternate Name: EXXON STATION # 7-7149
Affected Media: GROUND WATER
Ecology Region: North Western
Release Date: 6/1/1989
Status Date: 12/18/1997

Facility ID: 9520
Release ID: 1412
Release Status: CLEANUP STARTED
Alternate Name: EXXON STATION # 7-7149
Affected Media: GROUND WATER
Ecology Region: North Western
Release Date: 6/1/1989
Status Date: 6/1/1995

KENT SHELL (Continued) U001125924

UST:
Facility ID: 9520
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9520
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 2
Tank Material: Steel-Unprotected
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9520
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 3
Tank Material: Steel-Unprotected
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9520
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 4
Tank Material: Steel-Unprotected
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9520
Install Date: 1/5/1998
Capacity: Not reported
Status: OPERATIONAL
Tank Name: B
Tank Material: FIBERGLASS REINFORCED PLASTIC
Substance: DIESEL
Compartment #: 1
Ecology Region: North Western

KENT SHELL (Continued) U001125924

Facility ID: 9520
Install Date: 1/5/1998
Capacity: Not reported
Status: OPERATIONAL
Tank Name: A
Tank Material: FIBERGLASS REINFORCED PLASTIC
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 9520
Install Date: 1/5/1998
Capacity: Not reported
Status: OPERATIONAL
Tank Name: B
Tank Material: FIBERGLASS REINFORCED PLASTIC
Substance: UNLEADED GASOLINE
Compartment #: 2
Ecology Region: North Western

Facility ID: 9520
Install Date: 12/31/1964
Capacity: 111 to 1,100 Gallons
Status: Removed
Tank Name: 5
Tank Material: Steel-Unprotected
Substance: USED OIL/WASTE OIL
Compartment #: 1
Ecology Region: North Western

16
SSW
1/4-1/2
1819
Lower

GENERAL ELECTRIC COMPANY
1031 4TH AVE N
KENT, WA 98032

UST U000594470
LUST N/A

LUST:

Facility ID:	10354	Ecology Region:	North Western
Release ID:	2017	Release Date:	3/6/1991
Release Status:	REPORTED CLEANED UP	Status Date:	6/1/1995
Alternate Name:	GENERAL ELECTRIC CO KENT		
Affected Media:	SOIL		

Facility ID:	10354	Ecology Region:	North Western
Release ID:	2017	Release Date:	3/6/1991
Release Status:	CLEANUP STARTED	Status Date:	3/6/1991
Alternate Name:	GENERAL ELECTRIC CO KENT		
Affected Media:	SOIL		

GENERAL ELECTRIC COMPANY (Continued) U000594470

UST:
Facility ID: 10354
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: Not reported
Compartment #: 1
Ecology Region: North Western

17
NNW
1/4-1/2
1849
Higher

THE ROBBINS CO
22445 76TH AVE S
KENT, WA 98031

Database(s): UST, LUST
EDR ID Number: U001123562
EPA ID Number: N/A

LUST:
Facility ID: 4310
Release ID: 4574
Release Status: REPORTED CLEANED UP
Alternate Name: ROBBINS COMPANY
Affected Media: SOIL
Ecology Region: North Western
Release Date: 7/29/1993
Status Date: 6/1/1995

Facility ID: 4310
Release ID: 4574
Release Status: CLEANUP STARTED
Alternate Name: ROBBINS COMPANY
Affected Media: SOIL
Ecology Region: North Western
Release Date: 7/29/1993
Status Date: 7/29/1993

UST:
Facility ID: 4310
Install Date: 12/31/1964
Capacity: Not reported
Status: Closure in Process
Tank Name: 2
Tank Material: Steel-Unprotected
Substance: Not reported
Compartment #: 1
Ecology Region: North Western

Facility ID: 4310
Install Date: 4/6/1979
Capacity: Not reported
Status: Closure in Process
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: USED OIL/WASTE OIL
Compartment #: 1
Ecology Region: North Western

18
ESE
1/4-1/2
1867
Higher

CARPINITO BROTHERS, INC.
1148 CENTRAL AVE N
KENT, WA 98032

Database(s): UST, LUST, WA ICR
EDR ID Number: U003025053
EPA ID Number: N/A

CARPINITO BROTHERS, INC. (Continued) U003025053

LUST:
Facility ID: 100999
Release ID: 496649
Release Status: CLEANUP STARTED
Alternate Name: CARPINITO BROTHERS
Affected Media: SOIL
Ecology Region: North Western
Release Date: 3/23/1999
Status Date: 3/18/1999

WA ICR:
Date Ecology Received Report: 04/19/19
Contaminants Found at Site: Petroleum products
Media Contaminated: Soil
Cause of Contamination: Tank
Region: North Western
Type of Report Ecology Received: Interim cleanup report
Site Register Issue: 98-15
County Code: 17

UST:
Facility ID: 100999
Install Date: 5/2/1980
Capacity: 111 to 1,100 Gallons
Status: REMOVED
Tank Name: 2
Tank Material: Not reported
Substance: Not reported
Compartment #: 1
Ecology Region: North Western

Facility ID: 100999
Install Date: 5/2/1980
Capacity: 111 to 1,100 Gallons
Status: REMOVED
Tank Name: 1
Tank Material: Not reported
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

19
SE
1/4-1/2
2064
Higher

CENTRAL LAWN & GARDEN
1002 CENTRAL AVE N
KENT, WA 98032

UST U003026219
LUST N/A

LUST:
Facility ID: 2060
Release ID: 498200
Release Status: CLEANUP STARTED
Alternate Name: FORTY (FORTE) RENTAL
Affected Media: SOIL
Ecology Region: North Western
Release Date: 5/19/1999
Status Date: 2/9/1999

CENTRAL LAWN & GARDEN (Continued) U003026219

UST:
Facility ID: 2060
Install Date: 12/1/1984
Capacity: 1,101 TO 2,000 GALLONS
Status: REMOVED
Tank Name: 3
Tank Material: Not reported
Substance: KEROSENE
Compartment #: 1
Ecology Region: North Western

Facility ID: 2060
Install Date: 5/1/1976
Capacity: 111 to 1,100 Gallons
Status: REMOVED
Tank Name: 2
Tank Material: Not reported
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 2060
Install Date: 12/31/1964
Capacity: 111 to 1,100 Gallons
Status: Exempt
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: HEATING FUEL
Compartment #: 1
Ecology Region: North Western

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20 AIR LIQUIDE AMERICA CORPORATION UST U003028390
NNE 8008 S 222ND ST LUST N/A
1/4-1/2 KENT, WA 98032
2105
Higher

LUST:
Facility ID: 8183 Ecology Region: North Western
Release ID: 2051 Release Date: 7/27/1990
Release Status: REPORTED CLEANED UP Status Date: 6/1/1995
Alternate Name: LIQUID AIR
Affected Media: SOIL

Facility ID: 8183 Ecology Region: North Western
Release ID: 2051 Release Date: 7/27/1990
Release Status: CLEANUP STARTED Status Date: 7/27/1990
Alternate Name: LIQUID AIR
Affected Media: SOIL

AIR LIQUIDE AMERICA CORPORATION (Continued) U003028390

UST:
Facility ID: 8183
Install Date: 12/31/1964
Capacity: Not reported
Status: REMOVED
Tank Name: 1
Tank Material: Not reported
Substance: Not reported
Compartment #: 1
Ecology Region: North Western

Facility ID: 8183
Install Date: 5/15/1991
Capacity: 111 TO 1,000 GALLONS
Status: CLOSURE IN PROCESS
Tank Name: 3
Tank Material: FIBERGLASS REINFORCED PLASTIC
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 8183
Install Date: 5/15/1991
Capacity: 5,000 TO 9,999 GALLONS
Status: CLOSURE IN PROCESS
Tank Name: 2
Tank Material: FIBERGLASS REINFORCED PLASTIC
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

21
NE
1/4-1/2
2162
Higher

PACIFIC NORTH EQUIPMENT KENT
22431 83RD AVE S
KENT, WA 98032

FINDS 1000191155
RCRIS-LQG WAD051250611
UST
LUST
WA ICR

RCRIS:
Owner: WAJAX LIMITED
(604) 946-1171
Contact: TOM STANDARD
(253) 872-3500
Record Date: 12/31/1998
Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)
D001	41859.29
D007	672.00
D018	43922.79
D028	468.00
D039	43250.79
F005	468.00

Waste	Quantity (Lbs)
D006	40719.29
D008	43922.79
D027	40719.29
D035	672.00
D040	2735.50

PACIFIC NORTH EQUIPMENT KENT (Continued) 1000191155

Used Oil Recyc: No

Violation Status: No violations found

LUST:

Facility ID:	1804	Ecology Region:	North Western
Release ID:	4124	Release Date:	1/4/1993
Release Status:	REPORTED CLEANED UP	Status Date:	9/1/1998
Alternate Name:	MCDONALD INDUSTRIES		
Affected Media:	SOIL		

Facility ID:	1804	Ecology Region:	North Western
Release ID:	4124	Release Date:	1/4/1993
Release Status:	CLEANUP STARTED	Status Date:	6/1/1995
Alternate Name:	MCDONALD INDUSTRIES		
Affected Media:	SOIL		

WA ICR:

Date Ecology Received Report:	09/02/19
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Soil
Cause of Contamination:	Tank
Region:	North Western
Type of Report Ecology Received:	Final cleanup report
Site Register Issue:	98-15
County Code:	17

Date Ecology Received Report:	06/08/19
Contaminants Found at Site:	Metals Petroleum products
Media Contaminated:	Groundwater, Soil
Cause of Contamination:	Not reported
Region:	North Western
Type of Report Ecology Received:	Final cleanup report
Site Register Issue:	98-17
County Code:	17

Date Ecology Received Report:	06/01/19
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Soil
Cause of Contamination:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	93-02
County Code:	17

UST:

Facility ID:	1804
Install Date:	12/31/1964
Capacity:	Not reported
Status:	REMOVED
Tank Name:	5
Tank Material:	Not reported
Substance:	Not reported
Compartment #:	1
Ecology Region:	North Western

PACIFIC NORTH EQUIPMENT KENT (Continued) 1000191155

Facility ID: 1804
Install Date: 12/31/1964
Capacity: Not reported
Status: REMOVED
Tank Name: 4
Tank Material: Not reported
Substance: LEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

Facility ID: 1804
Install Date: 12/31/1964
Capacity: Not reported
Status: REMOVED
Tank Name: 3
Tank Material: Not reported
Substance: USED OIL/WASTE OIL
Compartment #: 1
Ecology Region: North Western

Facility ID: 1804
Install Date: 1/1/1986
Capacity: 10,000 TO 19,999 GALLONS
Status: REMOVED
Tank Name: 2
Tank Material: Not reported
Substance: DIESEL
Compartment #: 1
Ecology Region: North Western

Facility ID: 1804
Install Date: 1/1/1986
Capacity: 5,000 TO 9,999 GALLONS
Status: REMOVED
Tank Name: 1
Tank Material: Not reported
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

22
NNE
1/4-1/2
2303
Higher

J.P.FRANCIS AND ASSOC. INC
8223 S 222ND ST
KENT, WA 98032

UST U001123224
LUST N/A

LUST:
Facility ID: 3550
Release ID: 5140
Release Status: REPORTED CLEANED UP
Alternate Name: JP FRANCIS & ASSOCIATES
Affected Media: SOIL
Ecology Region: North Western
Release Date: 3/10/1994
Status Date: 9/27/1995

J.P.FRANCIS AND ASSOC. INC (Continued) U001123224

Facility ID: 3550 Ecology Region: North Western
Release ID: 5140 Release Date: 3/10/1994
Release Status: CLEANUP STARTED Status Date: 3/10/1994
Alternate Name: JP FRANCIS & ASSOCIATES
Affected Media: SOIL

UST:
Facility ID: 3550
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: UNLEADED GASOLINE
Compartment #: 1
Ecology Region: North Western

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23 WEYERHAEUSER COMPANY UST U003026011
West 7401 S 228TH ST LUST N/A
1/4-1/2 KENT, WA 98032
2394
Higher

LUST:
Facility ID: 1520 Ecology Region: North Western
Release ID: 2469 Release Date: 9/4/1991
Release Status: REPORTED CLEANED UP Status Date: 9/24/1998
Alternate Name: WEYERHAEUSER KENT CUSTOMER SVC CTR
Affected Media: SOIL

Facility ID: 1520 Ecology Region: North Western
Release ID: 2469 Release Date: 9/4/1991
Release Status: CLEANUP STARTED Status Date: 6/1/1995
Alternate Name: WEYERHAEUSER KENT CUSTOMER SVC CTR
Affected Media: SOIL

UST:
Facility ID: 1520
Install Date: 12/31/1964
Capacity: Not reported
Status: Removed
Tank Name: 1
Tank Material: Steel-Unprotected
Substance: Not reported
Compartment #: 1
Ecology Region: North Western

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24 BOEING KENT BENAROYA FINDS 1000257095
NNE 20651 84TH AVE S RCRIS-LQG WAD000711622
1/2-1 KENT, WA 98032 CORRACTS
4130 CERC-NFRAP
Higher

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY
Completed: 19801118

BOEING KENT BENAROYA (Continued) 1000257095

Assessment: PRELIMINARY ASSESSMENT Completed: 19850430
Assessment: PRELIMINARY ASSESSMENT Completed: 19880527

CERCLIS-NFRAP Alias Name(s):
BOEING COMPANY CORPORATE

CORRACTS Data:
Prioritization: Low
Status: RCRA Facility Assessment Completed

RCRIS:
Owner: BOEING CO
(206) 655-7431

Contact: JIMMY KO
(425) 865-6730

Record Date: 12/31/1997

Classification: Large Quantity Generator

Used Oil Recyc: No

Violation Status: Violation information exist

There are 9 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/28/1994
	Generator-All Requirements	06/30/1993
	Generator-All Requirements	06/30/1993
	Generator-All Requirements	06/30/1993
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	08/01/1991
	TSD-Other Requirements	07/23/1991
	TSD-Other Requirements	08/01/1991
	TSD-Other Requirements	06/20/1991
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	05/10/1985

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
KENT	1000199693	HWY 167 WILLIS KENT	HWY 167 & WILLIS	98032	RCRIS-SQG, FINDS	
KENT	1001128814	WDOT BRIDGE 127 SR167	SR 167 MP 20.90 TO 20.98	98032	RCRIS-SQG, FINDS	
KENT	S103822481	EAST VALLEY CROSSINGS PROPERTY	SW 43RD ST / E VALLEY HWY	98032	CSCSL	2443
KENT	94362524	20403 68TH AVE SOUTH BUILDING 18241	20403 68TH AVE SOUTH BUILDING 18241	98032	ERNS	
KENT	S103083938	KING CNTY REGIONAL JUSTICE	421 6TH AVE N	98032	CSCSL	2429
KENT	S103822460	BOEING S&CS SPACE CENTER	20403 68TH AVE S	98032	CSCSL	2099
KENT	S103822461	BORDEN CHEMICAL CO	421 1ST AVE N	98032	CSCSL	2102
KENT	S103822462	BORDEN CHEMICAL CO	421 1ST AVE N	98032	CSCSL	2102
KENT	S103822512	KING CNTY REGIONAL JUSTICE	421 6TH AVE N	98032	CSCSL	2429
KENT	S103822513	KING CNTY REGIONAL JUSTICE	421 6TH AVE N	98032	CSCSL	2429
KENT	S103822514	KING CNTY REGIONAL JUSTICE	421 6TH AVE N	98032	CSCSL	2429
KENT	S103398174	ORILLIA INDUSTRIAL DISTRICT II	E VALLEY HWY / SW 43RD ST	98032	CSCSL	77771959
KENT	U000925588	TEXACO KENT	E VALLEY HWY & 43 SW	98055	UST	101541
RENTON	U003604715	STATE FARM	1000 S 2ND ST	98055	UST	492551
RENTON	1000365449	STERNOFF METALS CORP	1600 SW 43RD ST	98055	CERC-NFRAP, WA ICR	
RENTON	S101840649	KENWORTH TRUCK COMPANY - RENTON	1601 N 6TH ST	98055	Air Emissions	0096
RENTON	S103083902	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW	98055	CSCSL	2272
RENTON	S103822449	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW	98055	CSCSL	2272
RENTON	S103822450	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW	98055	CSCSL	2272
RENTON	S103822451	BLACK RIVER CORP PARK TRACT A	OAKSDALE AVE SW	98055	CSCSL	2272
RENTON	S101703200	FUDS YOUNGS LAKE NIKE 32 33	SE OF RENTON	98055	CSCSL	147
RENTON	S103822453	BNRR QUENDALL LOADING RACKS FORMER	E OF RR TRACKS / 4503 LK WASHINGTON BLVD	98055	CSCSL	61436398
RENTON	S103822454	BNRR QUENDALL LOADING RACKS FORMER	E OF RR TRACKS / 4503 LK WASHINGTON BLVD	98055	CSCSL	61436398
RENTON	S103822445	ACTION AVIATION INC	840 PERIMETER RD W	98055	CSCSL	54846481
RENTON	S103822446	ACTION AVIATION INC	840 PERIMETER RD W	98055	CSCSL	54846481
RENTON	S103822447	ACTION AVIATION INC	840 PERIMETER RD W	98055	CSCSL	54846481
RENTON	S103822533	T & S AUTOMOTIVE SALES	515 RAINIER AV	98055	CSCSL	64969378

GEOCHECK VERSION 2.1 ADDENDUM
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Northern Quadrant)

BASIC WELL DATA

Site ID:	472355122140301	Distance from TP:	0 - 1/8 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1914	County:	Not Reported
Altitude:	33.00 ft.	State:	Not Reported
Well Depth:	68.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Eastern Quadrant)

BASIC WELL DATA

Site ID:	472346122133901	Distance from TP:	1/4 - 1/2 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1946	County:	Not Reported
Altitude:	34.00 ft.	State:	Not Reported
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Southern Quadrant)

BASIC WELL DATA

Site ID:	472258122134501	Distance from TP:	1 - 2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1938	County:	Not Reported
Altitude:	60.00 ft.	State:	Not Reported
Well Depth:	428.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Western Quadrant)

BASIC WELL DATA

Site ID:	472346122142101	Distance from TP:	1/4 - 1/2 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1910	County:	Not Reported
Altitude:	34.00 ft.	State:	Not Reported
Well Depth:	60.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Withdrawal of water
Date Measured:	Not Reported	Prim. Use of Water:	Domestic

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D018	BENZENE
D027	1,4-DICHLOROBENZENE
D028	1,2-DICHLOROETHANE
D035	METHYL ETHYL KETONE
D039	TETRACHLOROETHYLENE
D040	TRICHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND

EPA Waste Codes Addendum

Code	Description
	ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
F008	PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F009	SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.
F019	WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.
U057	CYCLOHEXANONE (I)
U159	2-BUTANONE (I,T)
U159	METHYL ETHYL KETONE (MEK) (I,T)
U220	BENZENE, METHYL-
U220	TOLUENE
U239	BENZENE, DIMETHYL- (I,T)
U239	XYLENE (I)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 08/26/99
Date Made Active at EDR: 11/11/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 08/30/99
Elapsed ASTM days: 73
Date of Last EDR Contact: 11/29/99

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 10/28/99
Date Made Active at EDR: 12/03/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 11/01/99
Elapsed ASTM days: 32
Date of Last EDR Contact: 11/01/99

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 07/22/99
Date Made Active at EDR: 09/10/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 08/05/99
Elapsed ASTM days: 36
Date of Last EDR Contact: 11/08/99

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 09/01/99
Date Made Active at EDR: 11/17/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 10/06/99
Elapsed ASTM days: 42
Date of Last EDR Contact: 01/03/00

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/07/99
Date Made Active at EDR: 10/28/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 09/13/99
Elapsed ASTM days: 45
Date of Last EDR Contact: 12/13/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/97
Database Release Frequency: Biennially

Date of Last EDR Contact: 12/20/99
Date of Next Scheduled EDR Contact: 03/20/00

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies

Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/13/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/12/00
Date of Next Scheduled EDR Contact: 04/10/00

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/30/99
Database Release Frequency: Annually

Date of Last EDR Contact: 10/28/99
Date of Next Scheduled EDR Contact: 01/24/00

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/29/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/10/00
Date of Next Scheduled EDR Contact: 04/10/00

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/24/99
Date of Next Scheduled EDR Contact: 02/21/00

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/22/97
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/09/99
Date of Next Scheduled EDR Contact: 02/14/00

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/13/99
Date of Next Scheduled EDR Contact: 03/13/00

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/31/99
Database Release Frequency: Annually

Date of Last EDR Contact: 01/10/00
Date of Next Scheduled EDR Contact: 04/10/00

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/97
Database Release Frequency: Annually

Date of Last EDR Contact: 12/27/99
Date of Next Scheduled EDR Contact: 03/27/00

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/94
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 01/03/00
Date of Next Scheduled EDR Contact: 04/24/00

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/01/98
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/03/00
Date of Next Scheduled EDR Contact: 04/03/00

STATE OF WASHINGTON ASTM RECORDS:

HSL: Hazardous Sites List
Source: Department of Ecology
Telephone: 360-407-7200
The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 08/31/99
Date Made Active at EDR: 11/19/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 10/26/99
Elapsed ASTM days: 24
Date of Last EDR Contact: 12/13/99

LUST: Leaking Underground Storage Tanks Site List
Source: Department of Ecology
Telephone: 360-407-7200
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/01/99
Date Made Active at EDR: 11/11/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 11/02/99
Elapsed ASTM days: 9
Date of Last EDR Contact: 11/02/99

CSCSL: Confirmed & Suspected Contaminated Sites List
Source: Department of Ecology
Telephone: 360-407-7200
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/21/99
Date Made Active at EDR: 06/29/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 06/01/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 11/24/99

LF: Solid Waste Facility Database
Source: Department of Ecology
Telephone: 360-407-6132
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/01/99
Date Made Active at EDR: 11/11/99
Database Release Frequency: Annually
Date of Data Arrival at EDR: 11/03/99
Elapsed ASTM days: 8
Date of Last EDR Contact: 01/11/00

UST: Underground Storage Tank Database
Source: Department of Ecology
Telephone: 360-407-7170
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 11/01/99
Date Made Active at EDR: 11/16/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 11/02/99
Elapsed ASTM days: 14
Date of Last EDR Contact: 11/02/99

STATE OF WASHINGTON NON-ASTM RECORDS:

AIR EMISSIONS: Washington Emissions Data System
Source: Department of Ecology
Telephone: 360-407-6040

Date of Government Version: 12/31/97
Database Release Frequency: Annually

Date of Last EDR Contact: 11/02/99
Date of Next Scheduled EDR Contact: 01/24/00

ICR: Independent Cleanup Reports
Source: Department of Ecology
Telephone: 360-407-7200
These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree.

Date of Government Version: 12/20/99
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/20/99
Date of Next Scheduled EDR Contact: 02/21/00

WASHINGTON COUNTY RECORDS

SEATTLE/KING COUNTY:

Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project
Source: Department of Public Health
Telephone: 206-296-4785
This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/86
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/14/95
Date of Next Scheduled EDR Contact: N/A

KING COUNTY:

Abandoned Landfill Study In King County
Source: Seattle-King County Department of Public Health
Telephone: 206-296-4785
The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/85
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/21/94
Date of Next Scheduled EDR Contact: N/A

SEATTLE COUNTY:

Abandoned Landfill Study In the City of Seattle
Source: Seattle - King County Department of Public Health
Telephone: 206-296-4785
The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/84
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/21/94
Date of Next Scheduled EDR Contact: N/A

SNOHOMISH COUNTY:

Solid Waste Sites of Record at Snohomish Health District
Source: Snohomish Health District
Telephone: 206-339-5250

Date of Government Version: 09/28/99
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 10/27/99
Date of Next Scheduled EDR Contact: 01/24/00

TACOMA/PIERCE COUNTY:

Closed Landfill Survey
Source: Tacoma-Pierce County Health Department
Telephone: 206-591-6500
Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 04/15/93
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 01/11/95
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

Disclaimer Provided by Real Property Scan, Inc.

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: NPL Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/24/99
Date Made Active at EDR: 09/10/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/10/99
Elapsed ASTM days: 31
Date of Last EDR Contact: 11/08/99

NFRAP: No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 08/26/99
Date Made Active at EDR: 11/11/99
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 08/30/99
Elapsed ASTM days: 73
Date of Last EDR Contact: 11/29/99

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SWDIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in March 1997 from the U.S. Fish and Wildlife Service.

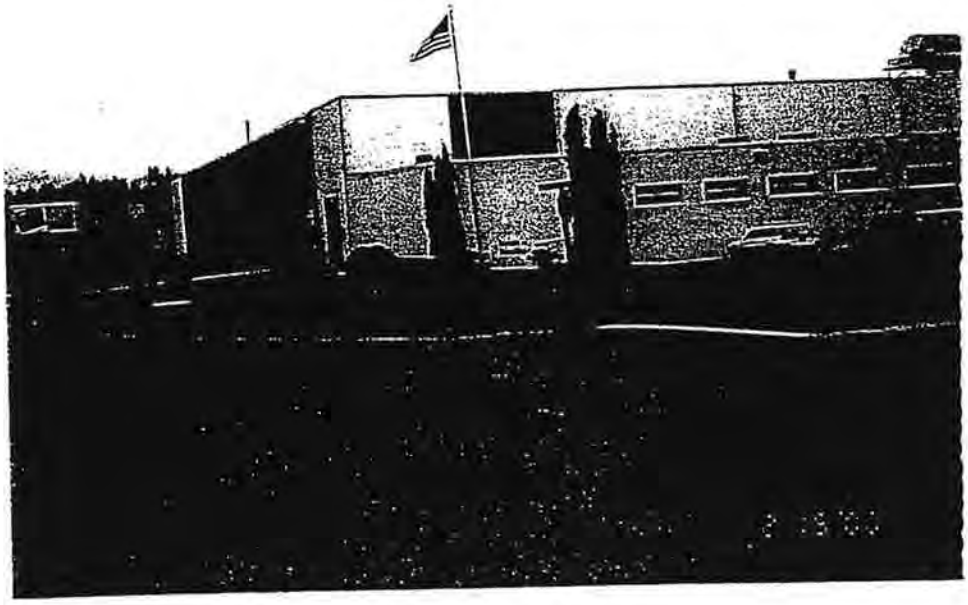
Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

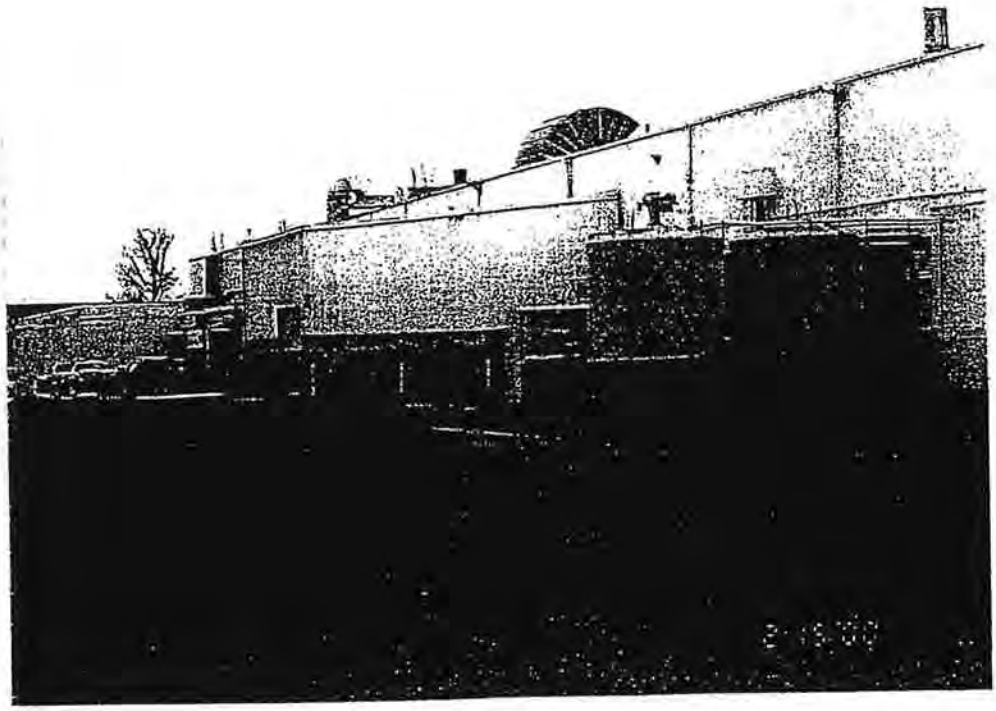
Water Dams: National Inventory of Dams
Source: Federal Emergency Management Agency
Telephone: 202-646-2801
National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

Kitsap County Water Wells in Washington
Source: Public Utility District No. 1 of Kitsap County
Telephone: 206-779-7656

SITE PHOTOGRAPHS

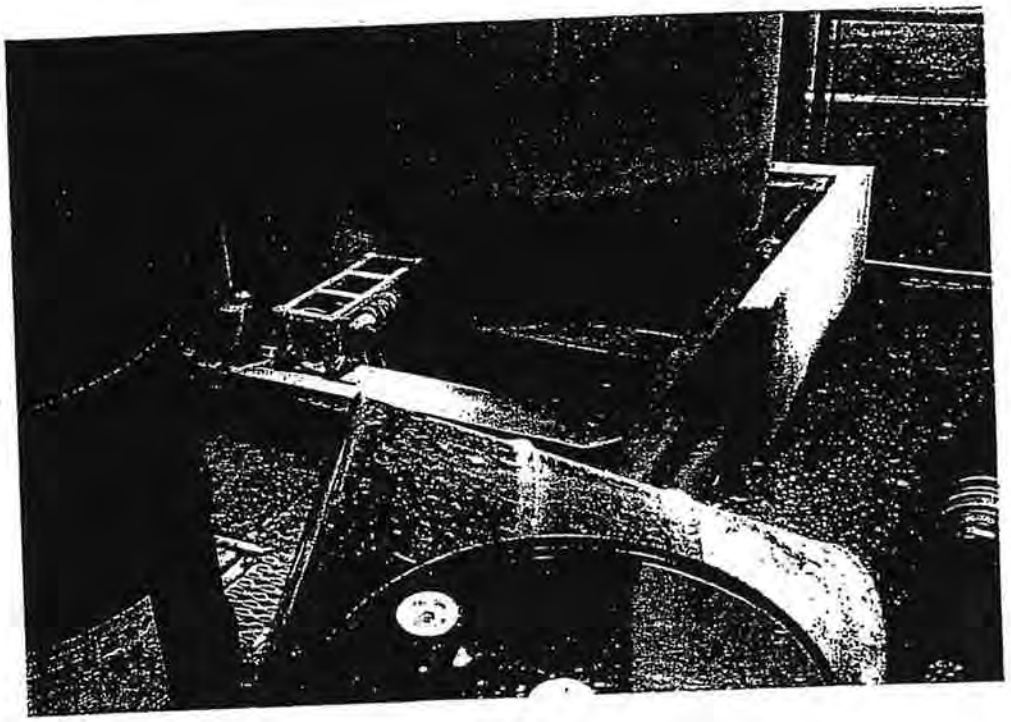
1) View of the can facility looking southeast.

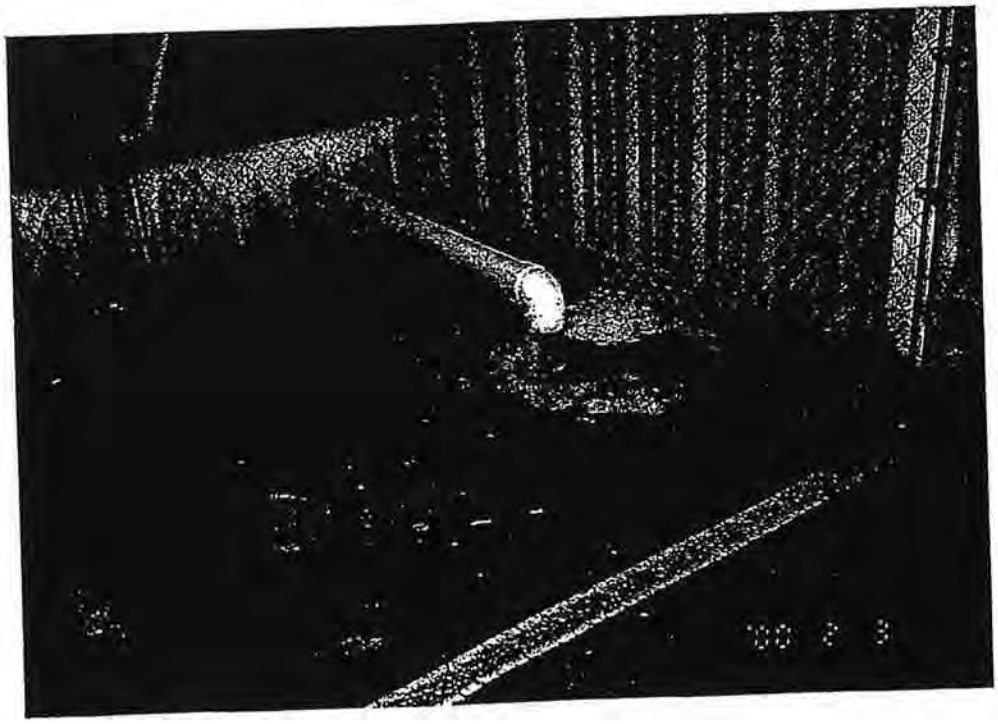




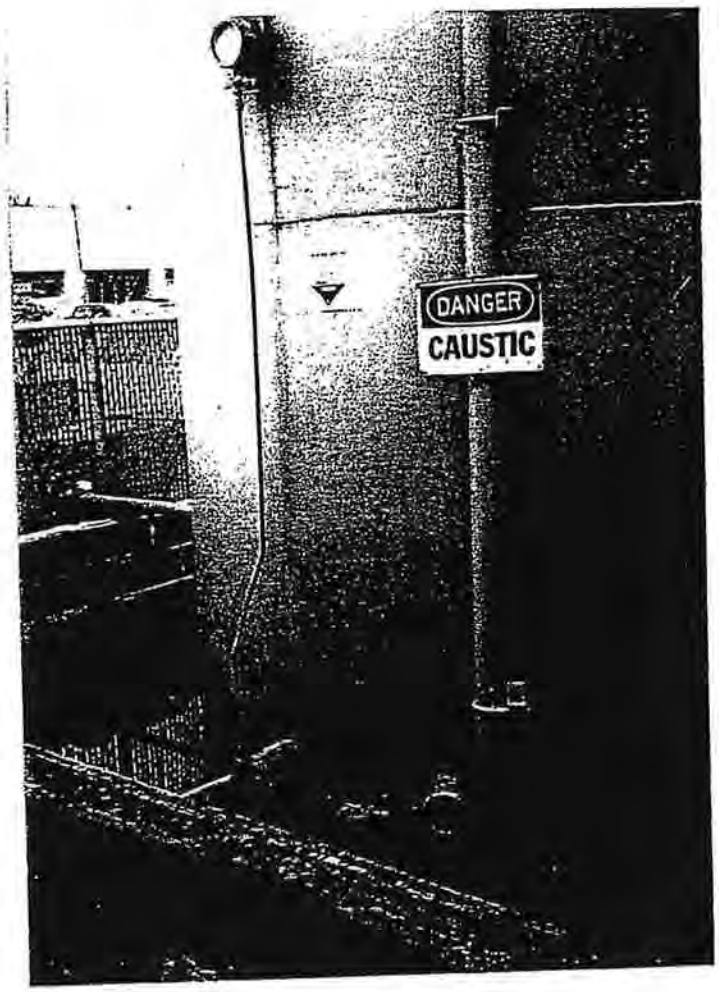
2) View of the west side of the building and the varnish ASTs.

3) View of area around the lime-slurry tank.

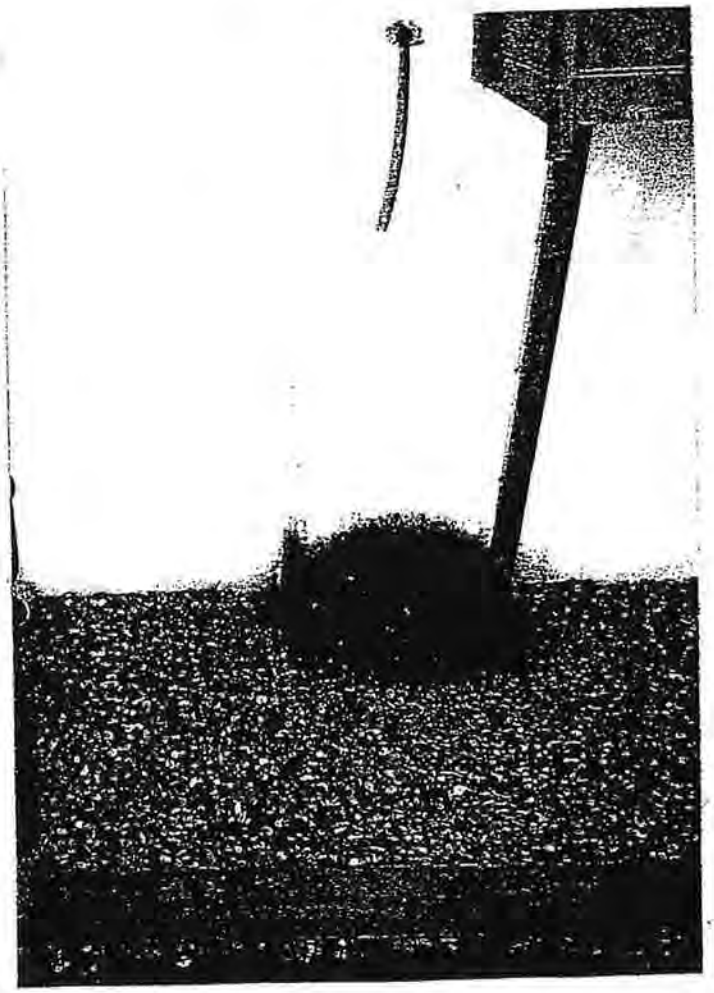




4) View of discharge fr the water treatment plant.

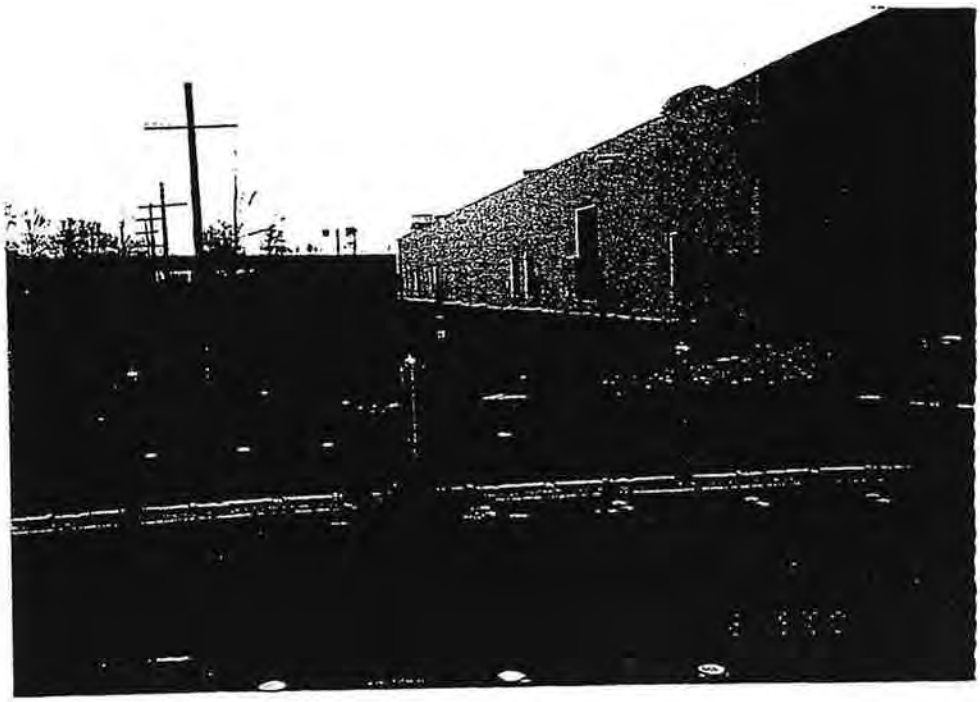


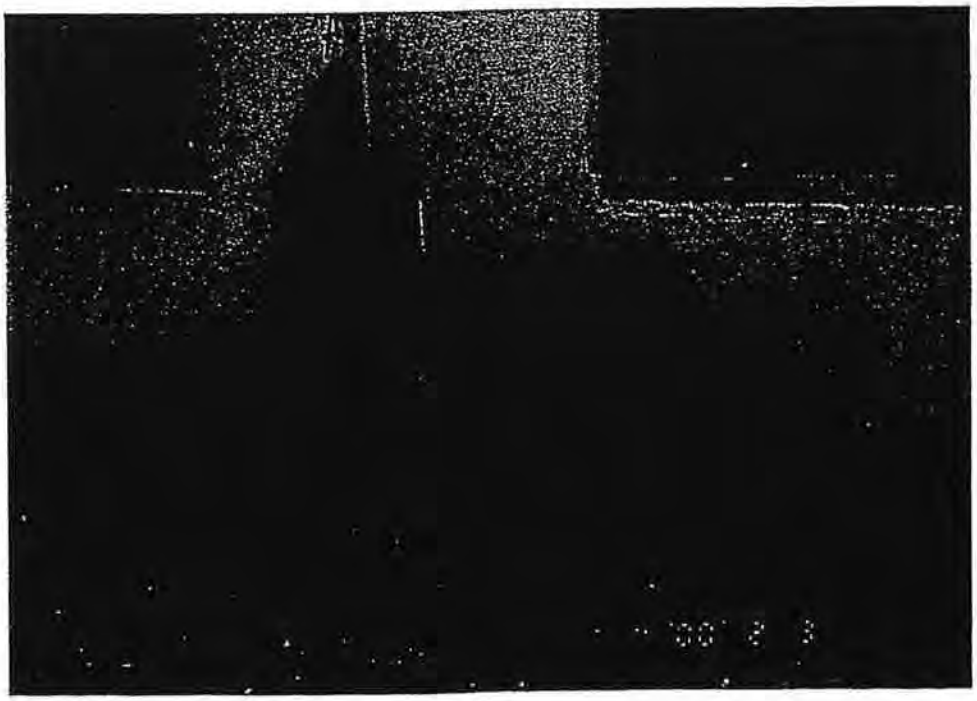
5) View of the caustic soda tank.



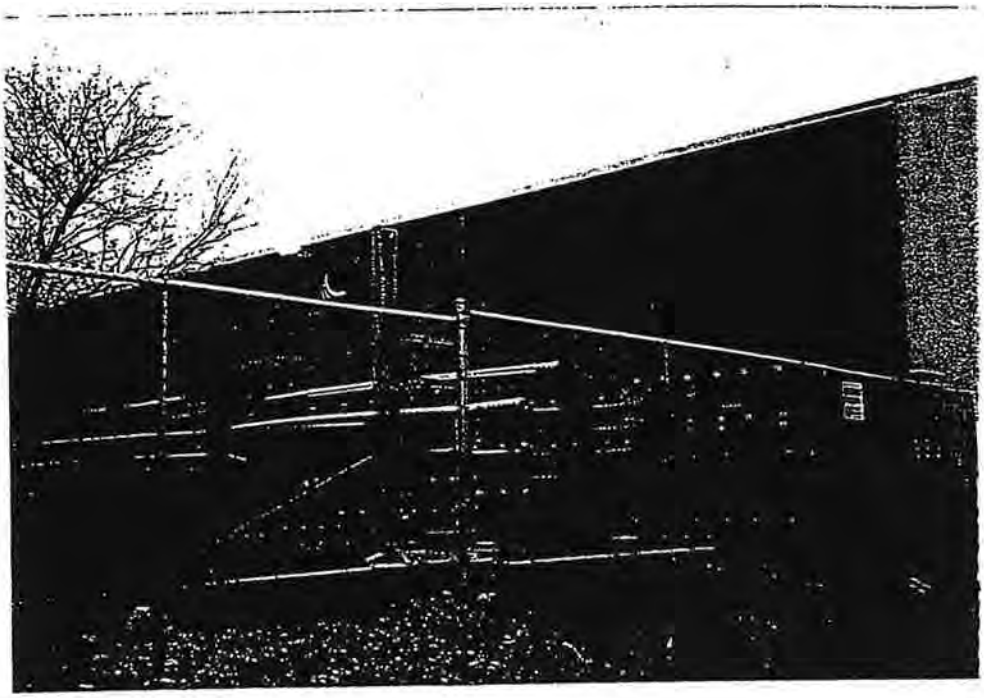
6) View of one of the w
side oil discharge
location.

7) View of the the east side of the building.



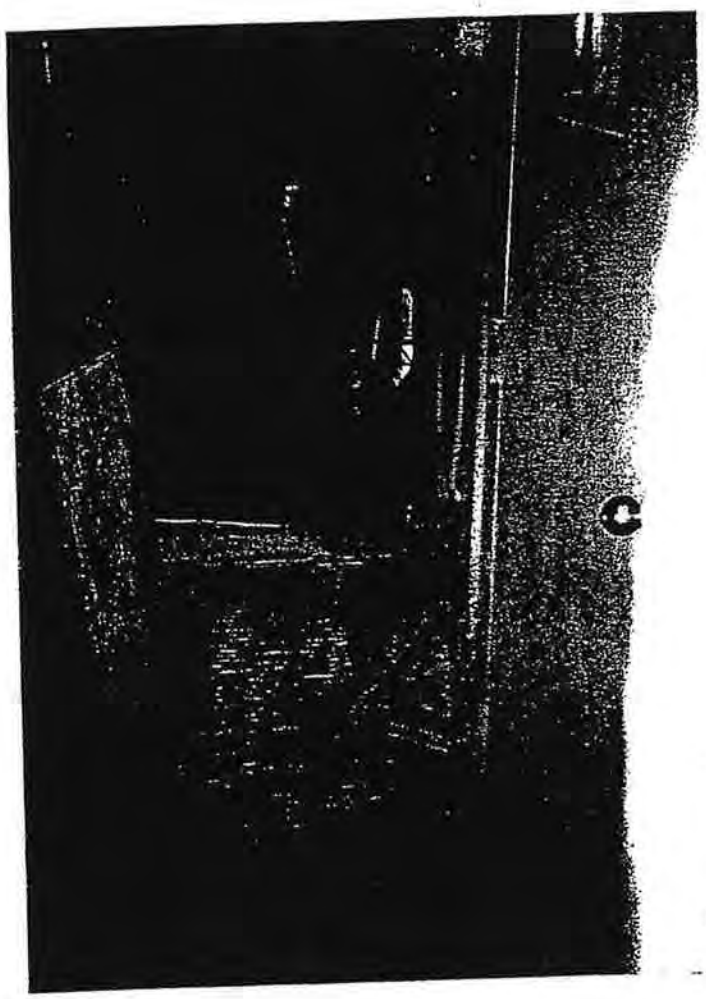


8) View of one of the e: side oil discharge locations.



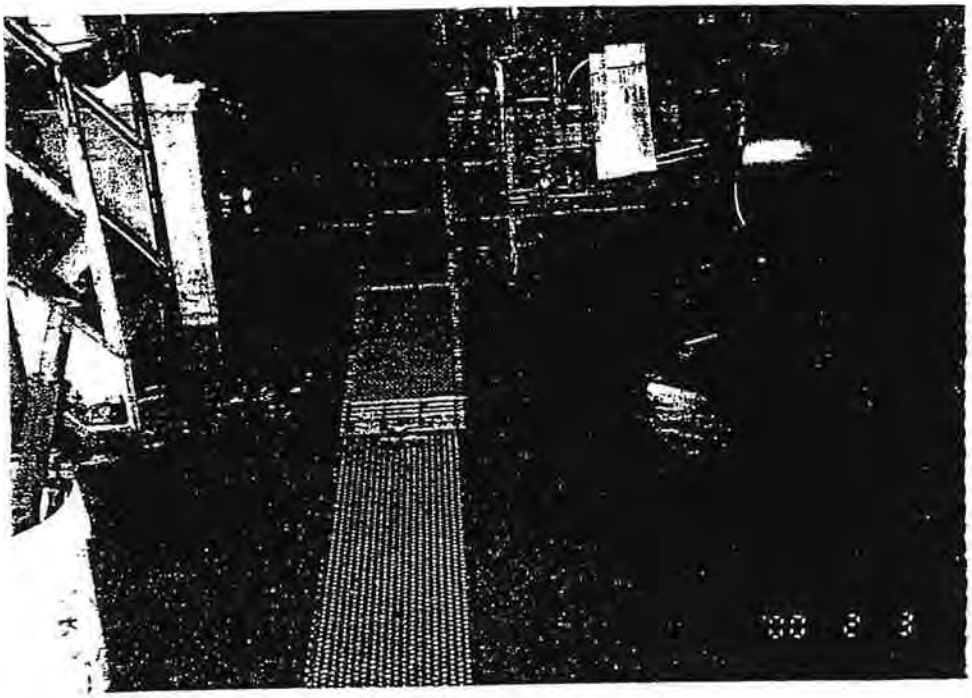
9) View of the storage area at the south end of the building.

10) View of the leaking sulfuric acid container in the water treatment plant.

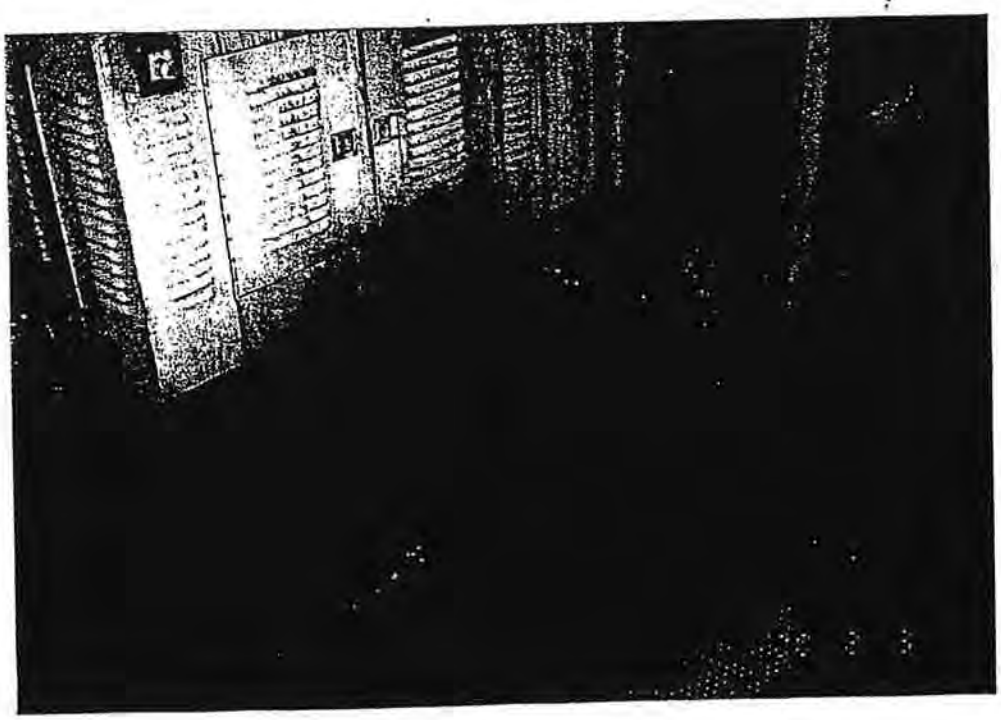


11) View of the floor in the water treatment plant.

