rcvd 3/15/07

TETRA TECH, INC.

May 8, 2006

Ms. Trish Amundson
AMRESCO Commercial Finance, LLC
412 East Park Center, Suite 300
Boise, Idaho 83706

RE: LIMITED FILE REVIEW OF GASOLINE STATION AT 1802 EAST NOB HILL BOULEVARD, YAKIMA, WASHINGTON

Dear Ms. Amundson:

This is the letter report for the Limited Site Review of the gasoline station property located at 1802 East Nob Hill Boulevard, Yakima, Washington. The subject gasoline station site may hereinafter also be referred to as the site, the property, or the subject property. This review was conducted during the months of March and April of 2006 by Tetra Tech, Inc. The details of the review are included below.

OBJECTIVE AND SCOPE OF WORK

The objective of this review is to document the steps necessary, with consideration to local, state and Federal laws, to obtain site closure and "no further action" (NFA) status regarding the environmental condition of the subject gasoline station property. This scope of work was customized in the attempt to provide the steps necessary to obtain closure and NFA status. The scope of work includes completing limited site review of the property. The site is currently a gasoline station/convenience store. The scope of work includes the following:

A. Perform private file review (of the full copies of existing Phase II reports);

B. Conduct one interview with Washington Department of Ecology (Ecology) personnel to determine action;

C. Submit letter to Ecology requesting "no further action" at this site, should Ecology indicate that further investigation is unnecessary to conclude that no further action may be warranted, and send copies of the letter to the Client, OR;

D. Submit request to Client for additional budget to resolve concerns on site identified through this process.

SITE DESCRIPTION AND LOCATION

The subject gasoline station property is used as a retail gasoline station and as a convenience store. The fueling facilities and convenience store are currently in operation.

The subject property is located at 1802 East Nob Hill Boulevard, within the City of Yakima, in Yakima County, in a central portion of Washington State. The subject property is situated at the southeast corner of the intersection of East Nob Hill Boulevard and South 18th Street. The subject

property is physically located within the Northwest Quarter of the Southeast Quarter of Section 29, Township 13 North and Range 19 East of the Willamette Meridian. The City of Yakima Parcel Number for the subject property is 19132942431. The subject property is generally level and rests in a mixed residential/industrial/commercial area.

BACKGROUND INFORMATION

The likely first developed use of the subject property was in the early 1900s when the property was used as a residence and possibly linked to larger orchard land or farmland. The subject property was used as a residence for around 60 years until the area began to become more commercialized. In the late 1980s, the property became a Maid O'Clover gas station.

Four UST are present at the site including two 10,000-gallon gasoline UST, one 6,000-gallon gasoline UST, and one 6,000 gallon diesel tank. The tanks were installed during 1987.

FILE REVIEW

File materials obtained from Ecology are provided in the Attachment.

The site is included on the state Leaking Underground Storage Tank (LUST), Confirmed and Suspected Contaminated Sites List (CSCSL), and UST lists. The site received a Washington Ranking Model (WARM) ranking of 2 (the second highest ranking possible) in 1992. The basis for the ranking was related to human health concerns regarding groundwater contamination. In the early 1990s, there was domestic well use in the site vicinity.

Initial characterization activities were performed during 1991 and 1992. A release was reported associated with the turbine pump for the westernmost 10,000 gallon gasoline UST. The release estimate varied from about 50 to 100 gallons up to 2,000 gallons. In 1991, three wells were installed and benzene, toluene, ethylbenzene, and xylenes (BTEX) and gasoline were detected above state cleanup standards. About 0.2 feet of product was found in MW-3. Groundwater flow was documented to be to the east-southeast at the site.

Six additional wells were installed in 1992. About 650 gallons of product was removed from one of the wells (MW-3) using a skimming pump. Pumps were installed in various other wells to remove additional product. Up to 7,000 gallons per day of product and water was reportedly pumped and treated during part of 1992.

In 1991 and 1992, petroleum contaminated groundwater in the general vicinity of the target property was the subject of residence complaints and newspaper articles. Some of the contamination in the site vicinity was attributed to a bulk fuel facility (Exxon/Tiger Oil) located about 400 feet west of the target property. The presence of groundwater contamination in a well along the south western boundary of the target property (MOC 3) was attributed to unnamed offsite sources in the 1992 report. Three other services stations (Citgo/7-11, Time Oil, and ARCO AM/PM) are present at the intersection of East Nob Hill Boulevard and South 18th Street and represent potential sources of offsite groundwater contamination.

In 2002, Ecology sent a letter regarding the status of LUST remedial activities at Maid O'Clover and stated that there was a need for further action at the site based of petroleum hydrocarbons at the site above Washington Model Toxics Control Act (MTCA) cleanup levels. The 2002 Ecology letter

concluded that there were inconsistencies in past reports regarding the levels of contaminants at the site, and that the site should remain in Cleanup Started status.

In 2004, a Phase II Environmental site assessment was performed at the site. The Phase II investigation found tetrachloroethene (PCE) in groundwater above state groundwater cleanup standards at two locations (16.7 and 38.2 µg/L). BTEX, gasoline, and diesel were not detected in any of the water and soil samples that were collected from near the UST.

In 2005, Ecology sent a Voluntary Cleanup Program Review of Phase II Limited Subsurface Investigation report. Ecology stated that further actions are needed to address soil and groundwater contamination. The letter specifically noted the presence of PCE in groundwater samples above the MTCA Method A cleanup level to support their finding.

The site is within the Yakima Railroad Area PCE plume. This is a large co-mingled plume that is present over a large area of downtown Yakima. Based on the "Revised Draft Remedial Investigation Report, Yakima, Railroad Area, Yakima, Washington," and dated December 1998, shallow groundwater flow is to the southeast in the vicinity of the target property. In 1998, PCE concentrations from wells located north (upgradient) of the target property ranged from about 10 to100 µg/L. The closest wells sampled in the 1998 investigation were about 2,000 feet from the target property.

The Ecology UST files include testing data for the tanks. These files show that the tanks and lines passed tightness testing during 2004 and 2003. Ecology correspondence indicates that the facility was cited for failing to perform an annual line tightness test and line leak detector test during 2002.

SITE RECONNAISANCE INFORMATION

The fueling facilities, convenience store, and car wash are all currently being actively operated. Six monitoring wells were observed and located at the site. The casing and monument on one of the wells appeared to have shifted and sunk, so that the well is no longer vertical. While the well monuments were not opened, the wells appeared to be fairly old and not well maintained.

Cuts and patches in the pavement were observed near two of the wells that suggest the past presence of piping or power associated with the wells. Remediation may have been performed at these two locations at some point in the past. Patched asphalt was noted at three additional locations that likely represent former boring or well locations. The direct-push boring locations from the 2004 Phase II ESA were also verified.

FINDINGS AND RECOMMENDATIONS

1. The existing wells should be inspected to assess their condition and see if they can be sampled. If so, the wells should be re-surveyed, re-developed, and sampled.

   The sampling program should include: BTEX, methyl tert-butyl ether (MTBE), 1, 2-dibromoethane (EDB), 1, 2-dichoroethane (EDC), gasoline-range organics, diesel-range organics, carcinogenic polynuclear aromatic hydrocarbons (PAH), dissolved lead, and chlorinated hydrocarbons including PCE. This program is consistent with MTCA requirements specified in Table 830-1 (WAC 173-340-900).

Depending on the results of the initial round, quarterly chemical and water-level monitoring may be required by Ecology. The analytical program should be scaled back after the first round of sampling to reflect only the COCs identified.

If the wells are determined to be unusable, the wells should be decommissioned in accordance with state regulations. Depending on the results of the well inspection and the initial round of groundwater sampling, additional wells may be needed.

2. The PCE contamination at the site likely represents an area-wide co-mingled contaminant plume associated with the Yakima Railroad Remedial Investigation. Based on the file review, there's no available information indicating that chlorinated solvents were ever handled, stored, or used at the target property. The site has been a gas station, convenience store, and car wash during its entire period of operation. The site owners should verify the conclusion that solvents were not handled, stored, or used at the target property.

   The Revised Code of Washington (RCW 70.105D.020 [12] [iv]) contains a provision that is sometimes referred to as the plume exclusion clause. In part, the code states that a person will not be considered an owner/operator where a hazardous substance has come to be located on the property solely as a result of migration of the hazardous substance through groundwater from a source off the property. For this clause to be applicable, it must be demonstrated that the hazardous substance has not been used, placed, managed or otherwise handled on the property, and that the site has not caused or contributed to the release of the hazardous substance. *If appropriate, the site owner should request that Ecology grant no further action for the PCE contamination at the site based on the plume exclusion clause.*

3. The underground storage tank release reporting requirements of MTCA (WAC 173-340-450) have not been strictly followed at this property. This regulation requires performance of an initial response, interim actions, and submission of a site characterization report within a specific schedule. Based on the file review, it appears that the 1992 report was submitted as the 90-day site characterization report required under WAC 173-340-450 (5) (b). WAC 173-340-450 (6) also requires a MTCA remedial investigation and feasibility study if the initial cleanup actions do not achieve cleanup levels throughout the site. While Ecology has not required a remedial investigation, it appears that there is a regulatory basis for making the request. Future environmental work should be reported consistent with state regulations.

LIMITATIONS AND SIGNATURE

This report was compiled based partially on information supplied to Tetra Tech from outside sources and other information in the public domain. The conclusions and opinions herein are based on the information Tetra Tech obtained in compiling the report. This information is on file at Tetra Tech's office in Spokane, Washington. Tetra Tech makes no warranty as to the accuracy of statements made by others which may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Because the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of client's obligations under local, state, or Federal laws or any modifications or changes to such laws. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

Tetra Tech appreciates the opportunity to assist AMRESCO with this project. If you have any questions or comments, please call Jon Welge at (509) 344-0262.

Sincerely,

Benjamin R. Farrell

Jon Welge
Project Manager
Tetra Tech – Spokane

Ben Farrell, LHg
Senior Geologist
Tetra Tech – Seattle

Attachment A: File Review Information

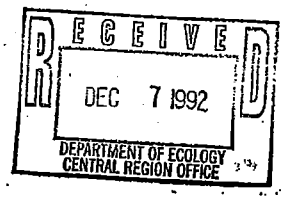
ATTACHMENT A

Tetra Tech, Inc.
1235 North Post, Suite 101, Spokane, WA 99201
www.tetratech.com

Maid o'Clover Corporation

202 South Fifth Avenue
Yakima, Washington 98902
(509) 248-3562

John Weitfeld
Department of Ecology



December 7, 1992

John,

Please find enclosed our copy of the our 90 day interim and partial cleanup action report for our Nob Hill location.

RESULTS OF A SITE ASSESSMENT INVESTIGATION AT MAID O'CLOVER FACILITY 1802 E. NOB HILL BOULEVARD YAKIMA, WASHINGTON

FOR:

MAID O'CLOVER CORPORATION
202 SOUTH FIFTH AVENUE
YAKIMA, WA 98902

PREPARED BY:

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
17411 N.E. UNION HILL ROAD, SUITE 220
REDMOND, WASHINGTON 98052
(206) 869-8220

MARCH 25, 1991

RECEIVED
APR 3 1991
DEPARTMENT OF ECOLOGY
CENTRAL REGION OFFICE

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

RESULTS OF A SITE ASSESSMENT INVESTIGATION AT MAID O'CLOVER FACILITY YAKIMA, WASHINGTON

1.0 INTRODUCTION

This report summarizes the results of a Site Assessment Investigation conducted by Environmental Science & Engineering, Inc. (ESE) at a Maid O'Clover facility in Yakima, Washington. The purpose of the investigation was to assess the lateral and vertical extent of soil and/or ground water impacted with petroleum hydrocarbons beneath the subject site. The scope of work for this investigation included the drilling of three soil borings, convertion of each of the borings to ground water monitoring wells and the collection and chemical analysis of soil and ground water samples.

This report presents information concerning the local geology and hydrogeology, and the results of on-site data collection. The data collection procedures employed during this investigation are documented in this report as are the methods and rationale for chemical analyses of soil samples. The physical and chemical findings of the program are presented and discussed herein, and are the basis for ESE's conclusions and recommendations concerning shallow subsurface soil and ground water at the subject site.

2.0 BACKGROUND INFORMATION

2.1 SITE DESCRIPTION AND HISTORY

The subject site is located at 1802 E. Nob Hill Boulevard, on the southeast corner of the intersection of 18th Street and E. Nob Hill Boulevard, in Yakima Washington (Figure 1). Two 6,000-gallon capacity gasoline underground storage tanks (USTs), and two 10,000-gallon capacity gasoline USTs are currently located on the property (Figure 2).

Convienience stores and service stations operating USTs containing petroleum hydrocarbon products for retail sale are present immediately north, northwest, and west of the subject facility. In addition, the facility is located approximately one quarter mile to the east of an Exxon service station at which a documented petroleum hydrocarbon release has occured.

The Site Assessment was initiated by the Washington State Department of Ecology (DOE). The DOE received reports of gasoline odors in residential basements to the south of the Maid O'Clover facility. In response, the DOE issued letters ordering nearby UST operators to conduct tank integrity tests. The test results indicated that leakage may have occurred from a turbine pump associated with the western-most 10,000-gallon capacity gasoline UST at the Maid O' Clover facility.

2.2 SITE GEOLOGY AND HYDROGEOLOGY

The local geology consists predominantly of four formations. These formations are the Yakima Basalt, the Ellensburg Formation, an extensive body of cemented basalt gravel, and a relatively thin mantle of unconsolidated and semi-consolidated stream deposits of recent age. (U.S. Geological Survey, 1962).

Ground water in the unconsolidated alluvium in the area is freely interconnected with the streams. Water may alternately rise to or percolate below the land surface several times during its course eastward through the Ahtanum Valley. During most of the year, stream flow is maintained largely by ground water discharge; conversely, much of the recharge to both shallow and deep ground water bodies occurs by direct infiltration from stream channels and by infiltration of irrigation water derived from streams.

First ground water was identified beneath the site at a depth of approximately 16 to 17 feet below ground surface (bgs). The direction of ground water flow beneath the site is uncertain. However, according to DOE personnel, ground water flow in the site area is believed to be to the southeast.

3.0 SITE ASSESSMENT PROGRAM

The objective of the Site Assessment Program was to assess the lateral and vertical extent of soil and/or ground water impacted with petroleum hydrocarbons beneath the subject site. The program consisted of drilling three soil borings and converting each of these borings to ground water monitoring wells (MW-1, MW-2, and MW-3). Soil and ground water samples were collected from each boring/well and submitted for laboratory analyses. The Site Assessment program is described in detail in the following sections.

3.1 DRILLING AND SOIL SAMPLING

Three soil borings were drilled using a truck-mounted O-DEX drilling system. The depths of the borings ranged from 53 to 55 feet bgs. Soil sample collection was attempted at 5-foot intervals during the drilling process for lithologic description and laboratory analyses. Soil samples were not collected at depths in excess of the static ground water level. A detailed description of the drilling and soil sampling procedures are included in Appendix A. Soil boring logs are presented in Appendix B.

3.2 GROUND-WATER MONITORING WELL INSTALLATION

Each of the three soil borings were converted to ground water monitoring wells (MW-1, MW-2, and MW-3) to assess the ground water quality beneath the site (Figure 2). The ground water monitoring wells were constructed of 2-inch inside diameter (ID) PVC blank and perforated casing. Appendix A contains a diagram of the typical monitoring well, and a description of the proceedures and construction specifications used during well installation.

3.3 GROUND-WATER SAMPLING

Ground water monitoring Wells MW-1, MW-2, and MW-3 were developed and sampled to assess the ground water quality beneath the site. These wells were developed by removing approximately four casing volumes of fluid with a small water pump. Once the wells were developed, ground water samples were collected from each well. Samples were placed in 40 milliliter (ml) glass vials having threaded septum lids and immediately capped to minimize the loss of volatile constituents. Samples were labeled with the sample identification number, date and time of sampling, and analyses required. Samples were placed on ice in a cooler for preservation of sample integrity during field work and transport. A detailed description of the ground water sampling procedures are included in Appendix A.

3.4 WELL SURVEYING AND GROUND WATER DEPTH MEASUREMENTS

The top of each ground water monitoring well casing was surveyed to establish vertical control. On February 14, 1991, after the elevations were recorded, the depths to ground water and floating product were measured using an electronic tape. Details of well leveling and ground water depth measurement procedures are included in Appendix A.

3.5 LABORATORY ANALYSES

Chemical analyses of all soil and ground water samples were conducted by North Creek Analytical located in Bothell, Washington. Selected depth-specific soil samples collected from on-site wells were analyzed for purgeable total petroleum hydrocarbons (TPH) using EPA Method 8015 and for Benzene, Toluene, Ethylbenzene, and Total Xylene (BTEX) using EPA Method 8020. Ground water samples collected from Wells MW-1, MW-2, and MW-3 were analyzed for purgeable TPH using EPA method 8015 and for BTEX using EPA Method 8020.

4.0 FINDINGS

4.1 PHYSICAL RESULTS

4.1.1 Soil

Soil beneath the site consists predominantly of sandy gravel to a depth of approximately 55 feet bgs.

Slight gasoline odors were detected in the soil sample collected from a depth of 15 feet bgs in Well MW-3. (Figure 2). For a more detailed description of the lithology at the site, refer to the boring logs included in Appendix B.

4.1.2 Ground Water

Ground water was identified at depths ranging from 16 to 17 feet bgs during this investigation.

The presence of approximately 0.2 feet of floating hydrocarbon product in Well MW-3 prevented an accurate determination of the ground water gradient and flow direction beneath the site. Refer to Appendix C for the actual depth to ground water and floating hydrocarbon thickness measurements.

4.2 CHEMICAL RESULTS

4.2.1 Soil

Laboratory results of soil sample analyses are summarized in Table 1. Copies of the laboratory reports and chain-of custody documentation are included in Appendix D.

Laboratory results of EPA Method 8015 analysis indicate that none of the soil samples collected from Wells MW-1, MW-2, and MW-3 contained TPH concentrations above the laboratory detection limit.

EPA Method 8020 results indicate that Benzene, Toluene, Ethylbenzene, and Total Xylenes were not detected above their respective limits of detection in any of the soil samples collected from Wells MW-1, MW-2, and MW-3.

4.2.2 Ground Water

Laboratory results of ground water sample analyses are summarized in Table 2. Copies of the laboratory reports and chain-of custody documentation are included in Appendix D.

Ground water samples analyzed for purgeable TPH using EPA Method 8015 contained concentrations ranging from less than 30 micrograms per liter (ug/l) or parts per billion (ppb) to 45,000 ppb.

Ground water samples analyzed for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) using EPA Method 8020 contained concentrations ranging from less than 0.30 ppb to 3,200, 6,200, 280, and 11,000 ppb, respectively.

TABLE 1. RESULTS OF SOIL SAMPLE ANALYSES;
EPA METHODS 8015 AND 8020

		EPA METHOD 8015 (ppm)	EPA METHOD 8020 (ppm)			
SAMPLE NUMBER	DEPTH	TPH	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
MW-1	5	ND	ND	ND	ND	ND
MW-1	10	ND	ND	ND	ND	ND
MW-1	15	ND	ND	ND	ND	ND
MW-2	10	ND	ND	ND	ND	ND
MW-2	15	ND	ND	ND	ND	ND
MW-3	5	ND	ND	ND	ND	ND
MW-3	10	ND	ND	ND	ND	ND
MW-3	15	ND	ND	ND	ND	ND

ppm - Parts per million or milligrams per kilogram (mg/kg)
TPH - Total Petroleum Hydrocarbons
ND - Not Detected
EPA - Environmental Protection Agency

TABLE 2. RESULTS OF GROUND WATER SAMPLE ANALYSES;
EPA METHODS 8015 AND 8020

	EPA METHOD 8015(ppb)	EPA METHOD 8020 (ppb)			
SAMPLE NUMBER	TPH	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
MW-11	ND	ND	ND	ND	ND
MW-21	34	ND	ND	ND	ND
MW-31	45,000	3,200	6,200	280	11,000

ppb - Parts per billion or micrograms per liter (ug/l)
TPH - Total Petroleum Hydrocarbons
ND - Not Detected
EPA - Environmental Protection Agency

5.0 CONCLUSIONS

Environmental Science & Engineering, Inc. has conducted a Site Assessment Investigation at the Maid O' Clover facility in Yakima, Washington to evaluate the lateral and vertical extent of petroleum hydrocarbon concentrations in site soil and ground water. The conclusions of this investigation are discussed in the following sections.