12) View of the oil tanks

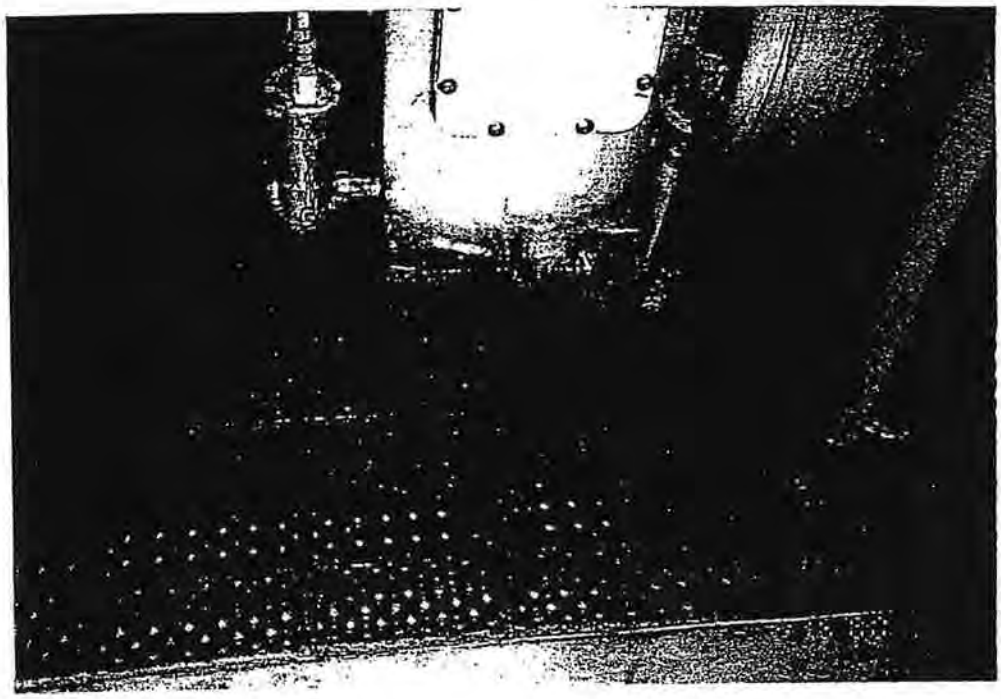


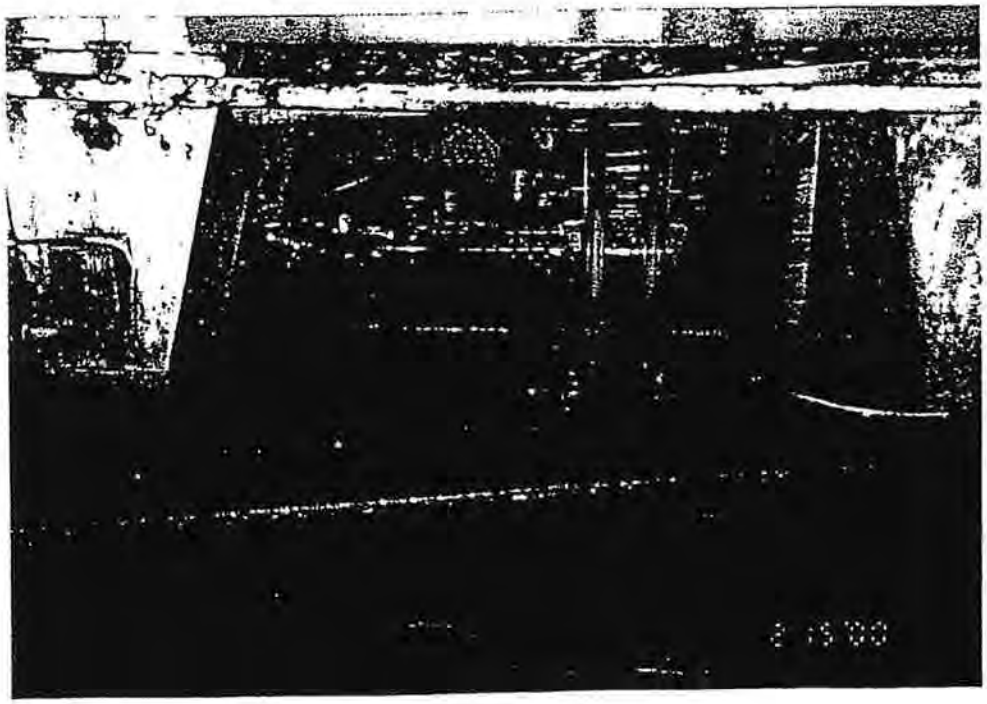
13) View of oil on the floor and the trench drains used to collect it.



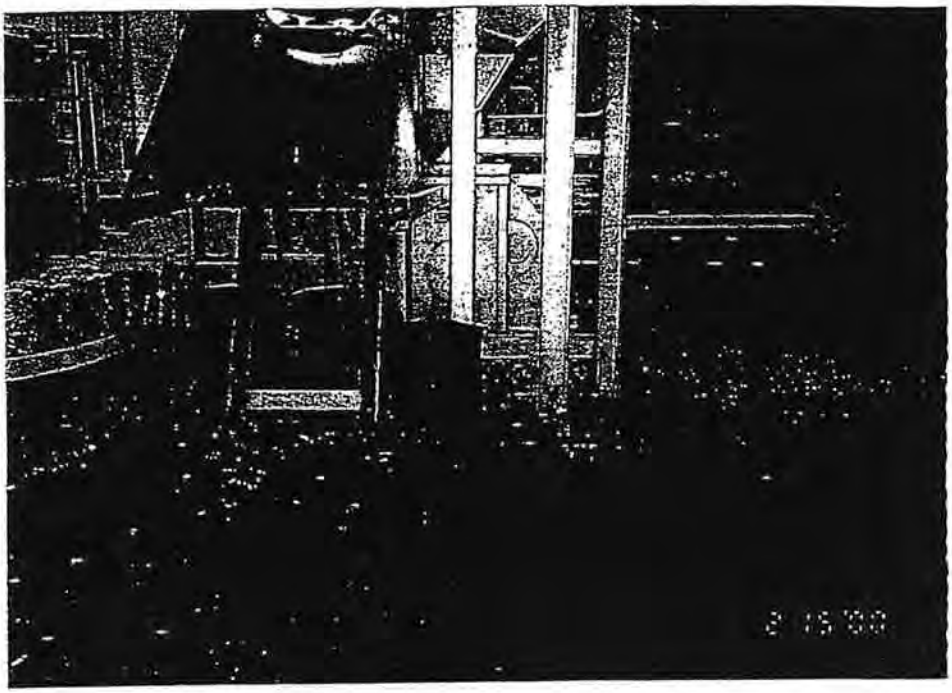
14) View of oil on the floor.

15) View of oil under the machinery.

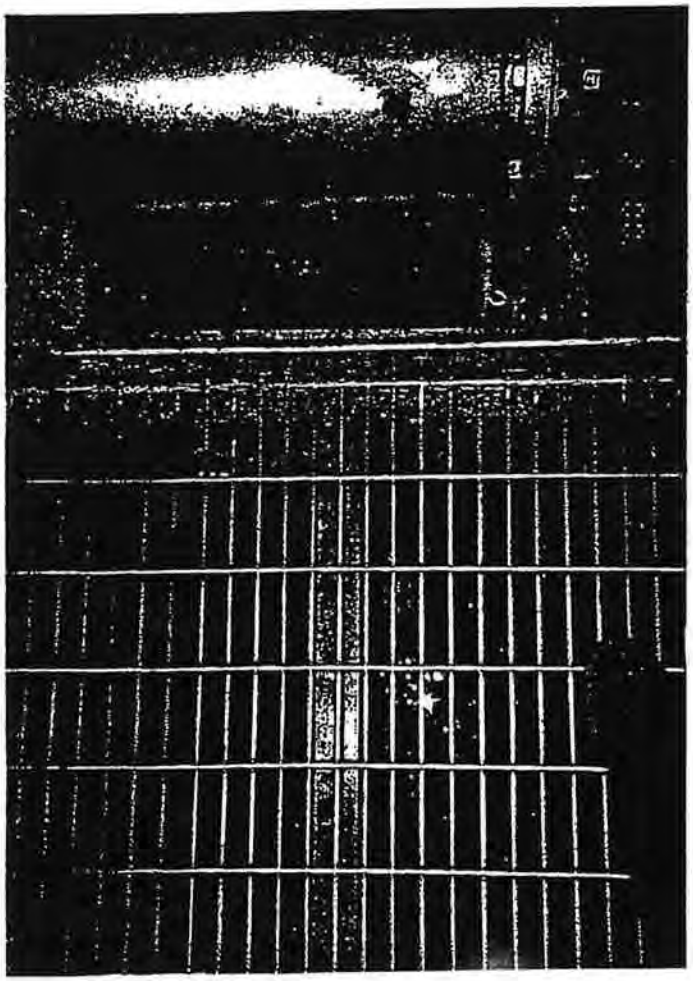




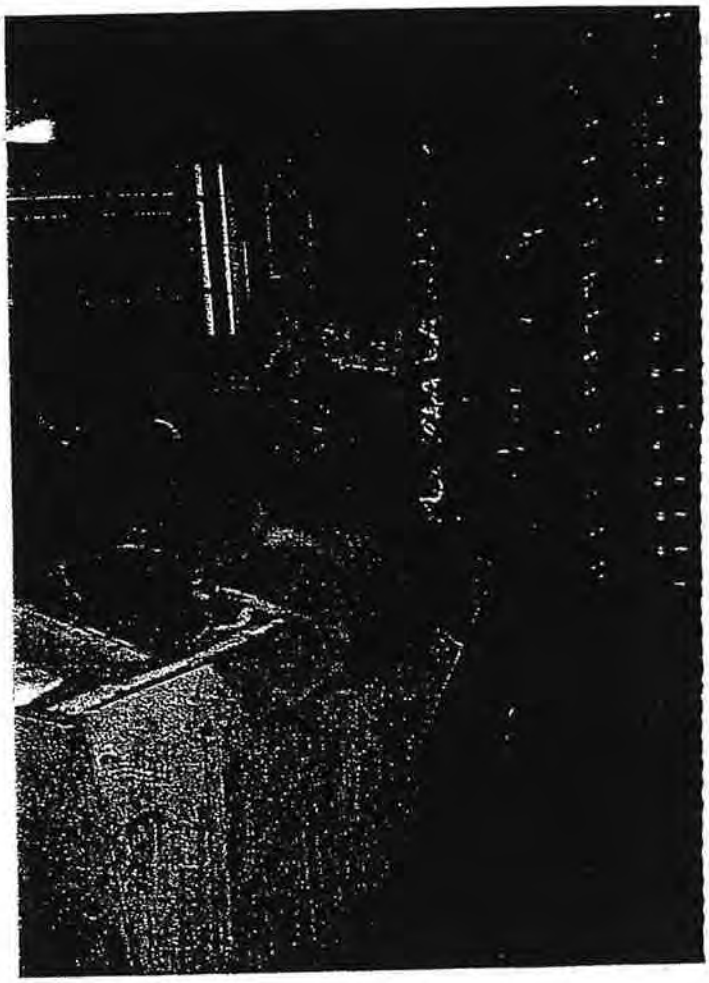
16) View of oil under machinery.



17) View of the oil near the baling machine.



18) Close-up of one of the oil water separator tanks.

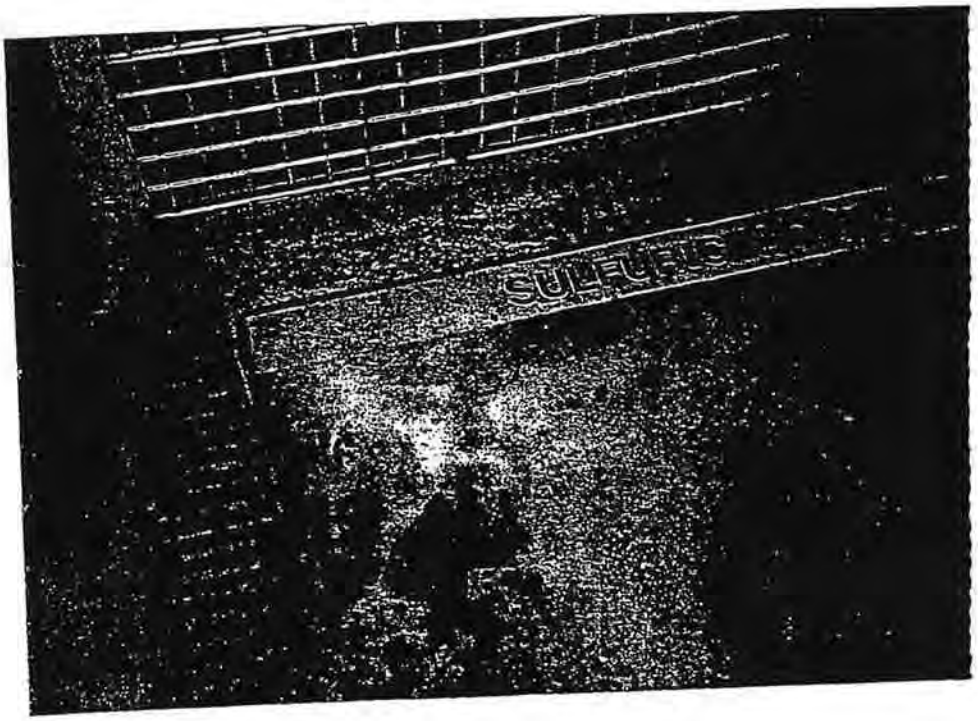


19) View of the oil filter material.

20) View of typical floo seams.

21) View of the acid storage area.

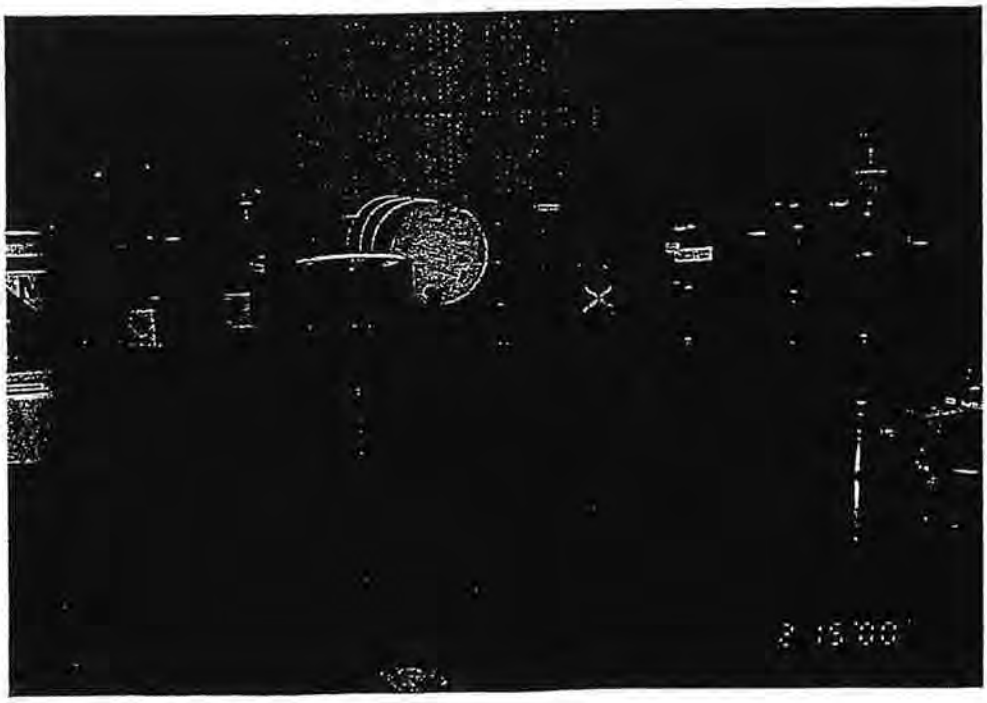
22) View of the acid and anti-microbial storag area.



23) Close-up of the trench drain in the acid storage area.

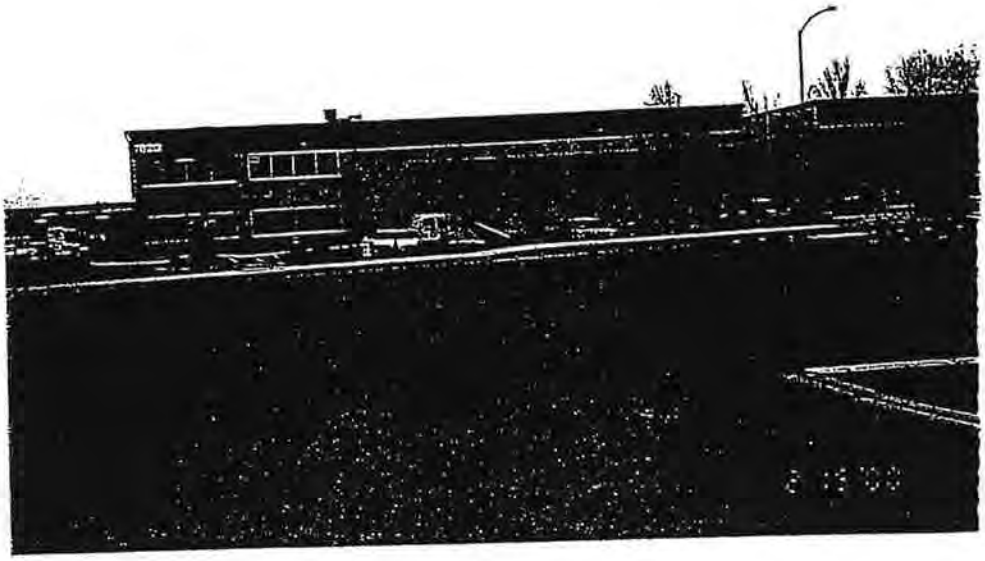
24) View of the ink stora area.

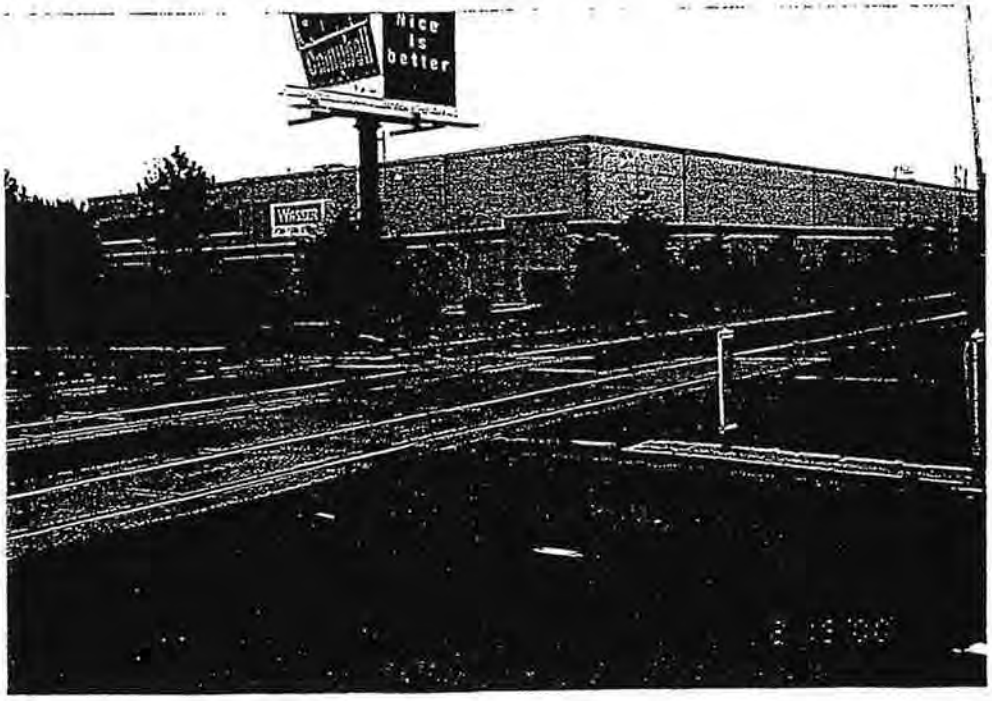
25) View of the acid and algaecide storage for the water cooling tower.



26) View of the recycle/shipping and receiving area.

27) View of the property to the north.

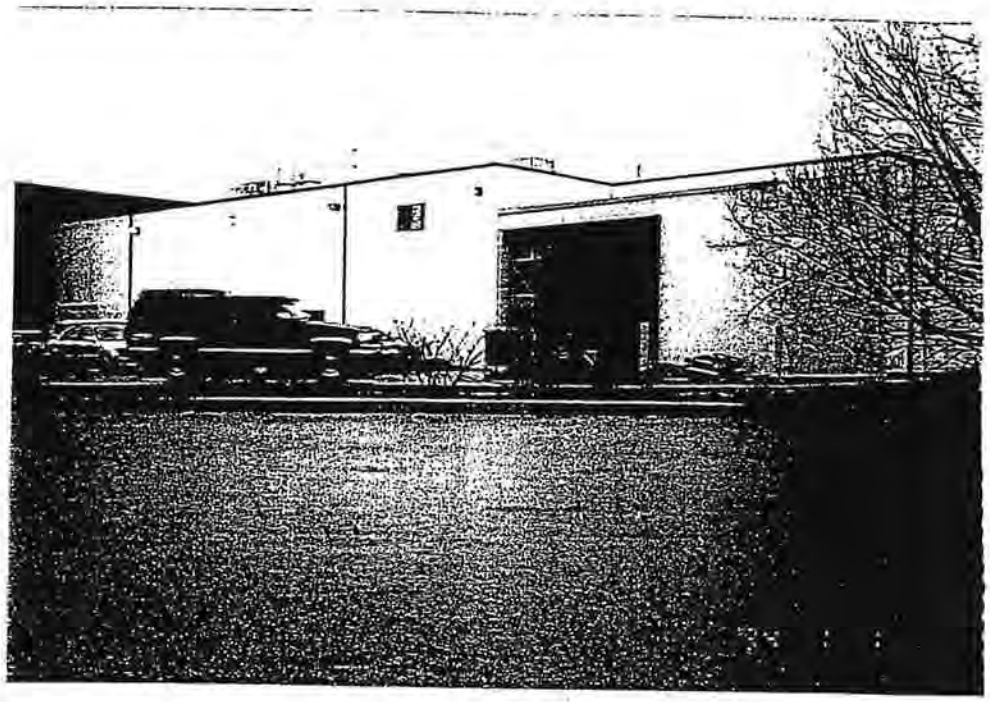




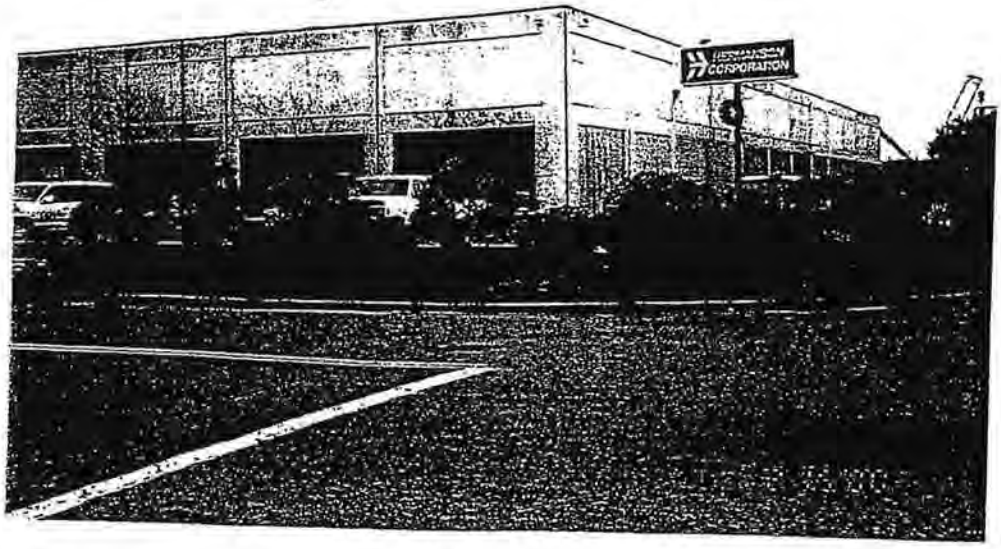
28) View of the property t the east.

29) View of the property to the south (attached can warehouse).

30) View of the property the southwest (Precision Coatings).



31) View of the property to the west (Precision Coatings).



32) View of the property to the northwest.

ENVISION
ENVIRONMENTAL, INC.

APPENDIX 3

PRK May 2001 Phase II Environmental Site Assessment

PHASE II ENVIRONMENTAL SITE ASSESSMENT

REXAM MANUFACTURING FACILITY

KENT, WASHINGTON

Prepared for

Gorge Leasing
P.O. Box 266
Bigen, Washington 98605

Friday, May 18, 2001

Prepared by

PRK Environmental Consulting Services
10315 SW Porter Street
Portland, Oregon 97225

E01276-001

PHASE II ENVIRONMENTAL SITE ASSESSMENT

REXAM MANUFACTURING FACILITY

KENT, WASHINGTON

Prepared for

Gorge Leasing
P.O. Box 266
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Friday, May 18, 2001

Prepared by

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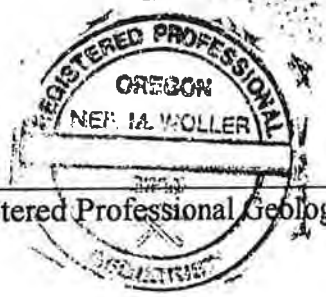
And



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Reviewed by

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EXECUTIVE SUMMARY

At the request of Gorge Leasing, PRK Environmental (PRK) performed a Phase II Environmental Site Assessment (Phase II ESA) at the REXAM Aluminum Can Manufacturing facility (Division of American National Can Manufacturing, Inc.) located in Kent, Washington. The address of the facility is 1220 North 2nd Street, Kent, King County, Washington. At the request of PRK, EVREN Northwest (ENW) collaborated in completion of the project and preparation of this Phase II ESA Report. In the text of the report, this collaborative team is referred to as PRK-ENW.

The property is reportedly 6.01 acres, and is located in an industrial area of north Kent. The property is generally flat with very little topographic relief. The site is occupied by two tilt-up concrete wall one-story manufacturing/warehouse structures. The structure on the north end of the property is the aluminum can manufacturing facility, and the structure on the south end is the associated warehouse. An enclosed corridor connects the two buildings. The west side of the site is paved with asphalt for employee parking and for truck deliveries/shipments at loading docks on the west side of the factory and warehouse. At the east side of the site is a currently unused rail spur and loading platforms.

The site is located on alluvial materials deposited by the Green River and its tributaries. The alluvial materials are mostly fine sand and silt. Fill materials are also present at the site, extending downward locally to the water table. The water table was encountered at 5 to 7 feet below ground surface at the site. However, perched water was encountered at about 3.5 feet depth at the north end of the aluminum can manufacturing plant.

Eleven borings were drilled on the subject property to investigate subsurface conditions at the property. Because of the limitations imposed by REXAM on the time PRK-ENW was permitted to perform the field phase of the investigation and by the client since information was critical for decision-making regarding purchasing, the site investigation should be considered a ***survey of selected locations of interest*** rather than a full Phase II-type environmental assessment of the site. The borings were drilled with push probe and hand auger. Two of the borings were drilled inside the north end of the manufacturing plant building. Two borings were sited just outside the north end of the manufacturing plant, and one boring was sited on the plant's east side. All other borings were sited on the west side of the manufacturing facility and warehouse.

Selected soil and ground water samples were submitted for laboratory analysis of volatile organic hydrocarbons (VOCs), semi-volatile organic hydrocarbons (SVOCs), total metals

(soil samples), dissolved metals (water samples), and total petroleum hydrocarbons. The samples were submitted based on sample descriptions, site activities and features, GasTech organic vapor monitor readings, and visual observations concerning the site. The findings are summarized below. **As an important note**, subsurface samples may not represent the highest subsurface impacts present on the site since:

a) The source areas are not currently fully known, nor explored.

b) In an effort to meet stringent time constraints placed by both our client and REXAM, the sampling and analysis plan was modified in the field, therefore not all samples were submitted for chemical analysis.

Subsurface Soil Impacts.

Petroleum impacts to soil above Washington State MTCA Method A Cleanup Levels for Industrial sites for soil were detected in only one boring (B17, sampled through the concrete slab floor at the north end of the factory). Oil-range TPH exceeded the MTCA standard at this location.

Free petroleum product was observed in the uppermost foot of B15. The free product was photographed but not analyzed. Nearby the B15 boring location were stained surface soil and a concentric area of seemingly distressed vegetation (see Appendix E – Site Photographs). It is speculated that the free oil product flows through the very permeable crushed rock aggregate of the rail spur toward the lower elevation area marked by the surface ground stains.

VOCs (volatile organic hydrocarbons) were detected in all seven soil samples analyzed. The only boring with VOCs in soil exceeding MTCA Method A Cleanup levels was B17. Tetrachloroethene exceeded its listed MTCA Method A cleanup level for industrial property. B17 was located in the northern portion of the manufacturing plant.

Of the EPA priority metals, only chromium exceeded MTCA Method A Cleanup levels. All reported chromium concentrations were within one order of magnitude of the MTCA Method A Cleanup Level for chromium. However, the Method A Cleanup Level in the MTCA Method A Cleanup Level Table for industrial sites is for hexavalent chromium. Since the analysis performed was for total metals, our comparison of chromium concentration with the MTCA Method A Cleanup level assumes all chromium present is hexavalent, a very conservative screening approach. No EPA Region IX PRGs were exceeded by any of the detected metals.

Eighteen semi-volatile organic compounds (SVOCs) was detected in the soil samples submitted for analysis. Subsurface soil sampled from Boring B15, sited at the east side of the manufacturing plant, exceeded MTCA Method A Cleanup levels for pyrene, (a polyaromatic hydrocarbon). No SVOC compounds were reported at concentrations

exceeding EPA Region IX PRGs. However, free product was observed in the uppermost foot of the B15 boring.

Ground Water Impacts

Ground water samples were collected from a temporary well point placed in selected borings. Therefore the analytical data does not reflect the same QA/QC implementation as for ground water samples collected from properly constructed monitoring wells. Since the reported detections include both dissolved and adsorbed constituents, the reported concentrations may overestimate the dissolved concentration in ground water. However, the reconnaissance water samples may not represent the highest ground water impacts present on the site since the source areas and groundwater flow direction are not yet determined.

Petroleum hydrocarbons (TPH) were detected in ground water samples from four of the six borings from which groundwater samples were collected. No gasoline-range detections exceeded MTCA cleanup standards. Two boring locations, B1 and B4, were impacted with diesel-range TPH above MTCA standards. B1 and B4 were located at the north end of the factory and in the asphalt-paved area on the factory's west side, respectively. All four boring locations where TPH was detected exceeded MTCA cleanup standards for oil. The highest oil-range TPH detections were in borings B1 and B4.

Twenty-three VOC constituents were detected in reconnaissance ground water samples submitted from the site. Of this total, twelve constituents exceeded either Method A Cleanup Levels or EPA Region IX PRGs. Boring B4, located near a catch basin in the west side asphalt-paved area, had the highest concentrations and the greatest number of exceedences. Sample B4-GW exceeded Method A Cleanup Levels for vinyl chloride, 1,1,1-trichloroethane, 1,2-dichloroethane, and tetrachloroethene, and exceeded EPA Region IX PRGs for vinyl chloride, chloroethane, 1,1-dichloroethene, methylene chloride, 1,1-dichloroethane, cis-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene, benzene, 1,2-dichloroethane, 1,1,2-trichloroethane, and tetrachloroethene. The exceedences ranged from less than 1 order of magnitude to over 4 orders of magnitude (vinyl chloride). Vinyl chloride concentrations exceeded MTCA Method A cleanup levels and EPA Region IX PRGs in all ground water samples except B10 (located at the inferred up-gradient margin of the property). The concentrations of some of the chlorinated VOC constituents detected in boring B4 suggest the possible presence of non-aqueous phase liquids.

Of the five metals detected above analytical method detection limits, only arsenic exceeded (slightly) its EPA Region IX PRG.

Nine SVOCs were detected in the reconnaissance groundwater samples submitted from the site. The Method A Cleanup Level for pyrene was exceeded in the water sample collected from B15 (east side of factory). The EPA Region IX PRG for bis(2-

ethylhexyl)phthalate was exceeded in water samples from borings B10 (assumed up-gradient boring) and B15. No other exceedences were present.

Analytical Summary.

Significant impacts to soil were detected in B17, drilled through the concrete factory floor; however slight detections of chlorinated solvents were detected in all soil samples submitted for analysis. Additionally, free petroleum product was observed (but not analyzed) in B15, at the east side of the factory.

Significant impacts to ground water are present at boring B4, located near the catch basin in the asphalt-paved area. Vinyl chloride, with exceedences in all but one ground water sample, may be widely distributed under the site. Additionally, all groundwater sampling locations showed impacts of volatile constituents (both petroleum-related and chlorinated). Total petroleum hydrocarbons (TPH) were detected in reconnaissance water samples collected from test borings B1, B4, B9, and B15 at levels exceeding MTCA cleanup standards.

Since the boring locations were sited based on site features and presently known activities, it is possible that other sources and plumes may be present but were not recognized during this Phase II investigation.

Recommendations

While efforts can be made to address current impacts to the site, effective long-term mitigation and remedial efforts will not be effective until current waste control operations/procedures are revised and structural and mechanical improvements are made. The following recommendations are made based on the results of the Phase II conclusions presented above:

1. All facility procedures should be reviewed to develop improved methods of controlling hazardous substances and preventing their release to the environment.

2. Subsurface vaults for fluid containment and processing, and surface/floor waste fluid races should be assessed and relined or replaced if needed. Additionally, since the floor area at the north end of the manufacturing building is commonly subjected to impacts by waste lubrication and cooling fluids, the entire floor structure should be re-sealed to prevent migration of these fluids through crack and seams to the subsurface media. Improved methods of operation, fluid and chemical control, and continuous monitoring should be implemented so that releases do not occur from the mechanical systems of the facility.

3. Known areas of contaminant impacts should be further characterized and delineated such that source areas are identified and mitigation and remediation efforts can be proposed. In particular, it should be determined if off-site impacts have occurred, and if so, if there are any human or ecological receptors that may be endangered. Any potential for offsite migration of contamination should be prevented.

Significant environmental impacts were detected during this Phase II Assessment. Since this assessment was performed to evaluate potential liability that might be assumed if property purchase is completed, PRK-ENW recommends that Gorge Leasing seek competent legal counsel experienced with acquisition of property with environmental liabilities before negotiating the proposed property transaction.

1 INTRODUCTION

At the request of Gorge Leasing, PRK Environmental (PRK) and Evren Northwest (ENW) (collectively, PRK-ENW within the body of this report) have prepared this Phase II Environmental Site Assessment (Phase II) for the property located at 1220 North Second Avenue, Kent, Washington. Sun Life of Canada currently owns the property, however Gorge Leasing currently owns the manufacturing building. Presently REXAM Beverage Can Company (REXAM; Division of American National Can Company) operates an aluminum can manufacturing and labeling facility and associated warehouse within the structures of the property.

1.1 Purpose

In accordance with the proposal submitted by PRK Environmental on April 24th, 2001 and authorized by Jason Spadaro of Gorge Leasing on April 30th, 2001, PRK-ENW performed a Phase II Environmental Site Assessment to evaluate site features and activities that may potentially impact soil and ground water in the vicinity of the site. Some of the site features and activities addressed during the Phase II were initially identified in a Phase I Environmental Assessment performed by Eckland Consultants for Sun Life of Canada.

1.2 Scope

The Scope of Work for this Phase II Investigation is as follows:

- Site subsurface borings in locations selected on the basis of chemical storage and usage, manufacturing processes, waste stream characteristics, natural and artificial drainage features, and staining, odors, distressed vegetation, and other signs of potential environmental impacts.
- Determine the geologic and hydrogeologic character of the site through surface and subsurface sampling activities, and review of published geologic mapping.
- Collect soil and ground water samples at selected locations onsite, as specified in the Sampling and Analysis Plan prepared by PRK-ENW.

- Analyze the samples for petroleum hydrocarbons (by methods NWTPH-HCID, NWTPH-Gx and NWTPH-Dx), metals (total and dissolved), VOCs (volatile organic hydrocarbons), and SVOCs (semi-volatile organic hydrocarbons).

- Evaluate the analytical data with respect to State of Washington Department of Ecology Model Toxic Control Act Cleanup Regulations and EPA Region 9 PRGs (Preliminary Remediation Goals).

- Preparation of this report.

REXAM permitted PRK-ENW to perform the activities described in this report on May 10, 2001 between 6 AM and 5 PM, and on May 11, 2001, between 6 AM and 9 AM. Originally, PRK-ENW had planned to perform subsurface investigation at 19 site locations previously approved by REXAM. However, due to the limited time allowed on site, subsurface investigation was performed at only 11 of the site locations. **Consequently, the results of this investigation should be considered a survey of selected locations/site features of interest, rather than a full Phase II environmental site assessment.**

2 SITE SETTING

2.1 Description and Location

The site is located at the north end of Kent, Washington, in an industrial park setting. The site is reportedly 6.01 acres, and is irregular in shape. The site is occupied by two large concrete structures, connected by an enclosed corridor. The more northerly concrete structure contains the aluminum can manufacturing facility. The structure reportedly has 130,615 square feet, and was built in 1970. The building is composed of tilt-up precast-concrete panels on a concrete floor. According to the Phase I report, the site has floor drains connected to an on-site wastewater treatment system. The more southerly structure is used as a warehouse. The area between the two buildings has historically been used for storage activities (including chemical storage).

The west side of the property is asphalt-paved and is used for employee parking and for truck access to numerous truck docks along the west side of the two buildings. Several catch basins are present within the asphalt-paved areas of the property. North 2nd Avenue, west of the asphalt-paved area, provides direct access to the property. The east side of the property is bordered by a rail spur, a possible wetland area, and the AMTRAK/Burlington Northern Railroad Tracks. The rail spur appears to be no longer in use; however, several loading docks on the east side of the factory building indicate that historically the rail spur was used to bring supplies or ship finished products. The south side of the property is asphalt-paved, and abuts against a small creek, Highway 167, and a neighboring manufacturing facility property (Protective Coatings). The north side of the property is landscaped with grass, bark dust, and some decorative shrubs, but also has a paved driveway and several large iron-gated doors. South 228th Street borders the property's north side.

2.2 Topography

The site is located at an approximate elevation of 10 feet MSL (mean sea level). According to the above-referenced Phase 1 report for the facility, there is an approximate maximum of 2 feet of relief across the site. The natural topographic gradient is toward the north or northwest.

2.3 Cultural Setting

The site is located in an area principally zoned for industrial and commercial use.

2.4 Geologic Setting

2.4.1 Regional Geology

The site is located within the Green River Valley. The area has been predominantly shaped by processes related to the Pleistocene ice sheets that pulsed into the area from 1.9 million years ago to 12 thousand years ago and subsequent alluvial processes. The alluvial deposits of the Green River overlie and are cut through older glacial features consisting of glacial drift, till, and outwash.

2.4.2 Site Geology

Geologic maps of the area indicate that the site is located on Holocene alluvial deposits of the Green River and its tributaries. The depth of the deposits was not determined. PRK-ENW site borings indicate the site is largely(?) underlain by fill materials ranging in thickness from 3 feet to 6 feet. The fill materials consist of silt and sand. In one boring, flakes of metal and carbonaceous material were seen in soil sampled collected at 5-feet depth.

Underlying the fill materials are fine to very fine-grained, well-sorted sand and silt of alluvial origin.

2.5 Hydrogeologic Setting

2.5.1 Surface Water

The site is located within the Green River Valley of western Washington. In the vicinity of the subject site, the Green River flows northward along the west side of the valley in a meandering channel. The grade of the river is very low. The Green River discharges to/becomes known as the Duwamish River at the north end of the valley. The Duwamish River flows into Elliot Bay at the south end of Puget Sound.

A small creek channel is present at the southeast corner of the property. The creek flows northward through a possible wetland area between the AMTRAK/Burlington Northern Railroad tracks and the rail spur at the east side of the subject property. Across South 228th Street, the creek channel is deepened and channelized.

Within the paved areas of the site, water is channeled to catch basins that are believed to discharge to the City of Kent storm water system.

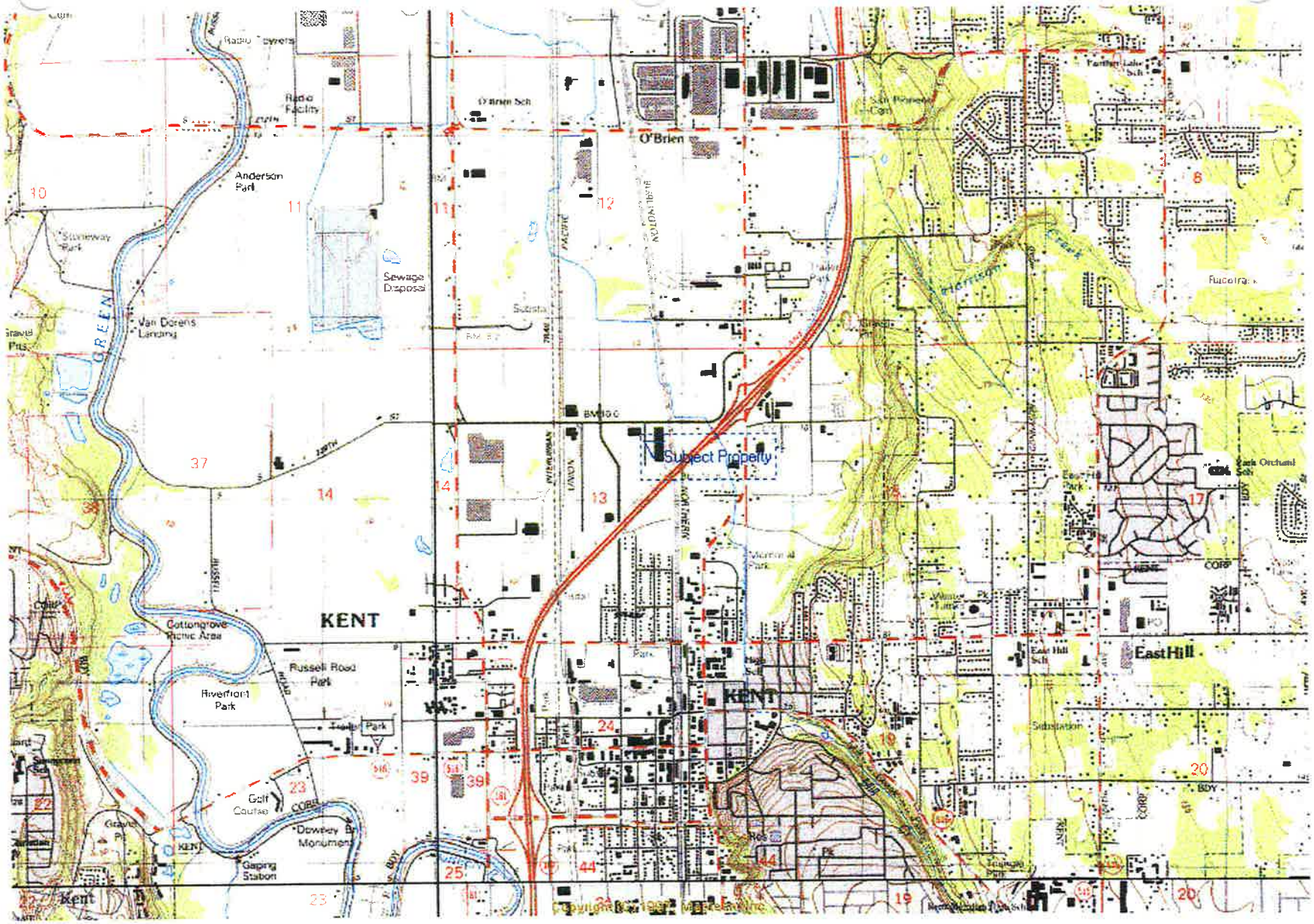
2.5.2 Ground Water

Ground water was encountered in most of the borings at the site at between 6 and 7 feet below ground surface. However, shallow, probably perched, ground water was encountered at 3.5 feet at the north end of the can factory building. Ground water flow direction has not been determined for the site.

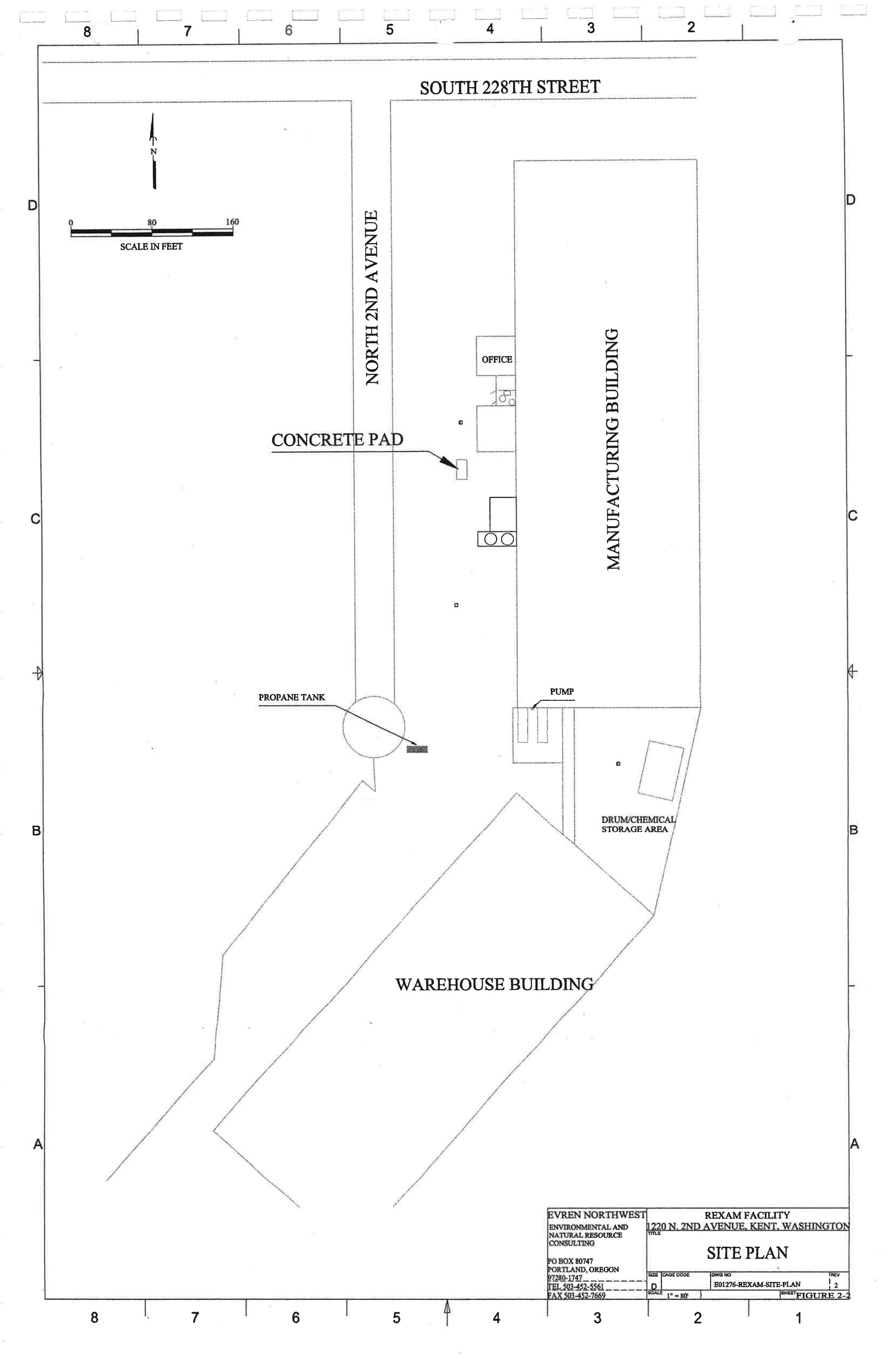
An area to the east of the railroad spur may possibly be wetlands. However, the Phase I report stated that no wetlands areas are identified on the subject property by the King County Soil Conservation District Wetlands Map. Detailed delineation of wetlands is beyond the scope of services for this Phase II investigation.

2.6 Site History

Based on the findings of the Phase I investigation, prior to 1970 the site was originally farmland with an associated farmhouse. The site was developed in 1970 for the aluminum can factory. The can facility warehouse was constructed between 1977 and 1985.



PRK Environmental, and EVREN Northwest Environmental and Natural Resources Consulting PO Box 80747 PORTLAND, OREGON 97280-1747	Date Drawn: 6/8/2001 CAD File Name: E01194E01276-figure_1 Drawn By: LDG Approved By: NMW	REXAM Manufacturing Facility 1220 North 2nd Avenue Kent, Washington For Gorge Leasing	**Site Vicinity Map**	Project No. E01276 Figure No. **2-1**



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REXAM FACILITY
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TITLE
SITE PLAN

SIZE	CAGE CODE	DWG NO	REV
D		E01276-REXAM-SITE-PLAN	2

SCALE 1" = 80'

SHEET FIGURE 2-2

3 SITE INVESTIGATION METHODS AND PROCEDURES

Work performed for this Phase II Investigation included incorporating existing site information with new information with the following specific objectives:

- To determine whether hazardous substances have impacted, or threaten to impact, environmental media at the site at concentrations above State of Washington MTCA Method A Cleanup Levels for Industrial Properties.

- To conduct an adequate and cost-effective investigation of the site while satisfying the requirements of our client, such that potential purchasing decisions could be evaluated.

- To assure that any existing information or data incorporated into work to be performed under this SOW be certifiable and validated for the intended use.

The work was performed in accordance with the associated Sampling and Analysis Plan and Health and Safety Plan (Appendices B and C, respectively). The following sections describe the various fieldwork activities. Because of the limited time permitted for on-site investigation and presentation of analytical results, the subsurface investigation was scaled back from the original objectives to that of performing a **survey of subsurface conditions at selected locations/site features of interest.**

3.1 Soil Borings

A hand auger and manual push-probe were operated by PRK-ENW to obtain soil cores and ground water samples at 11 boring locations (see Figure 3-1). The push-probe unit used "direct push" to advance a 1.0-inch diameter stainless-steel sampler in sequences of 2-foot penetrations. The hand auger was equipped with a 2.5-inch or 1.5-inch diameter stainless-steel sampling "barrel."

All boring and sampling tools were triple-rinsed before beginning each boring. Fresh sleeves were used for each push. [However, in one boring (B18) the hand auger met immediate refusal on cemented sand immediately below the concrete floor slab within the factory. Since there was no penetration into loose subgrade materials, the sampler was repacked in a clean plastic Zip-Lock bag. It was later deemed acceptable to use the auger in boring B17 without additional decontamination, which then penetrated soil with significant visible and olfactory impacts.]

A GasTech organic vapor monitor was used to perform safety monitoring to ensure safe working conditions for field staff.

The borings were designated with a "B" prefix and a number. Originally, 19 subsurface boring locations were sited and given approval by REXAM. However, REXAM only permitted sampling investigation on May 10, 2001 between 6 AM and 5 PM, and on May 11, 2001, between 6 AM and 9 AM. Therefore, to meet the allotted time constraints, only 11 boring sites were actually drilled. In the discussion below, the depth of the soil sample is appended to the boring number, so that each sample designation reflects both the boring number and depth.

3.2 Soil Sampling and Screening

Push probe soil cores were obtained in 2-foot long, 1-inch diameter, CAB (cellulose acetate butylate) sleeves. A fresh sleeve was used for each drive. After each drive, the sleeve was cut to isolate the recovered soil with minimal headspace. The ends of the sleeve were then sealed with Teflon tape and vinyl end caps. The sleeve was then labeled with a distinctive designation, logged, and placed in cooled storage until delivered to the laboratory. Chain of custody protocols were implemented from time of sampling.

Hand auger samples were collected in 1.5 inch or 2.5-inch diameter sample barrels. The sample was transferred with clean latex gloves into 8-ounce sample jars supplied by Sound Analytical, of Tacoma, Washington. The jars were sealed after minimizing headspace within the container. The jars were then immediately labeled with a distinctive designation, logged, and placed in cooled storage until delivered to the laboratory. Chain of custody protocols were implemented from time of sampling.

The recovered soil cores and samples were logged in the field by an experienced hydrogeologist. The GasTech organic vapor monitor was used to screen samples qualitatively. The GasTech monitor was also used to quantitatively assess air in the upper portions of the boreholes for the presence of organic vapors by inserting the sampling hose between 4 inches and 12 inches into the boring.

3.3 Reconnaissance Ground Water Sampling

Reconnaissance ground water samples were collected from selected borings with a 2-feet in length, 0.5-inch diameter 10-mill-slot well-point. The sampler was pushed down to the bottom of the boring for sampling (borings were completed at 2 to 3 feet below the water table, or into a perched water-bearing zone at shallower depth). Ground water was allowed to collect in the slotted well screen, and the temporary well was purged of approximately one liter of water. Purging was conducted with a peristaltic pump with clean (fresh), polyethylene tubing for each sampled boring. Conductivity, temperature,

and pH were recorded for each sample, until the pH probe was inadvertently broken during field operations. The peristaltic pump was then used to fill (optimally) three 40-milliliter VOA containers for volatile organic hydrocarbon analyses, two 1-liter amber (Boston Round) containers for total petroleum hydrocarbon identification and quantification as well as semi-volatile organic hydrocarbons (SVOCs), and one Nalgene bottle for EPA priority dissolved metals analyses. All sample containers were pre-prepared by Sound Analytical. However, some of the borings did not produce adequately to permit filling all the bottles with volumes indicated in the sampling and analysis plan.

The VOA containers were prepared with an aliquot of hydrochloric acid as a preservative. The water from select boreholes was transferred to the VOA vials with minimal turbulence, and all headspace was expelled prior to sealing with Teflon caps.

The Nalgene containers were pre-prepared by Sound Analytical with an aliquot of nitric acid to inhibit dissolved metal ions from precipitating out of solution. The water from the selected boreholes was pumped with the peristaltic pump through a 0.45-micron Versapor (acrylic copolymer membrane) filter approved for the application.