5.1 CLEAN-UP LEVEL GUIDELINE

The State of Washington, Department of Ecology (DOE) has adopted the Model Toxics Control Act (MTCA) Clean-up Regulation, Chapter 173-340 WAC. The regulation specifies clean-up level guidelines for various substances in soil and ground water. The following table outlines the clean-up levels in soil for the constituents analyzed in this investigation. The soil clean-up levels listed below are for industrial or commercial facilities.

STATE CLEAN-UP LEVEL GUIDELINES (SCLGs)

CONSTITUENT	SOIL (ppm)	GROUND WATER (ppb)
TPH (gasoline)	100	1,000
Benzene	0.5	5
Toluene	40	40
Ethylbenzene	20	20
Total Xylenes	20	20

5.2 SOIL

- Results of TPH analyses using EPA Method 8015 indicate that none of the soil samples collected contained petroleum hydrocarbon concentrations above the laboratory limit of detection.
- Results of BTEX analyses using EPA Method 8020 indicate that none of the soil samples collected contained BTEX constituent concentrations above the laboratory limits of detection.

5.3 GROUND WATER

- Results of TPH analyses using EPA Method 8015 indicate that the ground water sample collected from Well MW-3 contained a TPH concentration above the current MTCA clean-up level guideline. TPH concentrations were not detected above laboratory detection limits in Well MW-1, and were detected below the current MTCA clean-up level guideline in Well MW-2.

- Results of BTEX analyses using EPA Method 8020 indicate that the ground water sample collected from Well MW-3 contained Benzene, Toluene, Ethylbenzene, and Total Xylene concentrations above the current MTCA clean-up level guidelines. BTEX constituents were not detected above laboratory detection limits in Wells MW-1 and MW-2.

- Ground water was encountered at depths between 16 and 17 feet bgs during this investigation.

- The ground water flow direction could not be accurately evaluated during this investigation due to the presence of approximately 0.2 feet of floating hydrocarbon product in Well MW-3.

Based on the physical and analytical results of this investigation, petroleum hydrocarbons, possibly released from a faulty turbine pump, have impacted ground water beneath the USTs at the site.

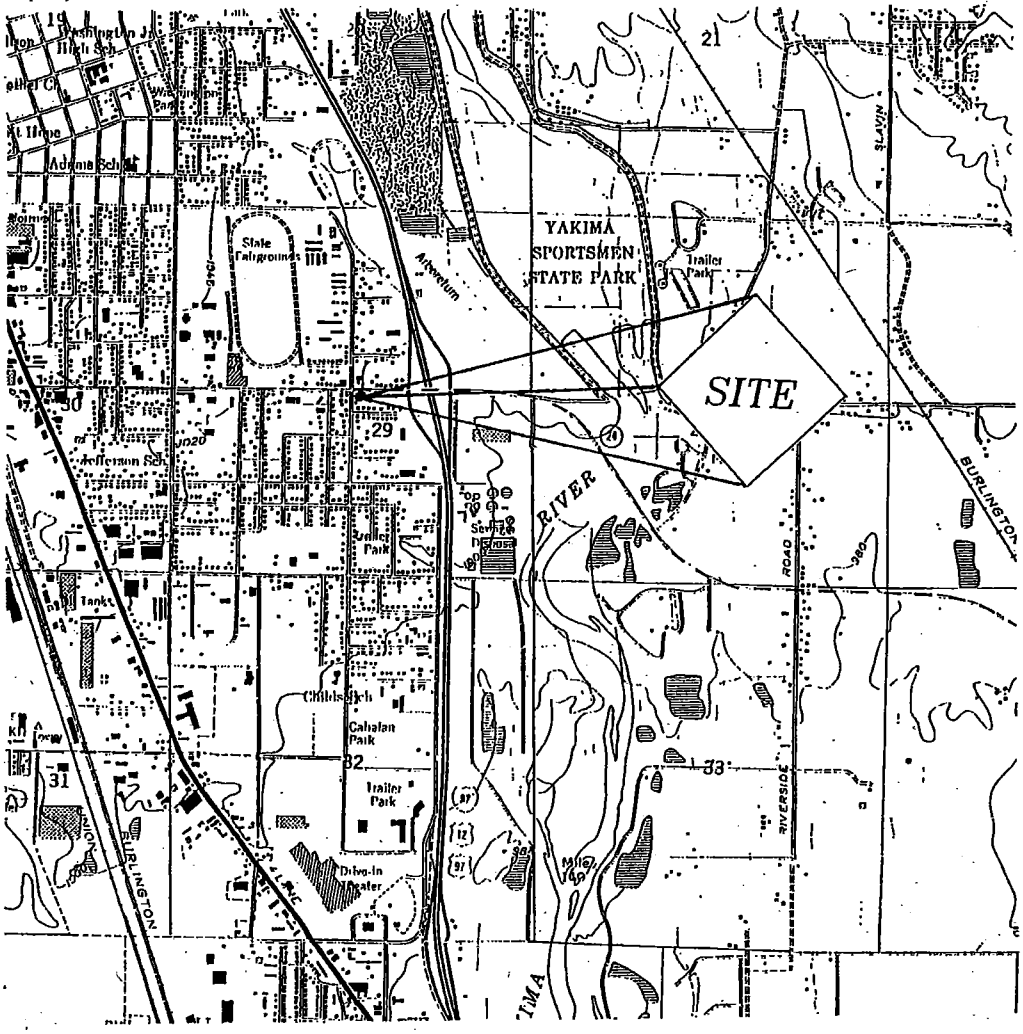
The lateral extent of the free-floating petroleum hydrocarbon plume and dissolved gasoline constituent plume could not be evaluated given the limited scope of this investigation. The lateral extent of soil impacted with petroleum hydrocarbon concentrations above the MTCA clean-up level guidelines, with the exception of soil currently in contact with free-floating petroleum hydrocarbons, appears to be limited to a radius of approximately 15 to 20 feet from the release source at the time of this writing.

REFERENCES

U.S. Geological Survey, 1985, Yakima East, Washington 7.5-minute Topographic Quadrangle, Yakima County, Washington: U.S. Geological Survey, scale 1:24,000, 1 sheet.

State of Washington, Department of Ecology, 1990, The Model Toxics Control Act Clean-up Regulation (Chapter 173-340 WAC).

FIGURES



0 2000 Feet

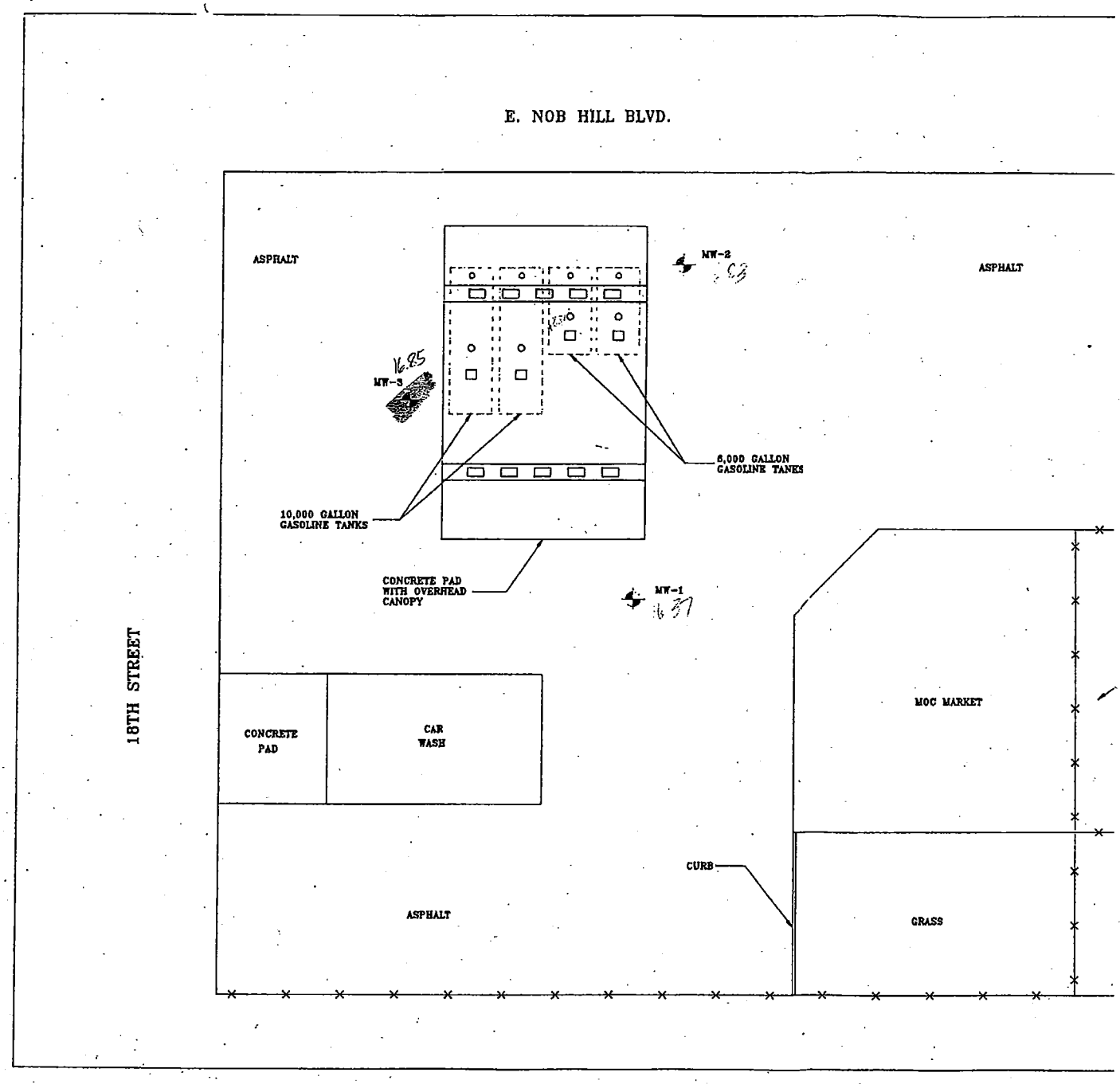
N

ESE
A CILCORP COMPANY

MAID O'CLOVER CORP.
1602 E. NOB HILL BLVD.
YAKIMA, WASH.

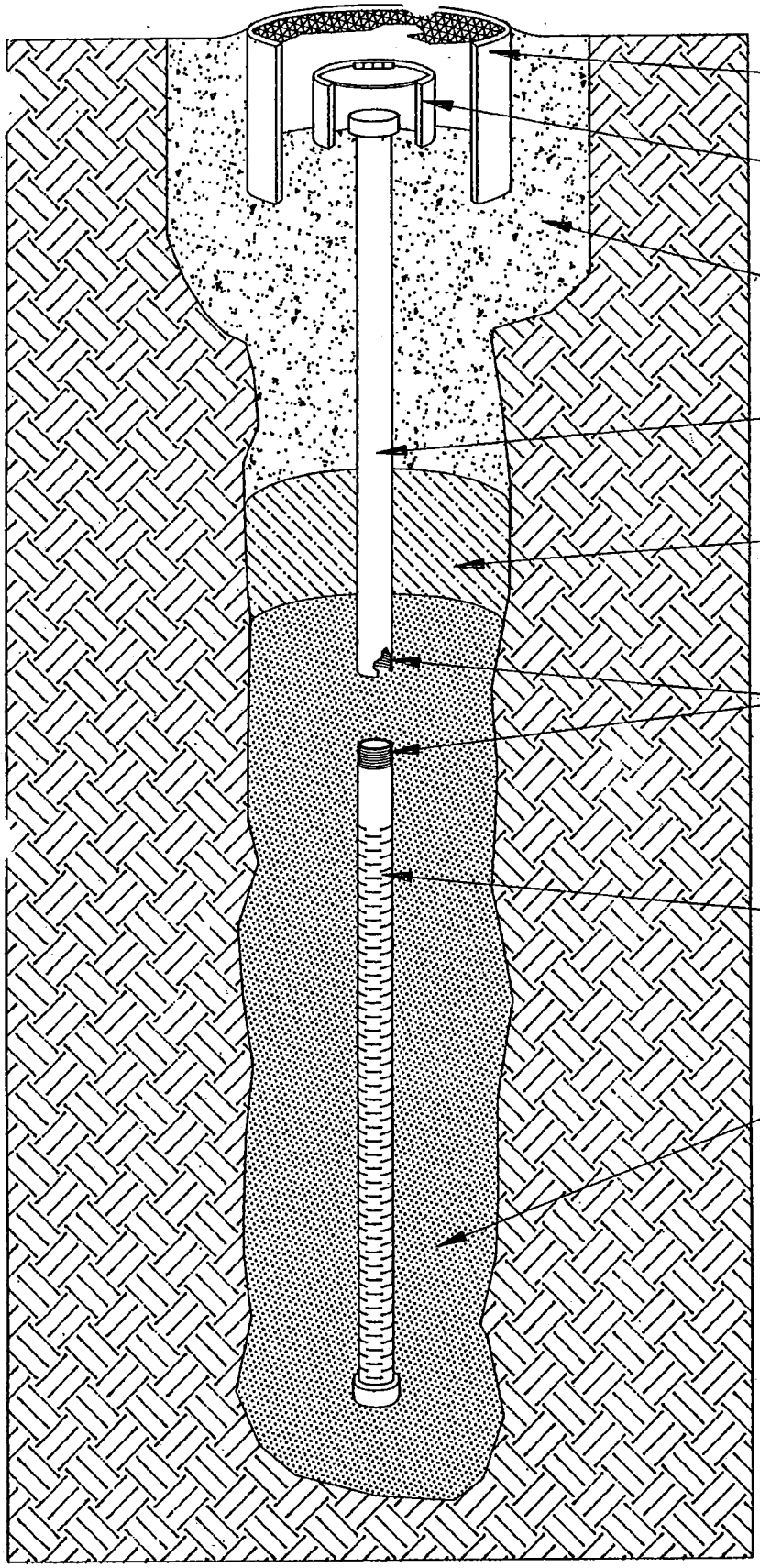
LOCATION MAP

DATE:	PROJECT NO.	FIG#
3-12-91	6-91-7096	1
SCALE:	DWG NO.:	SIZE:
1" =2000'	MOC01A--	A
DRAWN BY:	APPROVED BY:	REV:
M. ARMSTRONG	D. ALFORD	-


E. NOB HILL BLVD.
ASPHALT
MW-2
ASPHALT
16.85
MW-3
6,000 GALLON
GASOLINE TANKS
10,000 GALLON
GASOLINE TANKS
CONCRETE PAD
WITH OVERHEAD
CANOPY
MW-1
18TH STREET
CONCRETE
PAD
CAR
WASH
MOC MARKET
CURB
ASPHALT
GRASS

APPENDIX A

FIELD INVESTIGATION METHODOLOGY



ESE
A CILCORP COMPANY

ENVIRONMENTAL
SCIENCE & ENGINEERING
17411 N.E. UNION HILL RD.
REDMOND, WASH.

TYPICAL MONITORING WELL CONSTRUCTION

DATE: 3-25-91	PROJECT NO. N/A	FIG# 1
SCALE:	DWG NO.: MW-1	SIZE: A
DRAWN BY: M. ARMSTRONG	APPROVED BY: D. ALFORD	REV: -

FIELD INVESTIGATION METHODOLOGY

Drilling Procedures

A truck-mounted Mobile Drilling Company Model B-80 equipped with an O-DEX drilling system was used to drill the soil borings and install the ground water monitoring wells. The drill pipe and outer casing are constructed in 5 and 10-foot lengths. The outer casing has an inside diameter (ID) of approximately five and one half inches and an outside diameter (OD), of approximately six inches. The drill bit, which is positioned just slightly beneath the outer casing during the drilling process, has an O.D. of approximately six and one half inches. The retractable nature of the drill bit prevents soil from entering into the outer casing during the drilling process.

Soil Sampling Procedures

During the drilling process, relatively undisturbed soil samples were collected from the borings for chemical analysis, organic vapor monitoring, and visual description. Soil samples were collected at 5-foot intervals from each boring. The soil samples were collected using a Modified California Sampler.

The Modified California Sampler consists of an outer sampler barrel lined with a set of 6-inch long (2.50 inches OD) brass rings. The sampler is attached to the end of the drive hammer, lowered through the hollow-stem auger flights, and is driven 12 inches by raising and dropping the 140-pound drive hammer. A soil sample is thereby collected in the two rings placed end to end inside the sampler.

Before the Modified California Sampler and rings were assembled and placed in the boring, they were cleaned to avoid cross-contamination of samples. The equipment was washed with Liqui-Nox detergent solution, rinsed with tap water and then allowed to air dry. The auger flights were steam cleaned prior to arrival at the site.

After the sampler was driven to the desired depth, the rings were removed. Each end of the lower ring were sealed with a Teflon sheet, capped with plastic end caps, and secured with duct tape. The sample was then labeled and placed in an ice chest for cold storage during field work and transport. These procedures are in accordance with acceptable practices set by Federal, State, and local agencies.

The soil in the upper ring was examined in the field for olfactory indications of petroleum hydrocarbons and used for lithologic description. The grain size, color, odor, moisture, and other pertinent Unified Soil Classification System (USCS) properties were described on field boring logs by a hydrogeologist or engineer from Environmental Science & Engineering, Inc. (ESE).

Organic Vapor Monitoring

The organic vapor of each soil sample collected was monitored in the field according to procedures outlined in "Retail Real Estate Transactions - Environmental Procedures" provided by Shell Oil Company, using a HNU Model 101 Photoionization Detector. The upper 2 inches of soil collected from the top sample ring were removed and the remaining portion was placed in a glass jar until it was approximately half full. The glass jar was then sealed with aluminum foil and fitted with an air-tight lid. The soil sample was exposed to direct sunlight for approximately 10 minutes. The lid was removed and the organic vapor content of the soil was monitored by inserting the HNU probe through the foil and into the vapor head space. The readings were recorded on the soil boring logs in the field.

Ground Water Monitoring Well Installation

The ground water monitoring wells were constructed of 4-inch ID Schedule 40 perforated and blank PVC pipe. The perforated pipe, with openings of 0.02 inch, was fitted with a threaded cap and positioned at the bottom of each well. Blank pipe was connected to the perforated pipe and extended to approximately 6-inches below the ground surface. All lengths of pipe, both perforated and blank, were connected by threaded joints, no glues or adhesives were used. In general, perforated pipe was positioned from approximately 20 feet below and 10 feet above the static ground water surface. For specific well installation data refer to the soil boring logs.

The annulus of each well was filled with a clean silica sand pack (Colorado 8/12 sand) to a minimum of one foot above the top of the perforated pipe (see boring logs). A two to three foot layer of granular bentonite was placed above the sand pack to form an impermeable barrier in the annulus. The annulus was then filled to approximately 2 feet below the ground surface with concrete and/or bentonite. The ground water monitoring wells were protected at the surface with a cast-iron, traffic-rated well box cemented in place. The PVC casing was fitted with a locking well cover and secured.

Survey of Ground Water Monitoring Wells

The relative elevations of the ground water monitoring wells were determined by establishing a level line for vertical control from the top of the PVC casing in each well. This was accomplished using an engineer's level and a Philadelphia rod. The error of closure for the level line was maintained at no more than 0.01 feet. The relative elevation used was based on information obtained from a U.S. Geological Survey 7.5 Minute topographic map or other reliable references. This information was used to establish the ground water elevations above mean sea level (msl) in each well and in the construction of a ground water table contour map.

Depth to Ground Water Measurements

Depth to ground water surface measurements were recorded for each ground water monitoring well by ESE personnel. The ground water surface measurements were made by lowering an Oil Recovery Systems (ORS) interface probe into each well. The tape on the instrument, which is graduated in one hundredths of a foot increments, was lowered into the well until the electronic sounder is triggered. The depth to the ground water surface is then recorded relative to the top of the PVC casing.

Ground Water Monitoring Well Development and Sampling

Following the installation of the ground water monitoring wells, the wells were developed using a small surface water pump equipped with a dedicated one inch diameter intake hose. Typically, the development consisted of removing approximately four casing volumes of liquid. Prior to being lowered into the well, the dedicated intake hose was washed with a Liqui-Nox detergent solution, rinsed with tap water, and allowed to air dry.

Ground water samples were collected from each well using a disposable Teflon bailer attached to a nylon cord. The ground water samples were transferred from the bailer to 40-milliliter (ml) glass vials with Teflon septum lids, labeled , and placed in an ice chest for cold storage and transport. To prevent cross contamination of the ground water samples, the Teflon bailer and cord was disposed of following sample collection in each well.

APPENDIX B

LITHOLOGIC LOGS

LOG OF
EXPLORATORY BORING

Field location of boring:

Project No: 6-91-7096
Client: Maid O'Clover
Location: Yakima, WA
Logged By: J. Martin
Installation Data: 2" Dia. PVC, screen 55' to 5', blank 5' to grade.

Boring No: MW-1
Date: 2/11/91
Driller: Environmental West
Drilling Method: O-DEX B-8
Hole Diameter: 6"
Page No: 1 of 1

Depth (ft)	Graphic Log	Blow/ft	Vapor Concentration (ppm)	Sample type and Depth	Soil Group Symbol (U.S.C.S.)	Water Level	Time	Date	Comments:
0									Asphalt
5		68	BGL	Grab @ 5'	GW				No soil sample retained, graels fine to coarse, no odor.
10		75	BGL	Grab @ 10'	GW				No soil sample retained, gravels, fine to coarse, no odor.
15		80	BGL	Grab @ 15'	GW				Sandy gravel, fine to coarse, sand fine to medium, slightly moist, no odor. Groundwater present approximately 16.5' below grade.
20				Ring @ 20'	GW				Sandy gravel, similar to above, no odor.
25									
30									
35									
40									
45									
50									
55									TD=55'

LOG OF
EXPLORATORY BORING

Field location of boring:

Project No: 6-91-7096
Client: Maid O'Clover
Location: Yakima, WA
Logged By: J. Martin
Installation Data: 2" Dia. PVC, screen 55' to 5', blank 5' to grade.

Boring No: MW-2
Date: 2/12/91
Driller: Environmental West
Drilling Method: O-DEX B-80
Hole Diameter: 6"
Page No: 1 of 1

Depth (ft)	Graphic Log	Blow/ft	Vapor Concentration (ppm)	Sample type and Depth	Soil Group Symbol (U.S.C.S.)	Water Level	Time	Date	Comments:
0									Asphalt
5									Pea gravel fill, no sample retained.
10		52	BGL	Ring @ 10'	GW				Sandy gravel, fine to coarse, slightly moist, brown to gray, no odor.
15		105	BGL	Ring @ 15'	GW				Similar to above, no odor.
									Groundwater 16-17' during drilling, no additional sample collection.
55									TD=55'

LOG OF
EXPLORATORY BORING

Field location of boring:

Project No: 6-91-7096
Client: Maid O'Clover
Location: Yakima, WA
Logged By: J. Martin
Installation Data: 2" Dia. PVC, screen 55' to 5', blank 5' to grade.

Boring No: MW-3
Date: 2/13/91
Driller: Environmental West
Drilling Method: O-DEX
Hole Diameter: 6"
Page No: 1 of 1

Depth (ft)	Graphic Log	Blow/ft	Vapor Concentration (ppm)	Sample type and Depth	Soil Group Symbol (U.S.C.S.)	Water Level	Time	Date	Comments:
0									Asphalt
5		61	BGL	Grab @ 5'	GW				Sandy gravel, fine to coarse, slightly moist, brown, no odor, no ring sample retained.
10		96	BGL	Ring @ 10'	GW				Similar to above, no odor.
15		100+	6ppm	Ring @ 15'	GW				Similar to above, slight gas odor.
									Very bottom of sample (approximately 16.5') saturated or very close to saturated.
20									
25									
30									
35									
40									
45									
50									
55									TD=53'

APPENDIX C

FIELD MEASUREMENTS

PROJECT NAME: MAID O' CLOVER PROJECT NO.: 6917096

LOCATION: 1802 E. NOB HILL YAKIMA, WA. DATE: 2/14/91

VERTICAL CONTROL DATA SHEET

STATION	BACKSITE (KNOWN)	FORESITE (UNKNOWN)	Δ H.I. (+)	Δ H.I. (−)	ELEVATION	ERROR OF CLOSURE +/−
A	+5.84 (MW-2)	-5.96 (MW-3)		.12	MW-3 = 999.88	
B	+4.98 (MW-3)	-5.35 (MW-1)		.37	MW-1 = 999.51	
C	+5.57 (MW-1)	-5.10 (MW-2)	.49		* MW-2 = 1000.00	
CHECK	+16.41	-16.41	+.49	-.49		

REMARKS: * DATUM ESTABLISHED AT TOP OF WELL MW-2 CASING. ELEVATION AT THAT LOCATION ASSUMED = 1000.00' ABOVE MSL.

CREW:

SIGNATURE: [signature] DATE: 2/14/91

SIGNATURE: _____ DATE: _____

CHECKED BY: _____ DATE: _____

INTERFACE PROBE
WATER/HYDROCARBON LEVEL DATA

Project Location MAID O' CLOVER YAKIMA WA.

Recorded By J. MARTIN

Date 2/14/91

Well No.	(A) Casing Rim Elevation (Feet)	(B) Depth to Hydro-carbon	(C) Depth to Water (Feet)	(A)-(B) Hydro-carbon Surface Elevation (Feet)	(A)-(C) Water Surface Elevation (Feet)	(C)-(B) Hydro-carbon Thickness (Feet)	See Note Potentiometric Surface Elevation (Feet)	Comments
MW-1	999.51	—	16.37	—	983.14	—		
MW-2	ASSUME 1000' DATUM	—	16.83	—	983.17	—		
MW-3	999.88	16.65	16.85	983.23	983.03	0.20		

Water/Hydrocarbon level measurements should be recorded to 0.01 foot accuracy

Specific gravity of Hydrocarbon (S.G.) _____

Note: Potentiometric Surface Elevation = (A)-(C) + S.G. ((C)-(B))

APPENDIX D

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTS

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Environ. Science & Engineering	Client Project ID:	Maid O'Clover	Sampled:	See Below
17411 N.E.Union Hill Rd, Suite 220	Matrix Descript:	Soil	Received:	Feb 14, 1991
Redmond, WA 98052	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Feb 25, 1991
Attention: Jeff Martin	First Sample #:	102-0441	Reported:	Feb 28, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Purgeable Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
102-0441	MW-1, 5' 2/11/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0442	MW-1, 10' 2/11/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0443	MW-1, 15' 2/11/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0444	MW-2, 10' 2/12/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0445	MW-2, 15' 2/12/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0446	MW-3, 5' 2/13/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0447	MW-3, 10' 2/13/91	N.D.	N.D.	N.D.	N.D.	N.D.
102-0448	MW-3, 15' 2/13/91	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**1.0**	**0.050**	**0.10**	**0.10**	**0.10**

Purgeable (low to medium boiling point) Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

NORTH CREEK ANALYTICAL

Scot Cocanour
Laboratory Director

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Environ. Science & Engineering	Client Project ID:	Maid O'Clover	Sampled:	Feb 14, 1991
17411 N.E.Union Hill Rd, Suite 220	Matrix Descript:	Water	Received:	Feb 14, 1991
Redmond, WA 98052	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Feb 23, 1991
Attention: Jeff Martin	First Sample #:	102-0449	Reported:	Feb 28, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
102-0449	MW-11	N.D.	N.D.	N.D.	N.D.	N.D.
102-0450	MW-21	34	N.D.	N.D.	N.D.	N.D.
102-0451	MW-31	45,000	3,200	6,200	280	11,000
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Purgeable (low to medium boiling point) Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

NORTH CREEK ANALYTICAL

Scot Cocanour
Laboratory Director

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Environ. Science & Engineering
17411 N.E.Union Hill Rd, Suite 220
Redmond, WA 98052
Attention: Jeff Martin

Client Project ID: Maid O'Clover
Sample Matrix: Soil
QC Sample Group: 102-0441 to -0448

Reported: Feb 28, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
EPA Method:	8020	8020	8020	8020
Analyst:	B. Fletcher	B. Fletcher	B. Fletcher	B. Fletcher
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Feb 23, 1991	Feb 23, 1991	Feb 23, 1991	Feb 23, 1991
QC Sample #:	102-0389	102-0389	102-0389	102-0389
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.50	0.50	0.50	1.50
Conc. Matrix Spike:	0.45	0.48	0.51	1.50
Matrix Spike % Recovery:	90	96	102	100
Conc. Matrix Spike Dup.:	0.43	0.47	0.49	1.45
Matrix Spike Duplicate % Recovery:	86	94	98	97
Relative % Difference:	4.5	2.1	4.0	3.4

NORTH CREEK ANALYTICAL

Scot Cocanour
Laboratory Director

% Recovery:	$\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}}$	x 100
Relative % Difference:	$\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}}$	x 100

NORTH CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011-2569
Phone (206) 481-9200 • FAX (206) 485-2992

Environ. Science & Engineering
17411 N.E.Union Hill Rd, Suite 220
Redmond, WA 98052
Attention: Jeff Martin

Client Project ID: Maid O'Clover
Sample Matrix: Water
QC Sample Group: 102-0441 to -0448

Reported: Feb 28, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
EPA Method:	8020	8020	8020	8020
Analyst:	B. Fletcher	B. Fletcher	B. Fletcher	B. Fletcher
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Feb 27, 1991	Feb 27, 1991	Feb 27, 1991	Feb 27, 1991
QC Sample #:	102-0414	102-0414	102-0414	102-0414
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	5.0	5.0	5.0	15.0
Conc. Matrix Spike:	4.4	4.4	4.8	14.2
Matrix Spike % Recovery:	88	88	96	95
Conc. Matrix Spike Dup.:	4.4	4.4	5.0	15.0
Matrix Spike Duplicate % Recovery:	88	88	100	100
Relative % Difference:	0	0	4.1	5.5

NORTH CREEK ANALYTICAL

Scot Cocanour
Laboratory Director

% Recovery:	$\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}}$	x 100
Relative % Difference:	$\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}}$	x 100

CREEK ANALYTICAL

18939 120th Avenue N.E., Suite 101 • Bothell, WA 98011
Phone (206) 481-9200 • FAX (206) 485-2992

CHAIN OF CUSTODY REPORT

CLIENT: ENVIRONMENTAL SCIENCE + ENGINEERING, INC.
ADDRESS: 17711 NE UNION HILL RD SUITE 220
REDMOND WA 98052
PHONE: 206 869 8220
PROJECT NAME: MAID O' CLOVER
PROJECT NUMBER:
SAMPLED BY: Jeff Martin

REPORT TO: JEFF MARTIN
BILLING TO: ESE
P.O. NUMBER:

- 2-8 HOUR RUSH (+150%)
- 24 HOUR RUSH (+100%)
- 2-3 DAY RUSH (+75%)
- 5 DAY RUSH (+50%)
- 10 DAY STANDARD (LIST PRICE) (circled)

SAMPLE IDENTIFICATION: NUMBER OR DESCRIPTION	MATRIX (W,S,O)	# OF CONT.	SAMPLING DATE / TIME	ANALYSIS REQUESTED: EPA 602	REMARKS	LABORATORY NUMBER
1 MW-11	WATER	2	2/14/91	X		1020449
2 MW-21	WATER	2	2/14/91	X		1020450
3 MW-31	WATER	2	2/14/91	X		1020451
4						
5						
6						
7						
8						
9						
10						

RELINQUISHED BY: JEFF MARTIN 2/14/91 DATE:
FIRM: ESE 3:50 pm TIME:

RECEIVED BY: [signature]
FIRM: NCA 2-14-91 3:50 p

RELINQUISHED BY: DATE:
FIRM: TIME:

RECEIVED BY:
FIRM:

SAMPLES KNOWN TO BE HAZARDOUS? NO YES; DESCRIBE ON BACK

SAMPLE RECEIPT CONDITION: GOOD VIOLATED
PRESERVED? YES NO
COOL (4° C)? YES NO

PAGE OF

APPENDIX 3

Tank Basin Well Samples

APPENDIX 3

RESULTS OF SOIL SAMPLE ANALYSES
OF SOIL TAKEN FROM ESE WELLS
(Units in mg/kg)

SAMPLE NO.	DEPTH	BTEX EPA METHOD 8020				EPA METHOD 8015
		BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	TPH
MW-1	5	ND	ND	ND	ND	ND
MW-1	10	ND	ND	ND	ND	ND
MW-1	15	ND	ND	ND	ND	ND
MW-2	10	ND	ND	ND	ND	ND
MW-2	15	ND	ND	ND	ND	ND
MW-3	5	ND	ND	ND	ND	ND
MW-3	10	ND	ND	ND	ND	ND
MW-3	15	ND	ND	ND	ND	ND

mg/kg - milligrams per kilogram
TPH - Total Petroleum Hydrocarbons
ND - Not Detected
EPA - Environmental Protection Agency

RESULTS OF WATER SAMPLE ANALYSES
OF WATER TAKEN FROM ESE WELLS
(Units in mg/l)

SAMPLE NO.	BTEX EPA METHOD 8020				EPA METHOD 8015
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	TPH
MW-11	ND	ND	ND	ND	ND
MW-21	ND	ND	ND	ND	0.034
MW-31	3.2	6.2	0.28	11	45

mg/l - milligrams per liter
TPH - Total Petroleum Hydrocarbons
ND - Not Detected
EPA - Environmental Protection Agency

APPENDIX 4

Peripheral Well Samples

APPENDIX 4

RESULTS OF SOIL SAMPLE ANALYSES
OF SOIL TAKEN FROM PLSA WELLS
(Units in mg/kg)

SAMPLE NO.	WTPH-HCID			LEAD
	GASOLINE	DIESEL	HEAVY OILS	
MOC 1	<20	<50	<100	8.7
MOC 2	<20	<50	<100	3.4
MOC 3	<20	<50	<100	3.4
MOC 4	<20	<50	<100	4.7
MOC 5	<20	<50	<100	1.9
MOC 6	<20	<50	<100	3.2
MOC 7	<20	<50	<100	3.4
MOC 8	<20	<50	<100	4.1

mg/kg - milligrams per kilogram
< - less than

APPENDIX 5

Oil/Water Separator, Up flow Treatment Unit Samples

APPENDIX 5

RESULTS OF WATER SAMPLE ANALYSES
OF WATER TAKEN FROM OIL/WATER SEPARATOR
(Units in mg/l)

SAMPLE NO.	BTEX EPA METHOD 8020				EPA METHOD 418.1	
	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	TPH	LEAD
P-1	1.7	5.9	0.57	4.8	5.5	0.014
P-2	0.081	1.8	0.15	1.2	13	NT
P-3	8.2	0.19	1.2	1.8	81	0.014

mg/l - milligrams per liter
TPH - Total Petroleum Hydrocarbons
NT - Not Tested
EPA - Environmental Protection Agency

Maid o'Clover Corporation

202 South Fifth Avenue
Yakima, Washington 98902
(509) 248-3562

John Weitfeld
Department of Ecology

RECEIVED
DEC 7 1992
DEPARTMENT OF ECOLOGY
CENTRAL REGION OFFICE

December 7, 1992

John,

Please find enclosed our copy of the our 90 day interim and partial cleanup action report for our Nob Hill location.

SITE ASSESSMENT ENGINEERING REPORT

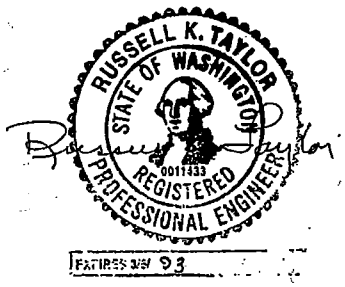
on

PETROLEUM RELEASE

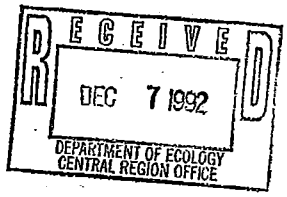
at

MAID o'CLOVER, INC.

Yakima, Washington



EXPIRES 9/93



Prepared by

PLSA ENGINEERING & SURVEYING
WDOE LIC. NO. S000210
1120 West Lincoln Avenue
Yakima, WA 98902
(509) 575-6990

July, 1992

Job No. 91056

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TABLE OF CONTENTS

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LIST OF FIGURES

LIST OF APPENDICES

INTRODUCTION

The Maid o'Clover, Inc., a convenience store located at 1802 East Nob Hill Boulevard, Yakima, Washington recently experienced two separate petroleum releases each involving new pressure relief valves installed at the gasoline turbine pump discharges serving its gasoline dispensers. The release site is located in the NW 1/4, SE 1/4, SEC 29, TWN 13N, R 18, EWM. See Figure 1.

Preliminary investigative work was performed by Environmental Science and Engineering, Inc. in February 1991. See Appendix 1. This preliminary report consisted of drilling three resource protection wells completed with 2 inch diameter perforated PVC casing, known as Monitoring Wells, (MW), 1, 2, and 3. See Figure 2. Slight gasoline odors were detected and 0.2 feet of free product was found in the most westerly well designated as MW 3. Soils were logged by ESE. See Figure 3.

This report summarizes the installation of additional monitoring wells, seasonal fluctuations in the water table, interim cleanup actions taken, sampling results compared to required cleanup levels, and proposed site closure.

Environmental and geotechnical engineers and a geologist from PLSA Engineering and Surveying, WDOE License No. S000210, experienced with local soil conditions conducted field investigations and monitored investigative drilling to determine the extent of contamination, and direction of the local hydraulic gradient, (easterly). See Figure 2.

The owner's representative and contact person for this project is:

Mr. Jeff Louden
Maid o'Clover, Inc.
207 South Sixth Avenue
Yakima, WA 98902
phone (509) 248-3562

SURFACE CONDITIONS

A convenience store, gas pumps, and self service car wash are located on the premises. Concrete pavement covers the tank basin. The balance of the open area is asphalt paved parking. The site is zoned commercial. Residential areas are immediately to the south of the site, and multiple gas stations exist immediately north, northwest and west of the site and further west of the site along East Nob Hill Blvd., (with a known, extensive petroleum product release on record).

Affected populations include local residents and those who work at or frequent the store.

the water table elevation. Each sample was labeled and assigned a coded designation specific to the well. Water samples were collected from the upper static water level by using a Teflon bailer to sample from the resource protection wells. The bailer and other sampling equipment was washed in an Alconox solution and rinsed with domestic tap water before each use. See Appendix 11. Sample containers supplied by the analytical laboratory were clean glass, with teflon lined, threaded caps. Soil gas was field monitored with a Gastech 1314 SMPN Combustion Analyser and a Photovac Photoanalizer. Health and safety issues were/are to be in accordance with PLSA's Health and Safety Plan. See Appendix 12.

Laboratory analysis of soil and water samples were performed by Sound Analytical Laboratories, Washington State Department of Ecology accreditation No. C027.

Quality control procedures and information are on file at WDOE, Sound Analytical, and at PLSA.

All samples were stored and shipped to the laboratory by overnight express in a refrigerated, insulated container, accompanied by a completed chain-of-custody form.

TANK BASIN CONTAMINANT CHARACTERIZATION

A petroleum odor was observed when the tank basin soil was disturbed, by ESE, Inc. A characterization sample was collected. This sample was submitted to a laboratory for analysis for WTPH-HCID, BTEX, and lead, in the tank basin.