Water samples were promptly labeled at the completion of sampling at each boring. Ground water samples were labeled with the boring designation followed by "-GW". The water samples were then placed in a cooler with frozen freezer packs until delivered to Sound Analytical under chain of custody protocols.

3.4 Analytical Methods

A Sampling and Analysis Plan was developed by PRK-ENW (see Appendix B).

The following analytical methods were used:

Analytical Method	Analytes	Soil and Sediment	Ground water
EPA 8260	Volatile organic hydrocarbons (VOCs)	Yes	Yes
EPA 8270 SIM	Polynuclear aromatic hydrocarbons (PAHs)	Yes	Yes
NWTPH-Gx	Total Petroleum Hydrocarbons (TPH)–Gasoline-range quantification	If indicated by NWTPH-HCID results	If indicated by NWTPH-HCID results
NWTPH-Dx	Total Petroleum Hydrocarbons (TPH)-Diesel and Oil range quantifications	If indicated by NWTPH-HCID results	If indicated by NWTPH-HCID results
NWTPH-HCID	Total Petroleum Hydrocarbons (TPH)-Hydrocarbon Identification	Yes	Yes
EPA 200.7/200.8/245.2	Total Priority Metals	(Total only)	(Dissolved)

All soil and ground water samples submitted for analysis were analyzed for SVOCs and metals (if adequate sample was produced by the borehole), VOCs, and for the presence of Total Petroleum Hydrocarbons (TPH) by NWTPH-HCID. NWTPH-Gx and/or –Dx were then performed as quantitative analyses when detections in NWTPH-HCID qualitative analysis were indicated.

3.5 Waste Management

All soil samples retained for possible laboratory analyses were removed from the site. Remaining soils were placed in 55-gallon drums in PRK-ENW's trailer for future appropriate disposal. Purge water from the soil borings and monitoring wells was also placed in 55-gallon drums, and sealed for future appropriate disposal. Waste filters, latex gloves, tubing, and other sampling waste were similarly contained.

Bore holes were backfilled with 3/8"-bentonite hole plug to within 3-inches (approximate) of the surface. Bore holes in landscaped materials were then completed by restoring the site to the original appearance. Bore holes in asphalt blacktop were then completed with asphalt patch compound. Bore holes drilled through the concrete floor were completed with cement patching material through the original thickness of the concrete floor slab (approximately 9 inches).

4 SITE INVESTIGATION RESULTS

A total of 11 soil borings were drilled at selected locations on the REXAM property (see Figure 3-1 and Section 3.1). Soil borings were logged by Neil Woller of PRK-ENW, with special attention to description of lithology, color, moisture, foreign clasts, physical properties, odor, and occurrence of ground water (see Appendix B). Procedures employed for the collection of environmental samples for laboratory analyses are described in Sections 3.2 through 3.5 above.

The target depth of each boring was approximately 2 to 3 feet below the ground water level. However, some borings were terminated at shallower depth in order to more efficiently use the available time allotted for the field investigation. Borehole logs are presented in Appendix A. However, additional comments are presented below for each boring.

Boring	Comment
B1	B1 was sited at the north end of the can manufacturing facility in an assumed down-gradient location to the facility and the waste (used) oil processing area. B1 encountered perched ground water at approximately 3.5 feet depth. The perched ground water was sampled for this investigation.
B2	B2 was also sited at the north end of the can manufacturing facility. B2 was terminated at 3.7 feet depth.
B3	B3 was sited next to a wastewater treatment area near the plant office (west side of plant). Soil was green-gray from 2 feet to 4 feet depth. A 4-inch thick zone of darkish fluid/water/stained sediment was present in the sampling sleeve at approximate 7 to 8 feet depth.
B4	B4 was sited adjacent to a catch basin in the parking lot at the west side of the manufacturing plant. Soil in the 3 feet to 6 feet depth interval had an unidentified odor.
B6	B6 was sited adjacent to the secondary containment around two above-ground storage tanks, reportedly containing lime and caustic soda. A milky fluid was observed within the secondary containment. The

Gastech alarm sounded when the instrument was placed at the top of the bore hole; readings ranged from 40-ppm to 3,000-ppm at that location, after completion of the boring.

B9 B9 was located in an area with two concrete fluid containment "trays". Fill materials containing metal cuttings and organic carbonaceous material were present in soil from 3 to 5 feet depth.

B10 B10, considered the up-gradient boring, was located at the southwest margin of the property. Two rectangular patches were present in the asphalt pavement near the boring location. The Gastech alarm sounded when the instrument was placed at the borehole top; readings ranged to 200-ppm in top of boring.

B13 B13 was sited in a newly paved drum/chemical storage area, next to a catch basin. The Gastech sounded alarm when placed at top of boring; readout indicated "overrange". The push probe was not able to achieve good recovery in lower portion of boring.

B15 B15 was sited at the east side of the plant, adjacent to a pipe and hose protruding from the wall of the factory. The pipe and hose were believed to be a bleed-off facility for some type of compressed air system. The wall of the factory was stained from previous releases. The pipe and hose are now plumbed to reenter the factory wall several feet away. The upper 1-foot of boring B15 was drilled through crushed rock aggregate of the railroad spur, from which free product was observed seeping through the gravel. Dark ground stains were observed in an adjacent area across the railroad spur, and appeared to be associated with a larger, concentric area with seemingly distressed vegetation.

B17 B17 was sited within the manufacturing plant adjacent to a subsurface oil-water containment/processing vault used in the recovery of spent oil-water from the manufacturing process. Strong petroleum-type odors and discoloration were observed in the soils directly underlying the concrete floor slab. The Gastech indicated 300-ppm when placed at the top of the boring, while ambient air in the vicinity of the boring was at 140-ppm.

B18 B18 was also located within the manufacturing plant. Cemented sand directly underlay the concrete floor slab. The 1.5-inch diameter hand auger was unable to cut or penetrate the cemented sand. It was inferred from observed conditions within the boring that the sand had been placed as a subgrade for the concrete floor pour, and was cemented by

possibly a separation phase from the concrete pour or overlay a second concrete slab structure. No visible or olfactory impacts were evident.

The following sections describe the concentrations and distributions of hazardous substances based on the analytical data generated for this report. All laboratory analytical reports are included in Appendix D. Tables 4-1 through 4-8 summarize the analytical data, and permit comparison with Washington State Model Toxics Control Act (MTCA) Method A Cleanup Levels for Industrial Sites, and with US Environmental Protection Agency (EPA) Region IX Preliminary Remediation Goals (PRGs). Figure 3-1 shows the boring and sampling locations discussed in the following sections.

4.1 Soil Investigation

The analytical data reported for soil samples collected at boring locations are believed to accurately represent soil conditions at the locations and depths indicated. However, since very little was previously known about the subsurface conditions, reported detections may not indicate the maximum concentrations of contaminants present on the site. It is reasonable to assume that soil (and ground water) concentrations will decrease with increasing distance from contamination source areas.

4.1.1 Total Petroleum Hydrocarbons (TPH)

TPH was detected in only one soil sample. The sample, B17-18"-25", was collected from below the concrete floor slab near the used oil-water recovery vault. Diesel was detected but did not exceed the MTCA Method A Cleanup Level. However, oil-range TPH in B17 did exceed the MTCA Method A cleanup standard. It is not known whether oil-contaminated soil is in contact with ground water at or near this location.

It should also be noted that free oil was observed in the uppermost foot of B15, in the crushed rock aggregate of the railroad spur. A sample was collected (see attached photographs) but not analyzed. Stained earth was present in the vicinity of the free product (see attached photographs), surrounded by a concentric area where distressed vegetation appeared to be present. Since the soil sample submitted from the B15 boring did not have detectable TPH, we speculate that the oil may be flowing through the extremely permeable crushed rock aggregate toward the lower elevation area indicated by the stain and possible distressed vegetation.

Table 4-2. Detected Volatile Organic Constituents in Soil Samples

	Vinyl chloride	Chloroethane	1,1-Dichloroethene	Methylene chloride	1,1-Dichloroethane	1,1,1-Trichloroethane	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	m,p-Xylene	o-Xylene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
EPA Region IX PRGs	6.3E+02	6.5E+03	1.2E+02	2.1E+04	2.1E+06	1.4E+06	1.5E+03	6.1E+03	5.2E+05	1.9E+04	2.3E+05	2.1E+05	2.1E+05	NA	2.4E+05	7.0E+04	1.7E+05	NA	2.4E+05	1.90E+05
Method A Cleanup Levels	NA	NA	NA	NA	NA	2.0E+03	3.0E+01	3.0E+01	7.0E+03	5.0E+01	6.0E+03	9.0E+03	9.0E+03	NA	NA	NA	NA	NA	NA	5000
Sample ID																				
B3-2'-4'	7.0E-01	3.9E+00	8.6E-01	ND	1.1E+01	ND	ND	ND	5.0E-01	ND	ND	ND	ND	ND	ND	ND	2.8E-01	2.3E-01	ND	ND
B6-3'-5'	ND	ND	ND	ND	ND	ND	4.3E-01	2.2E-01	6.9E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B9-5'-7'	ND	ND	ND	2.9E-01	ND	ND	7.4E-01	4.6E-01	1.1E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B10-6'-9'	ND	ND	ND	3.2E-01	ND	ND	8.0E-01	6.1E-01	1.7E+00	ND	ND	ND	ND	ND	ND	ND	ND	2.7E-01	ND	ND
B13-6'-9'	ND	ND	ND	2.9E-01	ND	ND	8.3E-01	4.9E-01	1.3E+00	ND	ND	4.8E-01	ND	ND	ND	ND	3.1E-01	2.8E-01	ND	ND
B15-3'-5'	ND	ND	ND	ND	1.3E+00	1.8E+00	ND	2.6E-01	7.3E-01	ND	ND	ND	1.2E+00	7.2E-01	2.9E+00	1.3E+01	3.4E+01	1.0E+00	ND	ND
B17-18'-26'	ND	ND	ND	ND	3.6E+01	ND	ND	ND	2.8E+01	1.1E+02	4.9E+01	8.6E+02	5.1E+02	1.6E+02	2.6E+02	5.9E+02	1.4E+03	2.3E+02	4.6E+02	1.4E+02

NA - not applicable

4.1.3 Total Metals

Of the EPA priority metals for which detections were reported, only **chromium** exceeded listed MTCA Method A Cleanup Levels. No detected metal exceeded listed EPA Region IX PRGs (see Table 4-3 below). All reported chromium concentrations were within one order of magnitude of the MTCA Method A Cleanup Level for chromium. Note that the laboratory analyses were for total chromium, while the listed standards are for hexavalent chromium. Therefore, the comparison of chromium concentration with the Method A Cleanup Level in the table assumes all detected chromium is hexavalent, a very conservative screening approach.

Table 4-3. Detected Metals in Soil Samples

	Vinyl chloride	Chloroethane	1,1-Dichloroethene	Methylene chloride	1,1-Dichloroethane	1,1,1-Trichloroethane	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	m,p-Xylene	o-Xylene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene
	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
EPA Region IX PRGs	6.3E+02	6.0E+06	1.2E+07	2.1E+07	2.1E+06	1.4E+08	1.1E+03	5.1E+05	5.2E+06	1.9E+04	2.3E+06	2.1E+06	2.1E+06	NA	2.4E+06	7.0E+04	1.7E+06	NA	2.4E+06	1.3E+06
Method A Cleanup Levels	NA	NA	NA	NA	NA	2.0E+08	3.0E+01	3.0E+01	7.0E+06	5.0E+01	8.0E+06	9.0E+06	9.0E+06	NA	NA	NA	NA	NA	NA	5.0E+06
Sample ID																				
B3-24	7.0E+01	3.9E+00	8.6E+01	ND	1.1E+01	ND	ND	ND	5.0E+01	ND	ND	ND	ND	ND	ND	ND	2.6E+01	2.3E+01	ND	ND
B5-3.5	ND	ND	ND	ND	ND	ND	4.3E+01	2.2E+01	6.9E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B9-5.7	ND	ND	ND	2.9E+01	ND	ND	7.4E+01	4.6E+01	1.1E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B10-6.8	ND	ND	ND	3.2E+00	ND	ND	8.0E+01	6.1E+00	1.7E+00	ND	ND	ND	ND	ND	ND	ND	ND	2.7E+01	ND	ND
B13-6.8	ND	ND	ND	2.1E+00	ND	ND	8.3E+01	4.9E+00	1.3E+00	ND	ND	4.8E+01	ND	ND	ND	ND	3.1E+00	2.8E+01	ND	ND
B15-3.5	ND	ND	ND	ND	1.3E+00	1.8E+00	ND	2.6E+01	7.3E+01	ND	ND	ND	1.2E+00	7.2E+01	2.5E+00	1.3E+01	3.4E+01	1.0E+00	ND	ND
B17-18.25	ND	ND	ND	ND	3.6E+01	ND	ND	ND	2.8E+01	1.1E+02	4.9E+01	8.6E+02	5.1E+02	1.6E+02	2.0E+02	5.9E+02	1.4E+03	2.3E+02	4.6E+02	1.4E+02

NA-not applicable

4.1.4 Semi-Volatile Constituents

Eighteen semi-volatile organic compounds (SVOCs) were detected in the soil samples submitted for analysis (see Table 4-4 below). Analytical data for Sample B15-3'-5', sited at the east side of the can manufacturing facility, indicated that **pyrene** (a polyaromatic hydrocarbon) exceeded Washington's MTCA Method A Soil Cleanup Level. However, it should be noted that free product was present in the overlying aggregate, which was not sampled.

No compounds were reported at concentrations exceeding EPA Region IX PRGs.

Table 4-4. Detected Semi-Volatile Organics Constituents in Soil Samples

	Vinyl chloride	Chloroethane	1,1-Dichloroethene	Methylene chloride	1,1-Dichloroethane	1,1,1-Trichloroethane	Benzene	Trichloroethene	Toluene	Tetrachloroethene	Ethylbenzene	m,p-Xylene	o-Xylene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene
	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)
EPA Region IX PRGs	5.3E+02	6.6E+03	1.2E+02	2.1E+04	2.1E+06	1.4E+06	1.5E+03	6.1E+03	5.2E+05	1.9E+04	2.3E+06	2.1E+05	2.1E+05	NA	2.4E+05	7.0E+04	1.7E+05	NA	2.4E+05	1.90E+05
Method A Cleanup Levels	NA	NA	NA	NA	NA	2.0E+03	3.0E+01	3.0E+01	7.0E+03	5.0E+01	6.0E+03	9.0E+03	9.0E+03	NA	NA	NA	NA	NA	NA	5000
Sample ID																				
B3-2'-4'	7.0E-01	3.9E+00	8.6E-01	ND	1.1E+01	ND	ND	ND	5.0E-01	ND	ND	ND	ND	ND	ND	ND	2.8E-01	2.3E-01	ND	ND
B6-3'-5'	ND	ND	ND	ND	ND	ND	4.3E-01	2.2E-01	6.9E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B9-5'-7'	ND	ND	ND	2.9E-01	ND	ND	7.4E-01	4.6E-01	1.1E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B10-6'-9'	ND	ND	ND	3.2E-01	ND	ND	8.0E-01	6.1E-01	1.7E+00	ND	ND	ND	ND	ND	ND	ND	ND	2.7E-01	ND	ND
B13-6'-9'	ND	ND	ND	2.9E-01	ND	ND	8.3E-01	4.9E-01	1.3E+00	ND	ND	4.8E-01	ND	ND	ND	ND	3.1E-01	2.8E-01	ND	ND
B15-3'-5'	ND	ND	ND	ND	1.3E+00	1.8E+00	ND	2.6E-01	7.3E-01	ND	ND	ND	1.2E+00	7.2E-01	2.9E+00	1.3E+01	3.4E+01	1.0E+00	ND	ND
B17-18'-25'	ND	ND	ND	ND	3.6E+01	ND	ND	ND	2.8E+01	1.1E+02	4.9E+01	8.6E+02	5.1E+02	1.6E+02	2.6E+02	5.9E+02	1.4E+03	2.3E+02	4.6E+02	1.4E+02

NA - not applicable

4.2 Reconnaissance Ground Water Investigation

Reconnaissance ground water samples were collected from borings B1, B4, B6, B9, B10, B15. Reconnaissance ground water samples were collected from a temporary well point set in freshly drilled bore holes, and therefore do not reflect ground water conditions with the same QA/QC standards as properly constructed monitoring wells. The analytical data reported for the borings reflects the presence of both dissolved and adsorbed species, and therefore may overestimate the concentration of constituents dissolved in ground water at those particular locations. Therefore the concentrations reported below for reconnaissance ground water samples should only be considered *indicators* of ground water conditions. However, it should also be remembered that this limited Phase II survey may not have sampled at the source areas of contamination plumes, and therefore higher concentrations may be present.

4.2.1 Total Petroleum Hydrocarbons (TPH)

TPH was detected in four reconnaissance ground water samples (see Table 4-5 below). A trace quantity of gasoline-range petroleum hydrocarbons was detected in Boring B1, below MTCA Method A Cleanup standard. No other gasoline-range TPH detections were reported.

Diesel-range TPH were detected in four borings, but exceeded MTCA standards in B1 and B4. Oil-range TPH exceeded MTCA standards in all four borings where TPH was detected. The highest diesel and oil-range TPH detections were in Boring B1, at the north end of the manufacturing plant.

Table 4-5. Ground Water TPH Analytical Results

Sample ID	TPH detected (based on NWTPH-HCID)	Concentration (mg/L)		
		NWTPH-Gx	NWTPH Diesel Range	NWTPH Oil Range
MTCA Method A Cleanup Level	NA	0.8/1.0 (depends if benzene detected)	**0.5**	**0.5**
B1-GW	Gasoline/Diesel/Oil	0.31	**3.4**	**19**
B4-GW	Diesel/Oil	NA	**0.84**	**1.9**
B6-GW	ND	NA	NA	NA
B9-GW	Diesel/Oil	NA	0.35	**0.72**
B10-GW	ND	NA	NA	NA
B15-GW	Diesel/Oil	NA	0.26	**0.74**

Table 4-1. Soil TPH Analytical Results

Sample ID	TPH detected (based on NWTPH-HCID)	Concentration (mg/L)		
		NWTPH-Gx	NWTPH Diesel Range	NWTPH Oil Range
MTCA Method A Cleanup Level	NA	0.8/1.0 (depends if benzene detected)	0.5	0.5
B1-GW	Gasoline/Diesel/Oil	0.31	**3.4**	**19**
B4-GW	Diesel/Oil	NA	**0.84**	**1.9**
B6-GW	ND	NA	NA	NA
B9-GW	Diesel/Oil	NA	0.35	**0.72**
B10-GW	ND	NA	NA	NA
B15-GW	Diesel/Oil	NA	0.26	**0.74**

4.1.2 Volatile Constituents

Seven soil samples were submitted for VOC analyses, of which all contained detectable levels of VOCs (see Table 4-2 below). Borings B3, B6 and B9 were sited on the west side of the manufacturing facility. Samples collected from these borings vinyl chloride, chloroethane, 1,1-dichloroethene, methylene chloride, 1,1-dichloroethane, benzene, trichloroethene, toluene, 1,2,4-trimethylbenzene, and 4-isopropyltoluene. All of these constituents were detected at concentrations below the EPA Region IX PRGs (Preliminary Remediation Goals).

Two samples were collected from the interface zone with the water table (B10-6'-9' and B13-6'-9'). Test boring B10 was sited along the property boundary between the Rexam Facility and the adjacent property to the southwest. Low levels of methylene chloride, benzene, trichloroethene, toluene and 4-isopropyltoluene were detected, though significantly below the EPA Region IX PRG for those compounds. Test boring B13 was sited adjacent to the catch basin located in the drum chemical storage area. Low levels of methylene chloride, benzene, trichloroethene, toluene, m,p-xylenes, 1,2,4-trimethylbenzene and 4-isopropyltoluene were detected though again significantly below the EPA Region IX PRG for those compounds.

B15, on the east side of the can manufacturing facility, contained ten VOCs above analytical method detection limits in the 3' to 5' depth interval. The ten compounds, 1,1-dichloroethane, 1,1,1-trichloroethane, trichloroethene, toluene, o-xylene, isopropylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and 4-isopropyltoluene were present at concentrations below the EPA Region IX PRGs for those compounds.

Boring B17 was sited on the north end of the manufacturing facility, cored through the concrete slab foundation. Sample B17-18"-25" contained detectable concentrations of 1,1-dichloroethane, toluene, tetrachloroethene, ethylbenzene, m,p-xylenes, o-xylene, isopropylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 4-

isopropyltoluene, n-butylbenzene, and naphthalene. Of the indicated compounds, only **tetrachloroethene** at 1.1E+02-µg/Kg exceeded its listed MTCA Method A cleanup level.

4.2.2 Volatile Constituents

Twenty-three VOC constituents were detected in reconnaissance ground water samples submitted from the site (see Table 4-6 below). Of this total, twelve constituents exceeded either Method A Cleanup Levels or EPA Region IX PRGs.

Reconnaissance Ground water Sample B4-GW

Sample B4-GW, collected from a boring sited near a catch basin in the asphalt parking lot on the west side of the can manufacturing facility, contained the most (by far) constituent exceedences. Sample B4-GW exceeded Method A Cleanup Levels for vinyl chloride, 1,1,1-Trichloroethane, 1,2-dichloroethane, and tetrachloroethene, and EPA Region IX PRGs in vinyl chloride, chloroethane, 1,1-dichloroethene, methylene chloride, 1,1-dichloroehane, cis-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene, benzene, 1,2-dichloroethane, 1,1,2-trichloroethane, and tetrachloroethene. The exceedences ranged from less than 1 order of magnitude to over 4 orders of magnitude (vinyl chloride).

Some particularly high detection concentrations reported for B4-GW may suggest the possible presence of dense non-aqueous phase fluids (DNAPL) near that location:

Chloroethane	**5,900-µg/L**
1,1-Dichloroethene	**1,800-µg/L**
1,1-Dichloroethane	**24,000-µg/L**
1,1,1-Trichloroethane	**27,000-µg/L**

Other Reconnaissance Ground water Samples

Vinyl chloride exceedences relative to both MTCA Method A and EPA Region IX PRGs were present in all ground water samples except B10-GW. (The B10 sampling location was the only ground water sampling location with no VOC exceedences. B10 was considered the upgradient sampling location). The vinyl chloride PRG was exceeded by as almost as much as 2 orders of magnitude; the vinyl chloride MTCA cleanup level was exceeded by one order of magnitude.

Chloroethane exceeded EPA Region IX PRGs in reconnaissance water samples collected from B1 and B15. The exceedence in B1 was one order of magnitude. Boring B1 was located at the north end of the can manufacturing facility. Boring B15 was located along the railroad spur at the east side of the manufacturing facility.

Table 4-6. Detected Volatile Organic Constituents in Ground water Samples

	Vinyl chloride	Chloroethane	1,1-Dichloroethene	Methylene chloride	trans-1,2-Dichloroethene	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	Benzene	1,2-Dichloroethane	Trichloroethene	Toluene	1,1,2-Trichloroethane	Tetrachloroethene	Ethylbenzene	m,p-Xylene[1]	o-Xylene[1]	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	4-Isopropyltoluene	Naphthalene
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
EPA Region IX PRGs	4.1E-02	4.8E+00	5.6E+02	4.3E+00	1.2E+02	8.1E+02	8.1E+01	5.4E+02	3.5E-01	1.2E-01	1.6E+00	7.2E+02	2.0E-01	1.1E+00	1.3E+03	1.4E+03	1.4E+03	6.6E+02	8.1E+01	1.2E+01	1.2E+01	NA	6.2E+00
Method A Cleanup Levels	2.0E-01	NA	NA	NA	NA	NA	NA	2.0E+02	5.0E+00	5.0E+00	NA	1.0E+03	NA	5.0E+00	7.0E+02	1.0E+03	1.0E+03	NA	NA	NA	NA	NA	1.6E+02
Sample ID																							
E1-GW	3.8E+00	4.5E+01	1.6E+01	ND	ND	2.4E+02	1.2E+00	1.7E+02	ND	ND	1.6E+00	1.7E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E4-GW	7.9E+02	5.9E+03	1.8E+03	7.3E+01	1.1E+01	2.4E+04	1.1E+02	2.7E+04	2.3E+00	9.7E+01	3.3E+01	7.0E+01	7.2E+00	2.9E+01	2.0E+00	3.6E+00	4.7E+00	3.2E-01	1.5E+00	1.3E+00	6.3E+00	ND	1.7E+00
E8-GW	3.5E+00	ND	ND	ND	ND	1.7E-01	8.3E-02	2.1E-01	ND	ND	ND	1.1E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E9-GW	3.6E-01	3.1E+00	2.4E+00	ND	ND	3.9E+01	8.6E-02	6.7E+01	ND	ND	1.2E-01	2.2E-01	ND	ND	ND	ND	ND	ND	ND	ND	1.5E-01	ND	ND
E10-GW	ND	ND	ND	ND	ND	ND	ND	1.5E-01	1.0E-01	ND	ND	2.6E-01	ND	ND	ND	1.6E-01	9.3E-02	ND	ND	ND	ND	ND	ND
E15-GW	6.3E-01	5.8E+00	3.6E+00	ND	ND	4.1E+01	1.6E-01	6.5E+01	ND	ND	2.1E-01	2.9E-01	ND	ND	ND	ND	3.4E-01	1.8E-01	6.2E-01	1.0E+00	1.0E+01	2.2E-01	1.2E-01

NA - not available

[1] MTCA Cleanup Levels and PRGs as Total Xylenes

4.2.3 Metals

Of the EPA priority metals, only five dissolved metals were detected above analytical method detection limits (see Table 4-7 below). The detected metals were arsenic, barium, selenium, zinc, and mercury. Arsenic slightly exceeded the EPA Region IX PRG in boring B6. No other detected metal was present over the indicated standards in any of the ground water samples.

Table 4-7. Detected Metals in Ground Water

	Arsenic	Barium	Selenium	Zinc	Mercury
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
EPA Region IX PRGs	4.5E-02	2.6E+03	1.8E+02	1.1E+04	1.1E+01
Method A Cleanup Levels	5.0E+00	NA	NA	NA	2.0E+00
Sample ID					
B1-GW	1.5E-02	3.9E-02	2.7E-01	1.1E-02	3.8E-02
B4-GW	3.6E-02	3.9E-02	4.0E-01	ND	5.0E-02
B6-GW	**4.6E-02**	ND	4.0E-01	ND	4.5E-02
B9-GW	2.9E-02	7.1E-03	3.4E-01	ND	4.6E-02
B15-GW	1.2E-02	ND	4.0E-01	ND	5.9E-02

NA - Not Available
1 - MTCA Cleanup Level and PRG based on Chromium VI
2 - PRG based on Lead (tetraethyl)

4.2.4 Semi-Volatile Constituents

Nine SVOCs were detected in the samples submitted from the site (see Table 4-8 below). The Method A Cleanup Level for pyrene was exceeded in water sample B15-GW. The EPA Region IX PRG for bis(2-ethylhexyl)phthalate was exceeded in water samples B10-GW and B15-GW. No other exceedences were present.

Table 4-8. Detected Semi-Volatile Constituents in Ground Water

	2-Methylphenol	3- & 4-Methylphenol	2,4-Dimethylphenol	Benzoic Acid	Naphthalene	2-Methylnaphthalene	N-Nitrosodiphenylamine	Pyrene	bis(2-Ethylhexyl)phthalate
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
EPA Region IX PRGs	1.8E+02	1.8E+02	7.3E+02	1.5E+05	6.2E+00	NA	1.4E+01	1.8E+02	**4.8E+00**
Method A Cleanup Levels	NA	NA	NA	NA	1.6E+02	NA	NA	**1.0E-01**	NA
Sample ID									
B1-GW	ND	ND	ND	ND	ND	ND	ND	ND	ND
B4-GW	1.2E+00	9.5E+00	3.9E-01	ND	8.9E-01	ND	ND	ND	ND
B6-GW	ND	ND	ND	ND	ND	ND	ND	ND	ND
B9-GW	ND	ND	ND	ND	ND	ND	ND	ND	ND
B10-GW	ND	ND	ND	5.0E+01	ND	ND	ND	ND	**1.4E+01**
B15-GW	ND	ND	ND	2.8E+00	7.9E-01	5.1E-01	2.5E+00	**1.8E-01**	**1.6E+01**

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The Phase II Investigation consisted of a sampling program at selected locations of interest. Eleven sampling locations were sampled during the investigation, although additional sampling locations had previously been approved, but were eliminated due to time constraints. Significant environmental impacts were encountered during the Phase II site activities. Of primary concern are the following:

- High levels of chlorinated VOCs are present in the vicinity of the Boring B4 in the asphalt-paved area. The source of the release may be the nearby catch basin or other up-gradient location on the site.

- Vinyl chloride was detected in several of the ground water samples. Because of its high toxicity and presence in concentrations exceeding MTCA standards and EPA PRGs, additional characterization of its distribution is recommended.

- Free petroleum product is present at the east side of the factory, along the railroad spur. Ground staining and apparent distressed vegetation suggest larger impacts are present in this area than indicated by the analytical data for B15.

- Significant TPH impacts were detected under the concrete slab floor of the facility.

5.2 Recommendations

While efforts can be make to address current impacts to the site, effective long-term mitigation and remedial efforts will not be effective until current waste control operations/procedures are revised and structure improvements are made. The following recommendations are made based on the results of the Phase II conclusions presented above:

1. All facility procedures should be reviewed to develop improved methods of controlling hazardous substances and preventing their release to the environment.

2. Subsurface vaults for fluid containment and processing, and surface/floor waste fluid races should be assessed and relined or replaced if needed. Additionally, since the floor area on the north end of the manufacturing building is commonly subjected to impacts by waste lubrication and cooling fluids, the entire floor structure should be re-sealed to prevent migration of this fluids through crack and seams to the subsurface media. Improved methods of operation, fluid and chemical control, and continuous monitoring should be implemented so that releases do not occur from the mechanical systems of the facility.

3. Known areas of contaminant impacts should be further characterized in order to begin mitigation and remediation. In particular, it should be determined if off-site impacts have occurred, and if so, if there are any human or ecological receptors that may be endangered. Any potential for offsite migration of contamination should be prevented.

Significant environmental impacts were detected during this Phase II Assessment. Since this assessment was performed to evaluate potential liability that might be assumed if property purchase is completed, PRK-ENW recommends that Gorge Leasing seek competent legal counsel experienced with acquisition of property with environmental liabilities before negotiating the proposed property transaction.

6 LIMITATIONS

The scope of this report is limited to observations made during on-site work; interviews with knowledgeable sources; and review of readily available published and unpublished reports and literature. As a result, these conclusions are based on information supplied by others as well as interpretations by qualified parties.

The focus of the site closure does not extend to the presence of the following conditions unless they were the express concerns of contacted personnel, report and literature authors or the work scope.

1. Naturally occurring toxic or hazardous substances in the subsurface soils, geology and water
2. Toxicity of substances common in current habitable environments, such as stored chemicals, products, building materials and consumables,
3. Contaminants or contaminant concentrations that are not a concern now but may be under future regulatory standards.
4. We are unable to predict events that may occur after our site visit, such as illegal dumping or accidental spillage.

There is no practice that is thorough enough to absolutely identify the presence of all hazardous substances that may be present at a given site. PRK-ENW's investigation has been focussed only on the potential for contamination that was specifically identified in the scope of work. Therefore, if contamination other than that specifically mentioned is present and not identified as part of a limited scope of work, PRK-ENW's environmental investigation shall not be construed as a guaranteed absence of such materials.

PRK-ENW has endeavored to collect representative analytical samples for the locations and depths indicated in this report. However, no sampling program can thoroughly identify all variations in contaminant distribution.

We have performed our services for this project in accordance with our agreement and understanding with Gorge Leasing. This document and the information contained herein have been prepared solely for the use of Gorge Leasing.

PRK-ENW performed this study under a limited scope of services per our agreement. It is possible, despite the use of reasonable care and interpretation, PRK-ENW may have failed

to identify regulation violations related to the presence of hazardous substances other than those specifically mentioned at the closure site. PRK-ENW assumed no responsibility for conditions that we did not specifically evaluate or conditions that were not generally recognized as environmentally unacceptable at the time this report was prepared.

7 REFERENCES

1. D.E. Mulineaux, 1965, Geologic Map of the Renton Quadrangle, King County, Washington; US Geological Survey Geological Quadrangle Map GQ-405;

2. Washington State Deportment of Natural Resources Geologic Map GM-41, 1994

APPENDIX A SOIL BORINGS

B1

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	5 Feet
Borehole Diameter	2.5 Inches	Depth to Water	3.5 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Bark dust, no recovery						
	Brown Sand, (fill), well sorted, no odor or discoloration						
	Sandy Gravel, moist but wet at 3.5 feet, no odor, gray						
	Clayey silt, gray with slight sheen, wet, appears to be perched water Groundwater sample B1-GW			B1-3.5	0 ppm	sheen	
		5					

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EVREN Northwest

B2

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	3.5 Feet
Borehole Diameter	2.5 Inches	Depth to Water	Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Bark dust						
	Sand, brown, dry						
	[black plastic]						
	Sand, brown, wet, well sorted						
	Silty Sand, gray, cohesive, damp to moist			B2-3.5	0 ppm	none	
		5					

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B3

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	10 Feet
Borehole Diameter	1.5 Inches	Depth to Water	6 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	asphalt						
	[no recovery - very soft drilling]						
	Silty Sand, green-gray, possible sheen on inside of sleeve, (63% recovery 2'-4')			B3-2'-4'		gm-gy	
	Silty Sand, green-gray to brown,						
	Silty sand, gray, no odor, dry to damp, granular, (50% recovery 4'-6'), SP-SM	5					
	Silty sand, saturated, SP-SM grading to SP at bottom of zone, gray(63% recovery 6'-8')						
	Sand, saturated, with dark gray fluid/water/stain						
	Sand, saturated, SP-SM grading to SP at bottom of zone, (63% recovery 6'-8')						
	Silty Sand, fine, gray to dark gray (mottled), SP-SM						

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EVREN Northwest

B4

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	10 Feet
Borehole Diameter	1.5 Inches	Depth to Water	6 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	asphalt						
	Silty sand, very soft, brown, no odor, SP-SM; (50% recovery 0.3'-3')						
	Silty Sand, brown, damp, slight unknown odor, possible sheen on inside of sleeve, (33% recovery 3'-6')						
	Sand, gray, "industrial" odor, damp at top to wet at bottom of zone, granular, SP-SM	5					
	Silty Sand, brown, compressible, SP-SM (50% recovery 6'-8')						
	Sand, saturated, hard drilling, very fine grain, granular, slight odor, (63% recovery 68'-10'), hydraulic heave between 2 foot pushes at 8 feet. Groundwater sample B4-GW						

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B6

REXAM — 1220 North 2nd Street — Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	9 Feet
Borehole Diameter	1.5 Inches	Depth to Water	5 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Asphalt and hard packed fill						
	Sand SP, fine to medium-grained, dry, very soft, brown, no odor, SP-SM; (67% recovery 1'-3'; 71% recovery 3'-5'))			B3-3'-5'		none	
	Alternating fine and medium sand, SP, gray, wet. Gastech warnings with readouts in upper bore hole of 40 ppm to 3,000 ppm.	5					
	Silt, fine, nonplastic, granular to poorly cohesive, gray, well sorted (58% recovery 7'-9') Groundwater sample B6-GW						

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B9

REXAM	1220 North 2nd Street		Kent, Washington
Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	9 Feet
Borehole Diameter	1.5 Inches	Depth to Water	7 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	asphalt and hard packed fill						
	Silt, brown-gray mottled with iron-oxide nodules (fill), dry.						
	Sandy silt, with metal flakes and organic carbon, brown, dry (slaking appearence), fill	5					
	Sand, fine-grained, well sorted, brown, no odor (88% recovery 5'-7')			B5-5'-7'		none	
	Sand, fine-grained, well sorted, gray, no odor (58% recovery 5'-7') Groundwater sample B9-GW						

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B10

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/11/01	Total Depth of Borehole	9 Feet
Borehole Diameter	1.5 Inches	Depth to Water	6 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Very hard, no sample						
	Silt, gray, dry slaking appearence, not very cohesive, (83% recovery for 2'-4' and 4'-6'); Gastech reading 200 ppm in top of boring	5					
	Sand, gray, fine, saturated, granular Groundwater sample B10-GW			B10-6'-9'		none	

B15

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	7 Feet
Borehole Diameter	1.5 Inches	Depth to Water	5 Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Aggregate crushed rock, free petroleum product oozing from interstices between gravel fragments,						
	Brown Silty Sand, dry						
	Sand, medium-grained, gray, no odor (63% recovery for 1'-3')						
	Silty Sand, brown, SP-SM						
	Sand, gray, medium to coarse-grained, fining downward, no odor, wet at 5 feet (67% recovery 3'-5'; 58% recovery 5' - 7') Groundwater sample B15-GW	5		B15-3'-5'		none	

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B17

REXAM | 1220 North 2nd Street | Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	2.1 Feet
Borehole Diameter	1.5 Inches	Depth to Water	Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Concrete						
	Sand, medium-grained, dark gray, strong petroleum odor (waste oil?), (fill)			B17-18"-25"	300 ppm	dark gry	
		5					

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B18

REXAM	1220 North 2nd Street	Kent, Washington

Project Number	E01276	Drill Rig	
Geologist	Woller	Ground Elevation	Feet
Date Drilled	5/10/01	Total Depth of Borehole	1 Feet
Borehole Diameter	1.5 Inches	Depth to Water	Feet

Graphic Log	Description	Depth	Sample	Sample	OVM	Obs./Odor	Completion
	Concrete						
	Cemented sand subgrade; refusal to hand auger (no hand-auger penetration with sample barrel); subsequently sampled with one-inch diameter solid stem hand auger, grains lifted on flights.	5					

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APPENDIX B SAMPLING AND ANALYSIS PLAN

Sampling and Analysis Plan

All samples shall be collected and prepared so as to maintain the highest integrity of the sampling program.

Decontamination procedures

Before collecting any sample, collection tools will be decontaminated using a sequential wash of Alconox or trisodium phosphate, rinsed in tap water from a known source (e.g., municipal water), and subjected to a final rinse with distilled water. Fresh latex gloves will be worn during any sample collection and when handling tools which are to be inserted into sampling areas. Sampling tools will consist of the following:

Soil sampling

Hand auger
Push probe with new sampling sleeves for each sample
Clean metal spoon (for organic analytical samples only)
Clean plastic spoon (for metals samples only)
Clean (fresh) latex gloves

Ground Water sampling

Temporary well point
Select sand for annular space
Clean tubing for each water sample collected
Bladder or peristaltic pump
Bailer and string trimmer line

Wash and rinse liquids will be changed frequently during sampling activities. Wash and rinsate fluids will be collected, if possible, and appropriately disposed. Solid waste generated during sampling activities (foil, paper towels, etc.) will also be appropriately disposed.

Sampling procedures

All samples will be promptly sealed after collection and labeled with a distinctive designation. After labeling, the samples shall be placed in cooled storage (4° C). Chain of custody protocols will be effective from the time of sample collection and collection of blanks. Samples will be kept secured until delivered to the laboratory.

Push-Probe Sampling of Temporary Borings

Soil samples will be collected in a push probe sampling sleeve (preferred) or hand auger sampling barrel. Subsurface characteristics (lithology, odor, color, etc) will be logged simultaneously by the on-site geologist. Soil cores will be recovered in clean, clear polymer sleeves in 4-foot long "pushes" and visually screened and observations recorded in a field book, duly noting sample location, sampling time, and samplers. The selected sample interval will be isolated by cutting the sleeve at the appropriate locations, and immediately sealing with Teflon tape-lined vinyl end caps. The sample will then be labeled, the designation recorded in a field book, and then the sample should be placed in a cooler with ice or frozen commercial freeze-paks. Sample lengths shall be no shorter than 6" to ensure adequate sample volume.

If the auger is to be used, the auger is to be cleaned at the beginning of each boring and preferably before taking any sample. The sample will be transferred to the appropriate container using clean latex gloves or clean stainless-steel spoons after homogenizing in a stainless steel bowl (spoons and bowls to be subjected to the decontamination procedure described above). Clean latex gloves are to used while handling the sampling barrel and another fresh pair used while transferring the sample to the appropriate sampling container. The sample will then be sealed and labeled, the designation recorded in a field book, and then the sample should be placed in a cooler with ice or frozen commercial freeze-paks. At each sampling location two 8-oz jar containers will be collected at each sampling location to ensure adequate sample volume. Samples collected for VOC analysis shall be packed so as to minimize headspace within the sealed container.

Only one depth interval will be sampled in each boring, unless varying contaminant impacts are evident by visual or olfactory evidence or non-background OVM meter readings. Each boring will be terminated at 3-feet below the first occurrence of groundwater, or at 15 feet, whichever occurs first.

Groundwater Sampling

If ground water is encountered during boring operations, the boring will be terminated approximately 3-feet below the ground water table. A clean, stainless steel well-point will be inserted into the boring. The depth to static-water will be recorded in a field book. Depending on the grain-size of the materials encountered in the interval to be samples, a sand-pack may be developed. If so, select sand shall then be slowly poured into the annular space around the well point.

Teflon tubing then will be inserted into the well-point and connected to a peristaltic sampling pump equipped with surgical tubing. Approximately 1/2-liter of water will then be purged and collected for future appropriate disposal. After purging, a selected volume of groundwater should be collected for field parameter determination (temperature, pH, conductivity). Samples for VOC analysis will be collected in 40-ml glass VOA-type bottles equipped with Teflon lines. Samples shall be collected with minimum turbulence and so as to eliminate all headspace within the appropriate container. The VOC samples will then be preserved with hydrochloric acid and immediately capped, again checking that no free headspace is present within the container. Samples collected for metals analysis shall be immediately field-filtered using a 0.45-micron filter of suitable manufacture and stored in 250-ml high-density polyethylene (HDPE) bottles equipped with Teflon lined caps. Other samples (e.g., SVOCs) should be allowed some headspace in order that the containers don't break in refrigerated storage or in transit. The samples should then be placed in a cooler with ice or frozen commercial freeze-paks.

At each sampling location three 40-ml VOAs, three 1-liter amber bottles, and 1 HDPE bottle should be appropriately filled and appropriately preserved, sealed and labeled.

Borehole completion
Boreholes will be backfilled with Bentonite Holeplug (3/8" or granular). Concrete and asphalt surfaces will be immediately sealed

Concrete Cores/Patch/Seal
To ensure an adequate seal, concrete cores will be patched in the following manor:

1. During coring, all dust, water and other debris will be collected during coring operations using a wet/dry vacuum to ensure that all derived waste does not enter the facility lubrication collection system;
2. Bentonite will be filled to the level of the bottom of the concrete pad cored;
3. Hydraulic cement (non-shrink ground augmented with vermiculite) will be used;
4. A marine epoxy surface seal will be coated over the coring patch, centering on the patch covering an area of not less than 1-square foot.

Investigation-derived waste (IDW)

IDW should be controlled and collected wherever possible. Facility managers should be asked for appropriate means of disposing of the waste. Only if necessary, the waste may be removed from the site if there are no evident indications of hazardous substances or characteristics. Fluids (purge water) should be similarly handled.

Safety considerations

See Evren Northwest's health and safety plan.

Record-keeping

Records shall be kept of all field activities and observations. Records shall include samples collected, samplers involved with each sample, time, weather, and observations concerning materials textures, colors, odors, and other relevant data. All record-keeping shall be performed in appropriate field books or clipboards with appropriate forms. All field records will be kept secure at all times. **All data is confidential until released by PRK Environmental.**

Analysis Plan

RCRA Metals (Total) - Ag, As, Ba, Co, Cr, Hg, Pb, Se	200.7/6010 (245.2/7470 for Hg) or TCLP	8-oz Clear wide mouth glass, minimum headspace		ice

Groundwater:				
Volatile Organic Hydrocarbons	EPA Method 8260	40-ml Teflon cap VOA containers, preserved with HCl, no headspace	14-days	ice/HCl
Petroleum Hydrocarbons	NWTPH-HCID	1 liter bottle clear/brown	14-days	ice
	NWTPH-Gx (only if detected by HCID)	8-oz Clear wide mouth glass or 40-ml VOA	14-days	ice
	NWTPH-Dx (only if detected by HCID)	1 liter bottle clear/brown	14-days	ice
Semivolatile Organic Hydrocarbons	EPA Method 8270-SIM	1-liter Boston round glass (brown)	7-days/ extract 40-days	ice
RCRA Metals (dissolved) - Ag, As, Ba, Co, Cr, Hg, Pb, Se	200.7/6010 (245.2/7470 for Hg)	Field filtered through 0.45-micron filter; 250-ml High density polyethylene (HDPE), preserved with HNO3;	6-months (Hg 14 days)	ice/HNO_3
Indicators	pH	per instrument instructions	Field	
	Temperature	per instrument instructions	Field	
	Conductivity	per instrument instructions	Field	
Blanks	Transport blank	40-ml Teflon cap VOA containers, preserved with HCl, no headspace		HCl/Ice
	Transfer blank	40-ml Teflon cap VOA containers, preserved with HCl, no headspace		ice
	Lab blank	40-ml Teflon cap VOA containers, preserved with HCl, no headspace		ice

APPENDIX C HEALTH AND SAFETY PLAN

HEALTH AND SAFETY PLAN
REXAM (National Can)
Kent, Washington

HEALTH AND SAFETY PLAN
REXAM
Kent, Washington

Project Manager:	*Lynn Green and Phil Brewer (PRK Environmental)*
Principal Author:	*Lynn Green*

Prepared for:	EVREN Northwest
Site Address:	REXAM 1220 N. Second Avenue Kent, Washington
Prepared by:	EVREN Northwest PO Box 80747 Portland, Oregon 97280-1747 (503) 452-5561

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APPENDICES

1.0 INTRODUCTION

This Health and Safety Plan (HASP) was designed to identify, evaluate, and minimize potential health and safety hazards, as well as to provide emergency response guidance for accidents, which may occur during environmental field activities being completed by EVREN Northwest. (ENW) at the REXAM facility in Kent, Washington.

This HASP covers the employees of ENW and subcontractor personnel who have the potential for exposure to hazardous waste, hazardous substances and other hazards. This HASP is intended to comply with the requirements of the Occupational Safety and Health Administration (OSHA) -- 29 CFR 1910.120 and the ENW Corporate Health and Safety Program.

Amendments to this HASP may be made as the contaminant profile is updated, a change in the work status or tasks is made, or regulatory requirements dictate. Any changes will be brought to the attention of those covered under this HASP through additional training or advisements.

This HASP addresses the procedures to be adhered to during the field activities at the Convent. All personnel working at this site will follow all safety provisions outlined in this HASP. The Site Safety Officers' (Project manager's) primary responsibility is implementing this HASP and the tailgate meeting forms in Appendix A. All questions or concerns regarding site safety should be directed to the Project Manager.

2.0 PERSONNEL

The Corporate Health and Safety Officer for this project will be Lynn Green of ENW. In this capacity, Mr. Green will oversee compliance with all applicable health and safety regulations. Under Mr. Green's direction, day-to-day site safety activities will be overseen by the designated Project Manager. Safety is effected by all involved parties or organizations. For this reason, the following list of key personnel and their organizations have been identified.

Corporate H & S Officer	Lynn Green, ENW	(503) 452-5561
Project Manager	Lynn Green, ENW	(503) 452-5561
Site Contact	Phil Brewer	(503) 292-5346

3.0 BACKGROUND

The REXAM facility is located in Kent, Washington. Subsurface and possibly ground water samples will be collected from several areas external to the building, and form two interior areas (within the manufacturing building confines).

.

The fieldwork consists of these tasks:

1. Geophysical survey of the immediate work area;
2. Installation of exploration borings and sampling;
3. Site cleanup and restoration.

Task 1.0

Fieldwork will employ the use of one or more of the following types of equipment;

L. Geoprobe manual push-equipment;
LI. Concrete corer;
LII. Hand auger and sample pumps;

There is the possibility of contaminated soils and or ground water to be found in the subsurface environment. If circumstances or site conditions alter any of the methods or procedures outlined, which are pertinent to the investigations, this HASP will be updated to incorporate any such changes.

Tasks will initially be completed wearing Level D personal protective equipment (PPE) and will be adjusted as site conditions warrant. Detailed discussions of the purpose and scope of the investigations are contained in the work plan dated April 24, 2001. Lynn Green may be contacted regarding additional information about the site at (503) 452-5561.

4.0 HAZARD ASSESSMENT AND ABATEMENT

Potential hazards at the sites include:

- Heavy equipment operation;
- Contaminated soil or ground water (ingestion of contaminated soil , inhalation of dust or vapors, and dermal absorption);
- Weather conditions; and
- Other personnel considerations.

4.1 Heavy Equipment Operation

Heavy equipment is a concern. Heavy equipment of concern includes drive probe use, and concrete corer use. The heavy equipment will be operated with caution, and all personnel will avoid contact with moving parts to the maximum extent practical. Care will also be taken when using the equipment. All personnel will stay clear of the drive-probe, support trucks, and other heavy equipment as they are being moved from place to place.

4.2 Contaminated Soil and Groundwater

Contaminated soil may be located at this site. Contaminants expected are limited to petroleum hydrocarbons (diesel/oil-range), heavy metals, and possibly caustic or corrosive media.

The potential exposure pathways for these contaminants are ingestion of contaminated soil, inhalation of contaminated airborne dust and vapor inhalation, and dermal absorption.

All personnel will minimize their contact with contaminated materials, and all samples will be collected with chemical-resistant gloves. Personnel will thoroughly wash their hands and other body parts, as necessary, upon leaving the work area and before eating, drinking, or other activities.

Release of dust and vapors to the air will be minimized, and all personnel will remain upwind of the work areas to the maximum extent practical.

4.2.1 Petroleum related compounds

Lube and fuel oils are petroleum products that are used in many types of engines, heaters, furnaces, lubricants and stoves. Lube oils come from crude petroleum and are refined to meet specifications for each use. Lube oils are complex mixtures of straight- and branched-chained (aliphatic) cyclic and aromatic hydrocarbons. In addition they may contain small amounts of nitrogen, sulfur and other substances as additives.

4.2.1.1 Physical Properties

The exact chemical composition of each lube/fuel oil is not well defined but primarily consist of aliphatic hydrocarbons (C12-C50). Additionally, potential exposure to corrosive or caustic media and/or various metals is exists based on current manufacturing process.

Exposure

The primary routes of potential human exposure are ingestion of contaminated soil, dermal contact and inhalation of vapors. The Occupational Safety and Health Administration (OSHA) and the Air Force Office of Safety and Health (AFOSH) has established the maximum allowable concentration of petroleum products in air in the workplace during an 8-hour day, 40 –hour workweek to be 400 ppm.

Regulatory Exposure Standards

Petroleum-related hydrocarbons	400 PPM OSHA 8-HOUR PERMISSIBLE EXPOSURE LEVEL (PEL) 350 PPM NIOSH
Sulfuric Acid	PERMISSIBLE EXPOSURE LIMIT: TABLE Z-1 8-HR TIME WEIGHTED AVG: 1 MG/CU M 8 HR TIME WEIGHTED AVG (TWA) 1 MG/CU M; 15 MIN SHORT TERM EXPOSURE LIMIT (STEL) 3 MG/CU M RECOMMENDED EXPOSURE LIMIT: 10 HR TIME-WEIGHTED AVG: 1 MG/CU M (NIOSH)
Metals	

4.2.1.2 Toxicity

Petroleum-related Compounds: Little toxicity information is available regarding fuel oils. Breathing fuel oils for short periods of time can cause nausea, increase blood pressure, and irritation or redness of the eyes. Occasionally vapors can affect the nervous system and cause headache, light-headedness, poor coordination and difficulty in concentration. Dermal contact with hydrocarbon based products have a defatting action on the skin and cause redness, irritation and rashes.

Sulfuric Acid: Corrosion of mucous membranes of mouth, throat, and esophagus, with immediate pain and dysphagia. The necrotic areas are at first grayish white but soon acquire a blackish discoloration and sometimes a shrunken or wrinkled texture; the process is described as a "coagulation necrosis." 2) Epigastric pain, which may be

associated with nausea and the vomiting of mucoid and "coffee-ground" material. At times, gastric hemorrhage may be intense, and the vomitus then contains fresh blood. Profound thrist. 3) Ulceration of all membranes and tissues with which the **acid** comes in contact

Routes of Exposure

Exposure to fuel oils can occur from inhalation of vapors and dusts, eye contact, skin contact, and ingestion of contaminated food, and soil.