Gasoline was found in excess of Model Toxics Control Act limits, (WAC 173-340), in the tank basin. See Appendix 3.

PERIPHERAL WELL CONSTRUCTION SAMPLING RESULTS

Soil and water samples were collected from the water table elevation at six, six inch diameter resource protection wells drilled around the periphery of the premises and submitted for analysis for the presence of TPH, gasoline components, and lead. Soil samples were below detection limits for WTPH-HCID, BTEX, and lead was low for normally found area background. Water samples similarly did not show evidence of contamination.

Resource protection well locations may be found on Figure 2. Analytical reports may be found in Appendix 4.

INTERIM CLEANUP METHODS

A Westinghouse FAP surface skimming pump was installed in MW 3. Nearly six hundred and fifty gallons of free product were removed directly to fifty five gallon barrels for recycling. When FAP pumping became inefficient, (less than one quarter inch of product on the groundwater surface), other means were explored.

Contamination is located within the gravel stratum. Permeability is sufficiently high to be suitable for remediation by soil agitation with high volume pumping, oil/water separation, and treatment, prior to discharge to a Publicly Owned Treatment Works. Such pumping would develop high ground water velocities to and through the slotted well casings. It was expected to accomplish a significant cleanup of the remaining plume, certainly shortening the time period required for any future soil gas remediation technique. A soil remediation provider was contacted to design and install a soil aeration system with monitoring and reporting by PLSA. Estimated costs of nearly one hundred thousand dollars for a completed project, with no guaranteed solution for the owners, seemed excessive, at this point.

An up flow petrophilic coalescing plate adsorption treatment system was designed by PLSA and constructed and installed on site, following a three hundred gallon per minute capacity oil/water separator. These unit processes were installed in series between the recovery wells and the City sewer. The equipment was tested and monitored. See Appendix 5. A City of Yakima waste discharge permit was obtained. See Appendix 10. The equipment was inspected by Mr. Kim Sherwood of the Washington State Department of Ecology.

Variously sized "trash pumps" and suction tubes and pipes were used to clean debris from each well and eventually to evacuate as much remaining product and potentially contaminated water to the oil/water separator and treatment facility for separation of product for recycling and treated water discharge to the City of Yakima Treatment Plant. Maximum rates of flow were measured at 57 gpm. Total pumpage amounted to as much as seven thousand gallons per day from the targeted wells. Measured draw down estimated by suction breaking and electrical tape, was approximately four feet, (well within the variation of static water levels observed by ESE and PLSA). Pumping locations were selected, opportunisticly, based on field and laboratory analysis of odors and water quality.

Static water levels were measured periodically, before and after pumping. See Figure 5. Recovery time was measured to one 1/100th of a foot in fifteen minutes at well MOC 3, indicating high transmissivity and aquifer yield.

CONTAMINANT REMOVAL MONITORING

Analytical results of samples taken after pumping are recorded in Appendix 7.

VISUAL OBSERVATIONS

Upon sampling with the Teflon bailer in ESE Wells MW 1 and 2, without agitation, numerous living macrophytes were collected, by PLSA, along with gelatinous floc at the ground water surface. This indicated aerobiosis in the upper aerated portion of the monitoring wells which were found to contain petroleum products in subsequent laboratory analysis.

At the beginning of a pumping campaign, water turbidity was monitored. When turbidity was observed, grab samples were taken for visual observation, by PLSA. Water in ESE Wells MW 1 and 2 exhibited a rusty color. Within thirty minutes of natural, undisturbed exposure to the atmosphere, what appeared to be iron oxide precipitate settled to the bottom of the sampling container. This indicated the oxidation of reduced iron and anaerobiosis in the lower portion of the well, the annulus, and the sand pack surrounding the casing. The observations indicate passive insitu bioremediation.

CLEANUP LEVELS

Level A Cleanup Levels are specified in WAC 173 340. See Appendix 8.

REMAINING CONTAMINATION

Contamination persists in two of the ESE monitoring wells. It is the conclusion of the writer that the sand packed, low transmissivity ESE, Inc., monitoring wells, ESE 1 and 2, are retaining, (acting like a sponge), petroleum product which supply nutrients and a carbon source for aerobic and anaerobic biota visually observed and reported herein. The peripheral wells show non detectable levels of analytes. It is theorized that environmental contamination is precluded by the adhesion of the product to the sand and the low ground water velocities it is subjected to. With warm weather, natural bioremediation is rapidly occurs in these wells. MTCA water cleanup levels have not yet been attained in samples from these wells. However, it is anticipated that bioremediation will continue and its progress should be analyzed for attainment of cleanup levels, quarterly,

There are no surface waters in the immediate vicinity of the site.

There are no known sensitive surface species in the immediate vicinity of the site. See Appendix 2.

SUB SURFACE CONDITIONS

The tanks were installed approximately three years ago and are reported to be bedded in pea gravel.

Soils consist of a 2 to 3 foot thick stratum of sandy silt followed by a deep stratum of cobbles, gravel, and sand extending more than 40 feet below the surface to bed rock.

Groundwater was encountered at 16.5 feet in February, 1991, by ESE, Inc., at 17.5 feet, by PLSA in April, 1992, at 12.5 feet, and variable in June, 1992. See Appendix 1 and Figure 5. The water table is expected to fluctuate seasonally with the irrigation season.

The existing ESE, Inc., monitoring wells were drilled to depths of 53-55 feet, fitted with 0.02 inch slotted and blank four inch PVC casing and the annulus back filled with fine grained, washed sand. They were meagerly developed for production by evacuating a minimum of four casing volumes of groundwater.

Six new, PLSA, resource wells were drilled on site. These wells were fitted with one sixteenth inch slotted and blank four inch PVC casing and the annulus back filled with gravel in accordance with WAC 173-160. The hydraulic gradient was determined from multiple measurements of static water levels in the 8 wells, described, using an electrical water surface detection tape. See Figure 5. The hydraulic gradient direction is depicted on Figure 2 and is nearly due east.

Utility trenches have been known to serve as conduits for petroleum contamination plumes, in otherwise impermeable soils. Although the soils at this site are highly permeable, utilities are shown on Figure 4.

Nearby drinking water well owners, who at one time, complained of petroleum contamination in their wells are shown in Appendix 1.

There are no known sensitive species affected by the groundwater plume. See Appendix 2.

SAMPLING PLAN

Representative soil and water samples were collected from wells at the locations shown on Figure 2. Soil samples were collected from

starting on April 1, 1993 and continued until cleanup is attained. Meanwhile, the owners will pursue air sparging at the site immediately.

The PLSA well in the south west corner of the property remains contaminated above MTCA cleanup levels. The PLSA well in the north west corner of the property is clean, as are all other peripheral wells. The hydraulic gradient is from west to east. The contaminant plume being monitored in the south west well appears to be migrating onto the owners' property from offsite. The south west well is sufficiently close to the south and west property lines of the owners' property to conclude that the westerly properties including a City street and gasoline stations further west are involved as potentially liable parties. Likewise, residential properties to the south are probably similarly involved and could be eligible to be named as potentially liable persons.

SITE CLOSURE

After contamination has been removed, the resource protection wells will remain in place for monitoring and the premises will continue to be used as a convenience store or other commercial purpose.

NEARBY WELLS

Copies of well logs for documented wells located within one half mile of the site may be found in Appendix 6.

SITE CHECK/SITE ASSESSMENT CHECKLIST

A completed Site Check/Site Assessment Checklist form may be found in Appendix 9.

Figure 1

Location Map

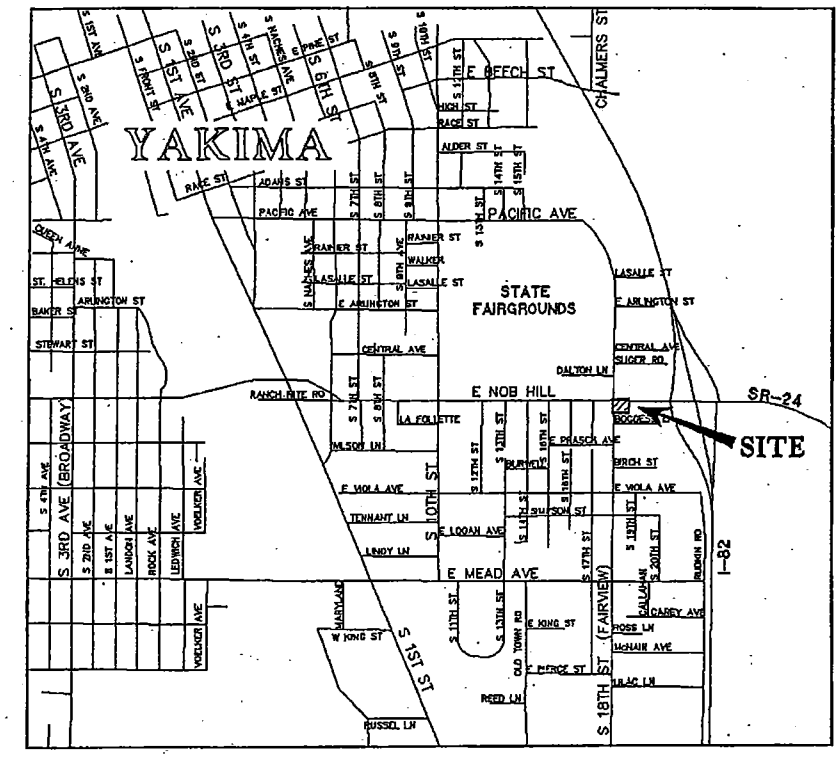


FIGURE 1

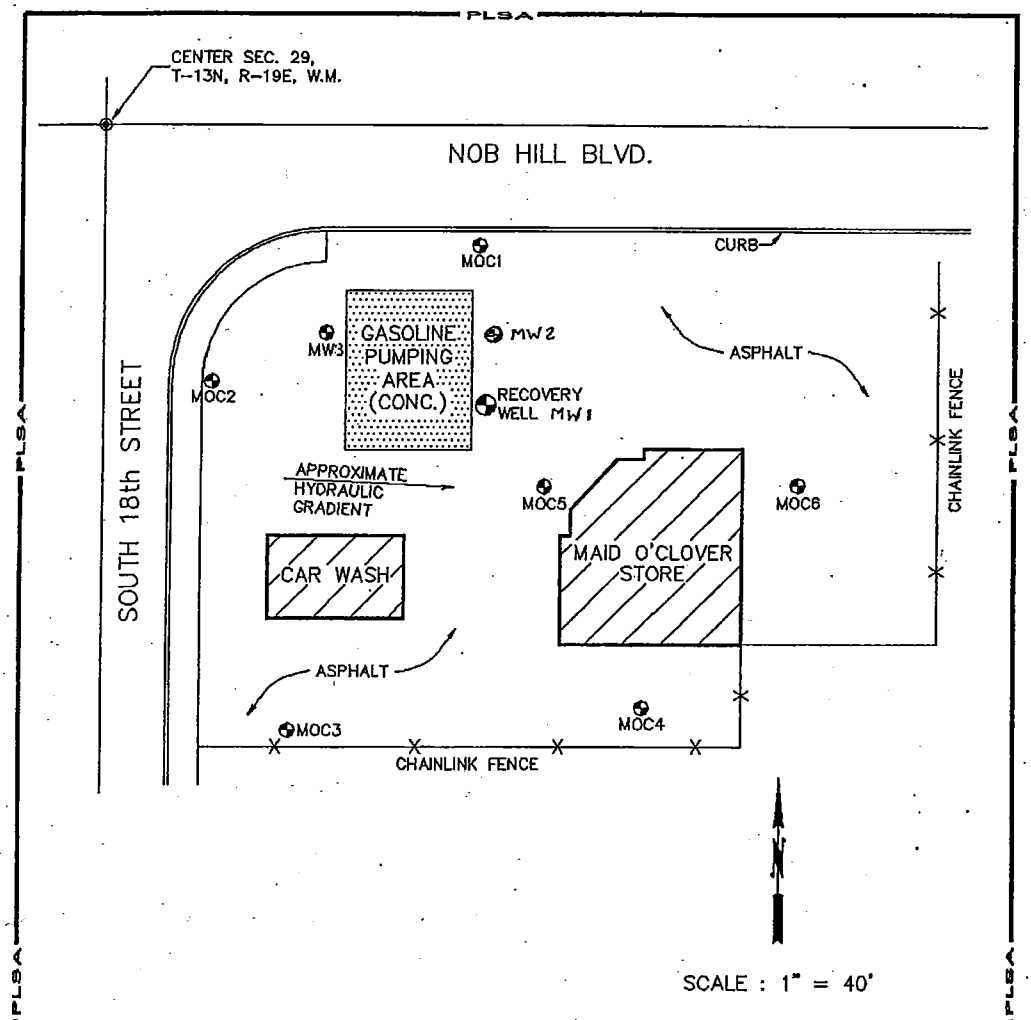
PLSA ENGINEERING–SURVEYING–PLANNING
YAKIMA, WASHINGTON
(509) 575-6990

LOCATION MAP
MAID O'CLOVER
1824 E. NOB HILL BLVD, YAKIMA, WA

DRAWN BY: AKV
DATE: JULY 1992
JOB NO. 91056

Figure 2

Site Map / With Hydraulic Gradient



LEGEND

MOC1 – DENOTES MONITORING WELL IDENTIFICATION NUMBER

FIGURE 2

PLSA ENGINEERING–SURVEYING–PLANNING
YAKIMA, WASHINGTON
(509) 575-6990

SITE MAP
WITH HYDRAULIC GRADIENT
MAID O'CLOVER
1802 E. NOB HILL BLVD, YAKIMA, WA

DRAWN BY: AKV
DATE: JULY 1992
JOB NO. 91056

Figure 3

Soils

Figure 4
Utilities

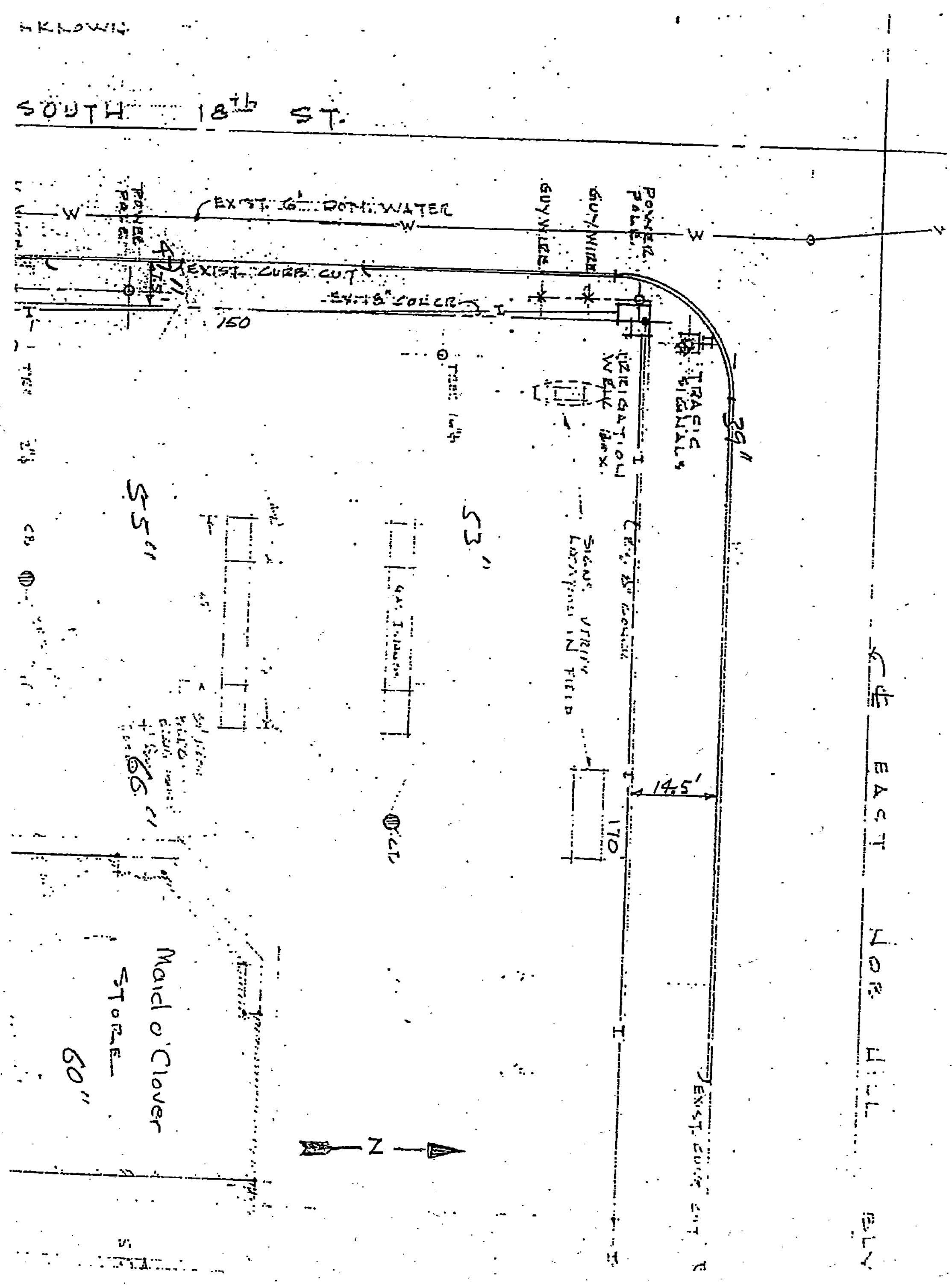
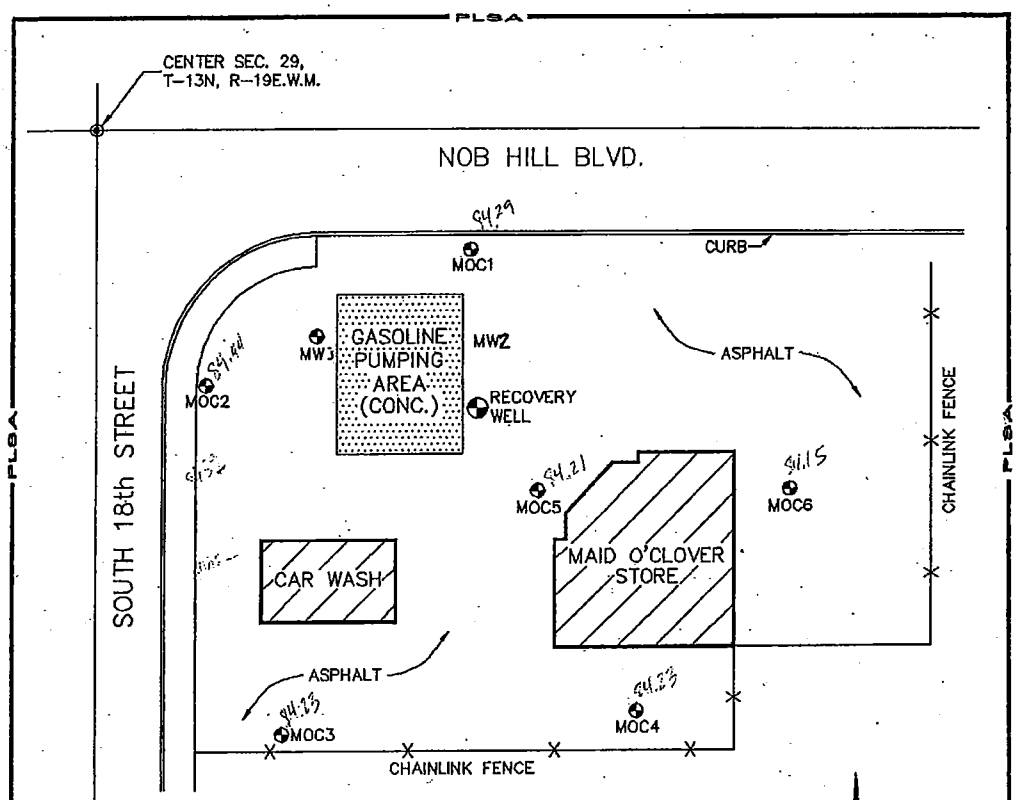

SOUTH 18th ST.
EXIST. 6" DOM. WATER
POWER POLE
GUY WIRE
GUY WIRE
POWER POLE
EXIST. CURB CUT
EXIST. 8" CONCR.
150
TRAFFIC SIGNALS
39"
55"
53"
145'
170
66"
Maid o' Clover
STORE
60"
Z
EAST NOB HILL
EXIST. CURB CUT

Figure 5

Static Water Levels



LEGEND

MOC1 – DENOTES MONITORING WELL IDENTIFICATION NUMBER

STATIC WATER LEVEL (ft)

WELL	DATE				
	4-6-92	5-14-92	6-18-92	6-19-92	6-22-92
MOC1	82.18	84.39	85.85		
MOC2	82.25	84.44	86.10		86.09
MOC3		84.23	85.79	85.78	
MOC4	82.10	84.23		85.71	85.77
MOC5	82.06	84.21		85.74	85.76
MOC6		84.15		85.75	85.68
MW7		84.37	85.84		
MW8			85.92		85.91
RW	82.18				85.87

SCALE : 1" = 40'

FIGURE 5

PLSA ENGINEERING–SURVEYING–PLANNING
YAKIMA, WASHINGTON
(509) 575-6990

MONITORING WELL LOCATIONS AND STATIC WATER LEVELS
MAID O'CLOVER
1802 E. NOB HILL BLVD, YAKIMA, WA

DRAWN BY: AKV
DATE: JULY 1992
JOB NO. 91056

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

May 28, 2002

Maid O'Clover
1802 E. Nob Hill Boulevard
Yakima, WA 98901

RE: Status of Leaking Underground Storage Tank Remedial Activities at 1802 E. Nob Hill Boulevard, Yakima, Washington

Dear Sir or Madam:

Ecology is currently in the process of reviewing older files. Our review indicates that the latest communication regarding your site was by a report from the Washington State Department of Health dated December 2, 1992. However, the most recent Site Assessment Engineering Report Ecology received from your consultant, PLSA Engineering & Surveying, is dated July 1992.