Route of Exposure	First Aid to be Rendered
Inhalation:	• Remove person from exposure. • Begin rescue breathing if breathing has stopped and CPR if heart action has stopped. • Is symptoms do not subside with fresh air, transfer promptly to a medical facility. Medical observation may be required.
Eye Contact:	• Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids. • Consult a physician if pain, redness, or irritation persists.
Skin Contact:	• Remove contaminated clothing. • Wash contaminated skin with soap and water. • Consult a physician if redness or irritation persists.
Ingestion:	• Get immediate medical attention. • If the victim is unconscious, do nothing except keep victim quiet and warm.

Personal Protective Equipment

To protect hands wear gloves. Goggles may be necessary to protect against eye contact, if appropriate. Long-sleeved clothing, rubber overshoes and coveralls will normally be sufficient to protect against skin contact.

Contaminated clothing should be disposed of daily or be washed with a strong detergent and hot water before reuse.

4.3 Severe Weather

4.3.1. Heat Exhaustion

Heat exhaustion is a state of very definite weakness or exhaustion caused by the loss of fluids from the body. Heat exhaustion is less dangerous than heat stroke and needs to be treated.

- **Symptoms:** Pale, clammy, moist skin, profuse perspiration and extreme weakness. Body temperature is normal, pulse is weak and rapid, and breathing is shallow. The person may have a headache, may vomit, and may be dizzy.

- **Treatment:** Remove the person to a cool, air-conditioned place, loosen clothing, place in a head-low position, and provide bed rest. Consult a physician, especially in severe cases. The normal thirst mechanism is not sensitive enough to ensure body fluid replacement. Have patient drink one to two cups of water immediately, and every 20 minutes thereafter, until symptoms subside. Total water consumption should be one to two gallons per day.

4.3.2 Storms

Storms strong enough to endanger operations may require termination of site activities. These can include thundershowers, electrical storms, high winds, dust devils, or protracted conditions of less intensity, which interfere directly with safety (high heat) or quality control efforts (rain, blowing dust). The Site Safety Officer will stop all work whenever dangerous weather conditions occur.

4.4 Other Personnel Considerations

No personnel will attempt to lift more than 50 pounds. Poor lifting technique may cause injury when attempting to lift even a few pounds. Any person exhibiting poor lifting technique will be corrected by one of the other workers on site. Good lifting technique requires keeping the back as straight as possible and bending the legs. All personnel will eat regular meals and receive adequate sleep to sustain energy and awareness. Maintenance of "Team Spirit" is essential.

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE) AND OTHER REQUIRED EQUIPMENT

The PPE and other safety equipment required for Level D are described below.

5.1 General Safety Equipment

First Aid Kit
1 - A, B, C Fire Extinguisher
Cellular Telephone
Eye Wash

5.2 Level D Personal Protective Equipment (PPE)

Work uniform with long sleeves and long pants
Steel-toed boots (leather or PVC)
Chemical Resistant Gloves (Nitrile, 4H or equivalent), as needed
Safety glasses
Hard hat
Eye protection

6.0 GENERAL OPERATIONAL PROCEDURES

Level D PPE will be required. Entry into any work area will be prohibited by any person not having the minimum PPE required for that site.

6.1 Communications

Successful communications between field personnel in and around the sampling areas is essential. Hand signals will be used as necessary and have the following meanings:

- Clutching throat - cannot breathe;
- Thumbs up - okay or affirmative;
- Thumbs down - having trouble or negative; and
- Hands on top of head - need help, remove at once.

6.2 Standard Operating Procedures

1. No smoking, eating, drinking, gum or tobacco chewing, or applying of cosmetics will be permitted in the designated work areas.

2. The instructions of the Project Manager will be followed.

3. No horseplay will be tolerated.

4. Airborne release of contaminants will be minimized.

5. Contact with waste material will be minimized.

6. The hands and face of personnel must be thoroughly washed as soon as possible upon leaving the work area and before eating, drinking, or other activities.

7. Since medicine can potentiate the effects of toxic chemicals in exposure conditions, medicines should not be used by employees working on the site. Personnel who must be on medication should advise the Project Manager prior to beginning work at the site.

8. No alcoholic beverages or drowsiness-inducing medications will be consumed before or during work activities.

9. All personnel are responsible for reading and understanding the provisions of this HASP. Any individual who will be doing work on the site needs to sign the HASP Acknowledgment verifying that they have reviewed this HASP and agree to follow all of the procedures put in place by the Project Manager.

Appendix B is Health and Safety Acknowledgment Signing form to be completed by each individual working at the site.

7.0 MEDICAL MONITORING

Workers are required by Occupational Safety and Health Administration (OSHA) to have a full hazardous materials physical if exposed to concentrations of toxic substances above permissible exposure limits (PEL) for 30 or more days per year. It is the policy of ENW that any person with the potential for exposure at or above any threshold limit value (TLV) will have a complete physical before beginning such work.

8.0 EMERGENCY RESPONSE PLAN AND SERVICE

In the unlikely event of a fire or explosion, emergency services will be immediately contacted (fire, police, etc.). In addition, all site personnel will be notified of the problem. Only small fires may be extinguished by workers at the site. If the fire is too large, or if personnel are in doubt, the affected area will be evacuated. CHEMTREC will be notified in case of a chemical emergency situation.

If there is an accident or emergency at the site, one or more of the following services will be contacted as necessary:

Fire	911	
Police	911	
Ambulance	911	
Emergency	911	
CHEMTREC (chemical emergencies only)		(800) 424-9300

Primary Hospital: Name not known

Directions to the Hospital

The nearest hospital is located north on HWY 167 then east on SW 43rd Street.

Appendix B.

Acknowledgment Signature Page

HEALTH AND SAFETY PLAN
ACKNOWLEDGMENT SIGNATURE PAGE

To be signed by all on-site personnel and returned to:

Lynn Green, Health and Safety Officer
EVREN Northwest
PO Box 80747
Portland, OR 97280-1747

I have read this Health and Safety Plan, and I agree to abide by these safety rules and all applicable safety regulations while working at this site. I understand that any violation of these rules will result in my removal from the work area.

Signature / Title - Project Role	Date
Pm	9.mar 01
Tech	5/9/01
PM	5/9/01
Tech	5/9/01
TECH	5/9/01
HYDROLOGIST	5/9/01

APPENDIX D LABORATORY DATA

D-1 - SOIL ANALYTICAL DATA

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071X02
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/20/01
% Solids	92.44
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	107		75	115
Fluorobenzene	99.9		84.7	115
Toluene-D8	104		91.2	109
Ethylbenzene-d10	116	X9	90	106
Bromofluorobenzene	98.1		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	8.7	4.3	
Chloromethane	ND	8.7	4.3	
Vinyl chloride	ND	8.7	4.3	
Bromomethane	ND	8.7	4.3	
Chloroethane	ND	8.7	4.3	
Trichlorofluoromethane	ND	8.7	4.3	
1,1-Dichloroethene	ND	8.7	4.3	
Methylene chloride	ND	8.7	4.3	
trans-1,2-Dichloroethene	ND	8.7	4.3	
1,1-Dichloroethane	36	8.7	4.3	
2,2-Dichloropropane	ND	8.7	4.3	
cis-1,2-Dichloroethene	ND	8.7	4.3	
Bromochloromethane	ND	8.7	4.3	
Chloroform	ND	8.7	4.3	
1,1,1-Trichloroethane	ND	8.7	4.3	
Carbon Tetrachloride	ND	8.7	4.3	
1,1-Dichloropropene	ND	8.7	4.3	
Benzene	ND	8.7	4.3	
1,2-Dichloroethane	ND	8.7	4.3	
Trichloroethene	ND	8.7	4.3	
1,2-Dichloropropane	ND	8.7	4.3	
Dibromomethane	ND	8.7	4.3	
Bromodichloromethane	ND	8.7	4.3	
cis-1,3-Dichloropropene	ND	8.7	4.3	
Toluene	28	8.7	4.3	
trans-1,3-Dichloropropene	ND	8.7	4.3	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X02 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	8.7	4.3	
Tetrachloroethene	110	8.7	4.3	
1,3-Dichloropropane	ND	8.7	4.3	
Dibromochloromethane	ND	8.7	4.3	
1,2-Dibromoethane	ND	8.7	4.3	
Chlorobenzene	ND	8.7	4.3	
Ethylbenzene	49	8.7	4.3	
1,1,1,2-Tetrachloroethane	ND	8.7	4.3	
m,p-Xylene	860	17	8.7	
o-Xylene	510	8.7	4.3	E
Styrene	ND	8.7	4.3	
Bromoform	ND	8.7	4.3	
Isopropylbenzene	160	8.7	4.3	
Bromobenzene	ND	8.7	4.3	
n-Propylbenzene	260	8.7	4.3	
1,1,2,2-Tetrachloroethane	ND	8.7	4.3	
1,2,3-Trichloropropane	ND	8.7	4.3	
2-Chlorotoluene	ND	8.7	4.3	
1,3,5-Trimethylbenzene	590	8.7	4.3	E
4-Chlorotoluene	ND	8.7	4.3	
t-Butylbenzene	ND	8.7	4.3	
1,2,4-Trimethylbenzene	1400	8.7	4.3	E
sec-Butylbenzene	ND	8.7	4.3	
1,3-Dichlorobenzene	ND	8.7	4.3	
4-Isopropyltoluene	230	8.7	4.3	
1,4-Dichlorobenzene	ND	8.7	4.3	
n-Butylbenzene	460	8.7	4.3	E
1,2-Dichlorobenzene	ND	8.7	4.3	
1,2-Dibromo-3-chloropropane	ND	8.7	4.3	
1,2,4-Trichlorobenzene	ND	8.7	4.3	
Hexachlorobutadiene	ND	8.7	4.3	
Naphthalene	140	8.7	4.3	
1,2,3-Trichlorobenzene	ND	8.7	4.3	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-3'-5'
Lab ID:	98071X04
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/19/01
% Solids	86.21
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	103		75	115
Fluorobenzene	98.7		84.7	115
Toluene-D8	102		91.2	109
Ethylbenzene-d10	103		90	106
Bromofluorobenzene	97.3		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.41	0.2	
Chloromethane	ND	0.41	0.2	
Vinyl chloride	ND	0.41	0.2	
Bromomethane	ND	0.41	0.2	
Chloroethane	ND	0.41	0.2	
Trichlorofluoromethane	ND	0.41	0.2	
1,1-Dichloroethene	ND	0.41	0.2	
Methylene chloride	ND	0.41	0.2	
trans-1,2-Dichloroethene	ND	0.41	0.2	
1,1-Dichloroethane	ND	0.41	0.2	
2,2-Dichloropropane	ND	0.41	0.2	
cis-1,2-Dichloroethene	ND	0.41	0.2	
Bromochloromethane	ND	0.41	0.2	
Chloroform	ND	0.41	0.2	
1,1,1-Trichloroethane	ND	0.41	0.2	
Carbon Tetrachloride	ND	0.41	0.2	
1,1-Dichloropropene	ND	0.41	0.2	
Benzene	0.43	0.41	0.2	
1,2-Dichloroethane	ND	0.41	0.2	
Trichloroethene	0.22	0.41	0.2	J
1,2-Dichloropropane	ND	0.41	0.2	
Dibromomethane	ND	0.41	0.2	
Bromodichloromethane	ND	0.41	0.2	
cis-1,3-Dichloropropene	ND	0.41	0.2	
Toluene	0.69	0.41	0.2	
trans-1,3-Dichloropropene	ND	0.41	0.2	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X04 continued...

Analyte	Result (ug/kg)	PQL	MRL
1,1,2-Trichloroethane	ND	0.41	0.2
Tetrachloroethene	ND	0.41	0.2
1,3-Dichloropropane	ND	0.41	0.2
Dibromochloromethane	ND	0.41	0.2
1,2-Dibromoethane	ND	0.41	0.2
Chlorobenzene	ND	0.41	0.2
Ethylbenzene	ND	0.41	0.2
1,1,1,2-Tetrachloroethane	ND	0.41	0.2
m,p-Xylene	ND	0.81	0.41
o-Xylene	ND	0.41	0.2
Styrene	ND	0.41	0.2
Bromoform	ND	0.41	0.2
Isopropylbenzene	ND	0.41	0.2
Bromobenzene	ND	0.41	0.2
n-Propylbenzene	ND	0.41	0.2
1,1,2,2-Tetrachloroethane	ND	0.41	0.2
1,2,3-Trichloropropane	ND	0.41	0.2
2-Chlorotoluene	ND	0.41	0.2
1,3,5-Trimethylbenzene	ND	0.41	0.2
4-Chlorotoluene	ND	0.41	0.2
t-Butylbenzene	ND	0.41	0.2
1,2,4-Trimethylbenzene	ND	0.41	0.2
sec-Butylbenzene	ND	0.41	0.2
1,3-Dichlorobenzene	ND	0.41	0.2
4-Isopropyltoluene	ND	0.41	0.2
1,4-Dichlorobenzene	ND	0.41	0.2
n-Butylbenzene	ND	0.41	0.2
1,2-Dichlorobenzene	ND	0.41	0.2
1,2-Dibromo-3-chloropropane	ND	0.41	0.2
1,2,4-Trichlorobenzene	ND	0.41	0.2
Hexachlorobutadiene	ND	0.41	0.2
Naphthalene	ND	0.41	0.2
1,2,3-Trichlorobenzene	ND	0.41	0.2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-5'-7'
Lab ID:	98071X06
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/19/01
% Solids	77.72
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	102		75	115
Fluorobenzene	98.8		84.7	115
Toluene-D8	100		91.2	109
Ethylbenzene-d10	103		90	106
Bromofluorobenzene	95.3		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.42	0.21	
Chloromethane	ND	0.42	0.21	
Vinyl chloride	ND	0.42	0.21	
Bromomethane	ND	0.42	0.21	
Chloroethane	ND	0.42	0.21	
Trichlorofluoromethane	ND	0.42	0.21	
1,1-Dichloroethene	ND	0.42	0.21	
Methylene chloride	0.29	0.42	0.21	J
trans-1,2-Dichloroethene	ND	0.42	0.21	
1,1-Dichloroethane	ND	0.42	0.21	
2,2-Dichloropropane	ND	0.42	0.21	
cis-1,2-Dichloroethene	ND	0.42	0.21	
Bromochloromethane	ND	0.42	0.21	
Chloroform	ND	0.42	0.21	
1,1,1-Trichloroethane	ND	0.42	0.21	
Carbon Tetrachloride	ND	0.42	0.21	
1,1-Dichloropropene	ND	0.42	0.21	
Benzene	0.74	0.42	0.21	
1,2-Dichloroethane	ND	0.42	0.21	
Trichloroethene	0.46	0.42	0.21	
1,2-Dichloropropane	ND	0.42	0.21	
Dibromomethane	ND	0.42	0.21	
Bromodichloromethane	ND	0.42	0.21	
cis-1,3-Dichloropropene	ND	0.42	0.21	
Toluene	1.1	0.42	0.21	
trans-1,3-Dichloropropene	ND	0.42	0.21	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X06 continued...

Analyte	Result (ug/kg)	PQL	MRL
1,1,2-Trichloroethane	ND	0.42	0.21
Tetrachloroethene	ND	0.42	0.21
1,3-Dichloropropane	ND	0.42	0.21
Dibromochloromethane	ND	0.42	0.21
1,2-Dibromoethane	ND	0.42	0.21
Chlorobenzene	ND	0.42	0.21
Ethylbenzene	ND	0.42	0.21
1,1,1,2-Tetrachloroethane	ND	0.42	0.21
m,p-Xylene	ND	0.84	0.42
o-Xylene	ND	0.42	0.21
Styrene	ND	0.42	0.21
Bromoform	ND	0.42	0.21
Isopropylbenzene	ND	0.42	0.21
Bromobenzene	ND	0.42	0.21
n-Propylbenzene	ND	0.42	0.21
1,1,2,2-Tetrachloroethane	ND	0.42	0.21
1,2,3-Trichloropropane	ND	0.42	0.21
2-Chlorotoluene	ND	0.42	0.21
1,3,5-Trimethylbenzene	ND	0.42	0.21
4-Chlorotoluene	ND	0.42	0.21
t-Butylbenzene	ND	0.42	0.21
1,2,4-Trimethylbenzene	ND	0.42	0.21
sec-Butylbenzene	ND	0.42	0.21
1,3-Dichlorobenzene	ND	0.42	0.21
4-Isopropyltoluene	ND	0.42	0.21
1,4-Dichlorobenzene	ND	0.42	0.21
n-Butylbenzene	ND	0.42	0.21
1,2-Dichlorobenzene	ND	0.42	0.21
1,2-Dibromo-3-chloropropane	ND	0.42	0.21
1,2,4-Trichlorobenzene	ND	0.42	0.21
Hexachlorobutadiene	ND	0.42	0.21
Naphthalene	ND	0.42	0.21
1,2,3-Trichlorobenzene	ND	0.42	0.21

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-3'-5'
Lab ID:	98071X08
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/19/01
% Solids	84.32
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	104		75	115
Fluorobenzene	97.2		84.7	115
Toluene-D8	99.7		91.2	109
Ethylbenzene-d10	97.9		90	106
Bromofluorobenzene	105		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.44	0.22	
Chloromethane	ND	0.44	0.22	
Vinyl chloride	ND	0.44	0.22	
Bromomethane	ND	0.44	0.22	
Chloroethane	ND	0.44	0.22	
Trichlorofluoromethane	ND	0.44	0.22	
1,1-Dichloroethene	ND	0.44	0.22	
Methylene chloride	ND	0.44	0.22	
trans-1,2-Dichloroethene	ND	0.44	0.22	
1,1-Dichloroethane	1.3	0.44	0.22	
2,2-Dichloropropane	ND	0.44	0.22	
cis-1,2-Dichloroethene	ND	0.44	0.22	
Bromochloromethane	ND	0.44	0.22	
Chloroform	ND	0.44	0.22	
1,1,1-Trichloroethane	1.8	0.44	0.22	
Carbon Tetrachloride	ND	0.44	0.22	
1,1-Dichloropropene	ND	0.44	0.22	
Benzene	ND	0.44	0.22	
1,2-Dichloroethane	ND	0.44	0.22	
Trichloroethene	0.26	0.44	0.22	J
1,2-Dichloropropane	ND	0.44	0.22	
Dibromomethane	ND	0.44	0.22	
Bromodichloromethane	ND	0.44	0.22	
cis-1,3-Dichloropropene	ND	0.44	0.22	
Toluene	0.73	0.44	0.22	
trans-1,3-Dichloropropene	ND	0.44	0.22	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X08 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	0.44	0.22	
Tetrachloroethene	ND	0.44	0.22	
1,3-Dichloropropane	ND	0.44	0.22	
Dibromochloromethane	ND	0.44	0.22	
1,2-Dibromoethane	ND	0.44	0.22	
Chlorobenzene	ND	0.44	0.22	
Ethylbenzene	ND	0.44	0.22	
1,1,1,2-Tetrachloroethane	ND	0.44	0.22	
m,p-Xylene	ND	0.88	0.44	
o-Xylene	1.2	0.44	0.22	
Styrene	ND	0.44	0.22	
Bromoform	ND	0.44	0.22	
Isopropylbenzene	0.72	0.44	0.22	
Bromobenzene	ND	0.44	0.22	
n-Propylbenzene	2.9	0.44	0.22	
1,1,2,2-Tetrachloroethane	ND	0.44	0.22	
1,2,3-Trichloropropane	ND	0.44	0.22	
2-Chlorotoluene	ND	0.44	0.22	
1,3,5-Trimethylbenzene	13	0.44	0.22	
4-Chlorotoluene	ND	0.44	0.22	
t-Butylbenzene	ND	0.44	0.22	
1,2,4-Trimethylbenzene	34	0.44	0.22	E
sec-Butylbenzene	ND	0.44	0.22	
1,3-Dichlorobenzene	ND	0.44	0.22	
4-Isopropyltoluene	1	0.44	0.22	
1,4-Dichlorobenzene	ND	0.44	0.22	
n-Butylbenzene	ND	0.44	0.22	
1,2-Dichlorobenzene	ND	0.44	0.22	
1,2-Dibromo-3-chloropropane	ND	0.44	0.22	
1,2,4-Trichlorobenzene	ND	0.44	0.22	
Hexachlorobutadiene	ND	0.44	0.22	
Naphthalene	ND	0.44	0.22	
1,2,3-Trichlorobenzene	ND	0.44	0.22	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B3-2'-4'
Lab ID:	98071X11
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/20/01
% Solids	88.29
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	107		75	115
Fluorobenzene	101		84.7	115
Toluene-D8	101		91.2	109
Ethylbenzene-d10	102		90	106
Bromofluorobenzene	99.2		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.42	0.21	
Chloromethane	ND	0.42	0.21	
Vinyl chloride	0.7	0.42	0.21	
Bromomethane	ND	0.42	0.21	
Chloroethane	3.9	0.42	0.21	
Trichlorofluoromethane	ND	0.42	0.21	
1,1-Dichloroethene	0.86	0.42	0.21	
Methylene chloride	ND	0.42	0.21	
trans-1,2-Dichloroethene	ND	0.42	0.21	
1,1-Dichloroethane	11	0.42	0.21	
2,2-Dichloropropane	ND	0.42	0.21	
cis-1,2-Dichloroethene	ND	0.42	0.21	
Bromochloromethane	ND	0.42	0.21	
Chloroform	ND	0.42	0.21	
1,1,1-Trichloroethane	ND	0.42	0.21	
Carbon Tetrachloride	ND	0.42	0.21	
1,1-Dichloropropene	ND	0.42	0.21	
Benzene	ND	0.42	0.21	
1,2-Dichloroethane	ND	0.42	0.21	
Trichloroethene	ND	0.42	0.21	
1,2-Dichloropropane	ND	0.42	0.21	
Dibromomethane	ND	0.42	0.21	
Bromodichloromethane	ND	0.42	0.21	
cis-1,3-Dichloropropene	ND	0.42	0.21	
Toluene	0.5	0.42	0.21	
trans-1,3-Dichloropropene	ND	0.42	0.21	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X11 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	0.42	0.21	
Tetrachloroethene	ND	0.42	0.21	
1,3-Dichloropropane	ND	0.42	0.21	
Dibromochloromethane	ND	0.42	0.21	
1,2-Dibromoethane	ND	0.42	0.21	
Chlorobenzene	ND	0.42	0.21	
Ethylbenzene	ND	0.42	0.21	
1,1,1,2-Tetrachloroethane	ND	0.42	0.21	
m,p-Xylene	ND	0.83	0.42	
o-Xylene	ND	0.42	0.21	
Styrene	ND	0.42	0.21	
Bromoform	ND	0.42	0.21	
Isopropylbenzene	ND	0.42	0.21	
Bromobenzene	ND	0.42	0.21	
n-Propylbenzene	ND	0.42	0.21	
1,1,2,2-Tetrachloroethane	ND	0.42	0.21	
1,2,3-Trichloropropane	ND	0.42	0.21	
2-Chlorotoluene	ND	0.42	0.21	
1,3,5-Trimethylbenzene	ND	0.42	0.21	
4-Chlorotoluene	ND	0.42	0.21	
t-Butylbenzene	ND	0.42	0.21	
1,2,4-Trimethylbenzene	0.28	0.42	0.21	J
sec-Butylbenzene	ND	0.42	0.21	
1,3-Dichlorobenzene	ND	0.42	0.21	
4-Isopropyltoluene	0.23	0.42	0.21	J
1,4-Dichlorobenzene	ND	0.42	0.21	
n-Butylbenzene	ND	0.42	0.21	
1,2-Dichlorobenzene	ND	0.42	0.21	
1,2-Dibromo-3-chloropropane	ND	0.42	0.21	
1,2,4-Trichlorobenzene	ND	0.42	0.21	
Hexachlorobutadiene	ND	0.42	0.21	
Naphthalene	ND	0.42	0.21	
1,2,3-Trichlorobenzene	ND	0.42	0.21	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-6'-9'
Lab ID:	98071X12
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/20/01
% Solids	70.12
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	106		75	115
Fluorobenzene	101		84.7	115
Toluene-D8	98.9		91.2	109
Ethylbenzene-d10	101		90	106
Bromofluorobenzene	94.3		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.53	0.26	
Chloromethane	ND	0.53	0.26	
Vinyl chloride	ND	0.53	0.26	
Bromomethane	ND	0.53	0.26	
Chloroethane	ND	0.53	0.26	
Trichlorofluoromethane	ND	0.53	0.26	
1,1-Dichloroethene	ND	0.53	0.26	
Methylene chloride	0.32	0.53	0.26	J
trans-1,2-Dichloroethene	ND	0.53	0.26	
1,1-Dichloroethane	ND	0.53	0.26	
2,2-Dichloropropane	ND	0.53	0.26	
cis-1,2-Dichloroethene	ND	0.53	0.26	
Bromochloromethane	ND	0.53	0.26	
Chloroform	ND	0.53	0.26	
1,1,1-Trichloroethane	ND	0.53	0.26	
Carbon Tetrachloride	ND	0.53	0.26	
1,1-Dichloropropene	ND	0.53	0.26	
Benzene	0.8	0.53	0.26	
1,2-Dichloroethane	ND	0.53	0.26	
Trichloroethene	0.61	0.53	0.26	
1,2-Dichloropropane	ND	0.53	0.26	
Dibromomethane	ND	0.53	0.26	
Bromodichloromethane	ND	0.53	0.26	
cis-1,3-Dichloropropene	ND	0.53	0.26	
Toluene	1.7	0.53	0.26	
trans-1,3-Dichloropropene	ND	0.53	0.26	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X12 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	0.53	0.26	
Tetrachloroethene	ND	0.53	0.26	
1,3-Dichloropropane	ND	0.53	0.26	
Dibromochloromethane	ND	0.53	0.26	
1,2-Dibromoethane	ND	0.53	0.26	
Chlorobenzene	ND	0.53	0.26	
Ethylbenzene	ND	0.53	0.26	
1,1,1,2-Tetrachloroethane	ND	0.53	0.26	
m,p-Xylene	ND	1.1	0.53	
o-Xylene	ND	0.53	0.26	
Styrene	ND	0.53	0.26	
Bromoform	ND	0.53	0.26	
Isopropylbenzene	ND	0.53	0.26	
Bromobenzene	ND	0.53	0.26	
n-Propylbenzene	ND	0.53	0.26	
1,1,2,2-Tetrachloroethane	ND	0.53	0.26	
1,2,3-Trichloropropane	ND	0.53	0.26	
2-Chlorotoluene	ND	0.53	0.26	
1,3,5-Trimethylbenzene	ND	0.53	0.26	
4-Chlorotoluene	ND	0.53	0.26	
t-Butylbenzene	ND	0.53	0.26	
1,2,4-Trimethylbenzene	ND	0.53	0.26	
sec-Butylbenzene	ND	0.53	0.26	
1,3-Dichlorobenzene	ND	0.53	0.26	
4-Isopropyltoluene	0.27	0.53	0.26	J
1,4-Dichlorobenzene	ND	0.53	0.26	
n-Butylbenzene	ND	0.53	0.26	
1,2-Dichlorobenzene	ND	0.53	0.26	
1,2-Dibromo-3-chloropropane	ND	0.53	0.26	
1,2,4-Trichlorobenzene	ND	0.53	0.26	
Hexachlorobutadiene	ND	0.53	0.26	
Naphthalene	ND	0.53	0.26	
1,2,3-Trichlorobenzene	ND	0.53	0.26	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B13-6'-9'
Lab ID:	98071X13
Date Received:	5/11/01
Date Prepared:	5/19/01
Date Analyzed:	5/20/01
% Solids	66.41
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	103		75	115
Fluorobenzene	101		84.7	115
Toluene-D8	101		91.2	109
Ethylbenzene-d10	101		90	106
Bromofluorobenzene	95.8		80	113

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MRL	Flags
Dichlorodifluoromethane	ND	0.47	0.24	
Chloromethane	ND	0.47	0.24	
Vinyl chloride	ND	0.47	0.24	
Bromomethane	ND	0.47	0.24	
Chloroethane	ND	0.47	0.24	
Trichlorofluoromethane	ND	0.47	0.24	
1,1-Dichloroethene	ND	0.47	0.24	
Methylene chloride	0.29	0.47	0.24	J
trans-1,2-Dichloroethene	ND	0.47	0.24	
1,1-Dichloroethane	ND	0.47	0.24	
2,2-Dichloropropane	ND	0.47	0.24	
cis-1,2-Dichloroethene	ND	0.47	0.24	
Bromochloromethane	ND	0.47	0.24	
Chloroform	ND	0.47	0.24	
1,1,1-Trichloroethane	ND	0.47	0.24	
Carbon Tetrachloride	ND	0.47	0.24	
1,1-Dichloropropene	ND	0.47	0.24	
Benzene	0.83	0.47	0.24	
1,2-Dichloroethane	ND	0.47	0.24	
Trichloroethene	0.49	0.47	0.24	
1,2-Dichloropropane	ND	0.47	0.24	
Dibromomethane	ND	0.47	0.24	
Bromodichloromethane	ND	0.47	0.24	
cis-1,3-Dichloropropene	ND	0.47	0.24	
Toluene	1.3	0.47	0.24	
trans-1,3-Dichloropropene	ND	0.47	0.24	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for 98071X13 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	0.47	0.24	
Tetrachloroethene	ND	0.47	0.24	
1,3-Dichloropropane	ND	0.47	0.24	
Dibromochloromethane	ND	0.47	0.24	
1,2-Dibromoethane	ND	0.47	0.24	
Chlorobenzene	ND	0.47	0.24	
Ethylbenzene	ND	0.47	0.24	
1,1,1,2-Tetrachloroethane	ND	0.47	0.24	
m,p-Xylene	0.48	0.95	0.47	J
o-Xylene	ND	0.47	0.24	
Styrene	ND	0.47	0.24	
Bromoform	ND	0.47	0.24	
Isopropylbenzene	ND	0.47	0.24	
Bromobenzene	ND	0.47	0.24	
n-Propylbenzene	ND	0.47	0.24	
1,1,2,2-Tetrachloroethane	ND	0.47	0.24	
1,2,3-Trichloropropane	ND	0.47	0.24	
2-Chlorotoluene	ND	0.47	0.24	
1,3,5-Trimethylbenzene	ND	0.47	0.24	
4-Chlorotoluene	ND	0.47	0.24	
t-Butylbenzene	ND	0.47	0.24	
1,2,4-Trimethylbenzene	0.31	0.47	0.24	J
sec-Butylbenzene	ND	0.47	0.24	
1,3-Dichlorobenzene	ND	0.47	0.24	
4-Isopropyltoluene	0.28	0.47	0.24	J
1,4-Dichlorobenzene	ND	0.47	0.24	
n-Butylbenzene	ND	0.47	0.24	
1,2-Dichlorobenzene	ND	0.47	0.24	
1,2-Dibromo-3-chloropropane	ND	0.47	0.24	
1,2,4-Trichlorobenzene	ND	0.47	0.24	
Hexachlorobutadiene	ND	0.47	0.24	
Naphthalene	ND	0.47	0.24	
1,2,3-Trichlorobenzene	ND	0.47	0.24	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071-02
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	92.44
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	-		56	145
2 - Fluorobiphenyl	98.4		55	137
p - Terphenyl - d14	69.8		45	134
Phenol - d5	121		54	140
2 - Fluorophenol	112		57	146
2,4,6 - Tribromophenol	99.2		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	ND	140	29	
bis(2-Chloroethyl)ether	ND	140	27	
2-Chlorophenol	ND	140	21	
1,3-Dichlorobenzene	ND	140	20	
1,4-Dichlorobenzene	33	140	23	J
Benzyl Alcohol	ND	140	30	
1,2-Dichlorobenzene	50	140	15	J
2-Methylphenol	ND	140	17	
bis(2-Chloroisopropyl)ether	ND	140	37	
3- & 4-Methylphenol	1900	140	21	
N-nitroso-di-n-propylamine	ND	140	16	
Hexachloroethane	ND	140	27	
Nitrobenzene	ND	140	20	
Isophorone	ND	140	20	
2-Nitrophenol	ND	140	20	
2,4-Dimethylphenol	ND	140	16	
Benzoic Acid	ND	360	49	
bis(2-Chloroethoxy)methane	ND	140	17	
2,4-Dichlorophenol	ND	140	16	
1,2,4-Trichlorobenzene	ND	140	12	
Naphthalene	350	72	5.7	
4-Chloroaniline	ND	140	13	
Hexachlorobutadiene	ND	140	13	
4-Chloro-3-methylphenol	ND	140	16	
2-Methylnaphthalene	110	72	6.3	
Hexachlorocyclopentadiene	ND	140	20	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-02 continued...

Analyte	Result (ug/kg)	PQL	MDL	
2,4,6-Trichlorophenol	ND	140	19	
2,4,5-Trichlorophenol	ND	140	26	
2-Chloronaphthalene	ND	14	4.3	
2-Nitroaniline	ND	140	19	
Dimethylphthalate	110	140	16	J
Acenaphthylene	ND	14	4.3	
2,6-Dinitrotoluene	ND	140	26	
3-Nitroaniline	ND	140	24	
Acenaphthene	ND	14	2.9	
2,4-Dinitrophenol	ND	140	34	
4-Nitrophenol	ND	140	27	
Dibenzofuran	ND	140	17	
2,4-Dinitrotoluene	ND	140	19	
Diethylphthalate	210	140	24	
4-Chlorophenylphenylether	ND	140	24	
Fluorene	ND	14	4.3	
4-Nitroaniline	ND	140	24	
4,6-Dinitro-2-methylphenol	ND	360	53	
N-Nitrosodiphenylamine	ND	140	11	
4-Bromophenylphenylether	ND	140	19	
Hexachlorobenzene	ND	140	16	
Pentachlorophenol	ND	140	30	
Phenanthrene	ND	72	5.9	
Anthracene	ND	14	2.9	
Di-n-butylphthalate	ND	720	120	
Fluoranthene	ND	72	5.7	
Pyrene	ND	72	5.4	
Butylbenzylphthalate	ND	140	27	
3,3'-Dichlorobenzidine	ND	140	16	
Benzo(a)anthracene	ND	140	10	
Chrysene	ND	72	7.2	
bis(2-Ethylhexyl)phthalate	1000	360	59	
Di-n-octylphthalate	ND	140	37	
Benzo(b)fluoranthene	ND	72	8.3	
Benzo(k)fluoranthene	ND	14	2.9	
Benzo(a)pyrene	ND	72	7.2	
Indeno(1,2,3-cd)pyrene	ND	72	10	
Dibenz(a,h)anthracene	ND	72	10	
Benzo(g,h,i)perylene	ND	72	7.2	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-3'-5'
Lab ID:	98071-04
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	86.21
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	116		56	145
2 - Fluorobiphenyl	77.6		55	137
p - Terphenyl - d14	93.6		45	134
Phenol - d5	98.2		54	140
2 - Fluorophenol	119		57	146
2,4,6 - Tribromophenol	103		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	550	150	30	
bis(2-Chloroethyl)ether	ND	150	29	
2-Chlorophenol	ND	150	23	
1,3-Dichlorobenzene	ND	150	21	
1,4-Dichlorobenzene	ND	150	24	
Benzyl Alcohol	ND	150	32	
1,2-Dichlorobenzene	ND	150	16	
2-Methylphenol	ND	150	18	
bis(2-Chloroisopropyl)ether	ND	150	39	
3- & 4-Methylphenol	ND	150	22	
N-nitroso-di-n-propylamine	ND	150	17	
Hexachloroethane	ND	150	29	
Nitrobenzene	ND	150	21	
Isophorone	ND	150	21	
2-Nitrophenol	ND	150	21	
2,4-Dimethylphenol	ND	150	17	
Benzoic Acid	310	380	52	J
bis(2-Chloroethoxy)methane	ND	150	18	
2,4-Dichlorophenol	ND	150	17	
1,2,4-Trichlorobenzene	ND	150	13	
Naphthalene	ND	76	6.1	
4-Chloroaniline	ND	150	14	
Hexachlorobutadiene	ND	150	14	
4-Chloro-3-methylphenol	ND	150	17	
2-Methylnaphthalene	ND	76	6.7	
Hexachlorocyclopentadiene	ND	150	21	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-04 continued...

Analyte	Result (ug/kg)	PQL	MDL
2,4,6-Trichlorophenol	ND	150	20
2,4,5-Trichlorophenol	ND	150	27
2-Chloronaphthalene	ND	15	4.5
2-Nitroaniline	ND	150	20
Dimethylphthalate	ND	150	17
Acenaphthylene	ND	15	4.5
2,6-Dinitrotoluene	ND	150	27
3-Nitroaniline	ND	150	26
Acenaphthene	ND	15	3
2,4-Dinitrophenol	ND	150	36
4-Nitrophenol	ND	150	29
Dibenzofuran	ND	150	18
2,4-Dinitrotoluene	ND	150	20
Diethylphthalate	ND	150	26
4-Chlorophenylphenylether	ND	150	25
Fluorene	ND	15	4.5
4-Nitroaniline	ND	150	26
4,6-Dinitro-2-methylphenol	ND	380	56
N-Nitrosodiphenylamine	ND	150	12
4-Bromophenylphenylether	ND	150	20
Hexachlorobenzene	ND	150	17
Pentachlorophenol	ND	150	32
Phenanthrene	ND	76	6.2
Anthracene	ND	15	3
Di-n-butylphthalate	ND	760	130
Fluoranthene	ND	76	6.1
Pyrene	ND	76	5.8
Butylbenzylphthalate	ND	150	29
3,3'-Dichlorobenzidine	ND	150	17
Benzo(a)anthracene	ND	150	11
Chrysene	ND	76	7.6
bis(2-Ethylhexyl)phthalate	ND	380	62
Di-n-octylphthalate	ND	150	39
Benzo(b)fluoranthene	ND	76	8.8
Benzo(k)fluoranthene	ND	15	3
Benzo(a)pyrene	ND	76	7.6
Indeno(1,2,3-cd)pyrene	ND	76	11
Dibenz(a,h)anthracene	ND	76	11
Benzo(g,h,i)perylene	ND	76	7.6

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-5'-7'
Lab ID:	98071-06
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	77.72
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	104		56	145
2 - Fluorobiphenyl	57.8		55	137
p - Terphenyl - d14	83		45	134
Phenol - d5	99.8		54	140
2 - Fluorophenol	114		57	146
2,4,6 - Tribromophenol	84.4		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	420	160	33	
bis(2-Chloroethyl)ether	ND	160	31	
2-Chlorophenol	ND	160	25	
1,3-Dichlorobenzene	ND	160	23	
1,4-Dichlorobenzene	ND	160	26	
Benzyl Alcohol	ND	160	34	
1,2-Dichlorobenzene	ND	160	17	
2-Methylphenol	ND	160	20	
bis(2-Chloroisopropyl)ether	ND	160	43	
3- & 4-Methylphenol	ND	160	24	
N-nitroso-di-n-propylamine	ND	160	18	
Hexachloroethane	ND	160	31	
Nitrobenzene	ND	160	22	
Isophorone	ND	160	23	
2-Nitrophenol	ND	160	23	
2,4-Dimethylphenol	ND	160	18	
Benzoic Acid	120	410	56	J
bis(2-Chloroethoxy)methane	ND	160	20	
2,4-Dichlorophenol	ND	160	18	
1,2,4-Trichlorobenzene	ND	160	14	
Naphthalene	ND	82	6.6	
4-Chloroaniline	ND	160	15	
Hexachlorobutadiene	ND	160	15	
4-Chloro-3-methylphenol	ND	160	18	
2-Methylnaphthalene	ND	82	7.2	
Hexachlorocyclopentadiene	ND	160	23	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-06 continued...

Analyte	Result (ug/kg)	PQL	MDL
2,4,6-Trichlorophenol	ND	160	22
2,4,5-Trichlorophenol	ND	160	30
2-Chloronaphthalene	ND	16	4.9
2-Nitroaniline	ND	160	21
Dimethylphthalate	ND	160	18
Acenaphthylene	ND	16	4.9
2,6-Dinitrotoluene	ND	160	30
3-Nitroaniline	ND	160	28
Acenaphthene	ND	16	3.3
2,4-Dinitrophenol	ND	160	39
4-Nitrophenol	ND	160	31
Dibenzofuran	ND	160	19
2,4-Dinitrotoluene	ND	160	21
Diethylphthalate	ND	160	28
4-Chlorophenylphenylether	ND	160	28
Fluorene	ND	16	4.9
4-Nitroaniline	ND	160	28
4,6-Dinitro-2-methylphenol	ND	410	61
N-Nitrosodiphenylamine	ND	160	13
4-Bromophenylphenylether	ND	160	22
Hexachlorobenzene	ND	160	18
Pentachlorophenol	ND	160	34
Phenanthrene	ND	82	6.7
Anthracene	ND	16	3.3
Di-n-butylphthalate	ND	820	140
Fluoranthene	ND	82	6.6
Pyrene	ND	82	6.2
Butylbenzylphthalate	ND	160	31
3,3'-Dichlorobenzidine	ND	160	18
Benzo(a)anthracene	ND	160	11
Chrysene	ND	82	8.2
bis(2-Ethylhexyl)phthalate	ND	410	67
Di-n-octylphthalate	ND	160	43
Benzo(b)fluoranthene	ND	82	9.5
Benzo(k)fluoranthene	ND	16	3.3
Benzo(a)pyrene	ND	82	8.2
Indeno(1,2,3-cd)pyrene	ND	82	11
Dibenz(a,h)anthracene	ND	82	11
Benzo(g,h,i)perylene	ND	82	8.2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-3'-5'
Lab ID:	98071-08
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	84.32
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	112		56	145
2 - Fluorobiphenyl	85.2		55	137
p - Terphenyl - d14	75		45	134
Phenol - d5	99.4		54	140
2 - Fluorophenol	112		57	146
2,4,6 - Tribromophenol	105		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	600	150	31	
bis(2-Chloroethyl)ether	ND	150	30	
2-Chlorophenol	ND	150	23	
1,3-Dichlorobenzene	ND	150	22	
1,4-Dichlorobenzene	ND	150	25	
Benzyl Alcohol	ND	150	32	
1,2-Dichlorobenzene	ND	150	16	
2-Methylphenol	ND	150	19	
bis(2-Chloroisopropyl)ether	ND	150	40	
3- & 4-Methylphenol	25	150	23	J
N-nitroso-di-n-propylamine	ND	150	17	
Hexachloroethane	ND	150	29	
Nitrobenzene	ND	150	21	
Isophorone	ND	150	22	
2-Nitrophenol	ND	150	22	
2,4-Dimethylphenol	ND	150	17	
Benzoic Acid	ND	390	53	
bis(2-Chloroethoxy)methane	ND	150	19	
2,4-Dichlorophenol	ND	150	17	
1,2,4-Trichlorobenzene	ND	150	13	
Naphthalene	190	77	6.2	
4-Chloroaniline	ND	150	14	
Hexachlorobutadiene	ND	150	14	
4-Chloro-3-methylphenol	ND	150	17	
2-Methylnaphthalene	250	77	6.8	
Hexachlorocyclopentadiene	ND	150	22	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-08 continued...

Analyte	Result (ug/kg)	PQL	MDL	
2,4,6-Trichlorophenol	ND	150	21	
2,4,5-Trichlorophenol	ND	150	28	
2-Chloronaphthalene	ND	15	4.6	
2-Nitroaniline	ND	150	20	
Dimethylphthalate	ND	150	17	
Acenaphthylene	ND	15	4.6	
2,6-Dinitrotoluene	ND	150	28	
3-Nitroaniline	ND	150	26	
Acenaphthene	ND	15	3.1	
2,4-Dinitrophenol	ND	150	37	
4-Nitrophenol	230	150	29	
Dibenzofuran	ND	150	18	
2,4-Dinitrotoluene	ND	150	20	
Diethylphthalate	ND	150	26	
4-Chlorophenylphenylether	ND	150	26	
Fluorene	ND	15	4.6	
4-Nitroaniline	ND	150	26	
4,6-Dinitro-2-methylphenol	ND	390	57	
N-Nitrosodiphenylamine	750	150	12	
4-Bromophenylphenylether	ND	150	21	
Hexachlorobenzene	ND	150	17	
Pentachlorophenol	ND	150	32	
Phenanthrene	87	77	6.3	
Anthracene	ND	15	3.1	
Di-n-butylphthalate	ND	770	130	
Fluoranthene	22	77	6.2	J
Pyrene	170	77	5.9	
Butylbenzylphthalate	ND	150	29	
3,3'-Dichlorobenzidine	ND	150	17	
Benzo(a)anthracene	ND	150	11	
Chrysene	ND	77	7.7	
bis(2-Ethylhexyl)phthalate	14000	390	63	D10
Di-n-octylphthalate	900	150	40	
Benzo(b)fluoranthene	ND	77	9	
Benzo(k)fluoranthene	ND	15	3.1	
Benzo(a)pyrene	ND	77	7.7	
Indeno(1,2,3-cd)pyrene	ND	77	11	
Dibenz(a,h)anthracene	66	77	11	J
Benzo(g,h,i)perylene	ND	77	7.7	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B3-2'-4'
Lab ID:	98071-11
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	88.29
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	128		56	145
2 - Fluorobiphenyl	67		55	137
p - Terphenyl - d14	101		45	134
Phenol - d5	112		54	140
2 - Fluorophenol	116		57	146
2,4,6 - Tribromophenol	103		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	1200	150	29	
bis(2-Chloroethyl)ether	ND	150	28	
2-Chlorophenol	ND	150	22	
1,3-Dichlorobenzene	ND	150	21	
1,4-Dichlorobenzene	ND	150	24	
Benzyl Alcohol	ND	150	31	
1,2-Dichlorobenzene	ND	150	15	
2-Methylphenol	ND	150	18	
bis(2-Chloroisopropyl)ether	ND	150	38	
3- & 4-Methylphenol	ND	150	22	
N-nitroso-di-n-propylamine	ND	150	16	
Hexachloroethane	ND	150	28	
Nitrobenzene	ND	150	20	
Isophorone	ND	150	21	
2-Nitrophenol	ND	150	21	
2,4-Dimethylphenol	ND	150	16	
Benzoic Acid	ND	370	50	
bis(2-Chloroethoxy)methane	ND	150	18	
2,4-Dichlorophenol	ND	150	16	
1,2,4-Trichlorobenzene	ND	150	12	
Naphthalene	ND	74	5.9	
4-Chloroaniline	ND	150	14	
Hexachlorobutadiene	ND	150	13	
4-Chloro-3-methylphenol	ND	150	16	
2-Methylnaphthalene	ND	74	6.5	
Hexachlorocyclopentadiene	ND	150	21	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-11 continued...

Analyte	Result (ug/kg)	PQL	MDL
2,4,6-Trichlorophenol	ND	150	20
2,4,5-Trichlorophenol	ND	150	27
2-Chloronaphthalene	ND	15	4.4
2-Nitroaniline	ND	150	19
Dimethylphthalate	ND	150	16
Acenaphthylene	ND	15	4.4
2,6-Dinitrotoluene	ND	150	27
3-Nitroaniline	ND	150	25
Acenaphthene	ND	15	2.9
2,4-Dinitrophenol	ND	150	35
4-Nitrophenol	ND	150	28
Dibenzofuran	ND	150	17
2,4-Dinitrotoluene	ND	150	19
Diethylphthalate	ND	150	25
4-Chlorophenylphenylether	ND	150	25
Fluorene	ND	15	4.4
4-Nitroaniline	ND	150	25
4,6-Dinitro-2-methylphenol	ND	370	55
N-Nitrosodiphenylamine	ND	150	12
4-Bromophenylphenylether	ND	150	20
Hexachlorobenzene	ND	150	16
Pentachlorophenol	ND	150	31
Phenanthrene	ND	74	6
Anthracene	ND	15	2.9
Di-n-butylphthalate	ND	740	130
Fluoranthene	ND	74	5.9
Pyrene	ND	74	5.6
Butylbenzylphthalate	ND	150	28
3,3'-Dichlorobenzidine	ND	150	16
Benzo(a)anthracene	ND	150	10
Chrysene	ND	74	7.4
bis(2-Ethylhexyl)phthalate	ND	370	60
Di-n-octylphthalate	ND	150	38
Benzo(b)fluoranthene	ND	74	8.5
Benzo(k)fluoranthene	ND	15	2.9
Benzo(a)pyrene	ND	74	7.4
Indeno(1,2,3-cd)pyrene	ND	74	10
Dibenz(a,h)anthracene	ND	74	10
Benzo(g,h,i)perylene	ND	74	7.4

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-6'-9'
Lab ID:	98071-12
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	70.12
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	111		56	145
2 - Fluorobiphenyl	75.4		55	137
p - Terphenyl - d14	98.2		45	134
Phenol - d5	102		54	140
2 - Fluorophenol	118		57	146
2,4,6 - Tribromophenol	93.4		35	146

Sample results are on a dry weight basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	660	190	38	
bis(2-Chloroethyl)ether	ND	190	36	
2-Chlorophenol	ND	190	28	
1,3-Dichlorobenzene	ND	190	27	
1,4-Dichlorobenzene	ND	190	30	
Benzyl Alcohol	ND	190	40	
1,2-Dichlorobenzene	ND	190	20	
2-Methylphenol	ND	190	23	
bis(2-Chloroisopropyl)ether	ND	190	49	
3- & 4-Methylphenol	ND	190	28	
N-nitroso-di-n-propylamine	240	190	21	
Hexachloroethane	ND	190	36	
Nitrobenzene	ND	190	26	
Isophorone	ND	190	27	
2-Nitrophenol	ND	190	27	
2,4-Dimethylphenol	ND	190	21	
Benzoic Acid	ND	470	64	
bis(2-Chloroethoxy)methane	ND	190	23	
2,4-Dichlorophenol	ND	190	21	
1,2,4-Trichlorobenzene	ND	190	16	
Naphthalene	ND	95	7.6	
4-Chloroaniline	ND	190	18	
Hexachlorobutadiene	ND	190	17	
4-Chloro-3-methylphenol	ND	190	21	
2-Methylnaphthalene	ND	95	8.3	
Hexachlorocyclopentadiene	ND	190	27	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-12 continued...

Analyte	Result (ug/kg)	PQL	MDL
2,4,6-Trichlorophenol	ND	190	25
2,4,5-Trichlorophenol	ND	190	34
2-Chloronaphthalene	ND	19	5.7
2-Nitroaniline	ND	190	25
Dimethylphthalate	ND	190	21
Acenaphthylene	ND	19	5.7
2,6-Dinitrotoluene	ND	190	34
3-Nitroaniline	ND	190	32
Acenaphthene	ND	19	3.8
2,4-Dinitrophenol	ND	190	45
4-Nitrophenol	ND	190	36
Dibenzofuran	ND	190	22
2,4-Dinitrotoluene	ND	190	25
Diethylphthalate	ND	190	32
4-Chlorophenylphenylether	ND	190	32
Fluorene	ND	19	5.7
4-Nitroaniline	ND	190	32
4,6-Dinitro-2-methylphenol	ND	470	70
N-Nitrosodiphenylamine	ND	190	15
4-Bromophenylphenylether	ND	190	25
Hexachlorobenzene	ND	190	21
Pentachlorophenol	ND	190	40
Phenanthrene	ND	95	7.8
Anthracene	ND	19	3.8
Di-n-butylphthalate	ND	950	160
Fluoranthene	ND	95	7.6
Pyrene	ND	95	7.2
Butylbenzylphthalate	ND	190	36
3,3'-Dichlorobenzidine	ND	190	21
Benzo(a)anthracene	ND	190	13
Chrysene	ND	95	9.5
bis(2-Ethylhexyl)phthalate	ND	470	78
Di-n-octylphthalate	ND	190	49
Benzo(b)fluoranthene	ND	95	11
Benzo(k)fluoranthene	ND	19	3.8
Benzo(a)pyrene	ND	95	9.5
Indeno(1,2,3-cd)pyrene	ND	95	13
Dibenz(a,h)anthracene	ND	95	13
Benzo(g,h,i)perylene	ND	95	9.5

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071-02
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	92.44
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	98		50	150
o-terphenyl	85		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	>20	20	X1
Diesel (>nC12-nC24)	>50	50	X2
Motor Oil (>nC24-nC32)	>100	100	

X1 - Chromatogram suggests this might be jet fuel, kerosene or similar product

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-3'-5'
Lab ID:	98071-04
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	86.21
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	74.2		50	150
o-terphenyl	80.9		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<22	22	
Diesel (>nC12-nC24)	<54	54	
Motor Oil (>nC24-nC32)	<110	110	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-5'-7'
Lab ID:	98071-06
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	77.72
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	66.9		50	150
o-terphenyl	74.2		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<24	24	
Diesel (>nC12-nC24)	<59	59	
Motor Oil (>nC24-nC32)	<120	120	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-3'-5'
Lab ID:	98071-08
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	84.32
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	83.2		50	150
o-terphenyl	87.6		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<22	22	
Diesel (>nC12-nC24)	<55	55	
Motor Oil (>nC24-nC32)	<110	110	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B3-2'-4'
Lab ID:	98071-11
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	88.29
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	68.7		50	150
o-terphenyl	73		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<22	22	
Diesel (>nC12-nC24)	<55	55	
Motor Oil (>nC24-nC32)	<110	110	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-6'-9'
Lab ID:	98071-12
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	70.12
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	81.6		50	150
o-terphenyl	84.5		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<28	28	
Diesel (>nC12-nC24)	<71	71	
Motor Oil (>nC24-nC32)	<140	140	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B13-6'-9'
Lab ID:	98071-13
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	66.41
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	85.8		50	150
o-terphenyl	88.5		50	150

Sample results are on a dry weight basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<28	28	
Diesel (>nC12-nC24)	<69	69	
Motor Oil (>nC24-nC32)	<140	140	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071-02
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/16/01
% Solids	92.44
Dilution Factor	50

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	101		50	150

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	MDL	Flags
#2 Diesel	1800	130	61	X2
Motor Oil	5900	250	130	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071-02
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	92.44

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2	
Antimony	ND	10	
Barium	40	1	
Beryllium	ND	0.4	
Cadmium	ND	1	
Chromium	59	2	
Copper	22	2	
Iron	14000	20	
Lead	3.3	2	
Nickel	33	2	
Selenium	ND	10	
Silver	ND	10	
Thallium	ND	4	
Zinc	19	2	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B17-18"-25"
Lab ID:	98071-02
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	92.44

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.038	0.021	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-3'-5'
Lab ID:	98071-04
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	86.21

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2	
Antimony	ND	9.8	
Barium	59	0.98	
Beryllium	ND	0.39	
Cadmium	ND	0.98	
Chromium	25	2	
Copper	27	2	
Lead	2.7	2	
Nickel	15	2	
Selenium	ND	9.8	
Silver	ND	9.8	
Thallium	ND	3.9	
Zinc	28	2	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-3'-5'
Lab ID:	98071-04
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	86.21

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.045	0.02	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-5'-7'
Lab ID:	98071-06
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	77.72

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2.4	
Antimony	ND	12	
Barium	61	1.2	
Beryllium	ND	0.49	
Cadmium	ND	1.2	
Chromium	26	2.4	
Copper	27	2.4	
Lead	3.7	2.4	
Nickel	14	2.4	
Selenium	ND	12	
Silver	ND	15	
Thallium	5	4.9	
Zinc	30	2.4	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-5'-7'
Lab ID:	98071-06
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	77.72

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.046	0.025	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-3'-5'
Lab ID:	98071-08
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	84.32

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2.1	
Antimony	ND	10	
Barium	61	1	
Beryllium	ND	0.42	
Cadmium	ND	1	
Chromium	25	2.1	
Copper	95	2.1	
Lead	4.6	2.1	
Nickel	19	2.1	
Selenium	ND	10	
Silver	ND	10	
Thallium	ND	4.2	
Zinc	48	2.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-3'-5'
Lab ID:	98071-08
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	84.32

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.059	0.021	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B3-2'-4'
Lab ID:	98071-11
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	88.29

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2.1	
Antimony	ND	10	
Barium	69	1	
Beryllium	ND	0.42	
Cadmium	ND	1	
Chromium	41	2.1	
Copper	18	2.1	
Lead	4.3	2.1	
Nickel	28	2.1	
Selenium	ND	10	
Silver	ND	10	
Thallium	ND	4.2	
Zinc	37	2.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B3-2'-4'
Lab ID:	98071-11
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	88.29

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.05	0.022	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-6'-9'
Lab ID:	98071-12
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1
% Solids	70.12

Metals by ICP - USEPA Method 6010

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	3.7	2.5	
Antimony	ND	12	
Barium	87	1.2	
Beryllium	ND	0.5	
Cadmium	ND	1.2	
Chromium	22	2.5	
Copper	34	2.5	
Lead	4	2.5	
Nickel	8.2	2.5	
Selenium	ND	12	
Silver	ND	15	
Thallium	ND	5	
Zinc	36	2.5	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-6'-9'
Lab ID:	98071-12
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1
% Solids	70.12

Mercury by CVAA - USEPA Method 7471

Sample results are on a dry weight basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	0.065	0.027	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - ITS1139
Date Received:	-
Date Prepared:	5/19/01
Date Analyzed:	5/19/01
% Solids	
Dilution Factor	1

Volatile Organics by USEPA Method 5035\8260B Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Dibromofluoromethane	105		75	115
Fluorobenzene	102		84.7	115
Toluene-D8	101		91.2	109
Ethylbenzene-d10	99.9		90	106
Bromofluorobenzene	99.5		80	113

Sample results are on an as received basis.

Analyte	**Result (ug/kg)**	**PQL**	**MRL**	**Flags**
Dichlorodifluoromethane	ND	0.4	0.2	
Chloromethane	ND	0.4	0.2	
Vinyl chloride	ND	0.4	0.2	
Bromomethane	ND	0.4	0.2	
Chloroethane	ND	0.4	0.2	
Trichlorofluoromethane	ND	0.4	0.2	
1,1-Dichloroethene	ND	0.4	0.2	
Methylene chloride	ND	0.4	0.2	
trans-1,2-Dichloroethene	ND	0.4	0.2	
1,1-Dichloroethane	ND	0.4	0.2	
2,2-Dichloropropane	ND	0.4	0.2	
cis-1,2-Dichloroethene	ND	0.4	0.2	
Bromochloromethane	ND	0.4	0.2	
Chloroform	ND	0.4	0.2	
1,1,1-Trichloroethane	ND	0.4	0.2	
Carbon Tetrachloride	ND	0.4	0.2	
1,1-Dichloropropene	ND	0.4	0.2	
Benzene	ND	0.4	0.2	
1,2-Dichloroethane	ND	0.4	0.2	
Trichloroethene	ND	0.4	0.2	
1,2-Dichloropropane	ND	0.4	0.2	
Dibromomethane	ND	0.4	0.2	
Bromodichloromethane	ND	0.4	0.2	
cis-1,3-Dichloropropene	ND	0.4	0.2	
Toluene	ND	0.4	0.2	
trans-1,3-Dichloropropene	ND	0.4	0.2	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5035\8260B Modified data for ITS1139 continued...

Analyte	Result (ug/kg)	PQL	MRL	
1,1,2-Trichloroethane	ND	0.4	0.2	
Tetrachloroethene	ND	0.4	0.2	
1,3-Dichloropropane	ND	0.4	0.2	
Dibromochloromethane	ND	0.4	0.2	
1,2-Dibromoethane	ND	0.4	0.2	
Chlorobenzene	ND	0.4	0.2	
Ethylbenzene	ND	0.4	0.2	
1,1,1,2-Tetrachloroethane	ND	0.4	0.2	
m,p-Xylene	ND	0.8	0.4	
o-Xylene	ND	0.4	0.2	
Styrene	ND	0.4	0.2	
Bromoform	0.4	0.4	0.2	J
Isopropylbenzene	ND	0.4	0.2	
Bromobenzene	ND	0.4	0.2	
n-Propylbenzene	ND	0.4	0.2	
1,1,2,2-Tetrachloroethane	ND	0.4	0.2	
1,2,3-Trichloropropane	ND	0.4	0.2	
2-Chlorotoluene	ND	0.4	0.2	
1,3,5-Trimethylbenzene	ND	0.4	0.2	
4-Chlorotoluene	ND	0.4	0.2	
t-Butylbenzene	ND	0.4	0.2	
1,2,4-Trimethylbenzene	ND	0.4	0.2	
sec-Butylbenzene	ND	0.4	0.2	
1,3-Dichlorobenzene	ND	0.4	0.2	
4-Isopropyltoluene	ND	0.4	0.2	
1,4-Dichlorobenzene	ND	0.4	0.2	
n-Butylbenzene	ND	0.4	0.2	
1,2-Dichlorobenzene	ND	0.4	0.2	
1,2-Dibromo-3-chloropropane	ND	0.4	0.2	
1,2,4-Trichlorobenzene	ND	0.4	0.2	
Hexachlorobutadiene	ND	0.4	0.2	
Naphthalene	ND	0.4	0.2	
1,2,3-Trichlorobenzene	ND	0.4	0.2	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	ITS1139
Date Prepared:	5/19/01
Date Analyzed:	5/19/01
QC Batch ID:	ITS1139

Volatile Organics by USEPA Method 5035\8260B Modified

Compound Name	Blank Result (ug/kg)	Spike Amount (ug/kg)	BS Result (ug/kg)	BS % Rec.	BSD Result (ug/kg)	BSD % Rec.	RPD	Flag
1,1-Dichloroethene	0	2	1.93	96.7	1.87	93.7	-3.2	
Benzene	0	2	2.16	108	2.12	106	-1.9	
Trichloroethene	0	2	2.21	110	2.19	109	-0.91	
Toluene	0	2	2.2	110	2.18	109	-0.91	
Chlorobenzene	0	2	2.27	114	2.25	112	-1.8	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike/Matrix Spike Duplicate Report

Client Sample ID:	B13-6'-9'
Lab ID:	98071-13
Date Prepared:	5/19/01
Date Analyzed:	5/20/01
QC Batch ID:	ITS1139

Volatile Organics by USEPA Method 5035\8260B Modified

Compound Name	Sample Result (ug/kg)	Spike Amount (ug/kg)	MS Result (ug/kg)	MS % Rec.	MSD Result (ug/kg)	MSD % Rec.	RPD	Flag
1,1-Dichloroethene	0	2.54	2.22	87.1	2.13	90.8	4.2	
Benzene	0.83	2.54	3.11	89.5	3.07	95.1	6.1	
Trichloroethene	0.49	2.54	2.6	83.3	2.65	92.2	10	
Toluene	1.3	2.54	3.02	67.4	3.09	76.2	12	x7
Chlorobenzene	0	2.54	1.92	75.3	1.89	80.5	6.7	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - SS0265
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	
Dilution Factor	20

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	129		56	145
2 - Fluorobiphenyl	101		55	137
p - Terphenyl - d14	95.8		45	134
Phenol - d5	97.4		54	140
2 - Fluorophenol	117		57	146
2,4,6 - Tribromophenol	88.4		35	146

Sample results are on an as received basis.

Analyte	Result (ug/kg)	PQL	MDL	Flags
Phenol	ND	130	27	
bis(2-Chloroethyl)ether	ND	130	25	
2-Chlorophenol	ND	130	20	
1,3-Dichlorobenzene	ND	130	19	
1,4-Dichlorobenzene	ND	130	21	
Benzyl Alcohol	ND	130	28	
1,2-Dichlorobenzene	ND	130	14	
2-Methylphenol	ND	130	16	
bis(2-Chloroisopropyl)ether	ND	130	35	
3- & 4-Methylphenol	ND	130	20	
N-nitroso-di-n-propylamine	ND	130	15	
Hexachloroethane	ND	130	25	
Nitrobenzene	ND	130	18	
Isophorone	ND	130	19	
2-Nitrophenol	ND	130	19	
2,4-Dimethylphenol	ND	130	15	
Benzoic Acid	ND	330	45	
bis(2-Chloroethoxy)methane	ND	130	16	
2,4-Dichlorophenol	ND	130	15	
1,2,4-Trichlorobenzene	ND	130	11	
Naphthalene	ND	67	5.3	
4-Chloroaniline	ND	130	12	
Hexachlorobutadiene	ND	130	12	
4-Chloro-3-methylphenol	ND	130	15	
2-Methylnaphthalene	ND	67	5.9	
Hexachlorocyclopentadiene	ND	130	19	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for SS0265 continued...

Analyte	Result (ug/kg)	PQL	MDL
2,4,6-Trichlorophenol	ND	130	18
2,4,5-Trichlorophenol	ND	130	24
2-Chloronaphthalene	ND	13	4
2-Nitroaniline	ND	130	17
Dimethylphthalate	ND	130	15
Acenaphthylene	ND	13	4
2,6-Dinitrotoluene	ND	130	24
3-Nitroaniline	ND	130	23
Acenaphthene	ND	13	2.7
2,4-Dinitrophenol	ND	130	32
4-Nitrophenol	ND	130	25
Dibenzofuran	ND	130	15
2,4-Dinitrotoluene	ND	130	17
Diethylphthalate	ND	130	23
4-Chlorophenylphenylether	ND	130	22
Fluorene	ND	13	4
4-Nitroaniline	ND	130	23
4,6-Dinitro-2-methylphenol	ND	330	49
N-Nitrosodiphenylamine	ND	130	11
4-Bromophenylphenylether	ND	130	18
Hexachlorobenzene	ND	130	15
Pentachlorophenol	ND	130	28
Phenanthrene	ND	67	5.5
Anthracene	ND	13	2.7
Di-n-butylphthalate	ND	670	120
Fluoranthene	ND	67	5.3
Pyrene	ND	67	5.1
Butylbenzylphthalate	ND	130	25
3,3'-Dichlorobenzidine	ND	130	15
Benzo(a)anthracene	ND	130	9.3
Chrysene	ND	67	6.7
bis(2-Ethylhexyl)phthalate	ND	330	55
Di-n-octylphthalate	ND	130	35
Benzo(b)fluoranthene	ND	67	7.7
Benzo(k)fluoranthene	ND	13	2.7
Benzo(a)pyrene	ND	67	6.7
Indeno(1,2,3-cd)pyrene	ND	67	9.3
Dibenz(a,h)anthracene	ND	67	9.3
Benzo(g,h,i)perylene	ND	67	6.7

SOUND ANALYTICAL SERVICES, INC.

Blank Spike Report

Lab ID:	SS0265
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
QC Batch ID:	SS0265

Semivolatile Organics by USEPA Method 8270

Parameter Name	Blank Result (ug/kg)	Spike Amount (ug/kg)	BS Result (ug/kg)	BS % Rec.	Flag
Phenol	0	670	575	86	
2-Chlorophenol	0	670	621	93	
1,4-Dichlorobenzene	0	670	675	101	
N-nitroso-di-n-propylamine	0	670	571	86	
1,2,4-Trichlorobenzene	0	670	665	100	
4-Chloro-3-methylphenol	0	670	620	93	
Acenaphthene	0	670	649	97	
4-Nitrophenol	0	670	535	80	
2,4-Dinitrotoluene	0	670	745	112	
Pentachlorophenol	0	670	476	71	
Pyrene	0	670	687	103	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike/Matrix Spike Duplicate Report

Client Sample ID:	B6-3'-5'
Lab ID:	98071-04
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
QC Batch ID:	SS0265

Semivolatile Organics by USEPA Method 8270

Compound Name	Sample Result (ug/kg)	Spike Amount (ug/kg)	MS Result (ug/kg)	MS % Rec.	MSD Result (ug/kg)	MSD % Rec.	RPD	Flag
Phenol	550	760	1200	86	1190	84.6	-1.6	
2-Chlorophenol	0	760	632	83.2	752	98.2	17	
1,4-Dichlorobenzene	0	760	640	84.2	687	89.8	6.4	
N-nitroso-di-n-propylamine	0	760	707	93	684	89.4	-3.9	
1,2,4-Trichlorobenzene	0	760	682	89.8	851	111	21	
4-Chloro-3-methylphenol	0	760	892	117	960	125	6.6	
Acenaphthene	0	760	648	85.2	706	92.2	7.9	
4-Nitrophenol	0	760	804	106	775	101	-4.8	
2,4-Dinitrotoluene	0	760	914	120	945	123	2.5	
ɜntachlorophenol	0	760	682	89.8	845	110	20	
⌐yrene	0	760	740	97.4	813	106	8.5	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - HC580
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	
Dilution Factor	20

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	82.4		50	150
o-terphenyl	82.2		50	150

Sample results are on an as received basis.

Analyte	**Result (mg/kg)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<20	20	
Diesel (>nC12-nC24)	<50	50	
Motor Oil (>nC24-nC32)	<100	100	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	010504SBDS24SS
Lab ID:	98000-01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
QC Batch ID:	HC580

NWTPH-HCID - Hydrocarbon Identification Method for Soil Modified

Parameter Name	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RPD %	Flag
Gasoline (Toluene-nC12)	<48	<52	NC	
Diesel (>nC12-nC24)	<120	<130	NC	
Motor Oil (>nC24-nC32)	>240	>260	NC	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - DS0292
Date Received:	-
Date Prepared:	5/15/01
Date Analyzed:	5/16/01
% Solids	
Dilution Factor	10

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
o-terphenyl	99.9		50	150

Sample results are on an as received basis.

Analyte	Result (mg/kg)	PQL	MDL	Flags
#2 Diesel	ND	25	12	
Motor Oil	ND	50	25	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	DS0292
Date Prepared:	5/15/01
Date Analyzed:	5/17/01
QC Batch ID:	DS0292

Diesel and Motor Oil by NWTPH-Dx Modified

Compound Name	Blank Result (mg/kg)	Spike Amount (mg/kg)	BS Result (mg/kg)	BS % Rec.	BSD Result (mg/kg)	BSD % Rec.	RPD	Flag
#2 Diesel	0	500	576	115	581	116	0.87	
Motor Oil	0	481	478	99.4	491	102	2.6	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B17-18"-25"
Lab ID:	98071-02
Date Prepared:	5/15/01
Date Analyzed:	5/16/01
QC Batch ID:	DS0292

Diesel and Motor Oil by NWTPH-Dx Modified

Parameter Name	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RPD %	Flag
#2 Diesel	1840	1840	0.0	
Motor Oil	5860	6030	-2.9	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - DS0292
Date Received:	-
Date Prepared:	5/15/01
Date Analyzed:	5/16/01
% Solids	
Dilution Factor	10

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
o-terphenyl	99.9		50	150

Sample results are on an as received basis.

Analyte	Result (mg/kg)	PQL	MDL	Flags
#2 Diesel	ND	25	12	
Motor Oil	ND	50	25	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	DS0292
Date Prepared:	5/15/01
Date Analyzed:	5/17/01
QC Batch ID:	DS0292

Diesel and Motor Oil by NWTPH-Dx Modified

Compound Name	Blank Result (mg/kg)	Spike Amount (mg/kg)	BS Result (mg/kg)	BS % Rec.	BSD Result (mg/kg)	BSD % Rec.	RPD	Flag
#2 Diesel	0	500	576	115	581	116	0.87	
Motor Oil	0	481	478	99.4	491	102	2.6	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B17-18"-25"
Lab ID:	98071-02
Date Prepared:	5/15/01
Date Analyzed:	5/16/01
QC Batch ID:	DS0292

Diesel and Motor Oil by NWTPH-Dx Modified

Parameter Name	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RPD %	Flag
#2 Diesel	1840	1840	0.0	
Motor Oil	5860	6030	-2.9	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - SP646
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
Dilution Factor	1

Metals by ICP - USEPA Method 6010

Sample results are on an as received basis.

Analyte	Result (mg/kg)	PQL	Flags
Arsenic	ND	2	
Antimony	ND	10	
Barium	ND	1	
Beryllium	ND	0.4	
Cadmium	ND	1	
Chromium	ND	2	
Copper	ND	2	
Lead	ND	2	
Nickel	ND	2	
Selenium	ND	10	
Silver	ND	10	
Thallium	ND	4	
Zinc	ND	2	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	SP646
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
QC Batch ID:	SP646

Metals by ICP - USEPA Method 6010

Compound Name	Blank Result (mg/kg)	Spike Amount (mg/kg)	BS Result (mg/kg)	BS % Rec.	BSD Result (mg/kg)	BSD % Rec.	RPD	Flag
Zinc	0	200	217	109	214	107	-1.9	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike Report

Client Sample ID:	B17-18"-25"
Lab ID:	98071-02
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
QC Batch ID:	SP646

Metals by ICP - USEPA Method 6010

Parameter Name	Sample Result (mg/kg)	Spike Amount (mg/kg)	MS Result (mg/kg)	MS % Rec.	Flag
Arsenic	0	754	675	90	
Antimony	0	566	487	86	
Barium	40	754	694	87	
Beryllium	0	18.9	16.2	86	
Cadmium	0	18.9	15.3	81	
Chromium	59	75.4	124	86	
Copper	22	94.3	100	83	
Lead	3.3	189	166	86	
Nickel	33	189	194	85	
Selenium	0	754	615	82	
Silver	0	113	96.6	85	
Thallium	0	754	646	86	
Zinc	19	189	143	66	x7a

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B17-18"-25"
Lab ID:	98071-02
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
QC Batch ID:	SP646

Metals by ICP - USEPA Method 6010

Parameter Name	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RPD %	Flag
Arsenic	0	0	NC	
Antimony	0	0	NC	
Barium	40	46	-14.0	
Beryllium	0	0	NC	
Cadmium	0	0	NC	
Chromium	59	68	-14.0	
Copper	22	21	4.7	
Lead	3.3	3	9.5	
Nickel	33	37	-11.0	
Selenium	0	0	NC	
Silver	0	0	NC	
Thallium	0	0	NC	
Zinc	19	21	-10.0	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - ZS376
Date Received:	-
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Mercury by CVAA - USEPA Method 7471

Sample results are on an as received basis.

Analyte	Result (mg/kg)	PQL	Flags
Mercury	ND	0.02	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike Report

Client Sample ID:	B10-6'-9'
Lab ID:	98071-12
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	ZS376

Mercury by CVAA - USEPA Method 7471

Parameter Name	Sample Result (mg/kg)	Spike Amount (mg/kg)	MS Result (mg/kg)	MS % Rec.	Flag
Mercury	0.0651	0.26	0.345	108	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B10-6'-9'
Lab ID:	98071-12
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	ZS376

Mercury by CVAA - USEPA Method 7471

Parameter Name	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RPD %	Flag
Mercury	0.065	0.07	-7.4	

Sound Analytical Services, Inc.
ANALYTICAL & ENVIRONMENTAL CHEMISTS
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www.saslab.com

SAS Lab No. ____________

TURNAROUND REQUEST (business days)
Standard (10 days) ____
RUSH: 24 hrs ____ 48 hrs ✓ 5 day ____
BY MONDAY NITE

CHAIN OF CUSTODY/REQUEST FOR LABORATORY ANALYSIS

Client: ~~[illegible]~~ EVREN N.W.
Project Name: REXAM
Contact: LYNN GREEN/NEIL WOLLER
Phone No.: 503 452-5561
Fax No.: 503 452-7669
Email: LYNNG@EASYSTREET.COM

Analyses Requested

Lab Use Only	Sample ID	Date	Time	Matrix	# of Containers	NWTPH HCID	VOCs	SVOCs	METALS 200.7/6010	pH	NWTPH-CX	NWTPX-DX						
	B1-GW	5/10	1200	WATER	6	✓	✓	✓	✓	✓								
	B17-18'-25'	"	10 30	SOIL	2	✓	✓	✓	✓									
	B6-GW	5/11/01	630	WATER	7	✓	✓	✓	✓	✓								
	B6-3'-5'	5/10/01		SOIL		✓	✓	✓	✓									
	B9-GW	"	1600	WATER	7	✓	✓	✓	✓	✓								
	B9-5'-7'	"	330	SOIL		✓	✓	✓	✓									
	B15-GW	"	1425	WATER	7	✓	✓	✓	✓	✓								
	B15-3'-5'	"	1:40	SOIL		✓	✓	✓	✓									
	B10-GW	5/11/01	800	WATER	4	✓	✓	✓	[illegible]	✓								
	B8-GW	5/10/01	845	WATER	7	✓	✓	✓	✓	✓								
	B3-2'-4'	5/10/01	10:00	SOIL		✓	✓	✓	✓									
	B10-6-9'	5/11/01	7:20	SOIL		✓	✓	✓	✓									
	[illegible]																	
	B13 6-9'	5/11/01	9:00	SOIL		✓	✓											
	TRIP BLANKS	5/9/01	5PM	H_2O	4		✓											

	Signature	Printed Name	Firm	Time/Date
Relinquished By:	[signature]	NEIL WOLLER	EVREN	5/11/01 1120
Received By	A Strom	A Strom	SAS	5/11/01 1120
Relinquished By:				
Received By				
Relinquished By:				
Received By				

Special Instructions
All Diss. metals have been field filtered
May run followups based on HCID

COC No. ____________

Page ____ of ____

D-2 GROUND WATER ANALYTICAL DATA

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Project Name	Rexam
Date Received	05-11-01

General Chemistry Parameters

Client Sample ID			B1-GW		
Lab ID			98071-01		
Parameter	**Method**	**Date Analyzed**	**Units**	**Result**	**PQL**
pH	EPA 150.1	05-11-01	N/A	6.34	N/A

Client Sample ID			B6-GW		
Lab ID			98071-03		
Parameter	**Method**	**Date Analyzed**	**Units**	**Result**	**PQL**
pH	EPA 150.1	05-11-01	N/A	6.84	N/A

Client Sample ID			B9-GW		
Lab ID			98071-05		
Parameter	**Method**	**Date Analyzed**	**Units**	**Result**	**PQL**
pH	EPA 150.1	05-11-01	N/A	6.71	N/A

Client Sample ID			B15-GW		
Lab ID			98071-07		
Parameter	**Method**	**Date Analyzed**	**Units**	**Result**	**PQL**
pH	EPA 150.1	05-11-01	N/A	6.76	N/A

Client Sample ID			B10-GW		
Lab ID			98071-09		
Parameter	**Method**	**Date Analyzed**	**Units**	**Result**	**PQL**
pH	EPA 150.1	05-11-01	N/A	6.80	N/A

SOUND ANALYTICAL SERVICES, INC.

	Client Sample ID		B4-GW		
	Lab ID		98071-10		
Parameter	Method	Date Analyzed	Units	Result	PQL
pH	EPA 150.1	05-11-01	N/A	6.73	N/A

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	10

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	99.1		82.5	114
Fluorobenzene	97.3		83.7	114
Toluene-D8	98.5		91.1	107
Ethylbenzene-d10	96.2		86.6	108
Bromofluorobenzene	97.2		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	4	0.34	
Chloromethane	ND	4	1.3	
Vinyl chloride	3	4	0.28	J
Bromomethane	ND	8	1.7	
Chloroethane	45	4	0.56	
Trichlorofluoromethane	ND	4	0.27	
1,1-Dichloroethene	16	4	0.86	
Methylene chloride	ND	4	1.3	
trans-1,2-Dichloroethene	ND	4	0.74	
1,1-Dichloroethane	240	4	0.61	D10
2,2-Dichloropropane	ND	4	0.6	
cis-1,2-Dichloroethene	1.2	4	0.57	J
Bromochloromethane	ND	4	0.58	
Chloroform	ND	4	0.63	
1,1,1-Trichloroethane	170	4	0.89	D10
Carbon Tetrachloride	ND	4	0.68	
1,1-Dichloropropene	ND	4	0.87	
Benzene	ND	4	0.65	
1,2-Dichloroethane	ND	4	0.61	
Trichloroethene	1.6	4	0.69	J
1,2-Dichloropropane	ND	4	0.53	
Dibromomethane	ND	4	0.61	
Bromodichloromethane	ND	4	0.85	
cis-1,3-Dichloropropene	ND	4	0.57	
Toluene	1.7	4	0.73	J
trans-1,3-Dichloropropene	ND	4	0.58	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-01 continued...

Analyte	Result (ug/L)	PQL	MDL
1,1,2-Trichloroethane	ND	4	0.73
Tetrachloroethene	ND	4	0.72
1,3-Dichloropropane	ND	4	0.66
Dibromochloromethane	ND	4	0.71
1,2-Dibromoethane	ND	4	0.72
Chlorobenzene	ND	4	0.68
Ethylbenzene	ND	4	0.77
1,1,1,2-Tetrachloroethane	ND	4	0.66
m,p-Xylene	ND	8	1.6
o-Xylene	ND	4	0.84
Styrene	ND	4	0.58
Bromoform	ND	4	0.57
Isopropylbenzene	ND	4	0.77
Bromobenzene	ND	4	0.69
n-Propylbenzene	ND	4	0.84
1,1,2,2-Tetrachloroethane	ND	4	0.83
1,2,3-Trichloropropane	ND	4	0.6
2-Chlorotoluene	ND	4	0.76
1,3,5-Trimethylbenzene	ND	4	0.77
4-Chlorotoluene	ND	4	0.81
t-Butylbenzene	ND	4	0.79
1,2,4-Trimethylbenzene	ND	4	0.86
sec-Butylbenzene	ND	4	0.93
1,3-Dichlorobenzene	ND	4	0.88
4-Isopropyltoluene	ND	4	0.7
1,4-Dichlorobenzene	ND	4	0.71
n-Butylbenzene	ND	4	0.75
1,2-Dichlorobenzene	ND	4	0.68
1,2-Dibromo-3-chloropropane	ND	4	1
1,2,4-Trichlorobenzene	ND	4	0.98
Hexachlorobutadiene	ND	4	0.55
Naphthalene	ND	4	0.9
1,2,3-Trichlorobenzene	ND	4	0.7

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-GW
Lab ID:	98071-03
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	102		82.5	114
Fluorobenzene	98.3		83.7	114
Toluene-D8	99.1		91.1	107
Ethylbenzene-d10	97.4		86.6	108
Bromofluorobenzene	96.6		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	3.5	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	ND	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	ND	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	0.17	0.4	0.061	J
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	0.083	0.4	0.057	J
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	0.21	0.4	0.089	J
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	ND	0.4	0.069	
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	0.11	0.4	0.073	J
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-03 continued...

Analyte	Result (ug/L)	PQL	MDL
1,1,2-Trichloroethane	ND	0.4	0.073
Tetrachloroethene	ND	0.4	0.072
1,3-Dichloropropane	ND	0.4	0.066
Dibromochloromethane	ND	0.4	0.071
1,2-Dibromoethane	ND	0.4	0.072
Chlorobenzene	ND	0.4	0.068
Ethylbenzene	ND	0.4	0.077
1,1,1,2-Tetrachloroethane	ND	0.4	0.066
m,p-Xylene	ND	0.8	0.16
o-Xylene	ND	0.4	0.084
Styrene	ND	0.4	0.058
Bromoform	ND	0.4	0.057
Isopropylbenzene	ND	0.4	0.077
Bromobenzene	ND	0.4	0.069
n-Propylbenzene	ND	0.4	0.084
1,1,2,2-Tetrachloroethane	ND	0.4	0.083
1,2,3-Trichloropropane	ND	0.4	0.06
2-Chlorotoluene	ND	0.4	0.076
1,3,5-Trimethylbenzene	ND	0.4	0.077
4-Chlorotoluene	ND	0.4	0.081
t-Butylbenzene	ND	0.4	0.079
1,2,4-Trimethylbenzene	ND	0.4	0.086
sec-Butylbenzene	ND	0.4	0.093
1,3-Dichlorobenzene	ND	0.4	0.088
4-Isopropyltoluene	ND	0.4	0.07
1,4-Dichlorobenzene	ND	0.4	0.071
n-Butylbenzene	ND	0.4	0.075
1,2-Dichlorobenzene	ND	0.4	0.068
1,2-Dibromo-3-chloropropane	ND	0.4	0.1
1,2,4-Trichlorobenzene	ND	0.4	0.098
Hexachlorobutadiene	ND	0.4	0.055
Naphthalene	ND	0.4	0.09
1,2,3-Trichlorobenzene	ND	0.4	0.07

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	100		82.5	114
Fluorobenzene	101		83.7	114
Toluene-D8	97.9		91.1	107
Ethylbenzene-d10	96.7		86.6	108
Bromofluorobenzene	96.5		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	0.36	0.4	0.028	J
Bromomethane	ND	0.8	0.17	
Chloroethane	3.1	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	2.4	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	39	0.4	0.061	D10
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	0.086	0.4	0.057	J
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	67	0.4	0.089	D10
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	0.12	0.4	0.069	J
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	0.22	0.4	0.073	J
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-05 continued...

Analyte	Result (ug/L)	PQL	MDL	
1,1,2-Trichloroethane	ND	0.4	0.073	
Tetrachloroethene	ND	0.4	0.072	
1,3-Dichloropropane	ND	0.4	0.066	
Dibromochloromethane	ND	0.4	0.071	
1,2-Dibromoethane	ND	0.4	0.072	
Chlorobenzene	ND	0.4	0.068	
Ethylbenzene	ND	0.4	0.077	
1,1,1,2-Tetrachloroethane	ND	0.4	0.066	
m,p-Xylene	ND	0.8	0.16	
o-Xylene	ND	0.4	0.084	
Styrene	ND	0.4	0.058	
Bromoform	ND	0.4	0.057	
Isopropylbenzene	ND	0.4	0.077	
Bromobenzene	ND	0.4	0.069	
n-Propylbenzene	ND	0.4	0.084	
1,1,2,2-Tetrachloroethane	ND	0.4	0.083	
1,2,3-Trichloropropane	ND	0.4	0.06	
2-Chlorotoluene	ND	0.4	0.076	
1,3,5-Trimethylbenzene	ND	0.4	0.077	
4-Chlorotoluene	ND	0.4	0.081	
t-Butylbenzene	ND	0.4	0.079	
1,2,4-Trimethylbenzene	0.15	0.4	0.086	J
sec-Butylbenzene	ND	0.4	0.093	
1,3-Dichlorobenzene	ND	0.4	0.088	
4-Isopropyltoluene	ND	0.4	0.07	
1,4-Dichlorobenzene	ND	0.4	0.071	
n-Butylbenzene	ND	0.4	0.075	
1,2-Dichlorobenzene	ND	0.4	0.068	
1,2-Dibromo-3-chloropropane	ND	0.4	0.1	
1,2,4-Trichlorobenzene	ND	0.4	0.098	
Hexachlorobutadiene	ND	0.4	0.055	
Naphthalene	ND	0.4	0.09	
1,2,3-Trichlorobenzene	ND	0.4	0.07	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	99.9		82.5	114
Fluorobenzene	101		83.7	114
Toluene-D8	97.8		91.1	107
Ethylbenzene-d10	97.3		86.6	108
Bromofluorobenzene	97.1		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	0.63	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	5.8	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	3.6	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	41	0.4	0.061	D10
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	0.16	0.4	0.057	J
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	65	0.4	0.089	D10
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	0.21	0.4	0.069	J
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	0.29	0.4	0.073	J
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-07 continued...

Analyte	Result (ug/L)	PQL	MDL	
1,1,2-Trichloroethane	ND	0.4	0.073	
Tetrachloroethene	ND	0.4	0.072	
1,3-Dichloropropane	ND	0.4	0.066	
Dibromochloromethane	ND	0.4	0.071	
1,2-Dibromoethane	ND	0.4	0.072	
Chlorobenzene	ND	0.4	0.068	
Ethylbenzene	ND	0.4	0.077	
1,1,1,2-Tetrachloroethane	ND	0.4	0.066	
m,p-Xylene	ND	0.8	0.16	
o-Xylene	0.44	0.4	0.084	
Styrene	ND	0.4	0.058	
Bromoform	ND	0.4	0.057	
Isopropylbenzene	0.18	0.4	0.077	J
Bromobenzene	ND	0.4	0.069	
n-Propylbenzene	0.82	0.4	0.084	
1,1,2,2-Tetrachloroethane	ND	0.4	0.083	
1,2,3-Trichloropropane	ND	0.4	0.06	
2-Chlorotoluene	ND	0.4	0.076	
1,3,5-Trimethylbenzene	3	0.4	0.077	
4-Chlorotoluene	ND	0.4	0.081	
t-Butylbenzene	ND	0.4	0.079	
1,2,4-Trimethylbenzene	10	0.4	0.086	
sec-Butylbenzene	ND	0.4	0.093	
1,3-Dichlorobenzene	ND	0.4	0.088	
4-Isopropyltoluene	0.22	0.4	0.07	J
1,4-Dichlorobenzene	ND	0.4	0.071	
n-Butylbenzene	ND	0.4	0.075	
1,2-Dichlorobenzene	ND	0.4	0.068	
1,2-Dibromo-3-chloropropane	ND	0.4	0.1	
1,2,4-Trichlorobenzene	ND	0.4	0.098	
Hexachlorobutadiene	ND	0.4	0.055	
Naphthalene	0.12	0.4	0.09	J
1,2,3-Trichlorobenzene	ND	0.4	0.07	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-GW
Lab ID:	98071-09
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	103		82.5	114
Fluorobenzene	99.9		83.7	114
Toluene-D8	98.8		91.1	107
Ethylbenzene-d10	97.7		86.6	108
Bromofluorobenzene	96.3		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	ND	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	ND	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	ND	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	ND	0.4	0.061	
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	ND	0.4	0.057	
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	0.15	0.4	0.089	J
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	0.1	0.4	0.065	J
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	ND	0.4	0.069	
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	0.26	0.4	0.073	J
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-09 continued...

Analyte	Result (ug/L)	PQL	MDL	
1,1,2-Trichloroethane	ND	0.4	0.073	
Tetrachloroethene	ND	0.4	0.072	
1,3-Dichloropropane	ND	0.4	0.066	
Dibromochloromethane	ND	0.4	0.071	
1,2-Dibromoethane	ND	0.4	0.072	
Chlorobenzene	ND	0.4	0.068	
Ethylbenzene	ND	0.4	0.077	
1,1,1,2-Tetrachloroethane	ND	0.4	0.066	
m,p-Xylene	0.16	0.8	0.16	J
o-Xylene	0.093	0.4	0.084	J
Styrene	ND	0.4	0.058	
Bromoform	ND	0.4	0.057	
Isopropylbenzene	ND	0.4	0.077	
Bromobenzene	ND	0.4	0.069	
n-Propylbenzene	ND	0.4	0.084	
1,1,2,2-Tetrachloroethane	ND	0.4	0.083	
1,2,3-Trichloropropane	ND	0.4	0.06	
2-Chlorotoluene	ND	0.4	0.076	
1,3,5-Trimethylbenzene	ND	0.4	0.077	
4-Chlorotoluene	ND	0.4	0.081	
t-Butylbenzene	ND	0.4	0.079	
1,2,4-Trimethylbenzene	ND	0.4	0.086	
sec-Butylbenzene	ND	0.4	0.093	
1,3-Dichlorobenzene	ND	0.4	0.088	
4-Isopropyltoluene	ND	0.4	0.07	
1,4-Dichlorobenzene	ND	0.4	0.071	
n-Butylbenzene	ND	0.4	0.075	
1,2-Dichlorobenzene	ND	0.4	0.068	
1,2-Dibromo-3-chloropropane	ND	0.4	0.1	
1,2,4-Trichlorobenzene	ND	0.4	0.098	
Hexachlorobutadiene	ND	0.4	0.055	
Naphthalene	ND	0.4	0.09	
1,2,3-Trichlorobenzene	ND	0.4	0.07	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	10

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	62.4	X9	82.5	114
Fluorobenzene	130	X9	83.7	114
Toluene-D8	94.2		91.1	107
Ethylbenzene-d10	97.8		86.6	108
Bromofluorobenzene	103		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	4	0.34	
Chloromethane	ND	4	1.3	
Vinyl chloride	700	4	0.28	D100
Bromomethane	ND	8	1.7	
Chloroethane	5900	4	0.56	D100
Trichlorofluoromethane	ND	4	0.27	
1,1-Dichloroethene	1800	4	0.86	D100
Methylene chloride	73	4	1.3	
trans-1,2-Dichloroethene	11	4	0.74	
1,1-Dichloroethane	24000	4	0.61	D1000
2,2-Dichloropropane	ND	4	0.6	
cis-1,2-Dichloroethene	110	4	0.57	
Bromochloromethane	ND	4	0.58	
Chloroform	ND	4	0.63	
1,1,1-Trichloroethane	27000	4	0.89	D1000
Carbon Tetrachloride	ND	4	0.68	
1,1-Dichloropropene	ND	4	0.87	
Benzene	2.3	4	0.65	J
1,2-Dichloroethane	87	4	0.61	
Trichloroethene	83	4	0.69	
1,2-Dichloropropane	ND	4	0.53	
Dibromomethane	ND	4	0.61	
Bromodichloromethane	ND	4	0.85	
cis-1,3-Dichloropropene	ND	4	0.57	
Toluene	70	4	0.73	
trans-1,3-Dichloropropene	ND	4	0.58	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-10 continued...

Analyte	Result (ug/L)	PQL	MDL	
1,1,2-Trichloroethane	7.2	4	0.73	
Tetrachloroethene	29	4	0.72	
1,3-Dichloropropane	ND	4	0.66	
Dibromochloromethane	ND	4	0.71	
1,2-Dibromoethane	ND	4	0.72	
Chlorobenzene	ND	4	0.68	
Ethylbenzene	2	4	0.77	J
1,1,1,2-Tetrachloroethane	ND	4	0.66	
m,p-Xylene	3.6	8	1.6	J
o-Xylene	4.7	4	0.84	
Styrene	ND	4	0.58	
Bromoform	ND	4	0.57	
Isopropylbenzene	0.82	4	0.77	J
Bromobenzene	ND	4	0.69	
n-Propylbenzene	1.5	4	0.84	J
1,1,2,2-Tetrachloroethane	ND	4	0.83	
1,2,3-Trichloropropane	ND	4	0.6	
2-Chlorotoluene	ND	4	0.76	
1,3,5-Trimethylbenzene	1.3	4	0.77	J
4-Chlorotoluene	ND	4	0.81	
t-Butylbenzene	ND	4	0.79	
1,2,4-Trimethylbenzene	6.3	4	0.86	
sec-Butylbenzene	ND	4	0.93	
1,3-Dichlorobenzene	ND	4	0.88	
4-Isopropyltoluene	ND	4	0.7	
1,4-Dichlorobenzene	ND	4	0.71	
n-Butylbenzene	ND	4	0.75	
1,2-Dichlorobenzene	ND	4	0.68	
1,2-Dibromo-3-chloropropane	ND	4	1	
1,2,4-Trichlorobenzene	ND	4	0.98	
Hexachlorobutadiene	ND	4	0.55	
Naphthalene	1.7	4	0.9	J
1,2,3-Trichlorobenzene	ND	4	0.7	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	TRIP BLANK
Lab ID:	98071-14
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	98.4		82.5	114
Fluorobenzene	98.5		83.7	114
Toluene-D8	97		91.1	107
Ethylbenzene-d10	99.3		86.6	108
Bromofluorobenzene	99.3		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	ND	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	ND	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	ND	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	ND	0.4	0.061	
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	ND	0.4	0.057	
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	ND	0.4	0.089	
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	ND	0.4	0.069	
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	ND	0.4	0.073	
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for 98071-14 continued...

Analyte	Result (ug/L)	PQL	MDL
1,1,2-Trichloroethane	ND	0.4	0.073
Tetrachloroethene	ND	0.4	0.072
1,3-Dichloropropane	ND	0.4	0.066
Dibromochloromethane	ND	0.4	0.071
1,2-Dibromoethane	ND	0.4	0.072
Chlorobenzene	ND	0.4	0.068
Ethylbenzene	ND	0.4	0.077
1,1,1,2-Tetrachloroethane	ND	0.4	0.066
m,p-Xylene	ND	0.8	0.16
o-Xylene	ND	0.4	0.084
Styrene	ND	0.4	0.058
Bromoform	ND	0.4	0.057
Isopropylbenzene	ND	0.4	0.077
Bromobenzene	ND	0.4	0.069
n-Propylbenzene	ND	0.4	0.084
1,1,2,2-Tetrachloroethane	ND	0.4	0.083
1,2,3-Trichloropropane	ND	0.4	0.06
2-Chlorotoluene	ND	0.4	0.076
1,3,5-Trimethylbenzene	ND	0.4	0.077
4-Chlorotoluene	ND	0.4	0.081
t-Butylbenzene	ND	0.4	0.079
1,2,4-Trimethylbenzene	ND	0.4	0.086
sec-Butylbenzene	ND	0.4	0.093
1,3-Dichlorobenzene	ND	0.4	0.088
4-Isopropyltoluene	ND	0.4	0.07
1,4-Dichlorobenzene	ND	0.4	0.071
n-Butylbenzene	ND	0.4	0.075
1,2-Dichlorobenzene	ND	0.4	0.068
1,2-Dibromo-3-chloropropane	ND	0.4	0.1
1,2,4-Trichlorobenzene	ND	0.4	0.098
Hexachlorobutadiene	ND	0.4	0.055
Naphthalene	ND	0.4	0.09
1,2,3-Trichlorobenzene	ND	0.4	0.07

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	20.9	X9	52	149
2 - Fluorobiphenyl	15	X9	56	127
p - Terphenyl - d14	16.5	X9	43	145
Phenol - d5	8.9	X9	19	105
2 - Fluorophenol	13.8	X9	34	109
2,4,6 - Tribromophenol	21.9	X9	55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	1.4	0.45	
bis(2-Chloroethyl)ether	ND	1.4	0.27	
2-Chlorophenol	ND	1.4	0.24	
1,3-Dichlorobenzene	ND	1.4	0.24	
1,4-Dichlorobenzene	ND	1.4	0.21	
Benzyl Alcohol	ND	1.4	0.45	
1,2-Dichlorobenzene	ND	1.4	0.23	
2-Methylphenol	ND	1.4	0.34	
bis(2-Chloroisopropyl)ether	ND	1.4	0.3	
3- & 4-Methylphenol	ND	1.4	0.32	
N-nitroso-di-n-propylamine	ND	1.4	0.3	
Hexachloroethane	ND	1.4	0.56	
Nitrobenzene	ND	1.4	0.63	
Isophorone	ND	1.4	0.25	
2-Nitrophenol	ND	1.4	0.31	
2,4-Dimethylphenol	ND	1.4	0.21	
Benzoic Acid	ND	1.4	0.28	
bis(2-Chloroethoxy)methane	ND	1.4	0.25	
2,4-Dichlorophenol	ND	1.4	0.21	
1,2,4-Trichlorobenzene	ND	1.4	0.23	
Naphthalene	ND	0.7	0.23	
4-Chloroaniline	ND	1.4	0.55	
Hexachlorobutadiene	ND	1.4	0.41	
4-Chloro-3-methylphenol	ND	1.4	0.76	
2-Methylnaphthalene	ND	1.4	0.25	
Hexachlorocyclopentadiene	ND	0.7	0.37	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-01 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	1.4	0.17
2,4,5-Trichlorophenol	ND	1.4	0.15
2-Chloronaphthalene	ND	0.14	0.039
2-Nitroaniline	ND	1.4	0.25
Dimethylphthalate	ND	1.4	0.23
Acenaphthylene	ND	0.14	0.062
2,6-Dinitrotoluene	ND	1.4	0.28
3-Nitroaniline	ND	1.4	0.46
Acenaphthene	ND	0.7	0.21
2,4-Dinitrophenol	ND	1.4	0.42
4-Nitrophenol	ND	1.4	0.41
Dibenzofuran	ND	1.4	0.2
2,4-Dinitrotoluene	ND	1.4	0.18
Diethylphthalate	ND	3.5	0.82
4-Chlorophenylphenylether	ND	1.4	0.21
Fluorene	ND	0.7	0.15
4-Nitroaniline	ND	1.4	0.44
4,6-Dinitro-2-methylphenol	ND	1.4	0.31
N-Nitrosodiphenylamine	ND	1.4	0.14
4-Bromophenylphenylether	ND	1.4	0.17
Hexachlorobenzene	ND	1.4	0.28
Pentachlorophenol	ND	1.4	0.24
Phenanthrene	ND	0.7	0.23
Anthracene	ND	0.14	0.06
Di-n-butylphthalate	ND	7	3.2
Fluoranthene	ND	0.7	0.18
Pyrene	ND	0.14	0.083
Butylbenzylphthalate	ND	7	2.6
3,3'-Dichlorobenzidine	ND	1.4	0.51
Benzo(a)anthracene	ND	0.14	0.062
Chrysene	ND	0.14	0.049
bis(2-Ethylhexyl)phthalate	ND	1.4	0.91
Di-n-octylphthalate	ND	1.4	0.48
Benzo(b)fluoranthene	ND	0.14	0.02
Benzo(k)fluoranthene	ND	0.14	0.049
Benzo(a)pyrene	ND	0.14	0.037
Indeno(1,2,3-cd)pyrene	ND	0.14	0.066
Dibenz(a,h)anthracene	ND	0.14	0.065
Benzo(g,h,i)perylene	ND	0.14	0.045

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-GW
Lab ID:	98071-03
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	132		52	149
2 - Fluorobiphenyl	88.5		56	127
p - Terphenyl - d14	92.9		43	145
Phenol - d5	33.1		19	105
2 - Fluorophenol	59.7		34	109
2,4,6 - Tribromophenol	115		55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	1	0.33	
bis(2-Chloroethyl)ether	ND	1	0.2	
2-Chlorophenol	ND	1	0.17	
1,3-Dichlorobenzene	ND	1	0.17	
1,4-Dichlorobenzene	ND	1	0.15	
Benzyl Alcohol	ND	1	0.33	
1,2-Dichlorobenzene	ND	1	0.16	
2-Methylphenol	ND	1	0.25	
bis(2-Chloroisopropyl)ether	ND	1	0.22	
3- & 4-Methylphenol	ND	1	0.24	
N-nitroso-di-n-propylamine	ND	1	0.22	
Hexachloroethane	ND	1	0.41	
Nitrobenzene	ND	1	0.46	
Isophorone	ND	1	0.19	
2-Nitrophenol	ND	1	0.23	
2,4-Dimethylphenol	ND	1	0.15	
Benzoic Acid	ND	1	0.21	
bis(2-Chloroethoxy)methane	ND	1	0.19	
2,4-Dichlorophenol	ND	1	0.15	
1,2,4-Trichlorobenzene	ND	1	0.16	
Naphthalene	ND	0.51	0.16	
4-Chloroaniline	ND	1	0.4	
Hexachlorobutadiene	ND	1	0.3	
4-Chloro-3-methylphenol	ND	1	0.56	
2-Methylnaphthalene	ND	1	0.19	
Hexachlorocyclopentadiene	ND	0.51	0.27	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-03 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	1	0.12
2,4,5-Trichlorophenol	ND	1	0.11
2-Chloronaphthalene	ND	0.1	0.029
2-Nitroaniline	ND	1	0.19
Dimethylphthalate	ND	1	0.16
Acenaphthylene	ND	0.1	0.045
2,6-Dinitrotoluene	ND	1	0.21
3-Nitroaniline	ND	1	0.34
Acenaphthene	ND	0.51	0.15
2,4-Dinitrophenol	ND	1	0.31
4-Nitrophenol	ND	1	0.3
Dibenzofuran	ND	1	0.14
2,4-Dinitrotoluene	ND	1	0.13
Diethylphthalate	ND	2.6	0.6
4-Chlorophenylphenylether	ND	1	0.15
Fluorene	ND	0.51	0.11
4-Nitroaniline	ND	1	0.32
4,6-Dinitro-2-methylphenol	ND	1	0.23
N-Nitrosodiphenylamine	ND	1	0.1
4-Bromophenylphenylether	ND	1	0.12
Hexachlorobenzene	ND	1	0.21
Pentachlorophenol	ND	1	0.17
Phenanthrene	ND	0.51	0.16
Anthracene	ND	0.1	0.044
Di-n-butylphthalate	ND	5.1	2.4
Fluoranthene	ND	0.51	0.13
Pyrene	ND	0.1	0.061
Butylbenzylphthalate	ND	5.1	1.9
3,3'-Dichlorobenzidine	ND	1	0.37
Benzo(a)anthracene	ND	0.1	0.045
Chrysene	ND	0.1	0.036
bis(2-Ethylhexyl)phthalate	ND	1	0.67
Di-n-octylphthalate	ND	1	0.35
Benzo(b)fluoranthene	ND	0.1	0.014
Benzo(k)fluoranthene	ND	0.1	0.036
Benzo(a)pyrene	ND	0.1	0.027
Indeno(1,2,3-cd)pyrene	ND	0.1	0.048
Dibenz(a,h)anthracene	ND	0.1	0.047
Benzo(g,h,i)perylene	ND	0.1	0.033

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	106		52	149
2 - Fluorobiphenyl	69.7		56	127
p - Terphenyl - d14	72.3		43	145
Phenol - d5	31.9		19	105
2 - Fluorophenol	62.9		34	109
2,4,6 - Tribromophenol	97.9		55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	1.1	0.37	
bis(2-Chloroethyl)ether	ND	1.1	0.22	
2-Chlorophenol	ND	1.1	0.19	
1,3-Dichlorobenzene	ND	1.1	0.19	
1,4-Dichlorobenzene	ND	1.1	0.17	
Benzyl Alcohol	ND	1.1	0.37	
1,2-Dichlorobenzene	ND	1.1	0.18	
2-Methylphenol	ND	1.1	0.28	
bis(2-Chloroisopropyl)ether	ND	1.1	0.24	
3- & 4-Methylphenol	ND	1.1	0.26	
N-nitroso-di-n-propylamine	ND	1.1	0.24	
Hexachloroethane	ND	1.1	0.46	
Nitrobenzene	ND	1.1	0.52	
Isophorone	ND	1.1	0.21	
2-Nitrophenol	ND	1.1	0.25	
2,4-Dimethylphenol	ND	1.1	0.17	
Benzoic Acid	ND	1.1	0.23	
bis(2-Chloroethoxy)methane	ND	1.1	0.21	
2,4-Dichlorophenol	ND	1.1	0.17	
1,2,4-Trichlorobenzene	ND	1.1	0.18	
Naphthalene	ND	0.57	0.18	
4-Chloroaniline	ND	1.1	0.45	
Hexachlorobutadiene	ND	1.1	0.33	
4-Chloro-3-methylphenol	ND	1.1	0.62	
2-Methylnaphthalene	ND	1.1	0.21	
Hexachlorocyclopentadiene	ND	0.57	0.3	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-05 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	1.1	0.14
2,4,5-Trichlorophenol	ND	1.1	0.13
2-Chloronaphthalene	ND	0.11	0.032
2-Nitroaniline	ND	1.1	0.21
Dimethylphthalate	ND	1.1	0.18
Acenaphthylene	ND	0.11	0.05
2,6-Dinitrotoluene	ND	1.1	0.23
3-Nitroaniline	ND	1.1	0.38
Acenaphthene	ND	0.57	0.17
2,4-Dinitrophenol	ND	1.1	0.34
4-Nitrophenol	ND	1.1	0.33
Dibenzofuran	ND	1.1	0.16
2,4-Dinitrotoluene	ND	1.1	0.15
Diethylphthalate	ND	2.9	0.67
4-Chlorophenylphenylether	ND	1.1	0.17
Fluorene	ND	0.57	0.13
4-Nitroaniline	ND	1.1	0.36
4,6-Dinitro-2-methylphenol	ND	1.1	0.25
N-Nitrosodiphenylamine	ND	1.1	0.11
4-Bromophenylphenylether	ND	1.1	0.14
Hexachlorobenzene	ND	1.1	0.23
Pentachlorophenol	ND	1.1	0.19
Phenanthrene	ND	0.57	0.18
Anthracene	ND	0.11	0.049
Di-n-butylphthalate	ND	5.7	2.6
Fluoranthene	ND	0.57	0.15
Pyrene	ND	0.11	0.068
Butylbenzylphthalate	ND	5.7	2.1
3,3'-Dichlorobenzidine	ND	1.1	0.41
Benzo(a)anthracene	ND	0.11	0.05
Chrysene	ND	0.11	0.04
bis(2-Ethylhexyl)phthalate	ND	1.1	0.75
Di-n-octylphthalate	ND	1.1	0.39
Benzo(b)fluoranthene	ND	0.11	0.016
Benzo(k)fluoranthene	ND	0.11	0.04
Benzo(a)pyrene	ND	0.11	0.03
Indeno(1,2,3-cd)pyrene	ND	0.11	0.054
Dibenz(a,h)anthracene	ND	0.11	0.053
Benzo(g,h,i)perylene	ND	0.11	0.037

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	90.1		52	149
2 - Fluorobiphenyl	59.1		56	127
p - Terphenyl - d14	65.2		43	145
Phenol - d5	26.1		19	105
2 - Fluorophenol	44.9		34	109
2,4,6 - Tribromophenol	84.9		55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	1.1	0.34	
bis(2-Chloroethyl)ether	ND	1.1	0.2	
2-Chlorophenol	ND	1.1	0.18	
1,3-Dichlorobenzene	ND	1.1	0.18	
1,4-Dichlorobenzene	ND	1.1	0.16	
Benzyl Alcohol	ND	1.1	0.34	
1,2-Dichlorobenzene	ND	1.1	0.17	
2-Methylphenol	ND	1.1	0.25	
bis(2-Chloroisopropyl)ether	ND	1.1	0.22	
3- & 4-Methylphenol	ND	1.1	0.24	
N-nitroso-di-n-propylamine	ND	1.1	0.22	
Hexachloroethane	ND	1.1	0.42	
Nitrobenzene	ND	1.1	0.48	
Isophorone	ND	1.1	0.19	
2-Nitrophenol	ND	1.1	0.23	
2,4-Dimethylphenol	ND	1.1	0.16	
Benzoic Acid	2.8	1.1	0.21	
bis(2-Chloroethoxy)methane	ND	1.1	0.19	
2,4-Dichlorophenol	ND	1.1	0.16	
1,2,4-Trichlorobenzene	ND	1.1	0.17	
Naphthalene	0.79	0.53	0.17	
4-Chloroaniline	ND	1.1	0.41	
Hexachlorobutadiene	ND	1.1	0.31	
4-Chloro-3-methylphenol	ND	1.1	0.57	
2-Methylnaphthalene	0.51	1.1	0.19	J
Hexachlorocyclopentadiene	ND	0.53	0.28	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-07 continued...