A cursory review of the information in your site file indicates that there is a need for further action at the site based, in part, on the following:

- Laboratory analysis of groundwater samples indicates petroleum hydrocarbons are present at levels which exceed the Model Toxics Control Act (MTCA).

In August 1992, a site hazard assessment determined the site's hazard ranking to be a 2 (1=high, 5=low). The ranking estimates the potential threat to human health and/or the environment relative to all other Washington state sites assessed at the time. The site has been listed on Washington State's Hazardous Sites List since that time.

According to the MTCA 173-340-450 (8), owners of underground storage tanks (USTs) that have had a release are subject to specific actions, including, among other requirements, submittal of reports pertinent to all remedial actions taken within 90 days of cleanup action completion. The reports we have received concerning the cleanup at your site are of insufficient scope for Ecology to determine if your cleanup is effective. In order for Ecology to evaluate the efficacy of your cleanup, please send any reports beyond those referenced above that you may have received concerning your site.

In addition, for you to receive a written no further action letter from Ecology you may participate in the Voluntary Cleanup Program. A no further action letter would remove your site from the Hazardous Sites Register. For your convenience I have enclosed copies of the information sheets listed below which provide more information regarding the Voluntary Cleanup Program.

LUST File Review
May 22, 2002
K. Rodriguez

Site Name: Maid O'Clover
Site ID: 100160
Address: 1802 East Nob Hill Blvd., Yakima
County: Yakima

References: Maid O'Clover Correspondence File

Results of a Site Assessment Investigation at Maid O'Clover Facility, Environmental Science & Engineering, Inc., March 25, 1991

Site Assessment Engineering Report on Petroleum Release at Maid O'Clover, Inc., PLSA Engineering & Surveying, July 1992

Summary: In January 1991, Ecology received reports of gasoline odors in residential basements to the south of the facility. Ecology ordered nearby UST operators to conduct tank integrity tests and Maid O'Clover discovered that leakage must have occurred from a turbine pump associated with the western-most 10,000-gallon gasoline UST. It was estimated that about 50-100 gallons of unleaded gasoline was released. The original release estimate was 2000-gallons.

The Site Assessment was performed by ESE to assess the lateral and vertical extent of contamination. This involved drilling 3 soil borings and converting them into monitoring wells. Soil and groundwater samples were collected and analyzed for TPH and BTEX. Groundwater depth ranged from 16-17 feet bgs and flow was believed to flow to the southeast (hydraulic gradient was not determined at this time). Approximately 0.2 feet of free product was found in MW-3 and levels of hazardous substances were found at: 45,000ppb TPH, 3,200ppb benzene, 6,200ppb toluene, 280ppb ethylbenzene, and 11,000ppb total xylenes. Soil samples from all three wells and groundwater samples from MW-1 and MW-2 were non-detect.

In May 1991, Maid O'Clover reported another turbine gasket failure. The release was estimated at 100 gallons.

In April 1992, PLSA installed six monitoring wells on site. At the time, groundwater was encountered at 12.5 feet bgs. Hydraulic gradient was noted as being to the east.

Soil and groundwater samples were collected and analyzed for TPH, BTEX, and lead. The levels found in the soil samples did not exceed MTCA cleanup levels. The report does not include the laboratory results or the values for the levels of contaminants detected in groundwater samples. However, according to the product concentration graphs in Appendix 7, the following wells have contaminants above cleanup levels.

- MW-1, 2, 3, 4, 5, and 6 have xylenes levels which exceed the cleanup level.
- ESE-1 and 2 have gasoline and xylenes at levels which exceed the cleanup levels.

According to the trend graphs in Appendix 7, the following wells have contaminants above cleanup levels.

- ESE 1, 2, MW-5, and 6 have gasoline levels above the cleanup level.
- MW-5 and 6 have total xylenes above the cleanup level.
- ESE 1 and 2 have toluene levels which exceed the cleanup levels.
- ESE 1 and 2 have ethylbenzene levels above the cleanup levels.
- ESE 1 and 2 have xylenes levels which exceed the cleanup levels.
- ESE 2 has total lead which exceeds the cleanup levels.

A surface skimming pump was installed in MW-3 and nearly 650 gallons of free product were removed and collected in 55-gallon barrels for recycling. Once this system was no longer productive, an up flow petrophilic coalescing plate adsorption treatment system was installed on site. This method removed as much of the remaining product and potentially contaminated water and had it go through an oil/water separator and treatment facility for separation of product. After separation, it was recycled and the treated water was discharged to the City of Yakima Treatment Plant.

PLSA anticipated that bioremediation will continue and monitoring should continue on a quarterly basis until cleanup levels are attained. Meanwhile, the report states, the owners would pursue air sparging at the site. Since the hydraulic gradient was found to be to the east, PLSA believes the contamination found in the southwest well is due to an offsite source.

In June 1992, Ecology received a letter from PLSA stating they wished to perform a colorimetric-hydraulic velocity test to characterize the direction and velocity of the groundwater movement through a system of monitoring wells.

In August 1992, this site was given a WARM ranking of 2.

The site is currently operating as a gas station and food mart with four 10,000-gallon diesel and unleaded gasoline USTs (according to ISIS). The reports indicate there were previously two 6,000 and two 10,000-gallon tanks on site.

Cleanup levels are based on old MTCA.

Conclusion: There are inconsistencies in the report regarding the levels of contaminants found in groundwater on site. Based on the information provided, the site should remain in Cleanup Started status.

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

January 19, 2005

CERTIFIED MAIL
7003 2260 0006 9878 2967

Mr. Robert Coleman
Coleman Oil Company
335 Mill Road
Lewiston, ID 83501

Dear Mr. Coleman:

RE: Early Notice Letter Regarding the Release of Hazardous Substances on property located at 1802 East Nob Hill Boulevard, Yakima, Washington, ERTS #C545507

Under Chapter 70.105D Revised Code of Washington (RCW), upon receiving a report of a release or threatened release of a hazardous substance that may pose a threat to human health or the environment, the Department of Ecology (Ecology) is required to conduct an Initial Investigation.

The Initial Investigation involved the review of the *Limited Phase II Investigation Report* dated July 29, 2004. The report summarizes the results of soil samples collected from four soil borings and groundwater samples from three borings. Analytical results indicate contaminant levels for those constituents tested did not exceed the Model Toxics Control Act (MTCA) cleanup levels. However, groundwater sampling revealed the presence of tetrachloroethene (16.7 and 38.2 ppb) at levels which exceed the MTCA cleanup level (5 ppb). Please note that while lead in soil samples was detected at levels which do not exceed the MTCA cleanup levels, it does, in some samples, exceed background levels. Additional soil sampling would be beneficial.

Under the MTCA, Ecology maintains a listing of known or suspected contaminated sites. It is Ecology's decision that the above-referenced property will be added to this information system. Ecology has also determined that a Site Hazard Assessment described in Washington Administrative Code (WAC) 173-340-320 will be required at this site. It is the policy of the Department of Ecology to work cooperatively with persons to accomplish prompt and effective site cleanups. Ecology prefers to achieve site cleanup cooperatively through independent cleanup actions (WAC 173-340-510). Cooperating with Ecology in planning or conducting remedial actions is not an admission of guilt or liability.

In proceeding with an independent cleanup, please be aware that there are requirements in state law which must be adhered to. In particular, WAC 173-340-300(4) which requires a report of independent actions. To the extent known, the report shall include: The identification and

location of the hazardous substance; circumstances of the release; the discovery and remedial actions planned, completed, or underway. More requirements of independent cleanup actions are discussed in WAC 173-340-120(8)(b). Ecology will use the appropriate requirements contained throughout this chapter in its evaluation of the adequacy of any independent remedial actions performed. In the future, Ecology may still need to conduct a more detailed inspection of this property, including testing for possible contamination. At that time we may assess the need for further action.

You are encouraged to contact Ecology for limited informal advice and assistance. For technical assistance you are advised to hire an environmental consultant with the appropriate expertise. A copy of Chapter 70.105D RCW, the Model Toxics Control Act, and the implementing regulation Chapter 173-340 WAC, which details the requirements of the Act, is enclosed.

I have enclosed a Focus sheet to assist you in familiarizing yourself with the MTCA regulations. If you have any questions regarding this letter or the requirements under the Model Toxics Control Act, please call me. My phone number is (509) 454-7842.

Sincerely,

Krystal Rodriguez

Krystal Rodriguez
Site Manager/Initial Investigations
Toxics Cleanup Program

Enc: Chapter 173-340 WAC
Chapter 70.105D RCW
Model Toxics Control Act Cleanup Regulation: Process for Cleanup of Hazardous Waste Sites

cc: Frosti Smith, TCP-CR
Michael Spencer, TCP

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

ROBERT COLEMAN
COLEMAN OIL CO
335 MILL RD
LEWISTON ID 83501

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Paula Holdren ☑ Agent ☐ Addressee

B. Received by (Printed Name) Paula Holdren C. Date of Delivery 1/20/05

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service) 7003 2260 0006 9878 2967

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

Department Decision Recommendation

RE: ERTS # C545507

Site: Maid O'Clover City: Yakima County: Yakima

In keeping with the requirement of WAC 173-340-310 (5) I recommend this site receive a Site Hazard Assessment.

Supporting Criteria

On January 3, 2005, Ecology received a Limited Phase II Investigation Report for the Maid O'Clover Service Station located at 1802 East Nob Hill Boulevard, Yakima, Yakima. The purpose of the investigation was to determine if contamination was present in the vicinity of the pump islands and the USTs.

Four soil borings were advanced to a depth of 16 feet. Groundwater was encountered at 13 feet below ground surface. Soil samples were collected continuously during the drilling and field analyzed for VOCs. No significant PID readings were encountered. Soil samples collected at a depth of 12 feet were also analyzed by a laboratory for VOCs, lead, TPH-G, and TPH-Dx. Of those substances, only lead was found to be present at levels (1.09 – 41.6 ppm) which do not exceed the MTCA cleanup level for lead (250 ppm).

Additionally, groundwater samples were collected from three borings and analyzed for TPH-G, TPH-Dx, BTEX, VOCs, and lead. Tetrachhloroethene was detected in two groundwater samples at concentrations (16.7 and 38.2 ppb) which exceed the MTCA cleanup level (5 ppb). Analytical results indicate all other substances were not detected.

This Department Decision Recommendation should be reviewed and re-evaluated based on any new information about these sites.

Investigator(s) Krystal Rodriguez Krystal Rodriguez
Print and sign name(s)

DATE: 1-6-05

Section Supervisor

DATE: 01-11-05

Coleman Oil Co.

335 Mill Road · P. O. Box 1308 · Lewiston, ID 83501
Facsimile (208) 799-2008 · Telephone (208) 799-2019
Email - jim@colemanoil.com

DEPT OF ECOLOGY
Received
SEP 29 2004
CENTRAL REGION OFFICE

September 27, 2004

WADOE
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902-3452

Re: Contamination Notice

Dear Ms. Clear,

We are notifying you that on July 23, 2004 a Limited Phase II Investigation (Project #24-8092), performed by EBI Consulting, discovered ground water contamination on the premises of Maid 'O Clover Service Station located at 1802 East Nob Hill Boulevard, Yakima, WA 98901. Enclosed is a complete copy of the Limited Phase II ESA, for your records.

As of May 10, 2004, we have been managing and operating the property pursuant to a Management Agreement with the property owners.

Sincerely,

Robert S. Coleman
Coleman Oil Company

cc:
Trish Amundson, Sr. Asset Manager
Amresco Commercial Finance, LLC.

ERTS # 545507

Department of Ecology - Environmental Report Tracking System

Initial Report

External Reference #

Caller Information

	First	Middle	Last
Name	ROBERT		COLEMAN
Busines Name	COLEMAN OIL COMPANY		
Street Address	335 MILL ROAD		
Other Address			
City	LEWISTON	State WA	Zip 83501-
E-mail			Confidential_FL ☐

Phone	Ext	Type
(208) 799-2019		Business

Where did it happen

Business or Location Name	MAID O CLOVER		
Street Address	1802 EAST NOB HILL		
Other Address			
City/Place	YAKIMA	State WA	Zip 98901-
County - Region	YAKIMA	CRO	FS ID
WIRA #			
Waterway		Type	
Latitude		Longitude	
Topo Quad 1:24:000	YAKIMA WEST		

Direction/Landmark (mile post, cross roads, township/range)

What happened

Incident Date	7/23/2004	Received Date	9/29/2004
Medium	GROUND WATER		
Material	PETROLEUM - UNKNOWN		
Quantity		Unit	UNKNOWN
Source	COMMERCIAL		
Cause	LEAKING UNDERGROUND STORAGE TANK		
Activity	STORING		
Impact	GROUND WATER CONTAMINATION		
Vessel Name		Type	

Primary Potentially Responsible Party Information

	First	Middle	Last
Name	TRISH		AMUNDSON
Business Name	AMRESCO COMMERCIAL FINANCE LLC		
Street Address	412 EAST PARKCENTER BLVD SUITE 300		
Other Address			
City	BOISE	State ID	Zip 83706-
Phone		Ext	Type
E-mail			

Additional Contact Information

Name	Phone	Ext	Type

More Information

REC'D LIMITED PHASE 2 INVESTIGATION ASSESSMENT DATED 9/27/2004 THAT NOTES GROUNDWATER COMTAMINATION AT LOCATION

Entry Person CLEAR, GWEN Entry Date 1/3/2005

ERTS # 545507

Referral

Referral Method
- ○ E-mail ERTS number
- ◉ E-mail attachment
- ○ Print
- ○ Telephone

Referral # 75855

Primary ☐

Person Referred to	BASSETT, DICK
Phone	509-454-7839 Fax
E-mail	rbas461@ecy.wa.gov
Program/Organization	TOXICS CLEANUP
Address	
City	
Region/Location	CRO
Referral Date	1/3/2005

ERTS # 545507

Followup

Inspector Information

Referral # 75855
Lead Inspector RODRIGUEZ, KRYSTAL
Program/Organization TOXICS CLEANUP

* Region/Location CRO
# of Ecology Staff 1 Overtime ☐

Action

Action	Start Date	End Date
TCP - DETERMINATION	1/11/2005	1/11/2005

What happened

Incident Date 7/23/2004 Hazardous ☐

Medium
GROUND WATER

Material
PETROLEUM - UNKNOWN

Quantity UNKNOWN ☐ Estimated

Source
COMMERCIAL

Cause
LEAKING UNDERGROUND STORAGE TANK

Activity
STORING

Impact
GROUND WATER CONTAMINATION

Vessel

Where did it happen

Business or Location Name MAID O CLOVER
Street Address 1802 EAST NOB HILL
Other Address
City/Place YAKIMA State WA Zip 98901-
County YAKIMA Region CRO FS ID
Waterway Type
WRIA #
Latitude Longitude
Lat/Long Method
Topo Quad 1:24,000 YAKIMA WEST

Potentially Responsible Party Information

Check if the primary PRP provided notice to Ecology ☐

Primary ☑	First	Middle	Last
Name	TRISH		AMUNDSON

Business Name AMRESCO COMMERCIAL FINANCE LLC
Street Address 412 EAST PARKCENTER BLVD SUITE 300
Other Address
City BOISE State ID Zip 83706-
Phone Ext Type
E-mail

Narrative

RECOMMEND THIS SITE RECEIVE A SITE HAZARD ASSESSMENT.

SUPPORTING CRITERIA:

On January 3, 2005, Ecology received a Limited Phase II investigation Report for the Maid O'Clover Service Station located at 1802 East Nob Hill Boulevard, Yakima. The Purpose of the investigation was to determine if contamination was present in the vicinity of the pump islands and the USTs.

Four soil borings were advanced to a depth of 16 feet. Groundwater was encountered at 13 feet below ground surface. Soil samples were collected continuously during the drilling and field analyzed for VOCs. No significant PID readings were encountered. Soil samples collected at a depth of 12 feet were also analyzed by a laboratory for VOCs, lead TPH-G, and TPH-Dx. Of those substance, only lead was found to be present at levels (1.09-41.6 ppm) which do not exceed the MTCA cleanup level for lead (250ppm).

Additionally, groundwater samples were collected from three borings and analyzed for TPH-G, TPH-Dx, BTEX, VOCs, and lead. Tetrachloroethene was detected in two groundwater samples at concentrations (16.7 and 38.2 ppb) which exceed the MTCA cleaup level (5 ppb). Analytical results indicate all other substances were not detected.

Entry Person: CLEAR, GWEN Entry Date 1/12/2005

*** The Initial report contains only information provided to Ecology from the complainant.

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

February 15, 2005

Mr. James Cach
Coleman Oil Company
335 Mill Rd
Lewiston ID 83501

Dear Mr. Cach:

Your application for the Voluntary Cleanup Program was received on February 14, 2005. The purpose of this letter is to acknowledge receipt of your application and to provide you with the name of the Site Manager assigned your file.

Site Name:	Dynamart Yakima Nob Hill / Former Maid O'Clover
Site Manager:	Krystal Rodriguez
Facility Site Number:	506
VCP Identification Number:	CE0218

Our database has been updated to reflect your participation in the Voluntary Cleanup Program. If you have any questions Ms. Rodriguez can be reached at (509) 454-7842.

Thank you for your commitment to the environment and the Voluntary Cleanup Program.

Sincerely,

Frosti Smith
Voluntary Cleanup Program Coordinator
Central Regional Office
Toxics Cleanup Program

cc: Krystal Rodriguez

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

March 22, 2005

Mr. James C. Cach
Coleman Oil Company
335 Mill Road
Lewiston, ID 83501

Dear Mr. Cach:

RE: Voluntary Cleanup Program Review of *Phase II Limited Subsurface Investigation Report*, Dynamart Yakima Nob Hill/Former Maid O'Clover, 1802 East Nob Hill Boulevard, Yakima, FS # 503 504 (VCP # CE0218)

Thank you for submitting your *Phase II Limited Subsurface Investigation Report*, for review by the Washington State Department of Ecology (Ecology). Ecology appreciates your initiative in pursuing an independent remedial action under the Model Toxics Control Act (MTCA).