Analyte	Result (ug/L)	PQL	MDL	
2,4,6-Trichlorophenol	ND	1.1	0.13	
2,4,5-Trichlorophenol	ND	1.1	0.12	
2-Chloronaphthalene	ND	0.11	0.03	
2-Nitroaniline	ND	1.1	0.19	
Dimethylphthalate	ND	1.1	0.17	
Acenaphthylene	ND	0.11	0.047	
2,6-Dinitrotoluene	ND	1.1	0.21	
3-Nitroaniline	ND	1.1	0.35	
Acenaphthene	ND	0.53	0.16	
2,4-Dinitrophenol	ND	1.1	0.32	
4-Nitrophenol	ND	1.1	0.31	J
Dibenzofuran	ND	1.1	0.15	
2,4-Dinitrotoluene	ND	1.1	0.14	
Diethylphthalate	ND	2.7	0.62	
4-Chlorophenylphenylether	ND	1.1	0.16	
Fluorene	ND	0.53	0.12	
4-Nitroaniline	ND	1.1	0.33	
4,6-Dinitro-2-methylphenol	ND	1.1	0.23	
N-Nitrosodiphenylamine	2.5	1.1	0.11	
4-Bromophenylphenylether	ND	1.1	0.13	
Hexachlorobenzene	ND	1.1	0.21	
Pentachlorophenol	ND	1.1	0.18	
Phenanthrene	ND	0.53	0.17	J
Anthracene	ND	0.11	0.046	
Di-n-butylphthalate	ND	5.3	2.5	
Fluoranthene	ND	0.53	0.14	
Pyrene	0.18	0.11	0.063	
Butylbenzylphthalate	ND	5.3	2	
3,3'-Dichlorobenzidine	ND	1.1	0.38	
Benzo(a)anthracene	ND	0.11	0.047	
Chrysene	ND	0.11	0.037	
bis(2-Ethylhexyl)phthalate	16	1.1	0.69	
Di-n-octylphthalate	ND	1.1	0.36	
Benzo(b)fluoranthene	ND	0.11	0.015	
Benzo(k)fluoranthene	ND	0.11	0.037	
Benzo(a)pyrene	ND	0.11	0.028	
Indeno(1,2,3-cd)pyrene	ND	0.11	0.05	
Dibenz(a,h)anthracene	ND	0.11	0.049	
Benzo(g,h,i)perylene	ND	0.11	0.034	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-GW
Lab ID:	98071-09
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	-	X9	52	149
2 - Fluorobiphenyl	-	X9	56	127
p - Terphenyl - d14	979	X9	43	145
Phenol - d5	726	X9	19	105
2 - Fluorophenol	886	X9	34	109
2,4,6 - Tribromophenol	1190	X9	55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	10	3.2	
bis(2-Chloroethyl)ether	ND	10	1.9	
2-Chlorophenol	ND	10	1.7	
1,3-Dichlorobenzene	ND	10	1.7	
1,4-Dichlorobenzene	ND	10	1.5	
Benzyl Alcohol	ND	10	3.2	
1,2-Dichlorobenzene	ND	10	1.6	
2-Methylphenol	ND	10	2.4	
bis(2-Chloroisopropyl)ether	ND	10	2.1	
3- & 4-Methylphenol	ND	10	2.3	
N-nitroso-di-n-propylamine	ND	10	2.1	
Hexachloroethane	ND	10	4	
Nitrobenzene	ND	10	4.5	
Isophorone	ND	10	1.8	
2-Nitrophenol	ND	10	2.2	
2,4-Dimethylphenol	ND	10	1.5	
Benzoic Acid	50	10	2	
bis(2-Chloroethoxy)methane	ND	10	1.8	
2,4-Dichlorophenol	ND	10	1.5	
1,2,4-Trichlorobenzene	ND	10	1.6	
Naphthalene	ND	5	1.6	
4-Chloroaniline	ND	10	3.9	
Hexachlorobutadiene	ND	10	2.9	
4-Chloro-3-methylphenol	ND	10	5.4	
2-Methylnaphthalene	ND	10	1.8	
Hexachlorocyclopentadiene	ND	5	2.6	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-09 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	10	1.2
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	1	0.28
2-Nitroaniline	ND	10	1.8
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	1	0.44
2,6-Dinitrotoluene	ND	10	2
3-Nitroaniline	ND	10	3.3
Acenaphthene	ND	5	1.5
2,4-Dinitrophenol	ND	10	3
4-Nitrophenol	ND	10	2.9
Dibenzofuran	ND	10	1.4
2,4-Dinitrotoluene	ND	10	1.3
Diethylphthalate	ND	25	5.8
4-Chlorophenylphenylether	ND	10	1.5
Fluorene	ND	5	1.1
4-Nitroaniline	ND	10	3.1
4,6-Dinitro-2-methylphenol	ND	10	2.2
N-Nitrosodiphenylamine	ND	10	1
4-Bromophenylphenylether	ND	10	1.2
Hexachlorobenzene	ND	10	2
Pentachlorophenol	ND	10	1.7
Phenanthrene	ND	5	1.6
Anthracene	ND	1	0.43
Di-n-butylphthalate	ND	50	23
Fluoranthene	ND	5	1.3
Pyrene	ND	1	0.59
Butylbenzylphthalate	ND	50	19
3,3'-Dichlorobenzidine	ND	10	3.6
Benzo(a)anthracene	ND	1	0.44
Chrysene	ND	1	0.35
bis(2-Ethylhexyl)phthalate	14	10	6.5
Di-n-octylphthalate	ND	10	3.4
Benzo(b)fluoranthene	ND	1	0.14
Benzo(k)fluoranthene	ND	1	0.35
Benzo(a)pyrene	ND	1	0.26
Indeno(1,2,3-cd)pyrene	ND	1	0.47
Dibenz(a,h)anthracene	ND	1	0.46
Benzo(g,h,i)perylene	ND	1	0.32

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Nitrobenzene - d5	98.6		52	149
2 - Fluorobiphenyl	73.5		56	127
p - Terphenyl - d14	83.7		43	145
Phenol - d5	50		19	105
2 - Fluorophenol	69.5		34	109
2,4,6 - Tribromophenol	101		55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	2.4	0.77	
bis(2-Chloroethyl)ether	ND	2.4	0.46	
2-Chlorophenol	ND	2.4	0.41	
1,3-Dichlorobenzene	ND	2.4	0.41	
1,4-Dichlorobenzene	ND	2.4	0.36	
Benzyl Alcohol	ND	2.4	0.77	
1,2-Dichlorobenzene	ND	2.4	0.39	
2-Methylphenol	1.2	2.4	0.58	J
bis(2-Chloroisopropyl)ether	ND	2.4	0.51	
3- & 4-Methylphenol	9.5	2.4	0.55	
N-nitroso-di-n-propylamine	ND	2.4	0.51	
Hexachloroethane	ND	2.4	0.96	
Nitrobenzene	ND	2.4	1.1	
Isophorone	ND	2.4	0.43	
2-Nitrophenol	ND	2.4	0.53	
2,4-Dimethylphenol	0.39	2.4	0.36	J
Benzoic Acid	ND	2.4	0.48	
bis(2-Chloroethoxy)methane	ND	2.4	0.43	
2,4-Dichlorophenol	ND	2.4	0.36	
1,2,4-Trichlorobenzene	ND	2.4	0.39	
Naphthalene	0.89	1.2	0.39	J
4-Chloroaniline	ND	2.4	0.94	
Hexachlorobutadiene	ND	2.4	0.7	
4-Chloro-3-methylphenol	ND	2.4	1.3	
2-Methylnaphthalene	ND	2.4	0.43	
Hexachlorocyclopentadiene	ND	1.2	0.63	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for 98071-10 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	2.4	0.29
2,4,5-Trichlorophenol	ND	2.4	0.27
2-Chloronaphthalene	ND	0.24	0.067
2-Nitroaniline	ND	2.4	0.43
Dimethylphthalate	ND	2.4	0.39
Acenaphthylene	ND	0.24	0.11
2,6-Dinitrotoluene	ND	2.4	0.48
3-Nitroaniline	ND	2.4	0.8
Acenaphthene	ND	1.2	0.36
2,4-Dinitrophenol	ND	2.4	0.72
4-Nitrophenol	ND	2.4	0.7
Dibenzofuran	ND	2.4	0.34
2,4-Dinitrotoluene	ND	2.4	0.31
Diethylphthalate	ND	6	1.4
4-Chlorophenylphenylether	ND	2.4	0.36
Fluorene	ND	1.2	0.27
4-Nitroaniline	ND	2.4	0.75
4,6-Dinitro-2-methylphenol	ND	2.4	0.53
N-Nitrosodiphenylamine	ND	2.4	0.24
4-Bromophenylphenylether	ND	2.4	0.29
Hexachlorobenzene	ND	2.4	0.48
Pentachlorophenol	ND	2.4	0.41
Phenanthrene	ND	1.2	0.39
Anthracene	ND	0.24	0.1
Di-n-butylphthalate	ND	12	5.6
Fluoranthene	ND	1.2	0.31
Pyrene	ND	0.24	0.14
Butylbenzylphthalate	ND	12	4.5
3,3'-Dichlorobenzidine	ND	2.4	0.87
Benzo(a)anthracene	ND	0.24	0.11
Chrysene	ND	0.24	0.084
bis(2-Ethylhexyl)phthalate	ND	2.4	1.6
Di-n-octylphthalate	ND	2.4	0.82
Benzo(b)fluoranthene	ND	0.24	0.034
Benzo(k)fluoranthene	ND	0.24	0.084
Benzo(a)pyrene	ND	0.24	0.063
Indeno(1,2,3-cd)pyrene	ND	0.24	0.11
Dibenz(a,h)anthracene	ND	0.24	0.11
Benzo(g,h,i)perylene	ND	0.24	0.077

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	24.3	X9	50	150
o-terphenyl	20.5	X9	50	150

Analyte	**Result (mg/L)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<0.11	0.11	
Diesel (>nC12-nC24)	>0.28	0.28	X1
Motor Oil (>nC24-nC32)	>0.57	0.57	

X1 - Chromatogram suggests this might be heavy oil

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-GW
Lab ID:	98071-03
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	55.3		50	150
o-terphenyl	57.1		50	150

Analyte	**Result (mg/L)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<0.11	0.11	
Diesel (>nC12-nC24)	<0.28	0.28	
Motor Oil (>nC24-nC32)	<0.57	0.57	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
1-chlorooctane	87.5		50	150
o-terphenyl	91.4		50	150

Analyte	Result (mg/L)	MDL	Flags
Gasoline (Toluene-nC12)	<0.13	0.13	
Diesel (>nC12-nC24)	<0.33	0.33	
Motor Oil (>nC24-nC32)	>0.67	0.67	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	76.1		50	150
o-terphenyl	81.1		50	150

Analyte	**Result (mg/L)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<0.11	0.11	
Diesel (>nC12-nC24)	<0.27	0.27	
Motor Oil (>nC24-nC32)	>0.55	0.55	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	76.1		50	150
o-terphenyl	81.1		50	150

Analyte	**Result (mg/L)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	<0.11	0.11	
Diesel (>nC12-nC24)	<0.27	0.27	
Motor Oil (>nC24-nC32)	>0.55	0.55	X2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B10-GW
Lab ID:	98071-09
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
1-chlorooctane	75.8		50	150
o-terphenyl	78.1		50	150

Analyte	Result (mg/L)	MDL	Flags
Gasoline (Toluene-nC12)	<0.16	0.16	
Diesel (>nC12-nC24)	<0.39	0.39	
Motor Oil (>nC24-nC32)	<0.79	0.79	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/12/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
1-chlorooctane	26.6	X9	50	150
o-terphenyl	26.1	X9	50	150

Analyte	**Result (mg/L)**	**MDL**	**Flags**
Gasoline (Toluene-nC12)	>0.14	0.14	
Diesel (>nC12-nC24)	>0.34	0.34	
Motor Oil (>nC24-nC32)	>0.68	0.68	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	84.2		50	150
Bromofluorobenzene	98.3		56.8	143

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	0.31	0.1	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
% Solids	-
Dilution Factor	5

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
o-terphenyl	20.9	X9	50	150

Analyte	Result (mg/L)	PQL	MDL	Flags
#2 Diesel	3.4	0.28	0.14	X1
Motor Oil	19	0.57	0.28	

X1 - Chromatogram suggests this might be diesel range contamination with heavy oil

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
% Solids	-
Dilution Factor	5

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	87.6		50	150

Analyte	Result (mg/L)	PQL	MDL	Flags
#2 Diesel	0.35	0.33	0.17	X1
Motor Oil	0.72	0.67	0.33	

X1 - Chromatogram suggests this might be diesel range contamination with heavy oil

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
% Solids	-
Dilution Factor	5

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	88.8		50	150

Analyte	Result (mg/L)	PQL	MDL	Flags
#2 Diesel	0.26	0.27	0.14	J X2
Motor Oil	0.74	0.55	0.27	X2

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
% Solids	-
Dilution Factor	5

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	35.7	X9	50	150

Analyte	Result (mg/L)	PQL	MDL	Flags
#2 Diesel	0.84	0.34	0.17	X2
Motor Oil	1.9	0.68	0.34	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	0.015	0.01	
Antimony	ND	0.05	
Barium	0.039	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	0.27	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	0.011	0.01	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B1-GW
Lab ID:	98071-01
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	0.00058	0.0002	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-GW
Lab ID:	98071-03
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	0.046	0.01	
Antimony	ND	0.05	
Barium	ND	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	0.4	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B6-GW
Lab ID:	98071-03
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	0.00049	0.0002	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	0.029	0.01	
Antimony	ND	0.05	
Barium	0.0071	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	0.34	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B9-GW
Lab ID:	98071-05
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	0.00063	0.0002	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	0.012	0.01	
Antimony	ND	0.05	
Barium	ND	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	0.4	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B15-GW
Lab ID:	98071-07
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	0.00043	0.0002	

Sound Analytical Services, Inc.
ANALYTICAL & ENVIRONMENTAL CHEMISTS
5755 8th Street East • Tacoma, WA 98424
(253) 922-2310 • FAX (253) 922-5047
www.saslab.com

SAS Lab No. _____

TURNAROUND REQUEST (business days)
Standard (10 days) ___
RUSH: 24 hrs ___ 48 hrs ✓ 5 day ___
BY MONDAY NITE

CHAIN OF CUSTODY/REQUEST FOR LABORATORY ANALYSIS

Client: ~~CORE LOGGING~~ EVREN NW
Project Name: REXAM
Contact: LYNN GREEN/NEIL WOLLER
Phone No.: 503 452-5561
Fax No.: 503 452-7669
Email: LYNNG @ EASYSTREET.COM

Analyses Requested

Lab Use Only	Sample ID	Date	Time	Matrix	# of Containers	NWTPH HCID	VOCs	SVOCs	METALS 200.7/6010	pH	NWTPH-CX	NWTPH-DX							
	B1-GW	5/10	1206	WATER	6	✓	✓	✓	✓	✓									
	B7-18"-25"	"	1030	SOIL	2	✓	✓	✓	✓										
	B6-GW	5/11/01	630	WATER	7	✓	✓	✓	✓	✓									
	B6-3'-5'	5/11/01		SOIL		✓	✓	✓	✓										
	B9-GW	"	1600	WATER	7	✓	✓		✓	✓									
	B9-5'-7'	"	3:30	SOIL		✓	✓	✓	✓										
	B15-GW	"	1425	WATER	7	✓	✓	✓	✓	✓									
	B15-3'-5'	"	1:40	SOIL		✓	✓		✓										
	B10-GW	5/11/01	800	WATER	4	✓	✓	✓	HOLD	✓									
	B8-GW	5/11/01	845	WATER	7	✓	✓	✓	✓	✓									
	B3-2'-4'	5/10/01	10:00	SOIL		✓	✓	✓	✓										
	B10-6'-9'	5/11/01	7:20	SOIL		✓	✓	✓	✓										
	[redacted]																		
	B13 6'-9'	5/11/01	9:00	SOIL		✓	✓												
	TRIP BLANKS	5/9/01	5 PM	H_2O	4		✓												

	Signature	Printed Name	Firm	Time/Date
Relinquished By:	[signature]	NEIL WOLLER	EVREN	5/11/01 1120
Received By	[signature]	A Strom	SAS	5/11/01 1120
Relinquished By:				
Received By				
Relinquished				
Received By				

Special Instructions
All Diss. metals have been field filtered
May run follow ups based on HCID

COC No. _____ Page ____ of ____

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	0.036	0.01	
Antimony	ND	0.05	
Barium	0.039	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	0.4	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Client Name	Evren NW/Tanks-A-Lot
Client ID:	B4-GW
Lab ID:	98071-10
Date Received:	5/11/01
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	0.00065	0.0002	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - ITS1131
Date Received:	-
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Dibromofluoromethane	99.8		82.5	114
Fluorobenzene	100		83.7	114
Toluene-D8	99.3		91.1	107
Ethylbenzene-d10	100		86.6	108
Bromofluorobenzene	98.5		86.1	110

Analyte	**Result (ug/L)**	**PQL**	**MDL**	**Flags**
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	ND	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	ND	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	ND	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	ND	0.4	0.061	
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	ND	0.4	0.057	
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	ND	0.4	0.089	
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	ND	0.4	0.069	
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	ND	0.4	0.073	
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for ITS1131 continued...

Analyte	Result (ug/L)	PQL	MDL
1,1,2-Trichloroethane	ND	0.4	0.073
Tetrachloroethene	ND	0.4	0.072
1,3-Dichloropropane	ND	0.4	0.066
Dibromochloromethane	ND	0.4	0.071
1,2-Dibromoethane	ND	0.4	0.072
Chlorobenzene	ND	0.4	0.068
Ethylbenzene	ND	0.4	0.077
1,1,1,2-Tetrachloroethane	ND	0.4	0.066
m,p-Xylene	ND	0.8	0.16
o-Xylene	ND	0.4	0.084
Styrene	ND	0.4	0.058
Bromoform	ND	0.4	0.057
Isopropylbenzene	ND	0.4	0.077
Bromobenzene	ND	0.4	0.069
n-Propylbenzene	ND	0.4	0.084
1,1,2,2-Tetrachloroethane	ND	0.4	0.083
1,2,3-Trichloropropane	ND	0.4	0.06
2-Chlorotoluene	ND	0.4	0.076
1,3,5-Trimethylbenzene	ND	0.4	0.077
4-Chlorotoluene	ND	0.4	0.081
t-Butylbenzene	ND	0.4	0.079
1,2,4-Trimethylbenzene	ND	0.4	0.086
sec-Butylbenzene	ND	0.4	0.093
1,3-Dichlorobenzene	ND	0.4	0.088
4-Isopropyltoluene	ND	0.4	0.07
1,4-Dichlorobenzene	ND	0.4	0.071
n-Butylbenzene	ND	0.4	0.075
1,2-Dichlorobenzene	ND	0.4	0.068
1,2-Dibromo-3-chloropropane	ND	0.4	0.1
1,2,4-Trichlorobenzene	ND	0.4	0.098
Hexachlorobutadiene	ND	0.4	0.055
Naphthalene	ND	0.4	0.09
1,2,3-Trichlorobenzene	ND	0.4	0.07

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - ITS1132
Date Received:	-
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	101		82.5	114
Fluorobenzene	101		83.7	114
Toluene-D8	96.8		91.1	107
Ethylbenzene-d10	97		86.6	108
Bromofluorobenzene	97.5		86.1	110

Analyte	Result (ug/L)	PQL	MDL	Flags
Dichlorodifluoromethane	ND	0.4	0.034	
Chloromethane	ND	0.4	0.13	
Vinyl chloride	ND	0.4	0.028	
Bromomethane	ND	0.8	0.17	
Chloroethane	ND	0.4	0.056	
Trichlorofluoromethane	ND	0.4	0.027	
1,1-Dichloroethene	ND	0.4	0.086	
Methylene chloride	ND	0.4	0.13	
trans-1,2-Dichloroethene	ND	0.4	0.074	
1,1-Dichloroethane	ND	0.4	0.061	
2,2-Dichloropropane	ND	0.4	0.06	
cis-1,2-Dichloroethene	ND	0.4	0.057	
Bromochloromethane	ND	0.4	0.058	
Chloroform	ND	0.4	0.063	
1,1,1-Trichloroethane	ND	0.4	0.089	
Carbon Tetrachloride	ND	0.4	0.068	
1,1-Dichloropropene	ND	0.4	0.087	
Benzene	ND	0.4	0.065	
1,2-Dichloroethane	ND	0.4	0.061	
Trichloroethene	ND	0.4	0.069	
1,2-Dichloropropane	ND	0.4	0.053	
Dibromomethane	ND	0.4	0.061	
Bromodichloromethane	ND	0.4	0.085	
cis-1,3-Dichloropropene	ND	0.4	0.057	
Toluene	ND	0.4	0.073	
trans-1,3-Dichloropropene	ND	0.4	0.058	

SOUND ANALYTICAL SERVICES, INC.

Volatile Organics by USEPA Method 5030/8260B Modified data for ITS1132 continued...

Analyte	Result (ug/L)	PQL	MDL
1,1,2-Trichloroethane	ND	0.4	0.073
Tetrachloroethene	ND	0.4	0.072
1,3-Dichloropropane	ND	0.4	0.066
Dibromochloromethane	ND	0.4	0.071
1,2-Dibromoethane	ND	0.4	0.072
Chlorobenzene	ND	0.4	0.068
Ethylbenzene	ND	0.4	0.077
1,1,1,2-Tetrachloroethane	ND	0.4	0.066
m,p-Xylene	ND	0.8	0.16
o-Xylene	ND	0.4	0.084
Styrene	ND	0.4	0.058
Bromoform	ND	0.4	0.057
Isopropylbenzene	ND	0.4	0.077
Bromobenzene	ND	0.4	0.069
n-Propylbenzene	ND	0.4	0.084
1,1,2,2-Tetrachloroethane	ND	0.4	0.083
1,2,3-Trichloropropane	ND	0.4	0.06
2-Chlorotoluene	ND	0.4	0.076
1,3,5-Trimethylbenzene	ND	0.4	0.077
4-Chlorotoluene	ND	0.4	0.081
t-Butylbenzene	ND	0.4	0.079
1,2,4-Trimethylbenzene	ND	0.4	0.086
sec-Butylbenzene	ND	0.4	0.093
1,3-Dichlorobenzene	ND	0.4	0.088
4-Isopropyltoluene	ND	0.4	0.07
1,4-Dichlorobenzene	ND	0.4	0.071
n-Butylbenzene	ND	0.4	0.075
1,2-Dichlorobenzene	ND	0.4	0.068
1,2-Dibromo-3-chloropropane	ND	0.4	0.1
1,2,4-Trichlorobenzene	ND	0.4	0.098
Hexachlorobutadiene	ND	0.4	0.055
Naphthalene	ND	0.4	0.09
1,2,3-Trichlorobenzene	ND	0.4	0.07

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	ITS1131
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	ITS1131

Volatile Organics by USEPA Method 5030/8260B Modified

Compound Name	Blank Result (ug/L)	Spike Amount (ug/L)	BS Result (ug/L)	BS % Rec.	BSD Result (ug/L)	BSD % Rec.	RPD	Flag
1,1-Dichloroethene	0	1	0.885	88.5	0.897	89.7	1.3	
Benzene	0	1	0.951	95.1	0.987	98.7	3.7	
Trichloroethene	0	1	0.985	98.5	1.01	101	2.5	
Toluene	0	1	1.05	105	1.05	105	0	
Chlorobenzene	0	1	1.01	101	1.05	105	3.9	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	ITS1132
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
QC Batch ID:	ITS1132

Volatile Organics by USEPA Method 5030/8260B Modified

Compound Name	Blank Result (ug/L)	Spike Amount (ug/L)	BS Result (ug/L)	BS % Rec.	BSD Result (ug/L)	BSD % Rec.	RPD	Flag
1,1-Dichloroethene	0	1	0.893	89.3	0.885	88.5	-0.9	
Benzene	0	1	0.959	95.9	0.941	94.1	-1.9	
Trichloroethene	0	1	0.986	98.6	1	100	1.4	
Toluene	0	1	1.02	102	1.04	104	1.9	
Chlorobenzene	0	1	1.03	103	1.06	106	2.9	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - SW0015
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

Semivolatile Organics by USEPA Method 8270

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Nitrobenzene - d5	139		52	149
2 - Fluorobiphenyl	96		56	127
p - Terphenyl - d14	91.3		43	145
Phenol - d5	45.2		19	105
2 - Fluorophenol	81.8		34	109
2,4,6 - Tribromophenol	102		55	156

Analyte	Result (ug/L)	PQL	MDL	Flags
Phenol	ND	1	0.32	
bis(2-Chloroethyl)ether	ND	1	0.19	
2-Chlorophenol	ND	1	0.17	
1,3-Dichlorobenzene	ND	1	0.17	
1,4-Dichlorobenzene	ND	1	0.15	
Benzyl Alcohol	ND	1	0.32	
1,2-Dichlorobenzene	ND	1	0.16	
2-Methylphenol	ND	1	0.24	
bis(2-Chloroisopropyl)ether	ND	1	0.21	
3- & 4-Methylphenol	ND	1	0.23	
N-nitroso-di-n-propylamine	ND	1	0.21	
Hexachloroethane	ND	1	0.4	
Nitrobenzene	ND	1	0.45	
Isophorone	ND	1	0.18	
2-Nitrophenol	ND	1	0.22	
2,4-Dimethylphenol	ND	1	0.15	
Benzoic Acid	ND	1	0.2	
bis(2-Chloroethoxy)methane	ND	1	0.18	
2,4-Dichlorophenol	ND	1	0.15	
1,2,4-Trichlorobenzene	ND	1	0.16	
Naphthalene	ND	0.5	0.16	
4-Chloroaniline	ND	1	0.39	
Hexachlorobutadiene	ND	1	0.29	
4-Chloro-3-methylphenol	ND	1	0.54	
2-Methylnaphthalene	ND	1	0.18	
Hexachlorocyclopentadiene	ND	0.5	0.26	

SOUND ANALYTICAL SERVICES, INC.

Semivolatile Organics by USEPA Method 8270 data for SW0015 continued...

Analyte	Result (ug/L)	PQL	MDL
2,4,6-Trichlorophenol	ND	1	0.12
2,4,5-Trichlorophenol	ND	1	0.11
2-Chloronaphthalene	ND	0.1	0.028
2-Nitroaniline	ND	1	0.18
Dimethylphthalate	ND	1	0.16
Acenaphthylene	ND	0.1	0.044
2,6-Dinitrotoluene	ND	1	0.2
3-Nitroaniline	ND	1	0.33
Acenaphthene	ND	0.5	0.15
2,4-Dinitrophenol	ND	1	0.3
4-Nitrophenol	ND	1	0.29
Dibenzofuran	ND	1	0.14
2,4-Dinitrotoluene	ND	1	0.13
Diethylphthalate	ND	2.5	0.58
4-Chlorophenylphenylether	ND	1	0.15
Fluorene	ND	0.5	0.11
4-Nitroaniline	ND	1	0.31
4,6-Dinitro-2-methylphenol	ND	1	0.22
N-Nitrosodiphenylamine	ND	1	0.1
4-Bromophenylphenylether	ND	1	0.12
Hexachlorobenzene	ND	1	0.2
Pentachlorophenol	ND	1	0.17
Phenanthrene	ND	0.5	0.16
Anthracene	ND	0.1	0.043
Di-n-butylphthalate	ND	5	2.3
Fluoranthene	ND	0.5	0.13
Pyrene	ND	0.1	0.059
Butylbenzylphthalate	ND	5	1.9
3,3'-Dichlorobenzidine	ND	1	0.36
Benzo(a)anthracene	ND	0.1	0.044
Chrysene	ND	0.1	0.035
bis(2-Ethylhexyl)phthalate	ND	1	0.65
Di-n-octylphthalate	ND	1	0.34
Benzo(b)fluoranthene	ND	0.1	0.014
Benzo(k)fluoranthene	ND	0.1	0.035
Benzo(a)pyrene	ND	0.1	0.026
Indeno(1,2,3-cd)pyrene	ND	0.1	0.047
Dibenz(a,h)anthracene	ND	0.1	0.046
Benzo(g,h,i)perylene	ND	0.1	0.032

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	SW0015
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
QC Batch ID:	SW0015

Semivolatile Organics by USEPA Method 8270

Compound Name	Blank Result (ug/L)	Spike Amount (ug/L)	BS Result (ug/L)	BS % Rec.	BSD Result (ug/L)	BSD % Rec.	RPD	Flag
Phenol	0	10	3.79	37.9	4.26	42.6	12	
2-Chlorophenol	0	10	8.91	89.1	9.58	95.8	7.2	
1,4-Dichlorobenzene	0	10	7.75	77.5	7.83	78.3	1	
N-nitroso-di-n-propylamine	0	10	9.76	97.6	8.75	87.5	-11	
1,2,4-Trichlorobenzene	0	10	10.3	103	9.27	92.7	-11	
4-Chloro-3-methylphenol	0	10	9.69	96.9	11.8	118	20	
Acenaphthene	0	10	9.09	90.9	9.75	97.5	7	
4-Nitrophenol	0	10	5.35	53.5	5.26	52.6	-1.7	
2,4-Dinitrotoluene	0	10	16.3	163	17.6	176	7.7	N
entachlorophenol	0	10	11.8	118	11.2	112	-5.2	
Pyrene	0	10	9.64	96.4	12	120	22	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - DW0008
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/11/01
% Solids	-
Dilution Factor	10

NWTPH-HCID - Hydrocarbon Identification Method for Water Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
1-chlorooctane	80.4		50	150
o-terphenyl	93.1		50	150

Analyte	Result (mg/L)	MDL	Flags
Gasoline (Toluene-nC12)	<0.1	0.1	
Diesel (>nC12-nC24)	<0.25	0.25	
Motor Oil (>nC24-nC32)	<0.5	0.5	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - GB2675
Date Received:	-
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	89.8		50	150
Bromofluorobenzene	92.6		56.8	143

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	ND	0.1	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	GB2675
Date Prepared:	5/15/01
Date Analyzed:	5/15/01
QC Batch ID:	GB2675

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

Compound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
Gasoline by NWTPH-G	0	1.25	1.13	90.1	1.13	90.2	0.11	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - DW0008
Date Received:	-
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
% Solids	-
Dilution Factor	5

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	91.1		50	150

Analyte	Result (mg/L)	PQL	MDL	Flags
#2 Diesel	ND	0.25	0.13	
Motor Oil	ND	0.5	0.25	

SOUND ANALYTICAL SERVICES, INC.

Blank Spike/Blank Spike Duplicate Report

Lab ID:	DW0008
Date Prepared:	5/11/01
Date Analyzed:	5/16/01
QC Batch ID:	DW0008

Diesel and Motor Oil by NWTPH-Dx Modified

Compound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
#2 Diesel	0	5	5.88	118	5.67	113	-4.3	
Motor Oil	0	4.81	4.8	99.7	4.69	97.4	-2.3	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - DP648
Date Received:	-
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Metals by ICP - USEPA Method 6010

Analyte	Result (mg/L)	PQL	Flags
Arsenic	ND	0.01	
Antimony	ND	0.05	
Barium	ND	0.005	
Beryllium	ND	0.002	
Cadmium	ND	0.005	
Chromium	ND	0.01	
Copper	ND	0.01	
Lead	ND	0.01	
Nickel	ND	0.02	
Selenium	ND	0.05	
Silver	ND	0.01	
Thallium	ND	0.02	
Zinc	ND	0.01	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike Report

Client Sample ID:	B6-GW
Lab ID:	98071-03
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	DP648

Dissolved Metals by ICP - USEPA Method 6010

Parameter Name	Sample Result (mg/L)	Spike Amount (mg/L)	MS Result (mg/L)	MS % Rec.	Flag
Arsenic	0.0464	4	3.78	93	
Antimony	0	3	2.65	88	
Barium	0	4	3.4	85	
Beryllium	0	0.1	0.0891	89	
Cadmium	0	0.1	0.0881	88	
Chromium	0	0.4	0.352	88	
Copper	0	0.5	0.421	84	
Lead	0	1	0.903	90	
Nickel	0	1	0.868	87	
Selenium	0.4	4	4.03	91	
Silver	0	0.6	0.497	83	
Thallium	0	4	3.6	90	
Zinc	0	1	0.899	90	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B6-GW
Lab ID:	98071-03
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	DP648

Dissolved Metals by ICP - USEPA Method 6010

Parameter Name	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD %	Flag
Arsenic	0.046	0.048	-4.3	
Antimony	0	0	NC	
Barium	0	0	NC	
Beryllium	0	0	NC	
Cadmium	0	0	NC	
Chromium	0	0	NC	
Copper	0	0	NC	
Lead	0	0	NC	
Nickel	0	0	NC	
Selenium	0.4	0.41	-2.5	
Silver	0	0	NC	
Thallium	0	0	NC	
Zinc	0	0	NC	

SOUND ANALYTICAL SERVICES, INC.

Lab ID:	Method Blank - ZD373
Date Received:	-
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
Dilution Factor	1

Dissolved Mercury by CVAA - USEPA Method 7470

Analyte	Result (mg/L)	PQL	Flags
Mercury	ND	0.0002	

SOUND ANALYTICAL SERVICES, INC.

Matrix Spike Report

Client Sample ID:	B6-GW
Lab ID:	98071-03
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	ZD373

Dissolved Mercury by CVAA - USEPA Method 7470

Parameter Name	Sample Result (mg/L)	Spike Amount (mg/L)	MS Result (mg/L)	MS % Rec.	Flag
Mercury	0.000494	0.002	0.00244	97	

SOUND ANALYTICAL SERVICES, INC.

Duplicate Report

Client Sample ID:	B6-GW
Lab ID:	98071-03
Date Prepared:	5/14/01
Date Analyzed:	5/14/01
QC Batch ID:	ZD373

Dissolved Mercury by CVAA - USEPA Method 7470

Parameter Name	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD %	Flag
Mercury	0.00049	0.0005	-2.0	

Sound Analytical Services, Inc.
ANALYTICAL & ENVIRONMENTAL CHEMISTS
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e-mail: info@saslab.com

DATA QUALIFIERS AND ABBREVIATIONS

B1: This analyte was detected in the associated method blank. The analyte concentration was determined not to be significantly higher than the associated method blank (less than ten times the concentration reported in the blank).

B2: This analyte was detected in the associated method blank. The analyte concentration in the sample was determined to be significantly higher than the method blank (greater than ten times the concentration reported in the blank).

C1: Second column confirmation was performed. The relative percent difference value (RPD) between the results on the two columns was evaluated and determined to be $\leq 40\%$.

C2: Second column confirmation was performed. The RPD between the results on the two columns was evaluated and determined to be $> 40\%$. The higher result was reported unless anomalies were noted.

M: GC/MS confirmation was performed. The result derived from the original analysis was reported.

D: The reported result for this analyte was calculated based on a secondary dilution factor.

E: The concentration of this analyte exceeded the instrument calibration range and should be considered an estimated quantity.

J: The analyte was analyzed for and positively identified, but the associated numerical value is an estimated quantity.

MCL: Maximum Contaminant Level

MDL: Method Detection Limit

See analytical narrative.

ND: Not Detected

PQL: Practical Quantitation Limit

X1: Contaminant does not appear to be "typical" product. Elution pattern suggests it may be _____ .

X2: Contaminant does not appear to be "typical" product.

X3: Identification and quantitation of the analyte or surrogate was complicated by matrix interference.

X4: RPD for duplicates was outside advisory QC limits. The sample was re-analyzed with similar results. The sample matrix may be nonhomogeneous.

X4a: RPD for duplicates outside advisory QC limits due to analyte concentration near the method practical quantitation limit/detection limit.

X5: Matrix spike recovery was not determined due to the required dilution.

X6: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Sample was re-analyzed with similar results.

X7: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Matrix interference may be indicated based on acceptable blank spike recovery and/or RPD.

X7a: Recovery and/or RPD values for this spiked analyte outside advisory QC limits due to high concentration of the analyte in the original sample.

8: Surrogate recovery was not determined due to the required dilution.

X9: Surrogate recovery outside advisory QC limits due to matrix interference.

APPENDIX E SITE PHOTOGRAPHS

West side of REXAM plant. Groundwater sampling in Boring B4 in progress; B3 boring location near blue fence in distance.

A hand auger was used to drill Boring B2 (shown here) and nearby Boring B1.

B4 sampling location was near catch basin in paved area of site. Decontamination procedure was performed with sequential wash sequence concluding with rinse of distilled water (in sprayer).

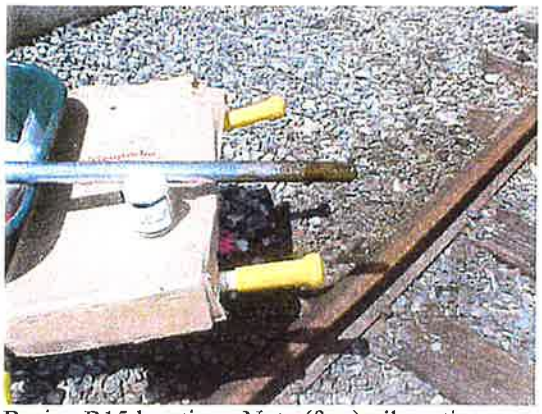
Groundwater sampling of Boring B1 in progress. Water samples were placed in cooled storage immediately after sealing.

A peristaltic pump and clean polyethylene hose were used to pull water out of the temporary well point.

View of sequential decontamination wash sequence at the B1 boring location.

RK Environmental & EVREN Northwest Environmental and Natural Resource Consulting 10315 SW Porter Street Portland, Oregon 97225	Date Drawn: 6/8/2001 CAD File Name: E01276_001E01276_001 photos Drawn By: LDG Approved By: NMW	REXAM 1220 N. 2nd Avenue Kent, Washington For Gorge Leasing	**Site Photographs**	Project No. E01276_001 Appendix **E**

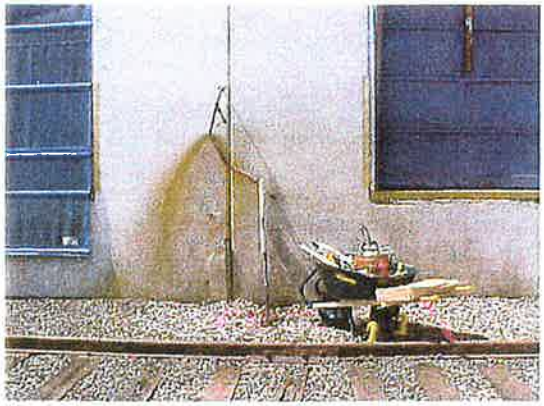
View within the northern part of the factory, Boring B18 location marked by clean paper towel set in top of bore hole.



Boring B15 location. Note (free) oil coating on end of push probe after being pushed to one-foot depth.

Boring B17 was located within the north end of the plant.

B15 location. After seeing the push probe coated with oil, a shovel was used to dig through the crushed rock aggregate. A significant thickness of free product was present, which flowed out of the aggregate toward the center of the hole.



Boring B15 location. Note stain on wall near hose and pipe protruding from wall. Free product was present in the crushed rock aggregate below the pipe.

Ground staining and distressed vegetation were present near the B15 location where shallow free product was present. View looking north.

RK Environmental & EVREN Northwest Environmental and Natural Resource Consulting 10315 SW Porter Street Portland, Oregon 97225	Date Drawn: 6/8/2001 CAD File Name: E01276_001E01276_001 photos Drawn By: LDG Approved By: NMW	REXAM 1220 N. 2nd Avenue Kent, Washington For Gorge Leasing	**Site Photographs**	Project No. E01276_001 Appendix **E**

Water sampling at Boring B15.

Water sampling at Boring B9.

Boring location B9 was adjacent to what appears to be (have been) concrete fluid processes structures at the southwest corner of the manufacturing plant.

Drilling with the push probe at Boring B10, the inferred up-gradient boring. Note the patching of the asphalt blacktop near the standing personnel.

Decontamination wash area near Boring B9.

RK Environmental & EVREN Northwest Environmental and Natural Resource Consulting 10315 SW Porter Street Portland, Oregon 97225	Date Drawn: 6/8/2001 CAD File Name: E01276_001E01276_001 photos Drawn By: LDG Approved By: NMW	REXAM 1220 N. 2nd Avenue Kent, Washington For Gorge Leasing	**Site Photographs**	Project No. E01276_001 Appendix **E**

ENVISION
ENVIRONMENTAL, INC.

APPENDIX 4

EARTH TECH September 2001 Limited Phase II Environmental Site Assessment

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

REXAM ALUMINUM CAN MANUFACTURING FACILITY
1220 NORTH 2ND STREET
KENT, KING COUNTY, WASHINGTON

Prepared for:

REXAM BEVERAGE CAN COMPANY
8770 West Bryn Mawr Avenue
Chicago Illinois 60631

Prepared by:

Earth Tech, Inc.
100 W. Broadway, Suite 240
Long Beach, CA 90802-4443

Earth Tech Project No. 45584

November 2001

Prepared by:

Roy A. Litzenberg, CEM
Certified Environmental Manager #12602

Reviewed by:

Edward W. Alusow
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Appendix

EXECUTIVE SUMMARY

At the request of Rexam Beverage Can Company (Rexam), Earth Tech, Inc. (Earth Tech) performed a Limited Phase II Environmental Site Assessment at the Rexam Aluminum Can Manufacturing Facility located at 1220 North 2nd Street, in Kent, Washington. The scope of work performed for the Limited Phase II Environmental Site Assessment included the drilling of 14 soil borings and placement of seven monitoring wells throughout the facility and collection of 14 soil samples and seven groundwater samples. The investigation was conducted in substantial compliance with the Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E1903).

Based on the results of the Limited Phase II ESA investigation at the site, and the previous onsite work, the following is concluded.

- Total Petroleum Hydrocarbon-impacted soil is located in the vicinity of the oil-water separator beneath the slab at the north end of the building (near Borehole B17). The impacted soil does not appear to extend beyond the building slab.

- The railroad base material is impacted with total petroleum hydrocarbons in the vicinity of the former compressor bleed line (the bleed line has been sealed). These hydrocarbons do not appear to have penetrated the underlying soil, and appear to be confined to an area of approximately 20-feet by 10-feet. The railroad base is approximately 2 feet deep in this area. Note that no groundwater impact was identified in this area.

- Groundwater impacted with VOCs above the Washington State MTCA Method A and EPA MCL levels is located west of the wastewater treatment facility (ETMW-4) and at the well downgradient of the aluminum bailer and former borehole B-1 (ETMW-6).

- No current source of the VOCs identified in the groundwater was found, although historical onsite operations reportedly included the use of chlorinated solvents.

1.0 INTRODUCTION

In July 2001, Rexam contracted with Earth Tech to perform a Phase II environmental investigation at the Rexam facility located at 1220 North 2nd Street, in Kent, Washington (see Figure 1 for Site Location Map).

1.1 SITE DESCRIPTION AND BACKGROUND

The subject property includes approximately six acres of land located at the southeast corner of the intersection of North 2nd Street and South 228th Street in Kent, Washington. The site is generally flat, with a slight slope toward the east. The site is occupied by a 1-story manufacturing building with an area of approximately 130,600 square feet. The building is of concrete tilt-up construction with a shallow foundation and built-up composition roofing. A one-story warehouse occupies approximately 100,000 square feet of a portion of the property to the south of the manufacturing building. An aluminum can manufacturing facility currently occupies the site.

The site was historically vacant marsh and farmland prior to 1970, including a farmhouse, which was located on the subject property from before 1956 until before 1965. Around 1970, the existing manufacturing building was constructed, and the warehouse added by 1979.

1.1.1 Summary of Previous Soil and Groundwater Sampling

Eckland Consultants, Inc. of Bellevue, Washington conducted a Phase I Environmental Assessment in February of 2000. The following areas of concern relating to possible subsurface contamination on the subject property were identified:

- Oil discharge noted from compressor bleed lines at three locations, two on the east side of the building and one at the north end of the west side of the building,
- Possible oil leakage from the concrete, underground oil-water separator tanks,
- Possible oil leakage from cracks and bolt holes in the concrete floors near the cupping, baling, and forming machinery,
- Corroded, damaged and leaking elements in the water treatment system.
- Two underground storage tanks (USTs), removed from the subject property in 1997 and 1998,
- Floor drains in trench drains in the acid storage area, were observed to have been damaged by corrosive chemicals.

Eckland recommended Phase II Subsurface Investigations, including the collection of soil and groundwater samples.

PRK Environmental Consulting Services of Portland, Oregon conducted a Phase II Environmental Site Assessment in May of 2001. Eleven borings were drilled at the subject property to investigate subsurface conditions (see Figure 2). Two of the borings were located inside of the north end of the building (Borings B-17 and B-18), two were located just to the north of the building (Boring B-1 and B-2), one was located on the east side of the building (Boring B-15), one south of the building (Boring B-13), one upgradient to the southwest of the building (Boring B-10), and the remainder were located on the west side of the building (Borings B-3, B-4, B-6, and B-9). Groundwater was encountered in the soil borings at depths ranging from 3.5 to 7 feet Below Ground Surface (BGS). Grab groundwater samples were

TABLE 1-2
Previous Water Sample Analysis Summary

Borehole	Location	Soil Sample Depth	Static Water Level	Detected Constituents of Concern (in mg/L)
B1	North End of Facility	--	3.5'	NWTPH-Gx: 0.31 **NWTPH-Dx: 3.4** **NWTPH-Oil: 19** **Vinyl Chloride: 0.003** Chloroethane: 0.045 1,1-DCE: 0.016 1,1-DCA: 0.24 cis-1,2-DCE: 0.0012 1,1,1-TCA: 0.17 TCE: 0.0016 Toluene: 0.0017
B4	Adjacent to Catch Basin West of Building	--	**	NWTPH-Dx: 0.84 **NWTPH-Oil: 1.9** **Vinyl Chloride: 0.70** Chloroethane: 5.9 **1,1-DCE: 1.8** **Methylene Chloride: 0.073** Trans-1,2-DCE: 0.011 1,1-DCA: 24 cis-1,2-DCE: 0.11 **1,1,1-TCA: 27** Benzene: 0.0023 **1,2-DCA: 0.087** **TCE: 0.083** **Toluene: 0.070** **1,1,2-TCA: 0.0072** **PCE: 0.029** Ethylbenzene: 0.002 Total Xylenes: 0.0083 Isopropylbenzene: 0.082 n-Propylbenzene: 0.0015 1,3,5-Trimethylbenzene: 0.0013 1,2,4-Trimethylbenzene: 0.0063 Naphthalene: 0.0017
B6	Adjacent to Lime & Caustic Soda ASTs	3-5'	**	**Vinyl Chloride: 0.0035** 1,1-DCA: 0.00017 cis-1,2-DCE: 0.000083 1,1,1-TCA: 0.00021 Toluene: 0.0.00011

TABLE 1-2
Previous Water Sample Analysis Summary

Borehole	Location	Soil Sample Depth	Static Water Level	Detected Constituents of Concern (in mg/L)
B9	Adjacent to Drum Storage Area	5-7'	**	NWTPH-Dx: 0.35 NWTPH-Oil: 0.72 **Vinyl Chloride: 0.00036** Chloroethane: 0.0031 1,1-DCE: 0.0024 1,1-DCA: 0.039 cis-1,2-DCE: 0.000086 1,1,1-TCA: 0.067 TCE: 0.00012 Toluene: 0.00022 1,2,4-Trimethylbenzene: 0.00015
B10	Southwest Margin of Property	6-9'	**	1,1,1-TCA: 0.00015 Benzene: 0.0001 Toluene: 0.00026 Total Xylenes: 0.00025 **bis(2-ethylhexyl)phthalate: 0.014**
B15	Compressor Bleed Line East of Building	3-5'	**	NWTPH-Dx: 0.26 NWTPH-Oil: 0.74 **Vinyl Chloride: 0.00063** Chloroethane: 0.0058 1,1-DCE: 0.0036 1,1-DCA: 0.0041 cis-1,2-DCE: 0.00016 1,1,1-TCA: 0.0065 TCE: 0.00021 Toluene: 0.00029 Total Xylenes: 0.00044 Isopropylbenzene: 0.00018 n-Propylbenzene: 0.00082 1,3,5-Trimethylbenzene: 0.003 1,2,4-Trimethylbenzene: 0.010 4-Isopropyltoluene: 0.00022 Naphthalene: 0.00012 Pyrene: 0.00018 **bis(2-ethylhexyl)phthalate: 0.016**

Notes: **Bolded** concentrations exceed the Washington State Method A Cleanup Level or the EPA MCL.

1.2 PURPOSE AND SCOPE OF SERVICES

The purpose of the current Limited Soil and Groundwater investigation was to evaluate if there is an on-site source for the groundwater contamination and the nature and extent of that contamination and to confirm the findings of the earlier investigation by PRK.

The work performed by PRK for the Phase II investigation included the collection of soil samples using manually operated direct-push equipment. Ground water "grab" samples were collected from the probe at the soil sample locations; no monitoring wells were installed. During the collection of the groundwater samples, Earth Tech observed poor quality assurance/ quality control procedures in that proper decontamination was not performed between sampling locations. The potential was high for cross-contamination from one sampling location to another, because the boring where the highest concentrations of contaminants was measured was sampled first. Thus, all subsequent samples may have been contaminated by the sampling equipment.

The Earth Tech investigation included the collection of soil samples, the installation of groundwater monitoring wells and the collection of groundwater samples. The specific scope of work for each proposed assessment technique is provided in the following sections.

The following tasks were performed to collect the data necessary to determine the nature and extent of groundwater contamination identified at the site:

- Clear the proposed drilling locations
- Prepare a site specific health and safety plan
- Collect soil and groundwater samples at discrete sampling locations throughout the site
- Install and sample groundwater monitoring wells

Sampling and field procedures were designed to ensure that:

- All sample and field measurements are consistent with the project objectives.
- Samples are identified, preserved, and transported in such a manner to ensure the integrity and validity of the samples

Soil and groundwater sampling methods and related field activities conformed to state and other applicable regulatory agency requirements. The field tasks were performed in a manner so that data from the first borings can be used to modify the specifics of later borings.

This report summarizes the results of the Limited Phase II ESA.

2.0 SITE INVESTIGATION

Prior to initiation of field activities, the project manager and field geologist performed a site reconnaissance to mark and inspect each proposed sampling location. All proposed locations were cleared by Rexam plant personnel.

Permits for the groundwater sampling and monitoring well installation will be obtained from the State of Washington, Department of Ecology.

2.1 DRILLING METHODS

Soil samples were collected by pushing a drill rod to the target sampling depth using the direct push rig. Once the target depth had been reached, the tip of the lead direct push rod was opened to allow for soil sample collection. A sample tube lined with acetate sleeves was driven 4.0 feet into the soil for soil sample collection. Each sampling interval utilized a 4-foot long, 2-inch diameter sample barrel. Following retrieval, the lead six inches of the sample tube were sealed with Teflon and polyethylene end caps. The collected soil samples were labeled with the boring number, sample depth, date, collection time, and sampler's initials, and subsequently placed in an ice filled cooler for cold storage, following proper COC procedures.

Between sampling events, the sampler was cleaned using the triple rinse method. The direct push drilling rods were decontaminated using the triple rinse method between soil borings. The triple rinse decontamination method consists of a three-bucket wash consisting of washing the equipment with Alconox™ (a non-phosphate detergent) solution, two rinses with potable water, followed by a final rinse with de-ionized water. The sampling equipment and drill rods were allowed to air dry before being used again.

2.2 SCREENING METHODS

Representative soils obtained from the sampler were logged for grain size distribution, organic content, moisture content, and visual and olfactory evidence of impacts, following the UCSC system.

2.3 ANALYTICAL SAMPLE PROCESSING

Soil samples were collected by one of the two following methods:

- An acetate sleeve was driven into undisturbed soil using a direct push rig. The sleeve was removed from the sampler, cut to the desired length and capped.

Sample containers were immediately placed in an insulated container and chilled with ice. Soil samples were analyzed by the following methods:

- NW Total Petroleum Hydrocarbons – Diesel Fuel Extended Range reported as:
  - NWTPH-Kerosene/Jet Fuel
  - NWTPH-Diesel
  - NWTPH-Heavy Oil
- Volatile Organic Compounds (VOCs) by EPA 8260

Samples were transported under Chain of Custody protocols to ESN Seattle Chemistry Laboratory.

2.4 SOIL BORING AND WATER WELL LOCATIONS

Fifteen soil borings were advanced at the site on September 10 and 11, 2001. The location of the boreholes and monitoring wells is summarized below, and shown on Figure 3.

TABLE 2-1
Soil Borehole/Water Well Locations

Borehole/ Well #	Location	Soil Sample Depth (BGS)	Water Level (BGS)
Boreholes			
ETB-1	20 feet West of B9 (Former Drum Storage Area)	5'	7'
ETB-2	20 feet South of B9 (Former Drum Storage Area)	5'	--
ETB-3	20 feet North of B9 (Former Drum Storage Area	5'	--
ETB-4	20 feet East of B9 (Former Drum Storage Area	5'	--
ETB-5	20 feet West of B4 (Wastewater Treatment Plant)	5'	--
ETB-6	20 feet North of B4 (Wastewater Treatment Plant)	5'	--
ETB-7	20 feet South of B4 (Wastewater Treatment Plant)	5'	--
ETB-8	15 feet East of B4 (Wastewater Treatment Plant)	5'	--
ETB-9	25 feet East of B1 (North of Building)	5'	11'
ETB-10	30 feet West of B1 (North of Building)	9'	--
ETB-11	20 feet South of B15 (Compressor Bleed Line)	5'	--
ETB-12	Adjacent to B15 (Compressor Bleed Line)*	NA – See B15	--
ETB-13	20 feet North of B15 (Compressor Bleed Line)	5'	--
ETB-14	20 feet East of B15 (Compressor Bleed Line)	5'	--
Wells			
ETMW-1	Adjacent to B9 (Former Drum Storage Area	--	6.34'
ETMW-2	Adjacent to B4 (Wastewater Treatment Plant)	--	8.73'
ETMW-3	South of Warehouse Building (Upgradient)	--	7.11'
ETMW-4	10 feet North (downgradient) of B15 (Compressor Bleed Line)	--	5.79'
ETMW-5	Downgradient Well	--	11.02'
ETMW-6	30 feet North of B1 (North of Building)	5'	11.49'
ETMW-7	West Property Boundary (Upgradient of ETMW-2)	--	7.46'

Note: *Borehole ETB-12 was originally sited adjacent to former Borehole B15 as the location of ETMW-4. However, because of free oil noted in the railroad base at this location no monitoring well was installed to prevent contamination of the groundwater with the oil in the rail base. ETMW-4 was moved 10 feet to the north (downgradient), where there was no free oil in the railroad base.

2.5 BORING DEPTHS AND GROUNDWATER OCCURRENCE

The intent of the drilling program was to further evaluate impacts to soils and to first-occurring groundwater beneath the site. Groundwater was encountered from approximately 5.7 to 11 feet BGS throughout the site.

Monitoring Wells ETMW-1, 2, 3, 4, and 7 were set at a depth of 15 feet. The wells were constructed of 2-inch PVC and were screened with 0.020-inch slotted pre-packed well screens from five feet to 15 feet.

A foam collar was affixed above the filter pack to prevent bentonite from filtering into the sand pack. A bentonite seal was placed between 3 and 5 feet BGS, and the well was finished with concrete and a flush-mount traffic box.

Monitoring Wells ETMW-5 and 6 were set at a depth of 18 feet. The wells were constructed of 2-inch PVC and were screened with 0.020-inch slotted pre-packed well screens from eight feet to 18 feet. A foam collar was affixed above the filter pack to prevent bentonite from filtering into the sand pack. A bentonite seal was placed between 1.5 and 8 feet BGS, and the well was finished with concrete and a flush-mount traffic box.

2.6 CRITERIA FOR SOIL SAMPLING

The soil collected from just above the saturated zone was submitted for analysis from each borehole.

2.7 WATER SAMPLING METHODOLOGY

The groundwater monitoring wells were developed, purged, and sampled following conventional well sampling protocol. A minimum of three well volumes was purged from each well. Well purging continued until the groundwater parameters (temperature, specific electrical conductivity, pH, and turbidity) had stabilized. Groundwater samples were collected using a peristaltic pump using clean Teflon and Tygon tubing.

3.0 SITE CONDITIONS

3.1 SITE STRATIGRAPHY

Sampled soils at the site were predominantly sandy or clayey silt grading to fine sand at the first occurrence of groundwater.

Groundwater was encountered between 5.7 and 11.5 feet BGS.

Soil boring logs are presented in Appendix A.

4.0 FINDINGS

Detected results for confirmatory soil samples are shown in Table A-1 and for groundwater samples in Table A-2. All laboratory data sheets are in Appendix B.

Total Petroleum Hydrocarbons

Soils: No detectable hydrocarbons as kerosene/jet fuel, diesel fuel or heavy oil were identified in any of the soil samples collected.

Groundwater: No detectable hydrocarbons as kerosene/jet fuel, diesel fuel or heavy oil were identified in any of the groundwater samples collected.

Volatile Organic Compounds

Soils: The VOCs toluene (17,000 µg/Kg), ethylbenzene (250 µg/Kg) and total xylenes (1,200 µg/Kg) were identified in one soil sample (ETB-1-5) (west of the former Drum Storage area). These VOCs are below both the Washington MCTA Method A soil screening levels for industrial soil and the EPA Region X Preliminary Remedial Goals (PRGs). No other VOCs were identified in the soil samples that were collected.

Groundwater: Four of the seven monitoring wells (ETMW-2, 3, 4, and 7) had no detectable VOCs.

The sample collected from ETMW-1 (west of the waste water treatment area and adjacent to formerBorehole B4) had 18 detectable VOCs, nine of which exceed applicable Washington MTCA Method A levels of the EPA Primary MCL, as detailed in Table A-2.

The sample collected from ETMW-5 (north – downgradient – of the building) had nine detectable VOCs, none of which exceed applicable WA MTCA Method A levels of the EPA Primary MCL, as detailed in Table A-2.

The sample collected from ETMW-6 (at the north – downgradient – end of the property) had 10 detectable VOCs, one of the 10 VOCs exceeded applicable WA MTCA Method A levels of the EPA Primary MCL, as detailed in Table A-2.

5.0 AQUIFER CALCULATIONS

5.1 GROUNDWATER GRADIENT

The surface topography varies only slightly across the site, averaging 12 feet above mean sea level at the south boundary of the site and 10 feet above sea level at the north boundary of the subject property. Landscaping and pavement grading causes local topographic relief at well locations to vary as much as three feet above the surrounding topography.

Based on the water measurements obtained on September 12, 2001, the groundwater gradient at the site is nearly flat, with a slight flow to the north.

6.0 CONCLUSIONS

Based on the results of the Limited Phase II ESA investigation at the site, and the previous onsite work, the following is concluded.

- Petroleum hydrocarbon-impacted soil apparently is located in the vicinity of the oil-water separator beneath the slab at the north end of the building (near Borehole B17). The impacted soil does not appear to extend beyond the building slab.

- The railroad base material is impacted with total petroleum hydrocarbons in the vicinity of the former compressor bleed line (the bleed line has been removed). These hydrocarbons do not appear to have penetrated the underlying soil, and appear to be confined to an area of approximately 20-feet by 10-feet. The railroad base is approximately 2 feet deep in this area. Note that no groundwater impact was identified in this area.

- Groundwater impacted with VOCs above the Washington State MTCA Method A and EPA MCL levels is located west of the wastewater treatment facility (ETMW-4) and at the well downgradient of the aluminum bailer and former borehole B-1 (ETMW-6).

- No current source of the VOCs identified in the groundwater was found, although historical onsite operations reportedly may have included the use of materials containing chlorinated compounds.

7.0 LIMITATIONS

Representatives, Warranties and Covenants

Earth Tech makes no warranty, either expressed or implied, as to its findings, opinions, recommendations, specifications, or professional advice except that these were promulgated after being prepared in accordance with generally accepted standards of are and diligence normally practiced by recognized consulting firms performing services of a similar nature.

The information contained in this report has received appropriate technical review and approval. The conclusions presented represent professional judgements and area based upon the findings from the investigation identified in this report and interpretation of such data based on our experience and background. This acknowledgement is made in lieu of all warranties, either expressed or implied.

All project documents prepared or furnished to Client may be based on information outside Consultant's control. Consultant does not warrant, expressly or by implication, the accuracy thereof.

Scope of Investigation

The scope of this investigation is limited to the scope of work as specified in Section 1.3.

8.0 REFERENCES

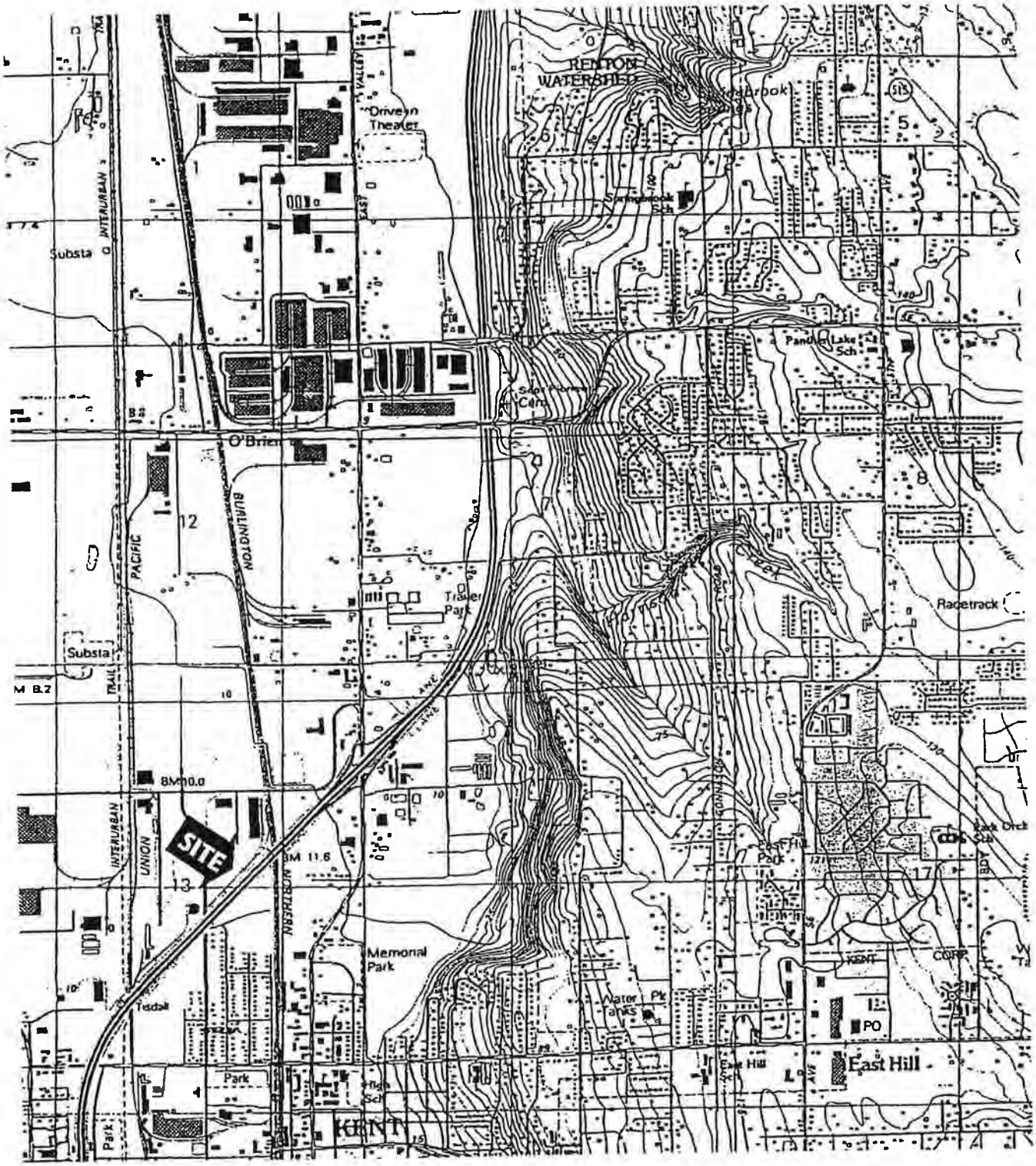
Eckland Consultants Inc., Phase I Environmental Site Assessment for Sun Life of Canada (US), American National Can Manufacturing Facility, 1220 North 2nd Street, Kent, King County, Washington, Comm. No. 2000-02734-0019, February 22, 2000.

PRK Environmental Consulting Services, Phase II Environmental Site Assessment, REXAM Manufacturing Facility, Kent, Washington, May 18, 2001.

United States Environmental Protection Agency, 1985. Preliminary Remediation Goals for Region XI, dated September 1, 1995.

United States Geologic Survey, 7.5 Minute, Topographic Map, Renton, WA quadrangle

FIGURES



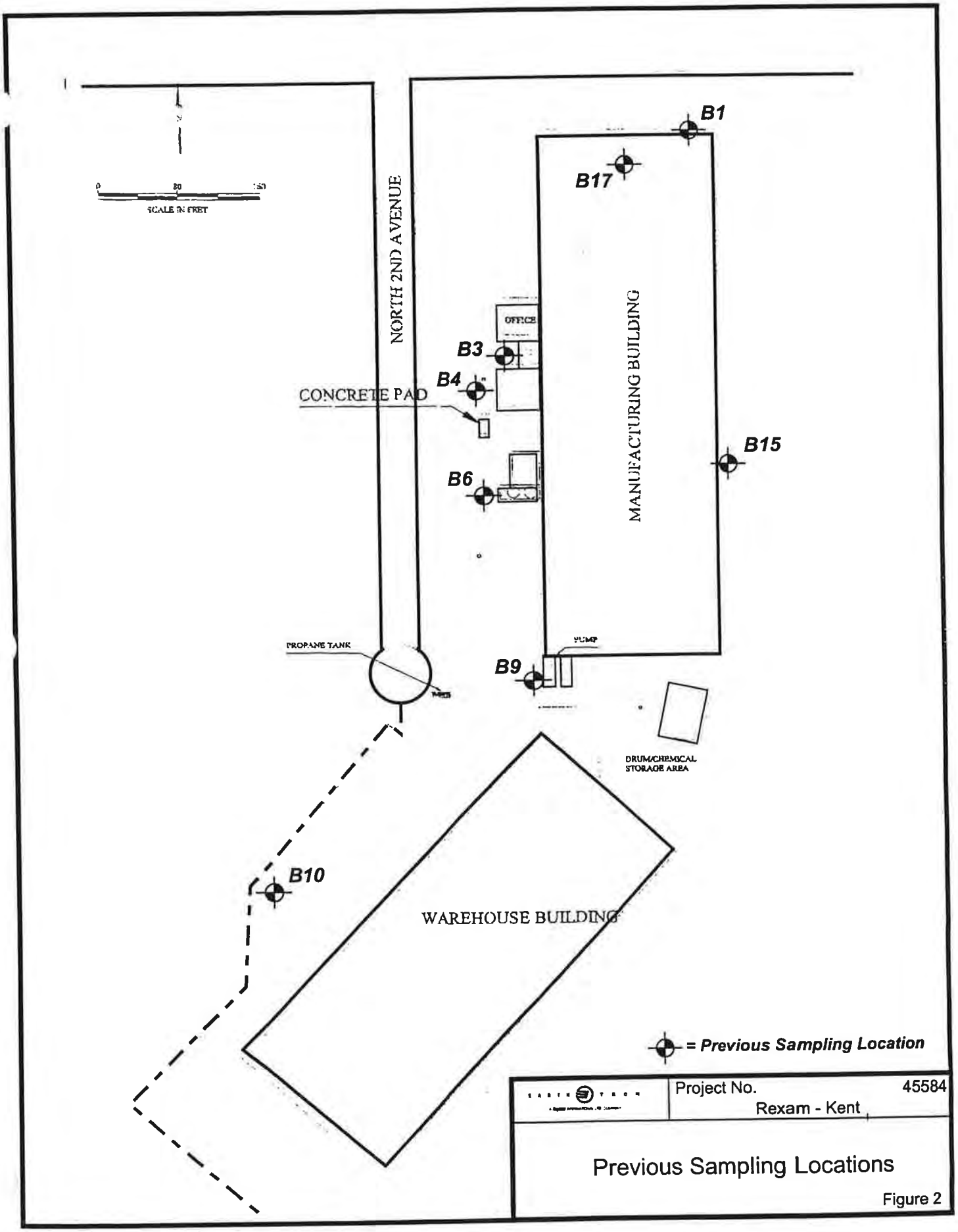
Source: USGS Topographic Map,

North
Scale 1:24000

Project No. 45584
Rexam - Kent

Site Map

Figure 1



Project No. 45584

Rexam - Kent

Previous Sampling Locations

Figure 2

APPENDIX A

SOIL BORING LOGS

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	Borehole Number: ETB-1	
Borehole Location: Adj. to B-9	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 7.9
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 5 Feet BGS	*Static:*
Completion Information: Filled back w/bentonite chips to 6" bgs. finished to match grade		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										AF	Asphalt/Concrete cover	
										CL-ML	Brownish black silt,dry,stiff,non-plastic	
										CL-ML	Dark,yellowish,brown silt w/clay,slightly moist,slightly plastic,no odor,stiff	
	1-5				0950					CL-ML	Dark greyish brown silt w/clay,slightly moist,slightly plastic,stiff,no odor	
5										CL-ML	Dark grey-green brown silt,w/clay,moist,slightly plastic,stiff,no odor	
										SW	Blackish brown sand,very fine grained,well graded,wet,no discoloration,no odor	
											Total Depth = 7.9 feet	
10												
15												
20												
25												
30												

EATH_Jane(SB) Adj to B-9 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-2**	
Borehole Location: 20' South of borehole B-9	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 5.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and capped w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										CL-ML	Dark yellowish brown silt w/clay,slightly moist,stiff,slightly plastic,no odor	
	2-5				1025							
5											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

E:\EB_Bore\SB\ 20' South of borehole B-9\Rexam-Kent\45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-3**	
Borehole Location: 20' North of B-9	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW	Driller: Marco Cure		
Drilling Equipment: ESN-NW	Date Started: 9/10/2001	Total Depth (feet): 5.0	
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										CL-ML	Dark greyish brown silt w/clay,slightly moist,no,odor,stiff,slightly plastic,saturated gravel	
	3-5				1040							
5											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EAFB_Bore[SB] 20' North of B-9 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** ETB-4	
Borehole Location: 20' East of B-9	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW	Driller: Marco Cure		
Drilling Equipment: ESN-NW	Date Started: 9/10/2001	Total Depth (feet): 5.0	
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										CL-ML	Dark grey-green brown silt,w/clay,moist,slightly plastic,stiff,no odor	
5	4-5				1100						Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EAFB Bore[SB]20' East of B-9 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-5**	
Borehole Location: 20' West of B-4	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW	Driller: Marco Cure		
Drilling Equipment: ESN-NW	Date Started: 9/10/2001	Total Depth (feet): 9.0	
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 7 Feet BGS	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
5	5-5				1125					CL-ML	Greyish brown silt w/clay,moderately stiff,dry,non-plastic,no odor,	
										CL-ML	No Recovery	
										SW	Dark brownish black sand,fine grained,wet,well graded,possible oil odor	BGS hole collapsing
											Total Depth = 9.0 feet	
10												
15												
20												
25												
30												

EAFB_Bore[SB]_30' West of B-4 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-6**	
Borehole Location: 20' North of B-4	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 5.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
5	6-5				1145					SW	Dark grayish brown silt w/clay,moderately stiff,dry,non-plastic,no odor,w/small scattered gravel	
											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EARTH Hand Shift 20' North of B-4 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-7**	
Borehole Location: 20' South of B-4	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 5.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										CL-ML	Greyish green brown,silt w/clay,scattered gravel	
	7-5				1200							
5											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EATB Borg[SB] 20' South of B-4 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	Borehole Number: ETB-8	
Borehole Location: 15' East of B-4	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 5.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
5	8-5				1215					CL-ML	Dark greyish brown silt w/clay,moderately stiff,dry,non-plastic,no odor,w/small scattered gravel	
											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EAFB_BoreSb_...ast of B-4 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** ETB-9	
Borehole Location: 25' East of B-1	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 13.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 11 Feet BGS	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										MLS	Medium brown sand w/silt,dry,fine-grained,poorly graded w/scattered gravel,no odor	
5	9-5				915					SW-SM	Medium brown clay w/silt and sand,non-plastic,moderately stiff,slightly moist	
										CLS	Medium brown clay w/silt and sand,moderately stiff,plastic,no odor,slightly moist	
10										GWS	Medium gray sand w/gravel,mostly well graded,unconsolidated,old HC odor or organic odor,slightly moist	
										SW	Dark gray sand,fine grained,well graded,wet,organic odor	
15											Total Depth = 13.0 feet	
20												
25												
30												

EAFB_Bore[SB]:25' East of B-1 Rexam-Kent 45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** **ETB-10**	
Borehole Location: 30' West of B-1	*Northing:*	*Easting:*	Sheet *1* of *1*
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 13.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 11 Feet BGS	*Static:*
Completion Information: Filled back w/bentonite and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										GWS	Medium brown sand w/gravel,dry,no odor	
5	10-5				945					SW	Medium brown sand well graded,very moist,no odor	
										SC	Gray clay w/sand,organic odor,very moist,plastic	
										SW	Gray sand ,medium,moist,organic odor	
10										SW	Dark gray sand,fine-grained,well graded,wet	
											Total Depth = 13.0 feet	
15												
20												
25												
30												

EAFB_Hand[SB] 30' West of B-1 Rexam-Kent-45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:** ETB-11	
Borehole Location: 20' South of B-15	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 9.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										AF	Rail road fill	
										CL-ML	Gray silt w/clay,moist,moderitly stiff,moderitly plastic	
5	11-5				1020					SW	Gray sand,medium grained,well graded,very moist,HC odor	
										SW	Dark gray sand,fine grained,well graded,wet,no odor	
10											Total Depth = 9.0 feet	
15												
20												
25												
30												

EAFB Bore[SB] 20 South of B-15 Rexam-Kent 45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent		Project Number: 45584-01	**Borehole Number:** **ETB-12**
Borehole Location: At B-15	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driler: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 9.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Type	Blow Count	Percent Recovery	Time	Field Analyses: FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Log: Graphic	USCS or Rock Type	Lithologic Description	Remarks
0											Rail road base rock,heavily impacted w/apparent oil-no standing oil noted	
										CL-ML	Gray silt w/clay,moist,moderately stiff,moderately plastic	
4.5–5	12-5	■			1035					SW	Gray sand,medium grained,well graded,very moist,HC odor	
										SW	Dark gray sand,fine grained,well graded,wet,no odor	
9											Total Depth = 9.0 feet	

Depth scale: 5, 10, 15, 20, 25, 30

EAFB_bore[SB] ...-15 Rexam-Kent 45584-01

EARTH TECH

Borehole Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:**	**ETB-13**
Borehole Location: 20' North of B-15	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 5.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
										AF	Gravel Saturated w/oil	
	13-5	■			1045							
5											Total Depth = 5.0 feet	
10												
15												
20												
25												
30												

EAFB_Bore[SB]:20' North of B-15 Rexam-Kent 45584-01

EARTH TECH

Borehole Log

Project Name: RexaM-Kent		Project Number: 45584-01	**Borehole Number:** ETB-14
Borehole Location: 20' East of B-15	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 4.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 5 Feet BGS	*Static:*
Completion Information: Filled back w/bentonite chips and finished w/cold patch asphalt		Elevation (feet MSL): *Ground:*	*Top of Casing:*
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Remarks
0										AF	Rail road base rock	
										MLS	Medium brown silt w/sand,moderately stiff,slightly moist,no odor	
	14-4	■			1155					SW	Gray black sand,fine-grained,well graded,no odor	
5											Total Depth = 4.0 feet	
10												
15												
20												
25												
30												

EAFB_Bore[SD] 20' East of B-15 RexaM-Kent-45584-01

EARTH TECH

Borehole/Well Constuction Log

roject Name: Rexam-Kent		Project Number: 45584-01	**Borehole Number:** ETMW-1
Borehole Location: Adj. to B-4	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/10/2001	Total Depth (feet): 15.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 6.34
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 33.14
		Logged By: R.LItzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
0										CL-ML	Brownish black silt,dry,stiff,non-plastic		
5	1-5				1310					CL-ML	Dark grayish brown silt w/clay,slightly moist,slightly plastic,stiff,no odor		
10													
15											Total Depth = 15.0 feet		Well Construction;10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage of bentonite.
20													
25													
30													

EAFB Well[SB] ...y to B-4 Rexam-Kent 45584-01

EARTH TECH

Borehole/Well Constuction Log

Project Name: Rexam-Kent	Project Number: 45584-01	Borehole Number: ETMW-2
Borehole Location: B-9 Location	*Northing:* *Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW	Driller: Marco Cure	
Drilling Equipment: ESN-NW	Date Started: 9/10/2001	Total Depth (feet): 15.0
Drilling Method: Direct Push; Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None; Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 8.73
Completion Information:	Elevation (feet MSL) : *Ground:*	*Top of Casing:* 34.85
	Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Type	Blow Count	Percent Recovery	Time	Field Analyses: FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Log: Graphic	USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
0										CL-ML	Dark yellow brown silt,non-plastic,dry,no odor		
2										CL-ML	Greenish gray silt,non-plastic,no odor,slightly moist		
4	2-5				1535								
5										CL-ML	Dark gray brown sand,as with other locations,organic odor		
15											Total Depth = 15.0 feet		Well Construction;10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage pf bentonite.

Depth scale: 5, 10, 15, 20, 25, 30

EAFB Well[SB] ...ocation-Rexam-Kent-45584-01

EARTH TECH

Borehole/Well Constuction Log

Project Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:**	ETMW-3
Borehole Location: North upgradient end of property	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW	Driller: Marco Cure		
Drilling Equipment: ESN-NW	Date Started: 9/10/2001	Total Depth (feet):	15.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/10/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 7.11
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 33.10
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
0										CL-ML	Dark yellow brown silt,non-plastic,dry,no odor		
										CL-ML	Greenish gray silt,non-plastic,no,odor,slightly moist		
5	3-5				1510					CL-ML	Dark gray brown sand,as with other locations,organic odor		
10													
15											Total Depth = 15.0 feet		Well Construction:10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage of bentonite.
20													
25													
30													

EAFB Well[SB] North upgradient end of property Rexam-Kent 45584-01

EARTH TECH

Borehole/Well Constuction Log

roject Name: Rexam-Kent	Project Number: 45584-01	**Borehole Number:**	**ETMW-4**
Borehole Location: 10'North of B-15	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 15.0
Drilling Method: Direct Push	Number of Samples: 0	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 5.79
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 33.44
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
5													
10													
15													Well Construction;10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter containeed within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage of bentonite.
20													
25													
30													

EAFB_Well(SB)_...orth of B-15 Rexam-Kent-45584-01

EARTH TECH

Borehole/Well Constuction Log

Project Name: Rexam-Kent		Project Number: 45584-01	Borehole Number: ETMW-5
Borehole Location: Downgracent location	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 18.0
Drilling Method: Direct Push	Number of Samples: 1	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:* 11 Feet BGS *Static:* 11.02	
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 36.44
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Type	Blow Count	Percent Recovery	Time	Field Analyses: FID (ppm) Sample/Background	PID (ppm) Sample/Background	Additional Tests	Log: Graphic	USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
0										GWS	Medium brown sand w/gravel,dry,no odor		
5	5-5				1255					SW	Medium brown sand,well graded,very moist,no odor		
										SC	Gray clay w/sand,organic odor,very moist,plastic		
										SW	Gray sand,medium,moist,organic odor		
10										SW	Dark gray sand,fine-grained,well graded,wet		
15													Well Construction:10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC Surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was plased to prevent seepage of bentonite.
											Total Depth = 18.0 feet		
20													
25													
30													

EAFB WellSk...ngracent location Rexam-Kent-45584-01

EARTH TECH

Borehole/Well Constuction Log

Project Name: Rexam-Kent		Project Number: 45584-01	Borehole Number: ETMW-6
Borehole Location: 35' North of B-1	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 17.5
Drilling Method: Direct Push	Number of Samples: 0	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 11.49
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 37.68
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
5													
10													
15													Well Construction;10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage of bentonite.
20													
25													
30													

EAFB Well[illegible] north of B-1 Rexam-Kent-45584-01

EARTH TECH

Borehole/Well Constuction Log

roject Name: Rexam-Kent		Project Number: 45584-01	**Borehole Number:** ETMW-7
Borehole Location: Upgradient of ETMW-1	*Northing:*	*Easting:*	Sheet 1 of 1
Drilling Agency: ESN-NW		Driller: Marco Cure	
Drilling Equipment: ESN-NW		Date Started: 9/11/2001	Total Depth (feet): 15.0
Drilling Method: Direct Push	Number of Samples: 0	Date Finished: 9/11/2001	Depth to Bedrock (feet): N/A
Drilling Fluid: None	Borehole Diameter (in): 2 Inch	Depth to Water (feet): *Drilling:*	*Static:* 7.46
Completion Information:		Elevation (feet MSL): *Ground:*	*Top of Casing:* 34.07
		Logged By: R.Litzenberg	Checked By: R.Litzenberg

Depth (feet)	Samples: Number	Samples: Type	Samples: Blow Count	Samples: Percent Recovery	Samples: Time	Field Analyses: FID (ppm) Sample/Background	Field Analyses: PID (ppm) Sample/Background	Field Analyses: Additional Tests	Log: Graphic	Log: USCS or Rock Type	Lithologic Description	Well Construction Diagram	Remarks
5													
10													
15													Well Construction; 10 Feet of pre-packed screen consisting of 3/4 inch schedule 40 PVC surrounded by a pre-packed sand filter contained within a stainless steel mesh. Above the pre-packed screen, a foam collar was placed to prevent seepage of bentonite.
20													
25													
30													

EAFB_Well[5]1 Upgradient of ETMW-1 Rexam-Kent=45584-01

APPENDIX B

LABORATORY DATA SHEETS

ESN NORTHWEST
Environmental
Services Network

September 20, 2001

Roy Litzenberg
Earth Tech, Inc.
100 W. Broadway, Suite 240
Long Beach, CA 90802-4443

Dear Mr. Litzenberg:

Please find enclosed the analytical data report for the Rexam Project in Kent, Washington. Soil and water samples were analyzed for Diesel and Oil by NWTPH-Dx/Dx Extended and VOC's by Method 8260 on September 12 & 13, 2001.

The results of these analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed.

ESN Northwest appreciates the opportunity to have provided analytical services to Earth Tech, Inc. for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A Korosec

Michael A. Korosec
President

677 Woodland Square Lp. SE, Suite D ■ Lacey, Washington 98503 ■ 360.459.4670 ■ FAX 360.459.3432
E-Mail: *esnnw@aol.com*
Web Site: *www.ESN-US.com*

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

NWTPH-Dx, mg/kg		MTH BLK	ETB1-5	ETB2-5	ETB3-5	ETB4-5	ETB5-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Date analyzed	Limits	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd	nd
Surrogate recoveries:							
Fluorobiphenyl		103%	78%	78%	107%	106%	104%
o-Terphenyl		101%	74%	75%	105%	103%	105%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

NWTPH-Dx, mg/kg		ETB6-5	ETB7-5	ETB8-5	DUPL ETB8-5	ETB9-5	ETB10-9
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Date analyzed	Limits	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd	nd
Surrogate recoveries:							
Fluorobiphenyl		105%	101%	101%	102%	105%	105%
o-Terphenyl		106%	105%	102%	102%	105%	105%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
'25) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

NWTPH-Dx, mg/kg		ETB11-5	ETB13-5	ETB14-4	DUPL ETB14-4	ETMW6-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Date analyzed	Limits	09/12/01	09/12/01	09/12/01	09/12/01	09/12/01
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd
Surrogate recoveries:						
Fluorobiphenyl		100%	102%	100%	99%	103%
o-Terphenyl		108%	107%	103%	104%	106%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

NWTPH-Dx, mg/l		MTH BLK	ETMW-1W	ETMW-2W	ETMW-3W	ETMW-4W
Matrix	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Kerosene/Jet fuel	0.20	nd	nd	nd	nd	nd
Diesel/Fuel oil	0.20	nd	nd	nd	nd	nd
Heavy oil	0.50	nd	nd	nd	nd	nd
Surrogate recoveries:						
Fluorobiphenyl		101%	111%	111%	109%	105%
o-Terphenyl		101%	112%	113%	110%	109%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
1 - matrix interference
J - estimated value
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
'425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

NWTPH-Dx, mg/l		ETMW-5W	ETMW-6W	ETMW-7W	DUPL ETMW-7W
Matrix	Water	Water	Water	Water	Water
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01
Kerosene/Jet fuel	0.20	nd	nd	nd	nd
Diesel/Fuel oil	0.20	nd	nd	nd	nd
Heavy oil	0.50	nd	nd	nd	nd
Surrogate recoveries:					
Fluorobiphenyl		106%	106%	106%	106%
o-Terphenyl		108%	104%	104%	104%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
nt: EARTH TECH INC
nt Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

8260, µg/kg		MTH BLK	LCS	ETB1-5	ETB2-5	ETB3-5	ETB4-5	ETB5-5	ETB6-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Dichlorodifluoromethane	50	nd		nd	nd	nd	nd	nd	nd
Chloromethane	50	nd		nd	nd	nd	nd	nd	nd
Vinyl chloride	50	nd		nd	nd	nd	nd	nd	nd
Bromomethane	50	nd		nd	nd	nd	nd	nd	nd
Chloroethane	50	nd		nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	50	nd		nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	50	nd		nd	nd	nd	nd	nd	nd
Methylene chloride	20	nd		nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	50	nd		nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	50	nd		nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	50	nd		nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	50	nd		nd	nd	nd	nd	nd	nd
Chloroform	50	nd		nd	nd	nd	nd	nd	nd
Bromochloromethane	50	nd		nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	50	nd		nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	50	nd		nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	50	nd		nd	nd	nd	nd	nd	nd
Carbon tetrachloride	20	nd	105%	nd	nd	nd	nd	nd	nd
Benzene	20	nd	96%	nd	nd	nd	nd	nd	nd
Trichloroethene	50	nd		nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	50	nd		nd	nd	nd	nd	nd	nd
Dibromomethane	50	nd		nd	nd	nd	nd	nd	nd
omodichloromethane	50	nd		nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	50	nd	101%	17,000	nd	nd	nd	nd	nd
Toluene	50	nd		nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	50	nd		nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	50	nd		nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	50	nd		nd	nd	nd	nd	nd	nd
Dibromochloromethane	50	nd		nd	nd	nd	nd	nd	nd
Tetrachloroethene	5	nd		nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)(*)	50	nd	98%	nd	nd	nd	nd	nd	nd
Chlorobenzene	50	nd		nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	50	nd		250	nd	nd	nd	nd	nd
Ethylbenzene	50	nd		1,200	nd	nd	nd	nd	nd
Xylenes	50	nd		nd	nd	nd	nd	nd	nd
Styrene	50	nd		nd	nd	nd	nd	nd	nd
Bromoform	50	nd		nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	50	nd		nd	nd	nd	nd	nd	nd
Isopropylbenzene	50	nd		nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	50	nd		nd	nd	nd	nd	nd	nd
Bromobenzene	50	nd		nd	nd	nd	nd	nd	nd
n-Propylbenzene	50	nd		nd	nd	nd	nd	nd	nd
2-Chlorotoluene	50	nd		nd	nd	nd	nd	nd	nd
4-Chlorotoluene	50	nd		nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	50	nd		nd	nd	nd	nd	nd	nd
tert-Butylbenzene	50	nd		nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	50	nd		nd	nd	nd	nd	nd	nd
sec-Butylbenzene	50	nd		nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	50	nd		nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	50	nd		nd	nd	nd	nd	nd	nd
Isopropyltoluene	50	nd		nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	50	nd		nd	nd	nd	nd	nd	nd
n-Butylbenzene	50	nd		nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	50	nd		nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	50	nd		nd	nd	nd	nd	nd	nd
Naphthalene	50	nd		nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	50	nd		nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene									

*-instrument detection limits

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

N Job Number:	S10911-8
ent:	EARTH TECH INC
Client Job Name:	REXAM-KENT
Client Job Number:	1262-01

Analytical Results

8260, µg/kg		MTH BLK	LCS	ETB1-5	ETB2-5	ETB3-5	ETB4-5	ETB5-5	ETB6-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Surrogate recoveries									
Dibromofluoromethane		94%	87%	92%	90%	86%	90%	91%	91%
Toluene-d8		112%	103%	98%	99%	94%	96%	95%	96%
4-Bromofluorobenzene		100%	93%	102%	101%	96%	98%	98%	97%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number 1262-01

Analytical Results

8260, µg/kg		ETB7-5	ETB8-5	ETB9-5	ETB10-9	ETB11-5	ETB13-5	ETB14-4	ETMW6-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Dichlorodifluoromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Chloromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Vinyl chloride	50	nd	nd	nd	nd	nd	nd	nd	nd
Bromomethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Chloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	50	nd	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	20	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	50	nd	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	50	nd	nd	nd	nd	nd	nd	nd	nd
Chloroform	50	nd	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	50	nd	nd	nd	nd	nd	nd	nd	nd
Carbon tetrachloride	50	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	20	nd	nd	nd	nd	nd	nd	nd	nd
Trichloroethene	20	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	50	nd	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	50	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	50	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	50	nd	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)(*)	5	nd	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
Xylenes	50	nd	nd	nd	nd	nd	nd	nd	nd
Styrene	50	nd	nd	nd	nd	nd	nd	nd	nd
Bromoform	50	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	50	nd	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	50	nd	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
n-Propylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	50	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
Isopropyltoluene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	50	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	50	nd	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	50	nd	nd	nd	nd	nd	nd	nd	nd

*-instrument detection limits

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number:	S10911-8
Client:	EARTH TECH INC
Client Job Name:	REXAM-KENT
Client Job Number:	1262-01

Analytical Results

8260, µg/kg		ETB7-5	ETB8-5	ETB9-5	ETB10-9	ETB11-5	ETB13-5	ETB14-4	ETMW6-5
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Surrogate recoveries									
Dibromofluoromethane		91%	90%	92%	92%	93%	91%	91%	91%
Toluene-d8		97%	96%	95%	97%	95%	94%	94%	95%
4-Bromofluorobenzene		98%	98%	99%	100%	98%	98%	99%	100%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
ent: EARTH TECH INC
ient Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

8260, µg/L		MTH BLK	LCS	ETMW-1W	ETMW-2W	ETMW-3W	ETMW-4W	ETMW-5W	ETMW-6W
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Dichlorodifluoromethane	1.0	nd		nd	nd	nd	nd	nd	nd
Chloromethane	1.0	nd		nd	nd	nd	nd	nd	nd
Vinyl chloride	0.2	nd		1,900	nd	nd	nd	nd	nd.
Bromomethane	1.0	nd		nd	nd	nd	nd	nd	nd
Chloroethane	1.0	nd		12,000	nd	nd	nd	4,000	6,300
Trichlorofluoromethane	1.0	nd		nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	1.0	nd		2,550	nd	nd	nd	nd	nd
Methylene chloride	1.0	nd		120	nd	nd	nd	3.1	48
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	1.0	nd		63,000	nd	nd	nd	7.8	12
cis-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd	nd	nd	nd
Chloroform	1.0	nd		nd	nd	nd	nd	nd	nd
Bromochloromethane	1.0	nd		nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		32,000	nd	nd	nd	nd	nd
1,2-Dichloroethane	1.0	nd		120	nd	nd	nd	5.0	3.1
1,1-Dichloropropene	1.0	nd		nd	nd	nd	nd	nd	nd
Carbon tetrachloride	1.0	nd		nd	nd	nd	nd	nd	nd
Benzene	1.0	nd	105%	4.0	nd	nd	nd	nd	nd
Trichloroethene	1.0	nd	96%	110	nd	nd	nd	nd	nd
1,2-Dichloropropane	1.0	nd		nd	nd	nd	nd	nd	nd
Dibromomethane	1.0	nd		nd	nd	nd	nd	nd	nd
Bromodichloromethane	1.0	nd		nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd	nd	nd
Toluene	1.0	nd	101%	150	nd	nd	nd	nd	2.1
trans-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd		12	nd	nd	nd	nd	nd
1,3-Dichloropropane	1.0	nd		nd	nd	nd	nd	nd	nd
Dibromochloromethane	1.0	nd		nd	nd	nd	nd	nd	nd
Tetrachloroethene	1.0	nd		60	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)(*)	0.01	nd		nd	nd	nd	nd	nd	nd
Chlorobenzene	1.0	nd	98%	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd		nd	nd	nd	nd	nd	nd
Ethylbenzene	1.0	nd		2.1	nd	nd	nd	3.4	nd
Xylenes	1.0	nd		9.2	nd	nd	nd	2.8	4.7
Styrene	1.0	nd		nd	nd	nd	nd	nd	nd
Bromoform	1.0	nd		nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd		6.8	nd	nd	nd	nd	nd
Isopropylbenzene	1.0	nd		nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	1.0	nd		nd	nd	nd	nd	nd	nd
Bromobenzene	1.0	nd		nd	nd	nd	nd	nd	nd
n-Propylbenzene	1.0	nd		nd	nd	nd	nd	nd	4.8
2-Chlorotoluene	1.0	nd		nd	nd	nd	nd	nd	nd
4-Chlorotoluene	1.0	nd		nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd		1.9	nd	nd	nd	4.2	19
tert-Butylbenzene	1.0	nd		nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd		8.4	nd	nd	nd	26	91
sec-Butylbenzene	1.0	nd		nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	1.0	nd		nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	1.0	nd		nd	nd	nd	nd	nd	nd
Isopropyltoluene	1.0	nd		nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd		nd	nd	nd	nd	nd	nd
n-Butylbenzene	1.0	nd		nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd		nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	1.0	nd		2.4	nd	nd	nd	2.4	3.3
Naphthalene	1.0	nd		nd	nd	nd	nd	nd	nd
Hexachloro-1,3-butadiene	1.0	nd		nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	1.0	nd							

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

8260, µg/L		MTH BLK	LCS	ETMW-1W	ETMW-2W	ETMW-3W	ETMW-4W	ETMW-5W	ETMW-6W
Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
Surrogate recoveries									
Dibromofluoromethane		94%	87%	C	89%	89%	92%	93%	92%
Toluene-d8		112%	103%	109%	104%	105%	108%	107%	106%
4-Bromofluorobenzene		100%	93%	99%	95%	95%	97%	96%	95%

*-instrument detection limits

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 35%

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

ESN Job Number: S10911-8
Client: EARTH TECH INC
Client Job Name: REXAM-KENT
Client Job Number: 1262-01

Analytical Results

8260, µg/L		ETMW-7W	ETMW-7W	ETMW-7W	ETMW-7W	RPD
Matrix	Water	Water	Water	Water	Water	
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01	
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01	
Dichlorodifluoromethane	1.0	nd				
Chloromethane	1.0	nd				
Vinyl chlonde	0.2	nd				
Bromomethane	1.0	nd				
Chloroethane	1.0	nd				
Trichlorofluoromethane	1.0	nd				
1,1-Dichloroethene	1.0	nd				
Methylene chloride	1.0	nd				
trans-1,2-Dichloroethene	1.0	nd				
1,1-Dichloroethane	1.0	nd				
cis-1,2-Dichloroethene	1.0	nd				
2,2-Dichloropropane	1.0	nd				
Chloroform	1.0	nd				
Bromochloromethane	1.0	nd				
1,1,1-Trichloroethane	1.0	nd				
1,2-Dichloroethane	1.0	nd				
1,1-Dichloropropene	1.0	nd				
Carbon tetrachloride	1.0	nd				
Benzene	1.0	nd	85%	104%	20%	
Trichloroethene	1.0	nd	77%	93%	19%	
1,2-Dichloropropane	1.0	nd				
Dibromomethane	1.0	nd				
Bromodichloromethane	1.0	nd				
cis-1,3-Dichloropropene	1.0	nd				
Toluene	1.0	nd	82%	99%	20%	
trans-1,3-Dichloropropene	1.0	nd				
1,1,2-Trichloroethane	1.0	nd				
1,3-Dichloropropane	1.0	nd				
Dibromochloromethane	1.0	nd				
Tetrachloroethene	1.0	nd				
1,2-Dibromoethane (EDB)(*)	0.01	nd				
Chlorobenzene	1.0	nd	79%	95%	19%	
1,1,1,2-Tetrachloroethane	1.0	nd				
Ethylbenzene	1.0	nd				
Xylenes	1.0	nd				
Styrene	1.0	nd				
Bromoform	1.0	nd				
1,1,2,2-Tetrachloroethane	1.0	nd				
Isopropylbenzene	1.0	nd				
1,2,3-Trichloropropane	1.0	nd				
Bromobenzene	1.0	nd				
n-Propylbenzene	1.0	nd				
2-Chlorotoluene	1.0	nd				
4-Chlorotoluene	1.0	nd				
1,3,5-Trimethylbenzene	1.0	nd				
tert-Butylbenzene	1.0	nd				
1,2,4-Trimethylbenzene	1.0	nd				
sec-Butylbenzene	1.0	nd				
1,3-Dichlorobenzene	1.0	nd				
1,4-Dichlorobenzene	1.0	nd				
Isopropyltoluene	1.0	nd				
1,2-Dichlorobenzene	1.0	nd				
n-Butylbenzene	1.0	nd				
1,2-Dibromo-3-Chloropropane	1.0	nd				
1,2,4-Trichlorobenzene	1.0	nd				
Naphthalene	1.0	nd				
Hexachloro-1,3-butadiene	1.0	nd				
1,2,3-Trichlorobenzene	1.0	nd				

ESN SEATTLE CHEMISTRY LABORATORY
(425) 957-9872, fax (425) 957-9904

'SN Job Number:	S10911-8
;ient:	EARTH TECH INC
Client Job Name:	REXAM-KENT
Client Job Number	1262-01

Analytical Results			MS	MSD	RPD
8260, µg/L		**ETMW-7W**	**ETMW-7W**	**ETMW-7W**	**ETMW-7W**
Matrix	Water	Water	Water	Water	Water
Date extracted	Reporting	09/13/01	09/13/01	09/13/01	09/13/01
Date analyzed	Limits	09/13/01	09/13/01	09/13/01	09/13/01
Surrogate recoveries					
Dibromofluoromethane		93%	94%	97%	
Toluene-d8		108%	109%	110%	
4-Bromofluorobenzene		96%	97%	101%	

*-instrument detection limits

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

Acceptable Recovery limits: 65% TO 135%

Acceptable RPD limit: 35%

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: EARTH TECH INC

ADDRESS: 100 W. BROADWAY STE 240, LONG BEACH CA 90802

PHONE: 562-951-2115 FAX: 562-951-2161

CLIENT PROJECT #: 1264.01 PROJECT MANAGER: Roy Litzenberg

DATE: 11 SEPT 01 PAGE 1 OF 1

PROJECT NAME: EXXON - KENT

LOCATION: 1220

COLLECTOR: Roy Litzenberg DATE OF COLLECTION 9-11-01

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8010/8021B	VOA 8021B BTEX	VOA 8260	SEMI VOL 8270	TPH - HCID	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (d & o)	PAH 8100	PCBs 8082	Pesticides 8081	TOTAL LEAD	pH	NW TPH Diesel +	HOLD	NOTES	Total Number of Containers	Laboratory Note Number
1. ETB 9.5	5'	0915	SOIL	ACETATE			X										X				1	
2. ETB 10.5	5'	0945	SOIL	ACETATE															X		1	
3. ETB-10.9	9'	0940	SOIL	ACETATE			X										X				1	
4. ETB 5.5	5'	0920	SOIL	ACETATE			X										X				1	
5. ETB 11.5	5'	1035	SOIL	ACETATE			[redacted]										[redacted]		X	HOLD - DO NOT ANALYZE	1	
6. ETB 13.5	5'	1045	SOIL	ACETATE			X										X				1	
7. ETB 14.4	4'	1155	SOIL	ACETATE			X										X				1	
8. ETMW-5-5	5'	1255	SOIL	ACETATE															X		1	
9. ETMW-6-5	5'	1345	SOIL	ACETATE			X										X				1	
10.																						
11.																						
12.																						
13.																						
14.																						
15.																						
16.																						
17.																						
18.																						

No Laboratory Analysis

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9-11-01/1730	[signature]	9-11-01/1730
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

X TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: EARTH TECH, INC.
ADDRESS: 100 W. BROADWAY, STE 240
PHONE: 562-951-2113 FAX: 562-951-2161
CLIENT PROJECT #: 1262-01 PROJECT MANAGER: [illegible]

DATE: 12-SEPT-01 PAGE 1 OF 1
PROJECT NAME: REXAM - KENT
LOCATION: 1220 N 2ND STR
COLLECTOR: [illegible] DATE OF COLLECTION 9-11-01

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8010/8021B	VOA 8021B BTEX	VOA 8260	SEMI VOL 8270	TPH - HCID	TPH 8015 (gasoline)	TPH 8015 (diesel)	PAH 8100	PCBs 8082	Pesticides 8081	TOTAL LEAD	pH	NW TPH DX	NOTES	Total Number of Containers	Laboratory Note Number
1. ETMW 1-W	—	1130	H_2O	40mL VOA			X										X		4	
2. ETMW 2-W	—	1057	H_2O	40mL VOA			X										X		4	
3. ETMW 3-W	—	1020	H_2O	40mL VOA			X										X		4	
4. ETMW 4 W	—	1430	H_2O	40mL VOA			X										X		4	
5. ETMW 5 W	—	1345	H_2O	40mL VOA			X										X		4	
6. ETMW 6-W	—	1310	H_2O	40mL VOA			X										X		4	
7. ETMW 7-W	—	1200	H_2O	40mL VOA			X										X		4	
8.																				
9.																				
10.																				
11.																				
12.																				
13.																				
14.																				
15.																				
16.																				
17.																				
18.																				