Ecology's Toxics Cleanup Program has reviewed the following information regarding the Dynamart Yakima Nob Hill/Former Maid O'Clover site located at 1802 East Nob Hill Boulevard, Yakima.

1. *Phase II Limited Subsurface Investigation Report*, EBI Consulting, July 29, 2004
2. *Site Assessment Engineering Report on Petroleum Release at Maid O'Clover, Inc.*, PLSA Engineering & Surveying, July 1992
3. *Results of a Site Assessment Investigation at Maid O'Clover Facility*, Environmental Science & Engineering, Inc., March 25, 1991
4. Dynamart/E Nob Hill Correspondence File, Ecology's Central Regional Office

Based upon the above listed information, Ecology has determined that, at this time, further actions are needed to address soil and groundwater contamination at the Dynamart Yakima Nob Hill property located at 1802 East Nob Hill Boulevard, Yakima. This determination is based on the following.

- **Groundwater samples collected from soil borings in 2004 indicate tetrachloroethene exceeds the MTCA Method A cleanup standard.** Laboratory analysis of groundwater samples collected from borings B1 and B2 indicate the presence of tetrachloroethene (PERC) at levels which exceed the MTCA cleanup levels. PERC was detected at 16.7 and 38.2 ppb; the cleanup standard is 5 ppb. These samples were not collected from groundwater monitoring wells.

The opinions presented by Ecology in this letter are made only with respect to the information provided in the reports and correspondence file listed above. This opinion is only applicable to the specified site and may not be used to justify action at any other site nor any other properties owned or operated by Amresco or Coleman Oil Company.

The State, Ecology, and its officers and employees are immune from all liability and no cause of action of any nature may arise from any act or omission in providing this determination.

I will hold this review open in anticipation of further work to be completed at the site. If you would prefer that this review be closed, please let me know and Ecology will close this review. At the time of closure, any overages in your deposit account will be forwarded to you for this site from our Fiscal office. Once the review has been closed, if you wish to have Ecology review future work on this site you must submit another request for review through the Voluntary Cleanup Program.

Please contact me at (509) 454-7842 if you have any questions or would like clarification of any portion of the letter.

Sincerely,

Krystal Rodriguez

Krystal Rodriguez
Site Manager
Toxics Cleanup Program – CRO

cc: Trish Amundson, Amresco Finance

FILE COPY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

August 25, 2005

Mr. James Cach
Coleman Oil Company
335 Mill Road
Lewiston ID 83501

RE: Voluntary Cleanup Program Review for the Dynamart Yakima Nob Hill / Former Maid O'Clover, 1802 E Nob Hill Boulevard, Yakima, Washington, Facility Site # 506 (VCP #CE0218)

Dear Mr. Cach:

On February 14, 2005, Ecology received a Voluntary Cleanup Program (VCP) request for review for the above-referenced site. On March 22, 2005, a further action letter for this site was issued by Krystal Rodriguez.

To date, Ecology has received no further correspondence on this VCP review; therefore Ecology is closing the review. Any overages in your deposit account will be forwarded to you for this site from our Fiscal Office. If you wish to have Ecology review future work on this site you must submit another request for review through the Voluntary Cleanup Program.

Please call me at (509) 454-7841 if you have any questions.

Sincerely,

Frosti Smith
Voluntary Cleanup Program Coordinator
Toxics Cleanup Program
Central Regional Office

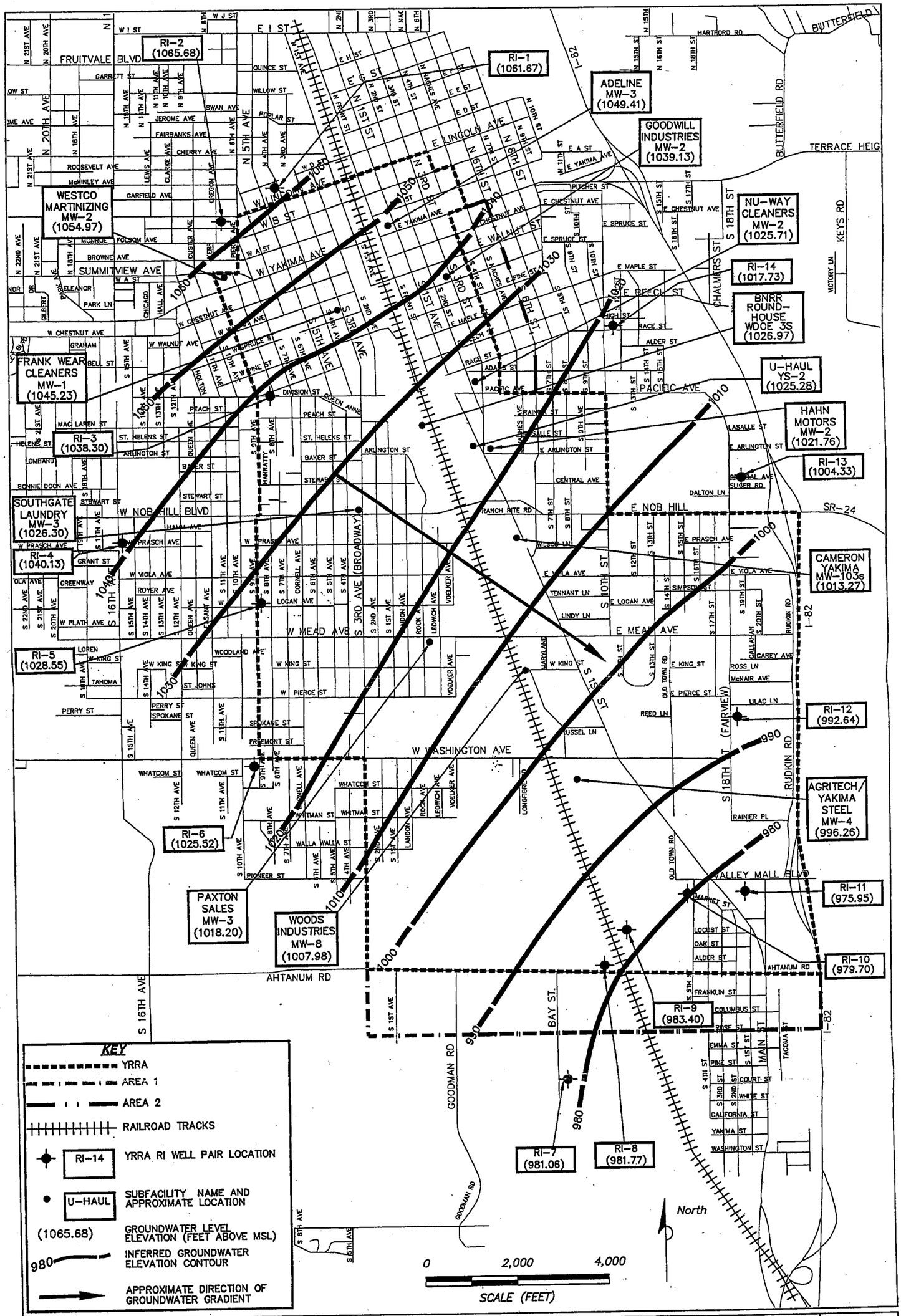
VOLUME 1 OF 3

REVISED DRAFT
REMEDIAL INVESTIGATION REPORT
YAKIMA RAILROAD AREA
YAKIMA, WASHINGTON

SECOR PN: 00378-001-03

Submitted by
SECOR International Incorporated
12034 - 134th Court NE, Suite 102
Redmond, Washington 98052-2442

SECOR



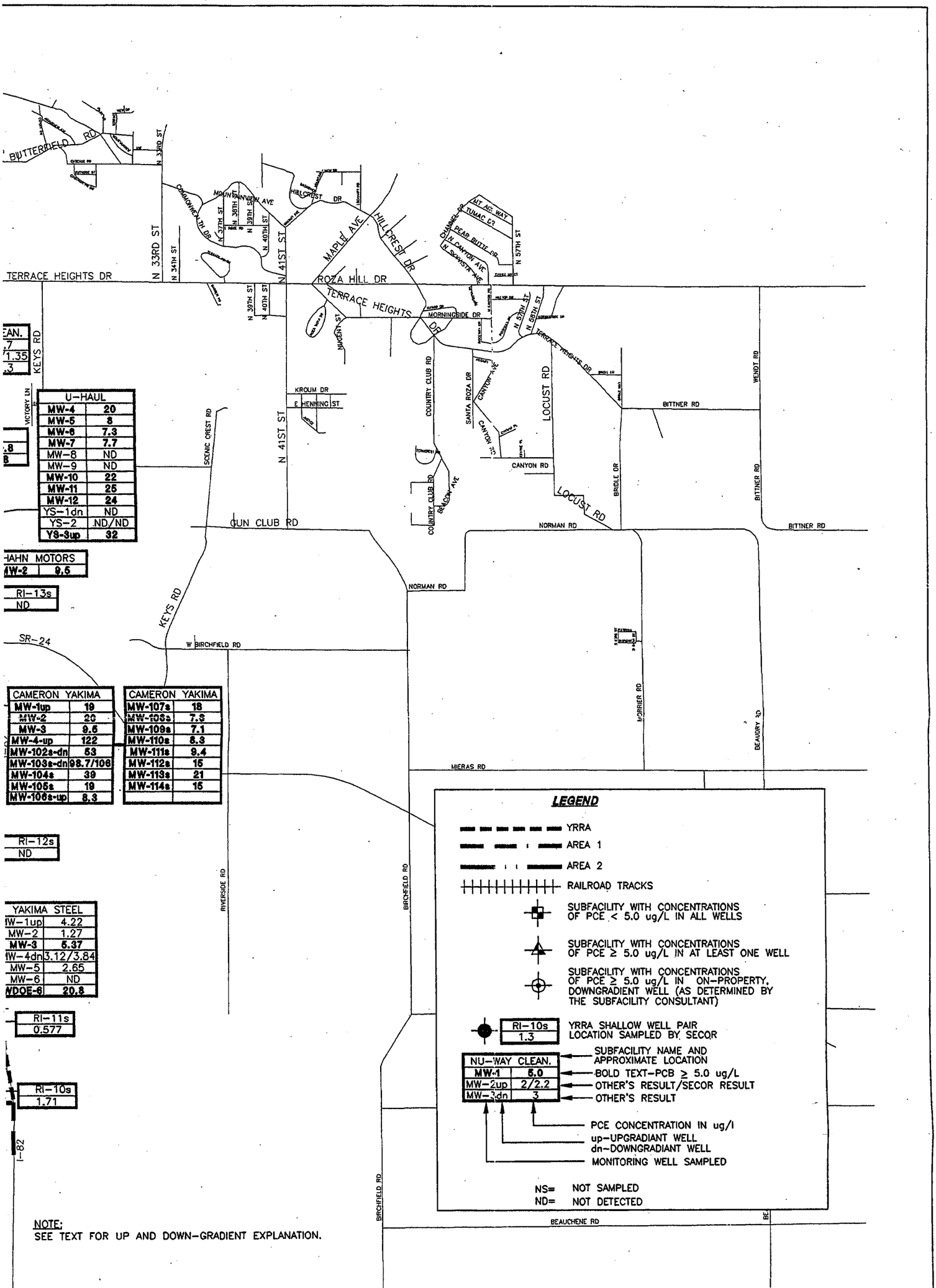
SECOR
International Incorporated

POTENTIOMETRIC SURFACE MAP
SHALLOW WATER-BEARING ZONE - DECEMBER 1997
YAKIMA RAILROAD AREA
REMEDIAL INVESTIGATION
YAKIMA, WASHINGTON

FIGURE: 11

JOB#: 00378-001-02 APPR: DWN: CDD DATE: 12/11/98

DWG: YAKMAP5.DWG



NOTE:
SEE TEXT FOR UP AND DOWN-GRADIENT EXPLANATION.

North

0 2,000 4,000

SCALE (FEET)

SECOR
International Incorporated

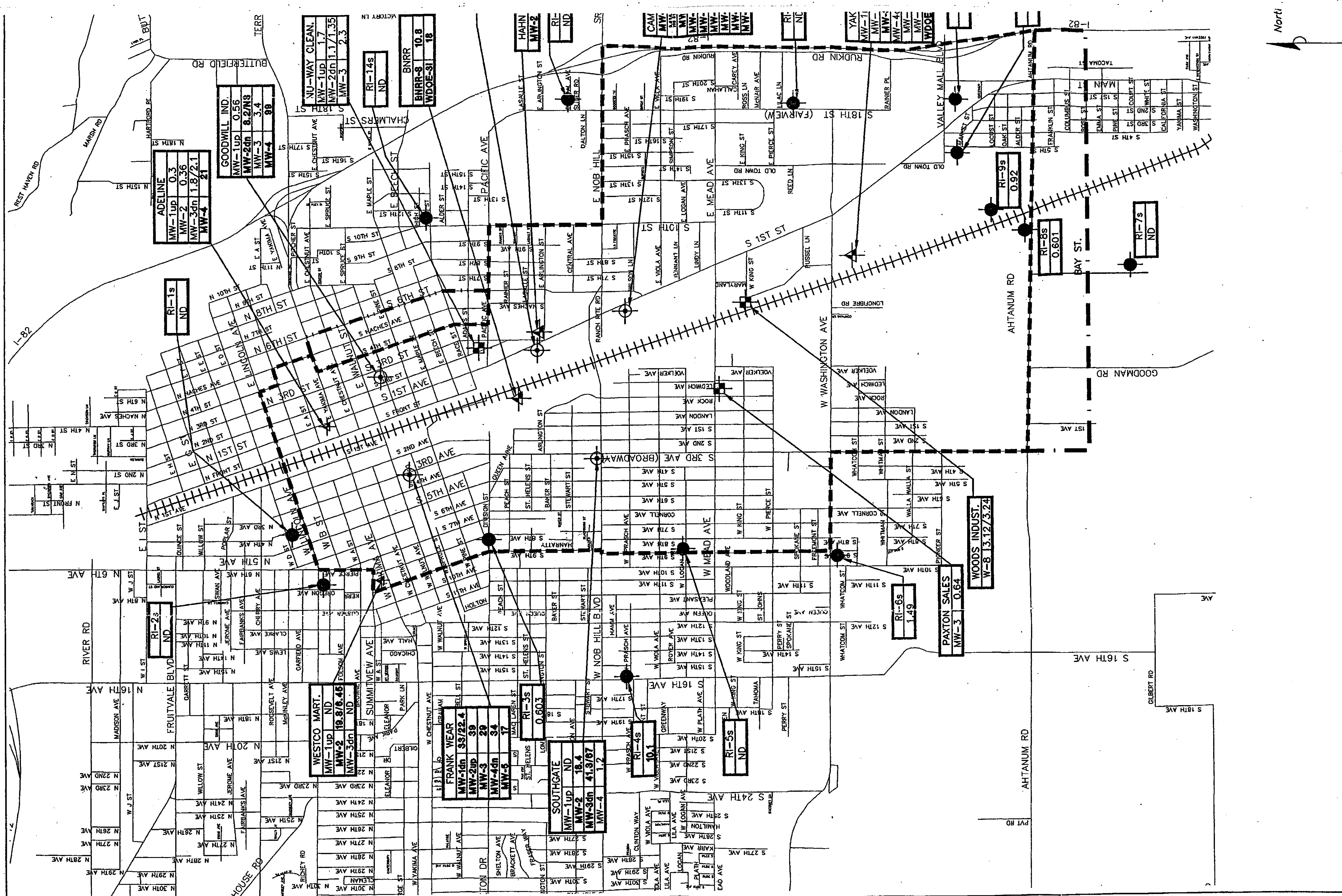
PCE ANALYTICAL RESULTS - SEPTEMBER 1998

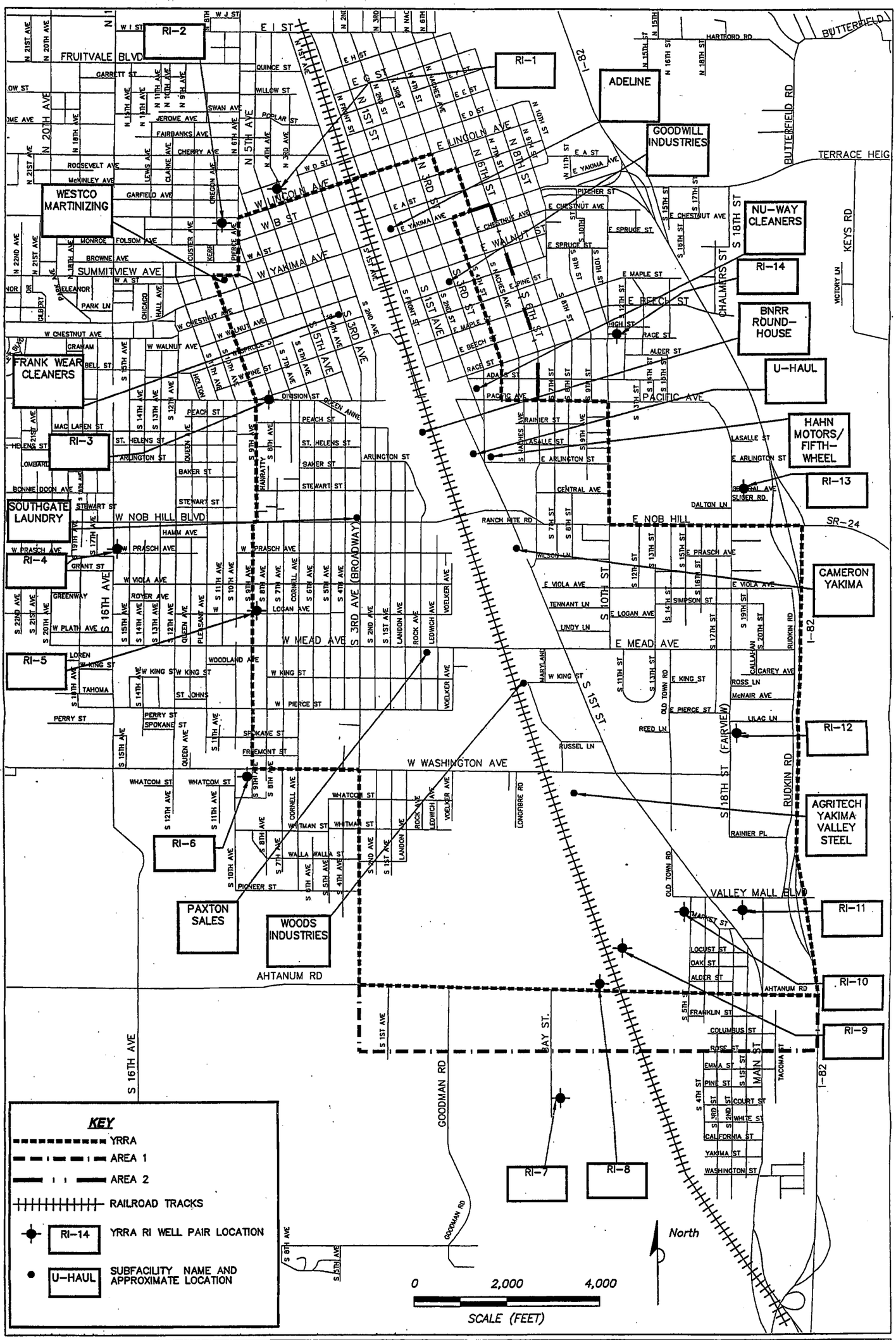
SHALLOW WATER-BEARING ZONE
YAKIMA RAILROAD AREA REMEDIAL INVESTIGATION
YAKIMA, WASHINGTON

FIGURE: 26

JOB#: 00374-001-02 APPR: DWN: QDD DATE: 1/6/99

DWG: YAK00107C


ADELINE
MW-1up 0.3
MW-2 0.36
MW-3dn 1.8/2.1
MW-4 21
GOODWILL IND.
MW-1up 0.56
MW-2dn 8.2/NS
MW-3 3.4
MW-4 99
NU-WAY CLEAN.
MW-1up 1.7
MW-2dn 1.1/1.35
MW-3 2.3
RI-14s ND
BNRR
BNRR-8 10.8
WDOE-3I 18
RI-1s ND
RI-2s ND
WESTCO MART.
MW-1up ND
MW-2 19.8/6.46
MW-3dn ND
FRANK WEAR
MW-1dn 33/22.4
MW-2up 39
MW-3 29
MW-4dn 34
MW-5 17
RI-3s 0.603
SOUTHGATE
MW-1up ND
MW-2 18.4
MW-3dn 41.3/67
MW-4 1.2
RI-4s 10.1
RI-5s ND
RI-6s 1.49
PAXTON SALES
MW-3 0.64
WOODS INDUST.
W-8 3.12/3.24
RI-8s 0.601
RI-9s 0.92
RI-7s ND



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International Incorporated

SUBFACILITIES AND RI WELL LOCATIONS

YAKIMA RAILROAD AREA
REMEDIAL INVESTIGATION
YAKIMA, WASHINGTON

FIGURE: 3

JOB#: 00378-001-02 APPR: DWN: QDD DATE: 12/11/98

DWG: YAKMAPF3.DWG

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DEC 21 1992
DEPARTMENT OF ECOLOGY
CENTRAL REGION OFFICE

MAID O'CLOVER
1802 EAST NOB HILL BOULEVARD
YAKIMA, WASHINGTON

December 16, 1992

WASHINGTON STATE
DEPARTMENT OF HEALTH
OFFICE OF TOXIC SUBSTANCES
HAZARDOUS WASTE SECTION

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Site Description

The Maid O'Clover Facility, at 1802 E. Nob Hill Boulevard, Yakima Washington, is located in an area of residential and commercial properties. Two 6,000 gallon capacity gasoline underground storage tanks, and two 10,000 gallon capacity gasoline underground storage tanks are located on the property. Convenience stores and service stations operating underground storage tanks containing petroleum hydrocarbon products for retail sale are present throughout the area.

Potential Public Health Problem

In January 1991, petroleum odors were reported in residential basements located south of the facility. A site assessment investigation conducted by Environmental Science & Engineering, Inc. (ESE) indicated the presence of petroleum contamination in the soil and groundwater at the site. In addition domestic wells at residences adjacent to the site have shown petroleum contamination.

Environmental Contamination

Three monitoring wells were installed on-site to characterize the extent of the contamination in the soil and groundwater. Samples were analyzed for total recoverable petroleum hydrocarbons (TPH) and volatile organic compounds (VOC's). None of the soil samples collected contained TPH or VOC concentrations above the laboratory limit of detection. Groundwater samples did contain TPH and VOC levels above laboratory detection limits and above Model Toxic Control Act (MTCA) cleanup standards.

Listed in the following tables are contaminants of concern associated with the Maid O'Clover facility. TPH was not evaluated separately because the threat posed by TPH is represented by the contaminants of concern benzene, ethylbenzene, toluene, and xylene. Contaminants of concern are selected from the sampling data by comparing the maximum contaminant concentrations to media specific screening values. The screening values are developed or utilized by the Agency for Toxic Substances and Disease Registry (ATSDR) to evaluate health effects of contaminants commonly found at hazardous waste sites. Screening values used in this investigation to determine noncarcinogenic and carcinogenic contaminants of concern include Reference Dose Media Evaluation

Guides (RMEGs), and Cancer Risk Evaluation Guides (CREGs). Contaminants of concern are not necessarily contaminants that will cause adverse health effects from exposures, rather contaminants that will be further evaluated in the Exposure Pathways section of this Health Investigation.

RMEGs are calculated from EPA's Reference Dose (RFD), and are estimated contaminant concentrations at which daily exposure would be unlikely to result in noncarcinogenic health effects. In addition to containing a toxicity component, the RMEGs also contain an exposure component that is based on the amount of contaminated water or soil that an individual ingests per day. Because water consumption and soil ingestion vary widely in different segments of the population, RMEG values are calculated for a range of exposures rather than for a single, arbitrary exposure value. Exposure to contaminated water or soil is usually greater in children than in adults because children typically ingest more water and soil per unit of body weight than adults. Therefore, at sites were both children and adults may be present, RMEG values derived for children are usually used because they represent the more highly exposed population.

CREGs are estimated contaminant concentrations at which exposure would unlikely result in more than one excess cancer in one million persons exposed for a lifetime of 70 years. CREG's are calculated from EPA cancer slope factors, and exposure variables such as ingestion rate and body weight.

TABLE 1
VOC Concentrations In On-Site Groundwater Sample

Contaminant	Concentration µ/L	Screening Value	
		µ/L	Source
Benzene	ND-3,200	1.2	CREG
Toluene	ND-6,200	2,000	*RMEG
Ethylbenzene	ND-280	1,000	*RMEG
Total Xylenes	ND-11,000	20,000	*RMEG

* Screening Value for a child's exposure
µ/L- Micrograms per Liter or Parts per Billion (ppb)
ND- Not Detected

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Data Gaps

The groundwater flow direction has not been accurately evaluated but is believed to be to the southeast. No testing was done to clearly identify the source of petroleum vapors in the neighboring residences. The site is in the vicinity of at least one other documented petroleum release and other past spills may have contributed to the vapor concentrations.

Because the nature and extent of groundwater contamination is not well defined, additional data is necessary to confirm the actual risk to people's health posed by site-related contaminants.

In preparing this health investigation, our Department relies on the information provided in the referenced documents. We assume that adequate quality assurance and quality control measures were followed regarding chain of custody, laboratory procedures, and data reporting. The analyses, conclusions, and recommendations in this health investigation are valid only if the referenced documents are complete and reliable.

Physical And Other Hazards

No physical or other hazards are associated with the site.

Exposure Pathways

An exposure pathway is the process by which an individual is exposed to contaminants that originate from a source of contamination. A pathway consists of five elements: a source of contamination, an environmental medium in which the contaminants may be present or may migrate, points of human exposure, routes of human exposure such as inhalation, ingestion or dermal absorption, and an exposed population. A completed exposure pathway exists if all five of the elements of an exposure pathway are present and exposure to the contaminant has occurred in the past, is currently occurring, or will occur in the future. A potential exposure pathway exists when one or more of the five elements are missing, but indications are that exposure could have occurred in the past, could be occurring now, or could occur in the future. A pathway can be eliminated if one or more of the elements is known not to exist or the pathway is unlikely to occur.

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Completed Exposure Pathways: Potentially harmful contaminants have been identified in the soil and groundwater at the site. Workers at the site, residents of the area and employees and customers of nearby businesses could have been exposed to toxic vapors through inhalation (Table 2).

Past, present, and future exposure from contaminated groundwater in private wells used for domestic supply represents a completed exposure pathway. Residents using contaminated water for domestic purposes may be exposed to benzene, toluene and xylene through ingestion of drinking water, inhalation of water vapors and dermal absorption. Inhalation exposure can occur as these compounds volatilize from contaminated water into indoor air during household activities such as showering, bathing, or dishwashing. Residents are currently supplied bottled water for drinking and cooking so the ingestion pathway has been eliminated. The scheduled extension of a municipal water system to the residents will eliminate the inhalation and dermal routes of exposure (Table 2).

TABLE 2 EXPOSURE PATHWAYS

SOURCE	MEDIUM	POINT OF EXPOSURE	ROUTE OF EXPOSURE	EXPOSED POPULATION	TIME	TYPE OF PATHWAY
Gasoline Spill	Water	Private Wells	Ingestion Inhalation Dermal Absorption	Residents	Past, Present and Future	Completed
Gasoline Spill	Air	Maid O' Clover Site	Inhalation	Workers, Residents	Past	Completed

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Community Health Concerns

There are no known community health concerns regarding this site at this time.

Conclusions

Groundwater beneath the Maid O'Clover site is contaminated with potentially harmful levels of the VOC's benzene, toluene, and xylene (Table 1). Residences with a contaminated domestic water supply are currently supplied bottled water for drinking and cooking, which eliminated the ingestion pathway. Exposure to low concentrations of VOC's may currently be occurring through dermal absorption and inhalation. The scheduled extension of the municipal water system to residences in the area will eliminate these routes of exposure. At this time the site poses no immediate public health threat to the known exposed population as a result of short-term, low level exposure to VOC's.

Public Health Recommendations

1. Remediation of the site should continue.

2. Residents should continue to use bottled water for drinking and cooking purposes until they have been connected to the municipal water system.

Preparer of Report

Milo Straus (206) 586-9120 SCAN 321-9120
Public Health Advisor
Washington State Department of Health
Office of Toxic Substances
Hazardous Waste Section

DRAFT

Distribution

Michael Spencer
Washington State Department of Ecology
Toxics Cleanup Program
Olympia, WA 98504-7600

Mark Peterschmidt
Washington State Department of Ecology
Central Regional Office
106 South 6th Avenue
Yakima, WA 98902-3387

Don Steinmetz
Director, Environmental Health
Yakima Health District
104 North First Street
Yakima, WA 98901

References

ATSDR Toxicological Profile, Benzene 1989

ATSDR Toxicological Profile, Ethylbenzene 1990

ATSDR Toxicological Profile, Toluene 1989

ATSDR Toxicological Profile, Xylene 1990

Environmental Science & Engineering, INC. March 25, 1991. Results of a Site Assessment Investigation at Maid O'Clover Facility, 1802 E. Nob Hill Boulevard, Yakima Washington.

HSDB (Hazardous Substance Data Base) for Benzene, Ethylbenzene, Toluene and Xylene

Peterschmidt, Mark. Washington State Department of Ecology Warm Ranking Method Route Score Summary and Ranking Calculation Sheet, Maid O'Clover 1802 E. Nob Hill Boulevard Yakima.

The Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

106 South 6th Ave. • Yakima, Washington 98902-3387 • (509) 575-2490

December 7, 1992

CERTIFIED MAIL
P 868 668 764

Mr. Jeff Louden
Maid O'CLover
202 South 5th Avenue
Yakima, WA 98902

Dear Mr. Louden:

RE: Notice of Potential Liability for the Release of Hazardous Substances Under the Model Toxics Control Act

Chapter 70.105D RCW, the Model Toxics Control Act (Act), requires the Department of Ecology (Ecology) to provide written notice to all persons it believes to be potentially liable for the release of hazardous substances.

It is Ecology's understanding that you, Mr. Jeff Louden, are an owner of the Maid O'Clover located at South 18th Street and East Nob Hill Boulevard and that credible evidence exists indicating that a release (or threatened release) of a hazardous substance has occurred at this site. The evidence supporting these findings is as follows:

Ecology 1992

Ecology records on the Maid O'Clover site:

With Ecol letters

Phone call from Ecology to Jeff Louden on 1/31/91. Mr. Louden reported a leak of approximately 2000 gallons over a period of one month due to a blown turbine gasket.

A Site Assessment Investigation was conducted by Environmental Science & Engineering, Inc. from February 11, 1991 to March 25, 1991. The site assessment was initiated by the Washington State Department of Ecology after they received reports of gasoline odors in residential basements to the south of the Maid O'Clover site. Three monitoring wells were installed and soil and groundwater samples were taken. Groundwater samples taken at monitoring well MW-3 showed concentrations of TPH and other hydrocarbons at levels above MTCA clean-up level guidelines.

The Washington State Department of Ecology performed a Site Hazard Assessment and the site was subsequently ranked.

As a result of this evidence, you have been identified as a person potentially liable for the release of petroleum products at the Maid O'Clover site located at 1802 East Nob Hill Boulevard in Yakima, WA.

Under the Act, you have 30 calendar days from the receipt of this letter to submit written comments to Ecology on your proposed status as a

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potentially liable person (PLP). Following a review of those comments, Ecology will make a final written determination of your status. In the interest of expediting this process without admitting liability, you may wish to accept your status as a Potentially Liable Person by waiving your right to the 30 days notice and comment period. This may be accomplished by signing and returning the enclosed form or sending a letter containing similar information to Ecology.

If you are aware of any other persons who may be potentially liable for the release at this site, Ecology encourages you to provide us with their identity and the reason you believe they are potentially liable.

Ecology intends to conduct the following actions at the site:

> Issue an administrative order to do an Remedial Investigation/Feasibility Study(RI/FS). The purpose of the RI/FS is to determine the full extent of the contamination and provide possible alternatives for remediation.

Ecology's policy is to work cooperatively with PLPs. Please note that cooperating with Ecology in planning or conducting remedial actions at the site is not an admission of guilt or liability and could ultimately result in a more efficient, prompt, and effective cleanup.

To date, Ecology has not proposed any other persons to be found potentially liable.

Enclosed, please find a copy of Chapter 70.105D RCW and Chapter 173-340 WAC for your information. If you have questions, please feel free to contact me at (509) 454-7836.

Sincerely,

John Wietfeld

John Wietfeld
Site Manager
Department of Ecology
Central Regional Office

JOW:JA:vw
g:plpmaid

Enc: Chapter 70.105D RCW
Chapter 173-340 WAC
Waiver Form

Dynamart /E Nob Hill
SHA & Ranking

WASHINGTON RANKING METHOD

ROUTE SCORES SUMMARY AND RANKING CALCULATION SHEET

For Sites With No Sediment Route Migration Pathways

Site name: Maid O' Clover Region: CRO

Street, city, county: Yakima, Yakima

This site was (XX) ranked, ( ) re-ranked, on August 12, 1992 based on quintile values from a total of 338 assessed/scored sites.

Pathway	Route Score(s)	Quintile Group number(s)
SW-HH	2.3	1
Air-HH	19.1	3
GW-HH	72.9	5
SW-En	2.9	1
Air-En	18.9	3

Priority scores:

$\frac{25 + 6 + 1}{8} = \frac{32}{8} = 4$

$\frac{9 + 2}{7} = \frac{11}{7} = 1.57 \doteq 2$

Use the matrix presented to the right, along with the two priority scores, to determine the site ranking. N/A refers to where there is no applicable pathway.

Human Health	Environment 5	4	3	2	1	N/A
5	1	1	1	1	1	1
4	1	2	2	(2)	3	4
3	1	2	3	4	4	5
2	2	3	4	4	5	5
1	2	3	4	5	5	5
N/A	3	4	5	5	5	NFA

DRAFT / (FINAL)

Matrix ("bin") Ranking: 2, or _____ No Further Action

CONFIDENCE LEVEL: The relative position of this site within this bin is:

_____ almost into the next higher bin.
__X__ right in the middle, unlikely to ever change.
_____ almost into the next lower bin.

rev. 8/92

RECEIVED
AUG 14 1992

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WORKSHEET 1
SUMMARY SCORE SHEET

Note: This document currently has no provision for sediment route scoring.

Site Name/Location (City, County, Section/Township/Range):

Maid O'Clover
1802 East Nob Hill Boulevard
Yakima

Township 13 North, Range 19 East Willamette Meridian, Section 29

Site Description (Include management areas, compounds of concern, and quantities):

This site is an operating gasoline retail outlet and convenience store. In January of 1991, petroleum odors were reported in the basements of two residences located just south of Maid O' Clover. In response to a letter sent out to gasoline retail businesses and residences in the immediate area. Maid O' Clover and other stations nearby checked their underground storage tank (UST) systems and Maid O'Clover reported a leak to WDOE within a few days. Independent attempts to characterize the contamination plume have been made, though Cleanup reports have not been received at this time. the management area is the documented subsurface contamination in contact with groundwater.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site):

Two special considerations for this site are the facts that domestic wells at residences adjacent to this site have shown petroleum contamination and that this site is in the vicinity of at least one other petroleum release, the Tiger Oil release in the early 1980's, that may have contributed to the contamination at this site and in the local area.

ROUTE SCORES:

Surface Water/Human Health:	2.3	( )	Surface Water/Environ.:	2.9	( )
Air/Human Health:	19.1	( )	Air/Environmental:	18.9	( )
Ground Water/Human Health:	72.9	( )			

( ) indicate quintile score based on August 1991 quintile breakdown. Scores may change at August 1992 quintile breakdown.

OVERALL RANK: 2

Rev. 4/3/92

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List substances to be considered for scoring: Source: 6

1. benzene
2. toluene
3. ethylbenzene
4. xylene
5. Total Petroleum Hydrocarbon

Explain basis for choice of substance(s) to be used in scoring.

Benzene, toluene, ethylbenzene and xylene were used in scoring. TPH was not used in scoring because the threat posed by TPH was judged to be represented by the four substances that were used.

List management units to be considered in scoring: Source: 6

1. Underground storage tank system

Explain basis for choice of unit used in scoring. Source: 6,12

A pump attached to a 10,000 gallon underground storage tank was documented as a probable source of contamination at this site. The surface water route was scored due to the correspondence between the Yakima City Waste Water Division and the consultants for Maid O'Clover showing a discharge of BETX contaminated water to the municipal sewer, which discharges to the Yakima River, without appropriate permitting from the state. This allows for a scoring of the route though analytical results necessary to score a release are not available.

WORKSHEET 2 (CONTINUED)
ROUTE DOCUMENTATION

2. AIR ROUTE

List substances to be considered for scoring: Source: 6

1. benzene
2. toluene
3. ethylbenzene
4. xylene
5. Total Petroleum Hydrocarbon

Explain basis for choice of substance(s) to be used in scoring.

Benzene, toluene, ethylbenzene and xylene were used in scoring. TPH was not used in scoring because the threat posed by TPH was judged to be represented by the four substances that were used.

List management units to be considered in scoring: Source: 6

1. Underground storage tank system

Explain basis for choice of unit used in scoring. Source: 13

The air route was scored due to the report and documentation of explosive levels of petroleum vapors in a neighboring (the Gilstrap) residence. I believe that this documentation, coupled with the sampling documentation for groundwater in the immediate area, show that a subsurface releases are available to the air route in this local area.

WORKSHEET 2 (CONTINUED)
ROUTE DOCUMENTATION

3. GROUND WATER ROUTE

List substances to be considered for scoring: Source: 6

1. benzene
2. toluene
3. ethylbenzene
4. xylene
5. Total Petroleum Hydrocarbon

Explain basis for choice of substance(s) to be used in scoring.

Benzene, toluene, ethylbenzene and xylene were used in scoring. TPH was not used in scoring because the threat posed by TPH was judged to be represented by the four substances that were used.

List management units to be considered in scoring: Source: 6

1. Underground storage tank system

Explain basis for choice of unit used in scoring. Source: 6

A pump attached to a 10,000 gallon underground storage tank was documented as a probable source of contamination at this site. The ground water route was scored due to the documentation of contamination in the ground water.

WORKSHEET 3
SUBSTANCE CHARACTERISTICS WORKSHEET
FOR MULTIPLE UNIT/SUBSTANCE SITES

	Combination 1	Combination 2	Combination 3
Unit:			
Substance:			

SURFACE WATER ROUTE

Human Toxicity Value:

Environ. Toxicity Value:

Containment Value:

Surface Water Human Subscore:

Surface Water Environ. Subscore:

AIR ROUTE

Human Toxicity/Mobility Value:

Environ. Toxicity/ Mobility Value:

Containment Value:

Air Human Subscore:

Air Environ. Subscore:

GROUND WATER ROUTE

Human Toxicity/ Mobility Value:

Containment Value:

Ground Water Subscore:

WORKSHEET 4
SURFACE WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Val.	Acute Toxicity (mg/kg-bw)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcinogenicity WOE	PF*	Val.
1. benzene	5	8	3306	3	X	-	A	.029	5
2. toluene	2000	2	5000	3	0.2	1	X	-	-
3. ethylbenzene	700	4	3500	3	0.1	1	X	-	-
4. xylene (total)	10000	2	50	10	2	1	X	-	-
5.									
6.									