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	9-12-01/1445	[signature]	9/12/01 1445
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
		[signature]	9/13/01

SAMPLE DISPOSAL INSTRUCTIONS

☒ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: STANDARD

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES

CHAIN-OF-CUSTODY RECORD

CLIENT: EARTH TECH INC

ADDRESS: 100 W. BROADWAY, STE 240

PHONE: 562-951-2113 FAX: 562-951-2161

CLIENT PROJECT #: 1262-01 PROJECT MANAGER: ROY LITTLEJOHN

DATE: 10-SEPT-2001 PAGE 1 OF 1

PROJECT NAME: REXING KENT

LOCATION: 1220 N. 2ND STR, KENT

COLLECTOR: ROY LITTLEJOHN DATE OF COLLECTION 9-18-01

Sample Number	Depth	Time	Sample Type	Container Type	VOA 8010/8021B	VOA 8021B BTEX	VOA 8260	SEMI VOL 8270	TPH - HCID	TPH 8015 (gasoline)	TPH 8015 (diesel)	TPH 8015 (d & o)	PAH 8100	PCBs 8082	Pesticides 8081	TOTAL LEAD	pH	NW HC Diesel	HOLD	NOTES	Total Number of Containers	Laboratory Note Number
1. ETB-1-5	5'	0950	SOIL	125mL			X										X				1	
2. ETB-2-5	5'	1025	SOIL	125mL			X										X				1	
3. ETB-3-5	5'	1040	SOIL	ACETATE LINER			X										X				1	
4. ETB-4-5	5'	1100	SOIL	ACETATE LINER			X										X				1	
5. ETB-5-5	5'	1125	SOIL	ACETATE LINER			X										X				1	
6. ETB-6-5	5'	1145	SOIL	ACETATE			X										X				1	
7. ETB-7-5	5'	1200	SOIL	ACETATE			X										X				1	
8. ETB-8-5	5'	1215	SOIL	ACETATE			X										X				1	
9. ETMW-1-5	5'	1310	SOIL	ACETATE															X		1	
10. ETMW-2-5	5'	1425	SOIL	ACETATE															X		1	
11. ETMW-3-5	5'	1535	SOIL	ACETATE															X		1	
12.					NO	FURTHER				SAMPLES												
13.																						
14.																						
15.																						
16.																						
17.																						
18.																						

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]	09-10-01 1730	[signature]	9-10-01 1730
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[signature]			

SAMPLE DISPOSAL INSTRUCTIONS

☒ TEG DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time:

ENVISION ENVIRONMENTAL, INC.

HEALTH AND SAFETY PLAN
for
SITE INVESTIGATION ACTIVITIES

at

REXAM BEVERAGE CAN COMPANY
1220 N 2nd STREET
KENT, WA 98032

Site No. 35918556

Prepared for:

STATE OF WASHINGTON
Department of Ecology
Northwest Regional Office
3190 160th Street
Bellevue, WA 98008-5452

Prepared by:

Leslie Reid-Green, CIH
Mark P. Roman, CHMM

ENVISION ENVIRONMENTAL, INC.

April 2003

ENVISION Project ID: 302.REX

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ENVISION
ENVIRONMENTAL, INC.

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ENVIRONMENTAL, INC.

1.0 INTRODUCTION

1.1 HASP Applicability

This Site-specific Health and Safety Plan (HASP) has been developed by ENVISION ENVIRONMENTAL, INC. (ENVISION). It establishes the health and safety procedures to minimize any potential risk to ENVISION and contractor personnel implementing the Site Investigation Workplan (SIW) activities at the REXAM BEVERAGE CAN COMPANY (RBCC) facility located at 1220 North 2nd Street in the City of Kent, King County, Washington (Site).

The provisions of this HASP apply to all ENVISION personnel and subcontractor personnel who may potentially be exposed to safety and/or health hazards related to activities described in Sections 2.0 and 3.0 of this document.

This HASP has been written to comply with the requirements of the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120). All activities covered by this HASP must be conducted in compliance with this HASP and with all applicable federal, state, and local health and safety regulations. Personnel covered by this HASP who cannot or will not comply will be excluded from Site activities.

This plan will be distributed to every employee involved with the Site investigation activities to be conducted onsite. Each employee must sign a copy of the attached Health and Safety Plan Acknowledgement Form (Appendix 1).

1.2 Organizational Responsibilities

ENVISION Project Manager – Mark Roman

The ENVISION Project Manager (PM) is responsible for ensuring the overall health and safety during this project. As such the PM is responsible for ensuring that the requirements of this HASP are implemented. The PM's specific responsibilities include:

- Assuring that all personnel covered under this HASP receive a copy of it.
- Providing the Health and Safety Manager with updated information regarding conditions at the Site and the scope of work.
- Maintaining regular communication with the Site Safety Officer (SSO) and if necessary the Health and Safety Manager.
- Coordinating the activities of all subcontractors and ensuring that they are aware of the pertinent health and safety requirements of this project.

ENVISION Health and Safety Manager – Leslie Reid-Green

The ENVISION Health and Safety Manager (HSM) is the individual responsible for the preparation, interpretation and modification of this HASP. Modifications to this HASP which

may result in less stringent precautions cannot be undertaken by the PM or the SSO without the approval of the HSM. Specific duties of the HSM include:

- Writing, approving and amending the HASP for this project.
- Advising the PM and SSO on matters relating to health and safety on this Site.
- Recommending appropriate personal protective equipment (PPE) and air monitoring instrumentation to protect personnel from Site hazards.
- Maintaining regular contact with the PM and SSO to evaluate Site conditions and new information which might require modification to the HASP.

Site Safety Officer - Abraham Platt/John Weakliem

The SSO is responsible for enforcing the requirements of this HASP once remedial activities begin. The SSO has the authority to immediately correct all situations where non-compliance with this HASP is observed and to stop work when an immediate danger is present. Some of the specific duties of the SSO include:

- Assuring that all personnel covered by this HASP have submitted a completed copy of the HASP Acknowledgement Form.
- Assuring that all personnel covered by this HASP have attended a Site safety and health meeting before entering the work areas.
- Ensuring that necessary PPE is available for use on the Site.
- Ensuring that necessary air monitoring instrumentation is available onsite.
- Performing air monitoring.
- Setting up and maintaining work zones and assuring proper decontamination of all Site personnel and equipment.
- Notifying the PM of all cases of noncompliance with the HASP and stopping work in the event of an immediate danger.
- Monitoring the safety performance of all personnel in the work areas to ensure that provisions of this HASP are being followed.
- Conducting the safety and health meeting prior to commencement of work.
- Initiating emergency response procedures in accordance with Section 9.0 of this HASP.

Field Personnel

All field personnel and contractor personnel covered by this HASP are responsible for following the health and safety procedures specified in this HASP and for performing their work in a safe and responsible manner. Some of the responsibilities of field personnel include:

- Reading the HASP in its entirety prior to the start of work on the Site.
- Submitting a completed HASP Acknowledgement Form and documentation of required training and medical surveillance to the ENVISION PM prior to the start of work.
- Attending a safety and health meeting prior to the start of work.

- Asking any questions or concerns regarding to the HASP to the PM or SSO prior to the start of work.
- Reporting all accidents, injuries, illnesses or any unsafe conditions to the SSO.
- Complying with the requirements of this HASP and the direction of the SSO.

Contractors

In addition to the other requirements outlined in this HASP all contractors are required to:

- Provide appropriate PPE for their employees.
- Ensure, via daily inspections that their equipment is maintained in good working condition.
- Operate their equipment in a safe manner.

1.3 Modifications to the HASP

The procedures in this HASP were developed with information collected in the previous Site investigations conducted by other consultants. Should additional information become available regarding known or potential hazards on the Site, it may be necessary to modify this HASP. This HASP only applies to tasks outlined in Section 2.0. A task specific HASP or an addendum to this HASP will be developed for any activities to be conducted at the Site at a later date.

2.0 SCOPE OF WORK

2.1 Soil Boring / Test Pit Excavation / Sampling

Install six (6) to eight (8) test areas at the Site through the use of either test pits, test trenches or clustered (multiple) soil borings extended to the top of groundwater to determine the extent of free phase petroleum hydrocarbon contamination found in Borings B15 and B17. At least one (1) soil sample will be collected from each pit based on lithology, field observations and air monitoring instrument readings.

2.2 Passive Soil Gas Survey

Approximately one-hundred (100) gas collection samplers will be installed in the area of the manufacturing building and near Boring B10 and the two (2) rectangular patches in the asphalt. The samplers will be recovered after one (1) week to be sent for laboratory analysis. The results of this sampling will be used to determine the location of soil borings to be collected in a second stage of sampling. This second stage of sampling is not within the scope of this HASP.

2.3 Installation of Groundwater Monitoring Wells

Five (5) monitoring wells (four (4) shallow and one (1) deep) will be installed using a cone penetrometer. After installation, the wells will be developed.

2.4 Groundwater Sampling

After a minimum of two (2) weeks following installation, the wells will be purged and sampled using a peristaltic pump via the USEPA low-flow purging technique.

3.0 HEALTH AND SAFETY RISK ANALYSIS

3.1 Chemical Hazards

The chemical contaminants of concern for the activities being performed onsite are chlorinated organics in the soil and groundwater near B4 and B17. High vapor readings and trace amounts of BTEX compounds near B-10 and the patches in the concrete, chlorinated solvent contamination in the groundwater in the area of the manufacturing building and free phase petroleum compounds near B17 and B15. Total chromium above the cleanup action level for hexavalent chromium was detected but no analyses have been performed to confirm concentrations of hexavalent chromium.

3.1.1 Vinyl Chloride

Vinyl chloride is a colorless gas or liquid (below 7° F) with a pleasant odor at high concentrations. It produces depression of the central nervous system, weakness, abdominal pain, gastrointestinal bleeding, pallor and/or cyanosis of extremities and liver damage. Vinyl chloride is also a confirmed human carcinogen. The OSHA Permissible Exposure Limit (PEL) and the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Valve (TLV) are both 1 ppm.

3.1.2 1,1-Dichloroethene (vinylidene chloride)

1,1-dichloroethene is a colorless liquid or gas (above 89° F) with a mild, sweet odor. It is a central nervous system depressant and causes injury to the kidneys and liver if ingested. There is no OSHA PEL established for 1,1-dichloroethene. The ACGIH has established a TLV of 5 ppm and gives it an A5 carcinogenicity rating. This means that it is not classifiable as a human carcinogen due to the lack of data.

3.1.3 1,1-Dichloroethane

1,1-dichloroethane is a colorless liquid with a slightly acrid chloroform-like odor. Symptoms of exposure include skin irritation and depression of the central nervous system. It causes liver and kidney damage. The OSHA PEL and ACGIH TLV are both 100 ppm.

3.1.4 Methylene Chloride

Methylene chloride is a colorless liquid with a chloroform-like odor. Symptoms of exposure include skin and eye irritation, lightheadedness, fatigue, nausea, and numbness and tingling in the limbs. It is considered a potential occupational carcinogen by NIOSH. The OSHA PEL is 25 ppm. The ACGIH has established a TLV of 50 ppm for methylene chloride based on its effects on the central nervous system and its ability to cause anoxia. The ACGIH considers it to be a class A3 carcinogen which means it is a confirmed animal carcinogen with unknown significance to humans.

3.1.5 cis 1,2-Dichloroethene

cis 1,2-Dichloroethene is a colorless liquid with a slightly acrid chloroform-like odor. Symptoms of exposure include irritated eyes and respiratory system and central nervous system depression. The OSHA PEL and ACGIH TLV are both 200 ppm. The basis for the TLV is the ability of cis 1,2-dichloroethene to cause liver damage.

3.1.6 1,1,1-Trichloroethane (methyl chloroform)

1,1,1-trichloroethane (a.k.a. methyl chloroform) is a colorless liquid with chloroform-like odor. Symptoms of exposure include skin and eye irritation, headache and central nervous system depression. It causes liver and kidney damage. The OSHA PEL and ACGIH TLV are both 350 ppm.

3.1.7 1,2-Dichloroethane (ethylene dichloride)

1,2-dichloroethane (a.k.a. ethylene dichloride) is a colorless liquid with a chloroform-like odor. Symptoms of exposure include irritated eyes, corneal opacity, central nervous system depression, nausea, vomiting, and dermatitis. Overexposure can cause liver and kidney damage. NIOSH considers 1,2-dichloroethene to be a potential occupational carcinogen, however ACGIH gives it an A4 rating, which means it is not classifiable as a human carcinogen due to the lack of sufficient data.

3.1.8 Trichloroethene

Trichloroethene is a colorless liquid with a mild chloroform-like odor. It produces irritation of the skin and eyes as well as headaches. Overexposure may also result in central nervous system depression and liver damage. The PEL for trichloroethene is 100 ppm, however the ACGIH recommends a TLV of 50 ppm based on its effects on the central nervous system, headaches and the liver.

3.1.9 1,1,2-Trichloroethane

1,1,2-trichloroethane is a colorless liquid with a sweet chloroform-like odor. Symptoms include irritated eyes and nose, and central nervous system depression. The OSHA PEL is 10 ppm. The ACGIH TLV is also 10 ppm based on its effects on the nervous system and ability to cause liver damage. Both OSHA and ACGIH give 1,1,2-trichloroethane a skin notation, meaning that significant exposure can result through absorption through the skin. NIOSH considers it a potential occupational carcinogen. The ACGIH considers it to be a class A3 carcinogen which means it is a confirmed animal carcinogen with unknown significance to humans.

3.1.10 Tetrachloroethene

Tetrachloroethene is a colorless liquid with a mild chloroform-like odor. Exposure to the vapors of tetrachloroethene above the PEL may produce irritation of the eyes, nose and throat. Overexposure may also result in depression of the central nervous system. Symptoms of such exposure include drowsiness, headache, fatigue and intoxicated behavior. The PEL for tetrachloroethene is 100 ppm. The ACGIH recommends a TLV of 25 ppm for toluene due to its irritant effects and effects on the central nervous system. The ACGIH classifies tetrachloroethene as a confirmed animal carcinogen with unknown relevance to humans.

3.1.11 Benzene

Benzene is a colorless to light yellow liquid with an aromatic odor which becomes a solid below 42° F. Symptoms of exposure include irritated eyes, skin, nose, and respiratory system, giddiness, headache, nausea, staggered gait, fatigue, and anorexia. The OSHA PEL is 1 ppm while the ACGIH has set a TLV of 0.5 ppm based on its ability to cause cancer. The ACGIH considers it to be a class A1 carcinogen which means it is a confirmed human carcinogen.

3.1.12 Toluene

Exposure to the vapors of toluene above the PEL may produce irritation of the mucous membranes of the upper respiratory tract, nose and mouth. Overexposure may also result in depression of the central nervous system. Symptoms of such exposure include drowsiness, headache, fatigue, and intoxicated behavior. The PEL for toluene is 200 ppm. The ACGIH recommends a TLV of 50 ppm for toluene due to its effects on the central nervous system.

3.1.13 Hexavalent Chromium

Exposure to hexavalent chromium may produce irritation of the mucous membranes of the upper respiratory tract, nose and mouth. Symptoms of exposure include nosebleeds and perforation of the nasal septum. Overexposure may also result in contact dermatitis. Hexavalent chromium is a known lung carcinogen. The PEL for hexavalent chromium is 0.1 mg/m^3. The ACGIH recommends a TLV of 0.01 mg/m^3 for insoluble hexavalent chromium compounds due to its irritant effects and its carcinogenicity and 0.05 mg/m^3 for soluble compounds based on its effects on the liver, kidney and respiratory system.

3.1.14 Petroleum Related Compounds

Lube and fuel oils are petroleum products that are used in many types of engines, heaters, furnaces, lubricants and stoves. Lube oils come from crude petroleum and are refined to meet specifications for particular uses. Lube oils are complex mixtures of

straight and branched chained (aliphatic) and cyclic (aromatic) hydrocarbons. In addition, they may contain small amounts of nitrogen, sulfur and other substances as additives. Symptoms of exposure include irritation of the eyes, nose and throat, dizziness, drowsiness, headache, and nausea. The OSHA PEL for petroleum distillates is 500 ppm.

3.1.15 Carbon Monoxide

There is potential for generation of carbon monoxide due to use of a drill rig inside the manufacturing building to install soil gas samplers. Carbon monoxide is a colorless odorless gas. Symptoms of exposure include headache, nausea, dizziness, and confusion.

TABLE 1

CHEMICAL HAZARDS

Contaminants	PEL/TLV	LEL (%)	IDLH
Vinyl Chloride	1 / 1 ppm	3.6	NA
1,1-Dichloroethene	NA / 5 ppm	6.5	NA
1,1-Dichloroethane	100 / 100 ppm	5.4	3,000 ppm
Methylene chloride	25 / 50 ppm	13	2,300 ppm
cis1,2-Dichloroethene	200 / 200 ppm	5.6	1,000 ppm
1,1,1-Trichloroethane	350 / 350 ppm	7.5	700 ppm
1,2-Dichloroethane	50 / 10 ppm	6.2	50 ppm
Trichloroethene	100 / 50 ppm	8	1,000 ppm
1,1,2-Trichloroethane	10 / 10 ppm	6	100 ppm
Tetrachloroethene	100 / 25 ppm	ND	150 ppm
Benzene	1 / 0.5 ppm	1.2	500 ppm
Toluene	200 / 50 ppm	1.1	500 ppm
Chromium (VI)	0.1 / 0.01 mg/m^3	NA	15 mg/m^3
Petroleum distillates	500 / NA ppm	1.1	1,100 ppm
Carbon Monoxide	50 / 25 ppm	NA	1,200 ppm

NA- Not established

3.2 Chemical Exposure and Control

3.2.1 Chemical Exposure Potential

The contaminants of concern are at relatively low concentrations in the soil and water. However, since the compounds are volatile and high PID readings were measured during previous sampling events, they pose a low to moderate potential inhalation

hazard for the field team during soil excavation and groundwater well installation and monitoring.

3.2.2 Chemical Exposure Control

The following chemical exposure control measures will be implemented during the proposed investigation activities:

- Air monitoring will be performed in the workers' breathing zone to determine exposure to vapors during subsurface investigations, sampling activities, monitoring well installation and sampling. If exposures exceed the action levels, respiratory protection will be worn.

- Dust generation will be kept to a minimum. If visible dust is generated, a particulate respirator will be worn. This may be an R or P series filtering facepiece with 99.97% efficiency or a full face respirator with a cartridge containing a HEPA filter.

- There is potential for generation of carbon monoxide due to use of a drill rig inside the building to install soil gas samplers. If use of a remote drill rig is not possible, vehicle exhaust will be vented to the outside. Any gasoline-powered equipment such as generators will be placed or exhausted to the outside. Air monitoring for carbon monoxide will be performed in any indoor areas where gasoline-powered equipment will be used.

- To avoid direct dermal contact with contaminated soil, water and equipment, protective clothing as described in Section 5.0 will be required when there is a potential for direct contact (during sample collection, decontaminating sampling and heavy equipment, or when otherwise handling contaminated soil, water, piping, etc.).

- To avoid exposure through ingestion, strict adherence to the health and safety guidelines outlined in Section 6.0 and the decontamination procedures outlined in Section 7.0 will be followed.

3.3 Physical Hazards and Controls

3.3.1 Underground Utilities

The State of Washington requires that a utility mark-out be performed at a site prior to starting any subsurface work. The Northwest Utility Notification Center (800-553-4344) or the Washington State Utility Underground Location Center (800 424-5555) must be called at least two (2) full business days, but not more than ten (10) business days, before work is to begin. ENVISION will contact one (1) of these organizations to request a mark-out of underground utilities in the proposed boring / excavation areas. Work will not begin until the required utility clearances have been completed.

Public utilities typically do not mark-out utility lines that are located on private property. Therefore, ENVISION will exercise due diligence and try to identify the location of any private utilities at the facility being investigated. ENVISION will do this using as-built drawings for the area being investigated, performing a line locating survey, identifying a no-dig/no-drill zone, and hand digging if there is insufficient data to determine the location of utility lines.

3.3.2 Excavation Hazards

Working in and around excavations can expose workers to many hazards including contact with utility lines, cave-ins, hazardous atmospheres, moving machinery, vehicular traffic and water accumulation.

3.3.2.1 Overhead Utilities

Contact with underground utilities is discussed in Section 3.3.1 above. Contact with overhead utilities will be avoided by keeping the boom of drilling/excavating equipment a distance of at least ten (10) feet from energized electric lines of 50 kV or less. An additional four (4) inches of clearance will be maintained for every 10 kV over 50 kV. This is in accordance with the OSHA rule on Electrical Safety Related Work Practices (29 CFR 1910.333 (c) (3) (iii)).

3.3.2.2 Cave-ins

The risk of injuries due to cave-ins will be controlled by the use of protective systems and safe work practices. No employee will be allowed to enter an excavation deeper than five (5) feet without a protective system such as shoring, sloping, or benching. Additionally, a stairway, ladder or ramp will be placed every twenty-five (25) feet within any excavation that is at least four (4) feet in depth to provide a means of egress. All materials, tools and equipment will be stored at least two (2) feet away from the edge of an excavation. Employees are not expected to enter the excavation since the samples will be obtained by the excavating equipment or through the use of a long handled auger.

3.3.2.3 Moving Equipment

All personnel working in the vicinity of excavating equipment will be required to wear steel-toed boots, hard hats, hearing protection and safety eyewear. Personnel should not remain in the vicinity of operating equipment unless it is required for their work responsibilities. Personnel will be instructed to stand clear of equipment as it is excavating and loading soil. All equipment must have operating backup alarms. No personnel will be permitted to ride in excavator buckets.

3.3.2.4 Hazardous Atmospheres

The test pits/test trenches will be monitored for oxygen, flammable gases/vapors and hydrogen sulfide. Monitoring for volatile organic compounds will also be performed using a portable photoionization detector and detector tubes for vinyl chloride and benzene.

See Section 4.0 for details about air monitoring.

3.3.2.5 Vehicular Traffic

Personnel exposed to public vehicular traffic will wear a vest or other garment made of highly visible material.

3.3.2.6 Water Accumulation

Water from the surface, groundwater or moisture from the soil itself may reduce the soil's strength and stability possibly causing a cave-in. Accumulated water will also impede worker mobility should personnel need to enter the excavation. Excavation of each test pit will stop when groundwater is encountered at which point a sample will be recovered and the test pit will be filled in.

3.3.3 Drilling Hazards

Use of a drill rig to install monitoring wells will require all personnel in the vicinity of the operating rig to wear steel-toed boots, hardhats, hearing protection and safety eyewear. Personnel should not remain in the vicinity of operating equipment unless it is required for their work responsibilities. Additionally, the following safety requirements must be followed:

- All drill rigs and other machinery with exposed moving parts must be equipped with an operational emergency stop device. Drillers and geologists must be aware of this device. This device must be tested before the job starts and periodically thereafter. The driller and helper shall not simultaneously handle augers unless there is a standby person to activate the emergency stop when necessary.
- The driller must never leave the controls of the rig while the tools are rotating unless all workers are kept clear of rotating equipment.
- A long-handled shovel must be used to clear drill cuttings away from the hole and from rotating tools. Hands and/or feet are not to be used for this purpose.
- A remote sampling device must be used to sample drill cuttings if the tools are rotating or if the tools are readily capable of rotating. Samplers must not reach into or near the rotating equipment. If personnel must work near any tools that could rotate, the driller must shut down the rig prior to initiating work.
- Drillers, helpers, and geologists must secure all loose clothing when in the vicinity of drilling operations.

- Only equipment that has been approved by the manufacturer may be used in conjunction with drilling equipment and specifically to attach sections of drilling tools together. Pins that protrude excessively from augers shall not be permitted.
- No person may climb the drill mast while tools are rotating.
- No person may climb the drill mast without the use of ANSI-approved fall protection or a portable ladder that meets the requirements of the OSHA standards.
- The drill rig must not be moved with the mast in a raised position.

3.3.4 Cuts and Lacerations

There is a potential for cuts and lacerations when employees must manually handle equipment with jagged edges or sharp metal pieces. Employees who are involved in these tasks should wear leather or Kevlar ™ gloves.

When using knives or blades, follow these safety guidelines:

- Keep your free hand out of the way.
- Use only sharp blades; dull blades require more force which results in less knife control.
- Use a hooked knife or a utility knife with a self-retracting blade.
- Wear leather or Kevlar ™ gloves when using knives or blades.

3.3.5 Noise Hazards

The use of excavation equipment and drill rigs will generate noise levels that will require the use of hearing protection in the immediate vicinity. Appropriate earplugs or earmuffs with a NRR greater than 25 will be worn to prevent overexposure.

3.3.6 Temperature Stress

It is not known at this time when Site investigation activities will be scheduled. As such, this HASP will address the hazards of heat and cold stress.

3.3.6.1 HEAT STRESS

Early symptoms of Heat-Related Illness:

- Decline in task performance
- Reduced coordination
- Decline in alertness
- Unsteady walk
- Excessive fatigue
- Muscle cramps
- Dizziness
- Nausea
- Headache
- Muscle cramps
- Cold, clammy skin

HOT, DRY, RED SKIN IS A SIGN OF HEAT STROKE WHICH IS A MEDICAL EMERGENCY REQUIRING IMMEDIATE FIRST AID

Susceptibility to Heat Stress Increases Due To:

- Lack of physical fitness
- Obesity
- Increased age
- Lack of acclimation
- Dehydration
- Drug or alcohol use
- Sunburn
- Infection

Measures to Avoid Heat Stress:

- Establish work/rest schedules
- Set-up a shaded, cool rest area
- Rotate personnel, alternate job functions
- Drink water beyond thirst quenching
- Eat lightly salted foods or drink salted drinks such as Gatorade
- Start work as early as possible and save most strenuous work for non-peak hours
- Avoid double shifts and overtime.

Site personnel should regularly check their pulse by placing their fore and middle fingers on the inside of the wrist below the thumb. This should be done for one (1) minute at the beginning of each rest cycle. If the pulse rate exceeds 110 beats per minute, shorten the next work cycle by one-third and keep the rest periods the same. If the pulse rate still exceeds 110 beats per minute shorten the next work cycle by one-third.

3.3.6.2 COLD STRESS: HYPOTHERMIA AND FROSTBITE

Symptoms of Cold Stress:

- Reduced or loss of touch sensation (frostbite).
- Redness followed by white patches in affected area (frostbite).
- Uncontrolled shivering and sensation of being cold.
- Slow and slurred speech, drowsiness and collapse.

Susceptibility to Cold Stress Increases Due To:

- Windy conditions
- Wet conditions
- Age
- Poor circulation
- Smoking

- Alcohol consumption
- Some medications
- Exposure to evaporative liquids (e.g. gasoline, alcohol, cleaning fluids).

Measures to Avoid Hypothermia:

- Dress in multiple layers of loose clothing, outer layer should be wind/water proof.
- Wear proper headgear. A head covering in conjunction with a cap and/or earmuffs will greatly add to one's protection in cold and windy locations.
- Listen to, or call for weather forecast so you can plan ahead.
- Acclimating yourself to the cold outdoors by performing moderate exercise and taking frequent breaks.
- Eating a proper (high carbohydrate) meal before going out and avoiding consumption of alcohol and caffeine. The body burns more calories while maintaining temperature.
- Carrying replacement clothing such as socks, shoes and pants that could become wet.
- Being aware of your surroundings, working with a partner and being informed of the weather. Don't venture out into severe weather.
- Being aware of the conditions that cause hypothermia.

First-Aid for Hypothermia:

- Remove victim from cold into warm environment.
- For frostbite, immerse affected area in warm, not hot, water.
- Wrap victim in warm dry materials (blankets, clothing).
- If possible, apply body heat (rescuer wrap him/herself and victim together).
- If mild hypothermia, provide warm liquids

If symptoms are severe, SEEK MEDICAL ATTENTION.

4.0 AIR MONITORING

4.1 Direct Reading Instruments

The following describes the air monitoring that will be conducted during excavation activities and system maintenance activities that could pose an inhalation hazard. Monitoring instruments will be used to determine the presence of vapors in the breathing zone of employees.

1,1-dichloroethane and 1,1,1-trichloroethane are present onsite at the highest concentrations. Vinyl chloride and benzene, while present onsite at lower concentrations have very low PELs/TLVs and are carcinogenic. There is no air-purifying respirator approved for use in vinyl chloride environments. Any readings in the breathing zone over one (1) PID unit will trigger the use of detector tubes for vinyl chloride and benzene. Presence of vinyl chloride will result in work stopping until supplied air respirators can be provided. Presence of benzene will result in the use of Level C protection. If vinyl chloride or benzene are not detected, the action level for upgrading to Level C protection will be ten (10) PID units based on the PEL for 1,1,2-trichloroethane.

The action level for donning Level B protection is based on fifty (50) times the PEL for benzene. This is due to the NIOSH assigned protection factor of fifty (50) for a full-face air-purifying respirator. An air-purifying respirator will only provide protection up to fifty (50) ppm of benzene.

The air monitoring instrument to be used onsite is the RAE Systems MultiRAE Plus with PID and carbon monoxide and hydrogen sulfide sensors. This instrument monitors for oxygen concentration, explosive/flammable gases (% LEL), volatile organic compounds, carbon monoxide and hydrogen sulfide. The instrument can be programmed to read the true concentration of any VOC and the true LEL of any combustible gas. It has an audible alarm that is preset to alarm at:

- <19.5% and > 23% Oxygen,
- >10% LEL,
- >35ppm Carbon Monoxide,
- >5ppm Hydrogen Sulfide, and/or
- >50ppm Volatile Organic Compounds.

The instrument can be programmed to alarm at any level.

TABLE 2

Air Monitoring Instruments and PPE Action Levels

Contaminant	Instrument	Calibration Gas	Frequency of Use	Action Level and Action Required
Volatile Organics	Multi RAE Plus	Isobutylene	Continuous	1 PID unit- use detector tubes 10 PID units(no vinyl chloride or benzene)- Level C
Vinyl Chloride	Detector tubes	NA	PID readings of > 1	Presence of vinyl chloride- stop work/Level B
Benzene	Detector Tubes	NA	PID readings of >1	Presence of benzene- Level B
Flammable Gases	Multi RAE Plus	Methane	Continuous	NA-see below
Oxygen	Multi RAE Plus	Oxygen	Continuous	NA-see below
Carbon Monoxide	Multi RAE Plus	Carbon Monoxide	Continuous	NA-see below
Hydrogen Sulfide	Multi RAE Plus	Hydrogen Sulfide	Continuous	NA-see below for action required

*These action levels are based on sustained readings (one minute or longer) in the workers' breathing zone.

TABLE 3

Action Levels for Combustible Gases/Oxygen/Carbon Monoxide/Hydrogen Sulfide

PARAMETER	RANGE	ACTION REQUIRED
Oxygen	Less than 19.5%	Leave area/supplied air
	More than 23.5%	Leave area-Fire/explosion hazard
Combustible gases	>10% LEL	Leave area-Fire/explosion hazard
Carbon Monoxide	>35 ppm	Leave area, ventilate
Hydrogen Sulfide	>5 ppm	Leave area

4.2 Calibration and Recordkeeping

Equipment will be calibrated in accordance with the manufacturer's specifications. The RAE Systems calibration kit comes with a four-gas mix for calibrating the unit for %LEL, hydrogen sulfide, carbon monoxide, and oxygen. A cylinder with isobutylene gas will be used to calibrate the PID component of the instrument. The MultiRAE will be calibrated at the beginning of each day of work. Calibration information and monitoring information will be kept in the field notebook.

5.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) will be worn during excavation, drilling and sampling activities to prevent onsite personnel from being injured from the physical hazards outlined in Section 3.0. In addition, chemical protective clothing will be worn to prevent direct dermal contact with the contaminants onsite. The following describes the PPE to be worn for specific tasks.

5.1 Protective Clothing and Other Equipment

Task 1 – Test Pit Excavation

Hard hat
Steel toe safety shoes
Safety glasses with side shields
Tychem 9400™ or Tychem BR™ coveralls*
Inner latex or PVC gloves*
Outer Nitrile gloves*
Disposable boot covers
Hearing protection

* If activities involve skin contact with contaminated soils or water

Task 2 – Passive Soil Gas Survey

Hard Hat
Steel toe safety shoes
Safety glasses with side shields
Tychem 9400™ or Tychem BR™ coveralls*
Leather gloves
Inner latex or PVC gloves*
Outer Nitrile gloves*
Hearing protection

* If activities involve skin contact with contaminated soils or water

Task 3 – Installation of Groundwater Monitoring Wells

Steel toe safety shoes
Safety glasses with side shields
Tychem 9400™ or Tychem BR™ coveralls*
Inner latex or PVC gloves
Outer Nitrile gloves
Disposable boot covers
Hearing protection

* If activities involve skin contact with contaminated soils or water

Task 4 – Groundwater Sampling

Steel toe safety shoes
Safety glasses with side shields
Tychem 9400™ or Tychem BR™ coveralls
Inner latex or PVC gloves
Outer Teflon or Viton gloves
Disposable boot covers
Hearing protection**

** During well evacuation/purging

5.2 Respiratory Protection

Respiratory protection will be worn in accordance with the action levels presented below:

Contaminant	Instrument	Action Level for Donning Level C/B
Volatile Organic Compounds	Multi RAE Plus	10/50 PID units*
Particulates	None proposed	Visible dusts/NA

* Unless vinyl chloride or benzene is detected. See explanation below.

Level C protection will be worn when sustained levels of VOCs as detected by the Multi RAE PID reach ten (10) PID units in the breathing zone and use of detector tubes confirm the absence of vinyl chloride (which requires Level B respiratory protection) and benzene vapors. If benzene is detected, Level C respiratory protection will be worn at levels up to 50 PID units.

Level C respiratory protection will consist of full-face air purifying respirators equipped with organic vapor/acid gas/HEPA cartridges. Cartridges will be changed every eight (8) hours.

Dust generation will be kept to a minimum. If visible dust is generated, a particulate respirator will be worn. This may be a R or P series filtering facepiece with 99.97% efficiency or a full face respirator with a cartridge containing a HEPA filter.

Level B respiratory protection will be required if sustained levels of VOCs as detected by the MultiRAE PID reach 50 PID units in the breathing zone. Level B respiratory protection will also be required if vinyl chloride is detected through the use of the MultiRAE PID and detector tubes as discussed in Section 4.0 of this HASP.

If Level B respiratory protection is required as determined by PID and detector tube readings, work will cease and the ENVISION HSM will be notified. Work will not continue until supplied air respiratory equipment can be delivered to the Site.

Level B respiratory protection will consist of a full-face air supplied respirator in the pressure demand mode. If an airline system is being used, all workers using the system must be equipped with a fifteen (15) minute emergency escape bottle of air.

Respiratory protection should also be donned if odors become objectionable at any time or if irritation of the respiratory tract is noticed.

All employees who are expected to wear respiratory protection must have successfully passed a quantitative fit test within the past year for the brand, model and size respirator they plan to wear during the proposed activities.

5.3 Other Protective Equipment

The following additional safety items will be available at the Site:

- Portable hand held eyewash bottles
- First aid kit
- Fire extinguisher

6.0 SITE CONTROL

6.1 Work Zones

To prevent both exposure of unprotected personnel and migration of contaminated materials due to tracking by personnel or equipment, work areas along with PPE requirements will be clearly identified. ENVISION designates work areas or zones in accordance with the "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" (NIOSH/OSHA/USCG/EPA). They recommend the areas surrounding each of the work areas to be divided into three (3) zones.

- Exclusion or "hot" zone
- Contamination Reduction Zone (CRZ)
- Support Zone

Figure 1 illustrates the Site control zone layout.

6.1.1 Exclusion Zone

The exclusion zone for test pit excavation will be the area twenty (20) feet around each test pit.

A radius around the drill rig that is at least equal to the height of the drill rig mast will be considered the exclusion zone during soil gas sampler installation and well installation. A twenty (20) feet radius will be maintained where possible.

A radius of ten (10) feet around each monitoring well will be the exclusion zone during well development, purging and sampling. This radius may be increased if air monitoring reveals that Level C respiratory protection is required during these activities.

6.1.2 Contamination Reduction Zone (CRZ)

The decontamination area will be set-up around the exclusion zone, and will be designed to be large enough to prevent contaminated materials or personnel from affecting adjacent areas.

6.1.3 Support Zone

A support area will be set-up adjacent to each contamination reduction/decontamination zone. The support area(s) will be set-up up-wind of the exclusion zone.

6.2 Safety Practices

The following procedures are designed to further minimize the risk of exposure and injury due to onsite activities:

- The buddy system will be used at all times by all field personnel in the exclusion zone. No one is to perform fieldwork alone. Visual, voice or radio communication will be maintained at all times.

- Whenever possible, contact with contaminated or potentially contaminated material will be avoided. This includes walking around puddles, discolored surfaces and contaminated soil, avoiding kneeling or setting equipment on the ground, and protecting equipment from contamination by bagging.

- There will be no eating, drinking, smoking, chewing gum or tobacco or any other practice that increases the probability of hand-to-mouth transfer or ingestion of contamination in the exclusion or contamination reduction zone (CRZ).

- All personnel must pass through the CRZ to enter or exit the exclusion zone.

- At a minimum, an emergency eyewash station is to be located on the clean side of the CRZ area. An emergency deluge shower/spray shall be kept in the same area for work in Level C and above.

- All personnel shall wash hands, arms and face after leaving the work area and before eating, drinking and smoking.

- All supplied breathing air shall be certified as grade D or better.

- Fire extinguishers will be onsite for use on equipment or small fires only.

- An adequate supply of cool drinking water (at least 1-gallon per person) with an ample supply of disposable cups shall be present for each day of Site operations and be readily available to Site personnel.

- Beards or other facial hair that interfere with respirator fit are prohibited in the exclusion zone.

- The use of alcohol or illegal drugs is prohibited during the conduct of field operations.

- All equipment must be decontaminated or properly discarded before leaving the Site.

7.0 DECONTAMINATION

7.1 Personnel Decontamination

Proper decontamination is required of all personnel before leaving the Site. Decontamination will occur within the contamination reduction zone (CRZ).

The steps for Level C decontamination are as follows:

Equipment drop
Boot and glove wash
Boot and glove rinse
Boot removal
Outer glove removal
Suit removal
Respirator removal
Inner glove removal

Disposable PPE will be removed and placed in lined garbage pails. Final disposal of PPE will be in accordance with applicable regulations. Respirators will be washed and rinsed after each day's use.

7.2 Sampling Equipment

Disposable items will be placed in lined garbage pails. Reusable items will be wiped with clean cloths or paper towels, washed with soap and water, and rinsed with clean water. These procedures are intended only to minimize the potential spread of contamination. Decontamination procedures to prevent sample contamination or cross-contamination will be addressed elsewhere.

7.3 Equipment Decontamination

Excavation and drilling equipment will be decontaminated in the CRZ. Contamination will be removed by steam cleaning.

8.0 MEDICAL SURVEILLANCE AND TRAINING REQUIREMENTS

8.1 Medical Surveillance

All personnel performing activities covered by the HASP must be active participants in a medical surveillance program that complies with 29 CFR 1910.120(f). Each individual must have completed an annual medical examination and/or initial baseline examination within the last year prior to performing any work on the Site covered by the HASP.

8.2 Health and Safety Training

All personnel performing activities covered by this HASP must have completed the training requirements specified in 29 CFR 1910.120 (e). Each individual must have completed an initial 40-hour health and safety training course and a current 8-hour refresher course if the initial training was completed more than one (1) year prior to Site activities.

All contractor personnel performing Site activities must submit copies of training certificates and proof of enrollment in a medical surveillance program to the ENVISION PM.

8.3 Pre-Work Briefing

The SSO will conduct a pre-work briefing before Site activities begin. HASP Acknowledgement Forms will be collected at this meeting. Short safety meetings will be conducted as needed throughout the duration of this project. Attendance at the pre-work briefing is mandatory and will be documented by the SSO on the Health and Safety Plan Pre-Entry Briefing Attendance Form (see Appendix 2).

9.0 EMERGENCY RESPONSE

9.1 Employee Training

Employees will be instructed on the Site-specific aspects of emergency evacuation. Onsite updates are required anytime escape routes or procedures are modified or personnel changes are made.

9.2 Emergency Signals

The emergency communication system that will be used in most situations will be direct verbal communication. In some situations, direct verbal communication will not be possible. Should an emergency occur when voices cannot be clearly perceived above ambient noise levels or when personnel are working in different areas of the Site, personnel will be alerted via two-way radios, air horns or other devices. The signals using an air horn are as follows:

Three (3) air horn blasts: Indicates that all personnel should leave the exclusion zone.
Continuous horn blast: Indicates personnel injury in the exclusion zone.

Cellular phones will be used to contact offsite emergency personnel such as EMS.

9.3 Escape Routes and Procedures

In the event of an emergency, such as fire, explosion, toxic gas release, etc., personnel will leave the Site through the CRZ and meet at the support zone. Alternate escape routes and assembly areas will be established to be used in the event escape through the CRZ is not possible. These routes and assembly areas will be reviewed during the pre-entry briefing.

9.4 Personnel Injury and Exposure

Emergency first aid shall be administered onsite as necessary. In the event an injury or illness requires further medical care, the SSO will accompany the injured person to the hospital and will remain with the person until release or admittance is determined. The SSO will relay all relevant medical information to the onsite PM and the HSM.

9.5 Emergency Decontamination Procedures

If decontamination can be performed without aggravating injuries or delaying life-saving treatment, protective clothing will be washed and rinsed or cut off personnel.

If decontamination cannot be done, the victim will be wrapped in blankets or plastic to reduce contamination of other onsite personnel and rescue workers. If the worker is suffering from a neck or back injury, the person will not be moved. The SSO must inform the responding emergency medical personnel about the nature of the Site and the injury. If the responder feels that the PPE can be cut away from the victim, this will be done onsite.

9.6 Designation of Responsible Parties

The SSO is responsible for initiating emergency response actions. In the event the SSO can not fulfill this duty, the PM or Site supervisor will take charge. The SSO is responsible for identifying all ENVISION and subcontractor personnel onsite at all times and to ensure that they have exited the Site during an evacuation.

9.7 Emergency Contacts

See Table 4 for a list of emergency contacts.

TABLE 4

EMERGENCY CONTACTS

Fire	**911**
Police	**911**
Ambulance	**911**
HazMat Team	**Complete if applicable**
Hospital:	**Auburn Regional Medical Center** **202 N. Division Street** **Auburn, WA 98001** **Phone: (253) 833-7711**

Directions:

1) Go north on North 2nd Avenue towards 228th Street by turning right
2) Turn right onto S. 228th Street
3) S. 228th Street becomes S. 83rd Avenue
4) S. 83rd Avenue becomes S. 224th Street
5) Turn right onto S. 84th Avenue
6) Take the WA-167 South ramp towards Auburn
7) Merge onto Valley Freeway
8) Stay straight to go onto WA-167 South
9) Take the WA-18 E exit towards Auburn
10) Keep left at the fork in the ramp
11) Merge onto WA-18E
12) Take the C Street S.W. exit
13) Turn left onto C Street S.W.
14) Turn right onto W. Main Street
15) Turn left onto N. Division Street

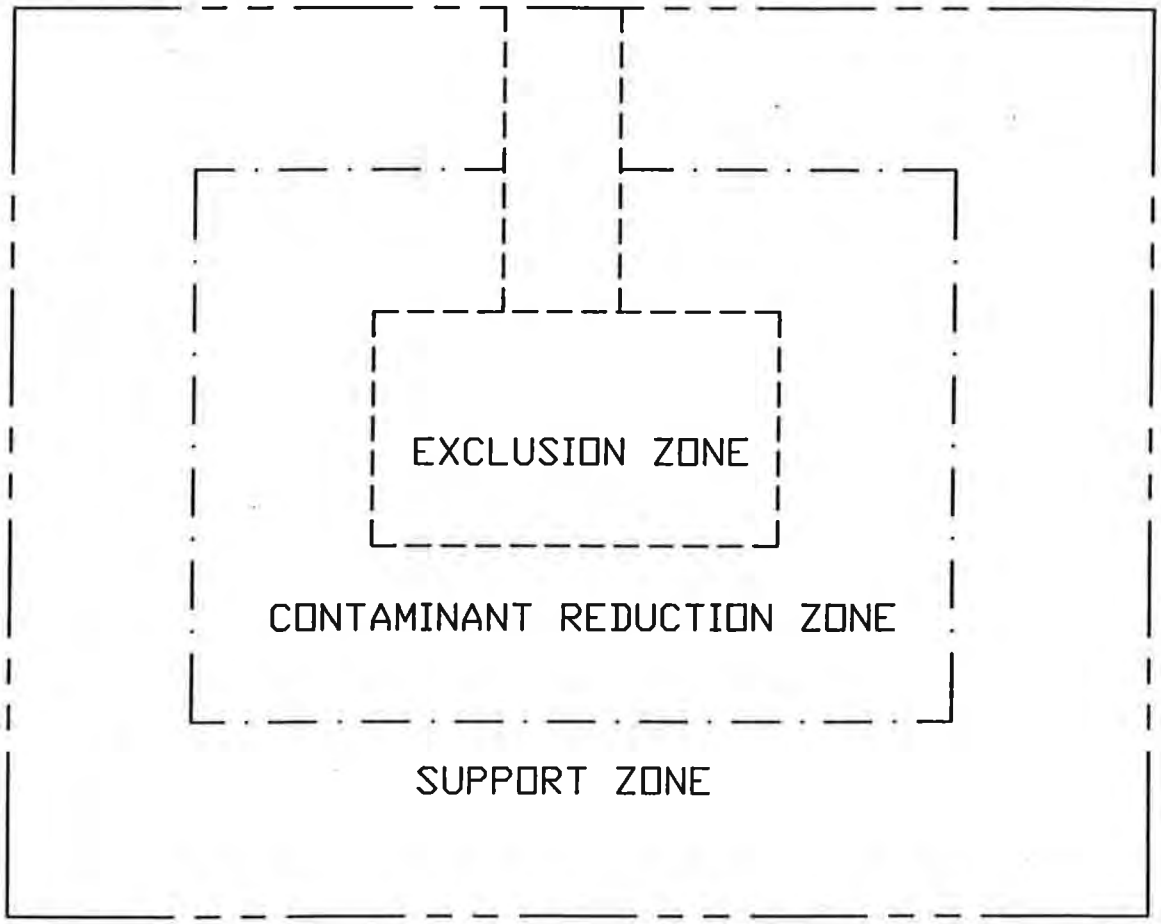
See Figure 2, which highlights the route to the hospital.

ENVISION
ENVIRONMENTAL, INC.

ENVISION PROJECT REPRESENTATIVES:

Mark Roman	(732) 886-1664 (732) 433-5320
Leslie Reid-Green	(732) 886-1664 (908) 806-7177
Abraham Platt	(732) 886-1664 (732) 433-5319
John Weakliem	(732) 886-1664 (732) 496-4179

FIGURES



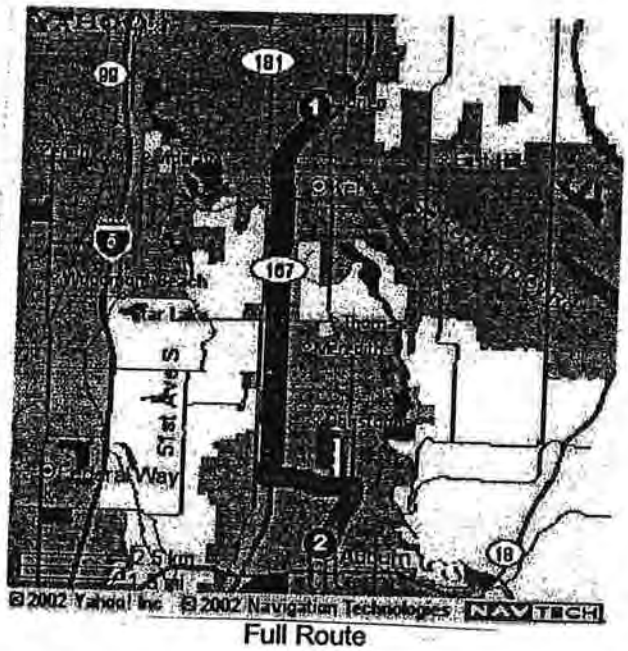
WORK ZONE MAP

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

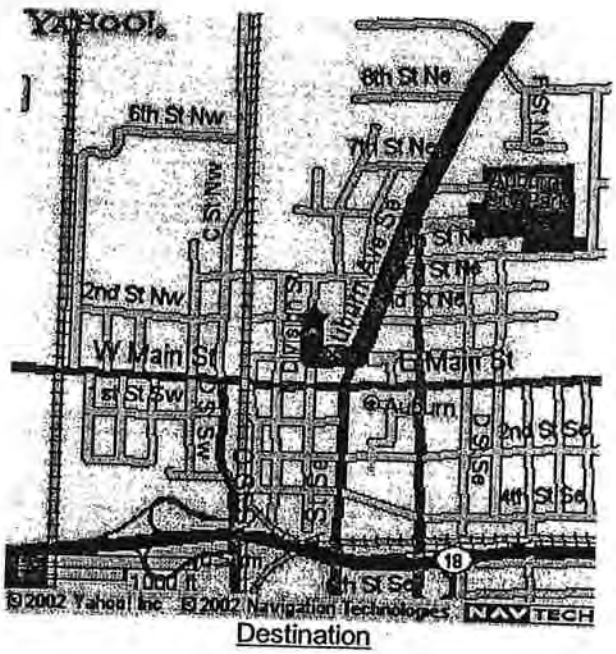
REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:

Project No. 302.REX
Date: 08/12/02
Scale: As Shown
Drawing No. FIGURE 1



Full Route



Destination

HOSPITAL ROUTE MAP

Envision Environmental, Inc.
21 Priscilla Lane, Howell, NJ 07731
Phone: 732-886-1664 Fax: 732-886-2925

REXAM BEVERAGE CAN CO.
1220 NORTH 2nd STREET
KENT, WASHINGTON 98032

Revisions:	Project No.
	302.REX
	Date: 08/12/02
	Scale: As Shown
	Drawing No.
	FIGURE 2

ENVISION
ENVIRONMENTAL, INC.

APPENDIX 1

Health and Safety Plan Acknowledgement Form

Envision Environmental, Inc.

HEALTH AND SAFETY PLAN ACKNOWLEDGEMENT FORM

I have received a copy of the Health and Safety Plan prepared for the REXAM facility in Kent, Washington. I have read and understood its contents and I agree to abide by its requirements.

Name	Signature	Affiliation	Date

ENVISION
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APPENDIX 2

Health and Safety Plan Pre-Entry Briefing
Attendance Form

ENVISION
ENVIRONMENTAL, INC.

Health and Safety Plan Pre-Entry Briefing Attendance Form

Site Investigation Activities
REXAM BEVERAGE CAN COMPANY Facility
Kent, WA

Briefing Conducted By:_____
Date Performed:_____

Printed Name	Signature	Affiliation

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APPENDIX 5

Health and Safety Plan

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APPENDIX 6

Proposed Schedule

Proposed Schedule for Site Investigation Activities

REXAM BEVERAGE CAN COMPANY
1220 North 2nd Street
Kent, Washington

	Month 1		Month 2		Month 3		Month 4		Month 5		Month 6		Month 7		Month 8		Month 9		Month 10	
STAGE 1																				
Contractor Selection	■	■																		
Mobilization			■																	
Site Preparations			■																	
Utilities Markout			■																	
Gas Probe Survey and B15 Excavation			■	■																
Soil Sampling				■																
Monitoring Well Installation				■																
Laboratory Analysis					■	■	■													
Site Investigation Report Preparation								■	■											
Submit Site Investigation Report										■										
Regulatory Review											■	■	■							
Prepare for Stage 2 Activities *														■						
Perform Stage 2 Activities *															■	■				
Laboratory Analysis																	■	■	■	
Report on Stage 2 Activities *																			■	■

Notes:
Month 1 initiates within fourteen (14) days of receipt of SIW approval from the WDE.
Schedule does not take into account weather delays, access issues and contractor availability.
* The need for Stage 2 Activities will be determined in Stage 1.