*Potency Factor

Source: 1
Highest Value: 10
+2 Bonus Points? yes
Final Toxicity Value 12

1.2 Environmental Toxicity

Substance	Acute Criteria (ug/l)	Value	Non-human Mammalian Acute Toxicity (mg/kg)	Value
1. benzene	5300	2	X	-
2. toluene	17500	2	X	-
3. ethylbenzene	32000	2	X	-
4. xylene (total)	X	-	4300	3
5.				
6.				

Source: 1,11 Value: 3

1.3 Substance Quantity: 10,000 gallons Source: 6 Value: 5

Explain basis: No documentation has been provided for the estimates of the quantity of release that have been made by the site owner/operator. Thus, the once filled volume of the underground storage tank is being used as an estimate of quantity.

WORKSHEET 4 (CONTINUED)
SURFACE WATER ROUTE

2.0 MIGRATION POTENTIAL

2.1 Containment — Source: 6 — Value: 0
Explain basis: surface of area containing contamination is covered with an asphalt parking area.

2.2 Surface Soil Permeability: piped (sewer) to river — Source: 7 — Value: 7

2.3 Total Annual Precipitation: 7.86 inches — Source: 5 — Value: 1

2.4 Max. 2-Yr/24-hour Precipitation: 0.9 inches — Source: 5 — Value: 1

2.5 Flood Plain: Does not lie within flood plain — Source: 2 — Value: 0

2.6 Terrain Slope: < 2 % — Source: 9 — Value: 1

3.0 TARGETS

3.1 Distance to Surface Water: Yakima River <4500 — Source: 7 — Value: 4

3.2 Population Served within 2 miles: √pop.= 0 — Source: 3,4 — Value: 0

3.3 Area Irrigated within 2 miles: 0.75√no.acres= 3.35 — Source: 3 — Value: 3.35

3.4 Distance to Nearest Fishery Resource: <4300(Yakima) — Source: 7 — Value: 6

3.5 Distance to, and Name(s) of, Nearest Sensitive Environment(s) Yakima River <4500 feet — Source: 7 — Value: 6

4.0 RELEASE

Explain basis for scoring a release to surface water: No release to surface water has been documented. — Source: ____ — Value: 0

WORKSHEET 5
AIR ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Introduction (WARM Scoring Manual) - Please review before scoring

1.2 Human Toxicity

Substance	Air Standard (ug/m^3)	Val.	Acute Toxicity (mg/m^3)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcinogenicity WOE	PF*	Val.
1. benzene	0.12	10	31947	3	X	-	A	0.029	5
2. toluene	1248.6	1	X	-	0.57	1	X	-	-
3. ethylbenzene	1448.6	1	X	-	X	-	X	-	-
4. xylene(total)	1448.6	1	21714	3	0.085	1	X	-	-
5.									
6.									

*Potency Factor

Source: 1
Highest Value: 10
+2 Bonus Points? no
Final Toxicity Value: 10

1.3 Mobility (Use numbers to refer to above listed substances)

1.3.1 Gaseous Mobility

Vapor Pressure(s): 1= 95; 2= 28; 3= 7; 4= 10 ; 5= ; 6= Source: 1
Value: 4

1.3.2 Particulate Mobility

Soil type: N.A. Source:
Erodibility: Value:
Climatic Factor:

1.4 Highest Human Health Toxicity/Mobility Matrix Value (from Table A-7) equals Final Matrix Value: 20

1.5 Environmental Toxicity/Mobility

Substance	Non-human Mammalian Acute Inhal. Toxicity (mg/m^3)	Value	Mobility	Value	(Table A-7) Matrix Value
1. benzene	31947	3	95	4	6
2. toluene	X	-	28	4	-
3. ethylbenzene	X	-	7	3	-
4. xylene(total)	21714	3	10	3	5
5.					
6.					

Highest Environmental Toxicity/Mobility Matrix Value 6
(From Table A-7) equals Final Matrix Value: 6

WORKSHEET 5 (CONTINUED)
AIR ROUTE

1.6 Substance Quantity: 10,000 gallons Source: 6 Value: 5
Explain basis: No documentation of release volume has been provided, default quantity estimate equals once filled volume of 10,000 Gallons.

2.0 MIGRATION POTENTIAL

2.1 Containment: Spill/discharge occurred in subsurface only with no vapor collection system. Source: 6 Value: 5

3.0 TARGETS

3.1 Nearest Population: Adjacent to south of site. Source: 13 Value: 10

3.2 Distance to, and Name(s) of, Nearest Sensitive Environment(s) State Fairgrounds ≤1000; Yakima arboretum <2000; Source: 9 Value: 7

3.3 Population within 0.5 miles: √population=√863=29.4 Source: 10 Value: 29

4.0 RELEASE

Explain basis for scoring a release to air: No evidence is available to clearly identify the source of petroleum vapors in the neighboring residences, other past spills may have contributed or created the vapor release. Source: Value: 0

WORKSHEET 6
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Val.	Acute Toxicity (mg/kg-bw)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcinogenicity WOE	PF*	Val.
1. benzene	5	8	3306	3	X	-	A	.029	5
2. toluene	2000	2	3500	3	0.2	1	X	-	-
3. ethylbenzene	700	4	5000	3	0.1	1	X	-	-
4. xylene (total)	10000	2	50	10	2	1	X	-	-
5.									
6.									

*Potency Factor

Source: 1
Highest Value: 10
+2 Bonus Points? yes
Final Toxicity Value: 12

1.2 Mobility (Use numbers to refer to above listed substances)
Cations/Anions NA Source: 1 Value: 3

OR
Solubility(mg/l) benzene: 1.8E+3; toluene: 5.4E+2; Ethylben: 1.5E+2; xylene: 2.0E+2

1.3 Substance Quantity: 10,000 gallons Source: 6 Value: 5
Explain basis: No documentation has been provided for the estimates of the quantity of release that have been made by the site owner/operator. Therefor the once filled volume of the underground storage tank is being used as an estimate of quantity.

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 6 Value: 10
Explain basis: Ground water contamination and contact with free product have been documented.

2.2 Net Precipitation: 1.7 inches Source: 5 Value: 1

2.3 Subsurface Hydraulic Conductivity: $>10^{-1}$ cm/sec Source: 6 Value: 4

2.4 Vertical Depth to Ground Water: <25 feet Source: 6 Value: 8

WORKSHEET 6 (CONTINUED)
GROUND WATER ROUTE

3.0 TARGETS

3.1 Ground Water Usage: Public supply, No alternative Source: 7,8 Value: 9

3.2 Distance to Nearest Drinking Water Well: ≤ 600 ft Source: 7 Value: 5

3.3 Population Served within 2 Miles: √pop.=√4124=64.22 Source: 3,4 Value: 64

3.4 Area Irrigated by (Groundwater) Wells within 2 miles: 0.75√no.acres=35.95 Source: 3 Value: 36

4.0 RELEASE

Explain basis for scoring a release to ground water: Source of information documents free petroleum product in contact with ground water. Source: 6 Value: 5

SOURCES USED IN SCORING

1. Toxicology Database for Use in WARM Scoring, Washington Department of Ecology (SAIC.) January, 1992.

2. Flood Boundary and Floodway Map, Community-Panel Number 530217 1055, FEMA.

3. Recorded Water rights of the Department of Ecology, Region 4, August 16, 1990

4. State of Washington Public Water Supply System Listing, November 8, 1989

5. Washington Climate, Cooperative Extension Service, Washington State University, May 1979.

6. Results of a site Assessment Investigation at Maid O'Clover Facility, 1802 E. Nob Hill Boulevard, Yakima Washington, Environmental Science & Engineering, Inc. March 25, 1991.

7. Engineering Maps, SE¼ & SW¼ Sec 29, Township 13 North, Range 19 East, City of Yakima, copies from masters, June 1992.

8. Personal Communications with Mary Lovell, Engineering Technician for the city of Yakima, and Ty Wick, Engineer for the city of Yakima. June 1992.

9. Yakima East Quadrangle Map, USGS 7.5 Minute Topographic Series

10. Census Data Maps & Tables, Provided by Wallace Webster, Yakima Valley Conference of Governments, 1990 U.S. Census data.

11. RTECS, NIOSH, April 1987.

12. Correspondence between PLSA Engineering and City of Yakima Wastewater Division, Dates May 21, 23 and 29, 1991

13. field notes from early site visits by Ecology staff, January, February 1991.

June 24, 1992

TO: SHA files: Maid O'Clover South 18th Street,
Tiger Oil, East Nob Hill Blvd.

FROM: Mark Peterschmidt Mark Peterschmidt

SUBJECT: Utility services to neighborhoods south of these sites.

Having Checked with the Yakima City Engineering Department today, and talked to Mary Lovell, Engineering Technician, I have found that the SW¼ and SE¼ of Section 29, Township 13 N, Range 19 EWM. have very limited access to municipal water supplies. East Nob Hill Boulevard, South 18th Street and East Viola Avenue have water lines, while the side streets in this area have no water mains. This means that the homes facing the main streets can be connected to municipal water while those on side streets cannot. I would estimate that less than half of the residences in this area have access to the water system and to further complicate the situation, South 18th Street has a five year moratorium against breaking the asphalt due to new construction 2 years ago (three year left on the moratorium). Therefore without the Health District declaring a health hazard for the ground water in the area, those people on S. 18th Street will not be allowed to break the asphalt to connect to municipal water.

Maid o'Clover Corporation

202 South Fifth Avenue
Yakima, Washington 98902
(509) 248-3562

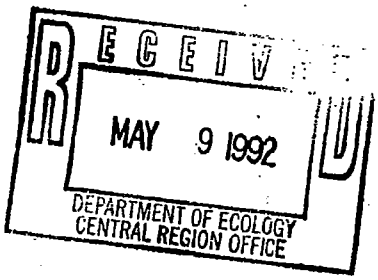
John Weitfeld
Department of Ecology
106 S. Sixth Ave.
Yakima, WA 98902

May 7, 1992

John,

Please find enclosed a copy of the letter that was sent to the following three businesses:

1. Time Oil Company
2. Tiger Oil Company
3. Seven-Eleven

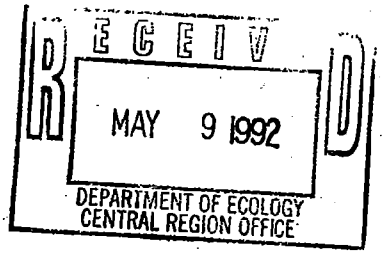


Thank you,

Jeff Loudon

Maid o'Clover Corporation

202 South Fifth Avenue
Yakima, Washington 98902
(509) 248-3562



Seven-Eleven #22714
1711 E. Nob Hill Blvd.
Yakima, Washington

May 7, 1992

To Whom It May Concern:

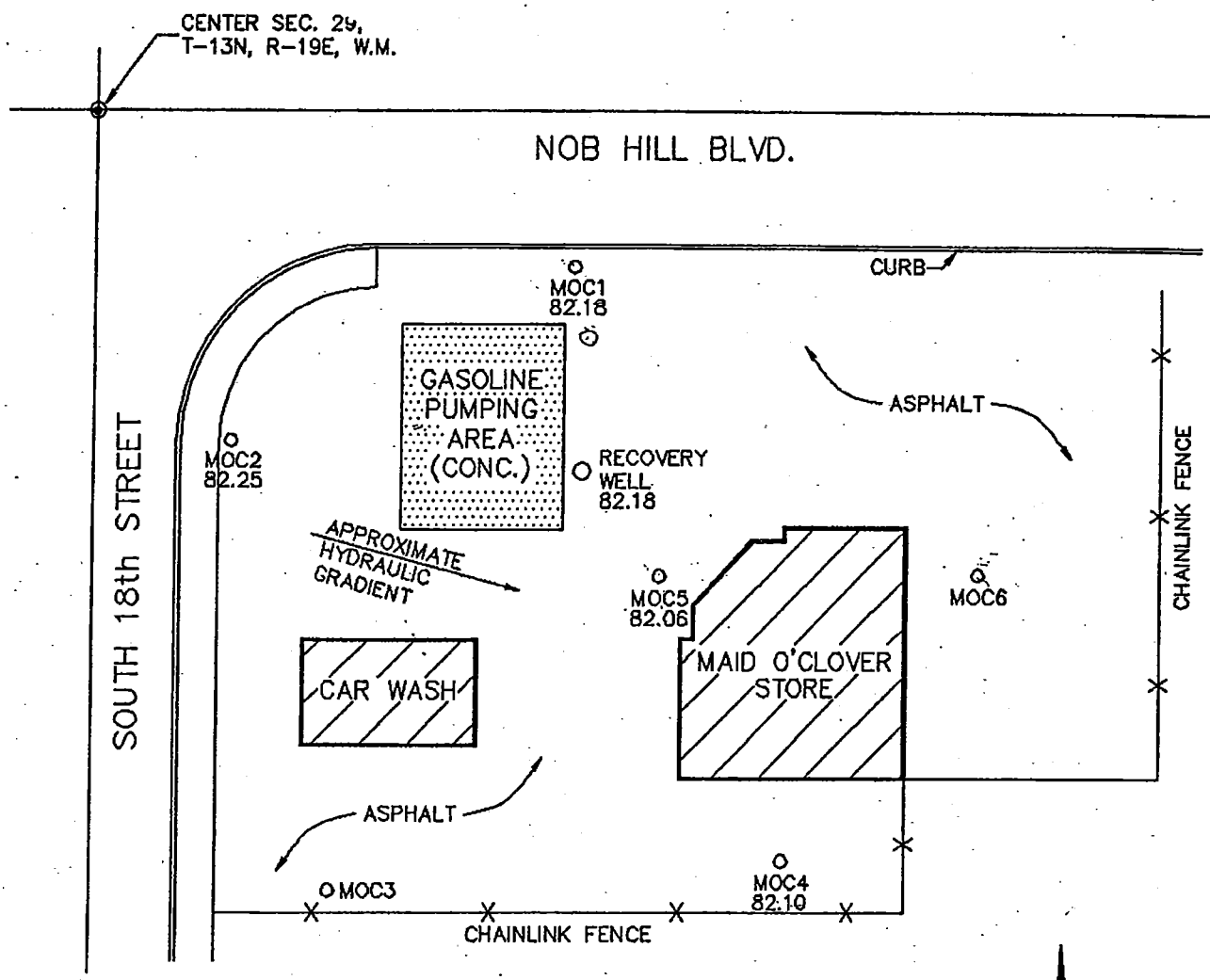
We have recently drilled numerous test wells at our store in Yakima located at 18th Street and Nob Hill Blvd.

Our test results indicate that there is a high probability that hydrocarbons are crossing our site from an outside source of pollution. The well we drilled at the southwest corner tested highly positive in this regard and our site was not the cause.

I look forward to discussing the matter with a representative of your company in the near future. Please contact me within 7 days.

Sincerely,

Jeff Loudon



LEGEND

MOC1 – DENOTES MONITORING WELL IDENTIFICATION NUMBER

82.10 – DENOTES STATIC WATER ELEVATION (ft), RESULTS OBTAINED 4-6-92.

SAMPLE RESULTS (Units are in mg/l)	MOC1	MOC2	MOC3	MOC4	MOC5	MOC6
WTPH-GASOLINE	18	1.1	46	3.1	8.4	3.6
BENZENE	0.034	<0.001	0.75	<0.001	0.12	0.056
TOLUENE	0.96	<0.001	7.2	<0.001	0.39	0.051
ETHYL BENZENE	0.13	<0.001	0.51	<0.001	0.075	0.024
XYLENES	5.0	0.21	11	0.67	2.5	1.1
LEAD	<0.005	<0.005	0.007	<0.005	0.008	<0.005

SCALE : 1" = 40'

FIGURE 1

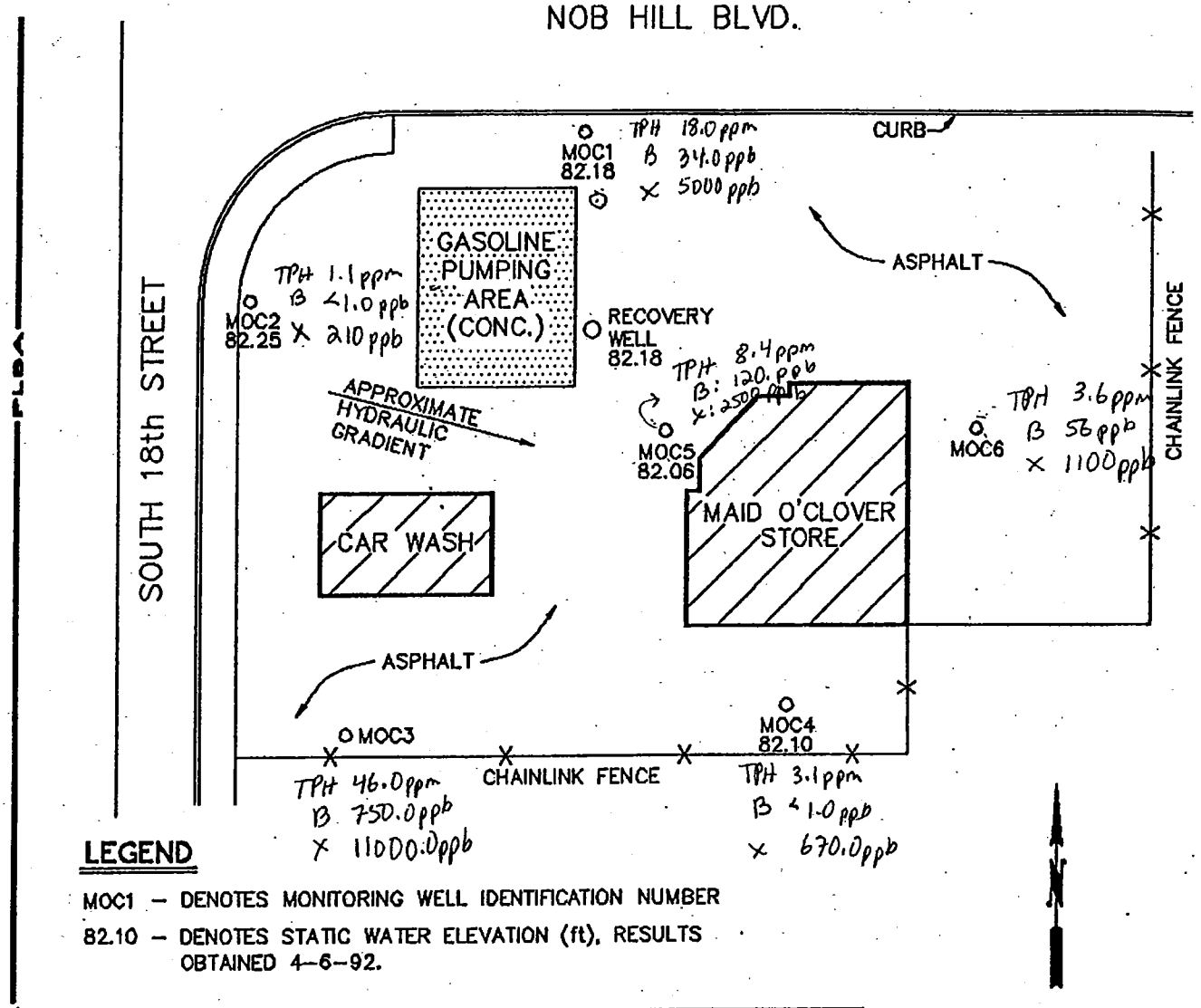
PLSA ENGINEERING–SURVEYING–PLANNING
YAKIMA, WASHINGTON
(509) 575-8990

MONITORING WELL LOCATIONS AND SAMPLE RESULTS
MAID O'CLOVER
1802 E. NOB HILL BLVD, YAKIMA, WA

DRAWN BY: AKV
DATE: 5-5-92
JOB NO. 9116.4

Maid o Clover
E. Nob Hill
Yak LUST

TER SEC.
5N, R-19E, ...M.



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LEAD	<0.005	<0.005	0.007	<0.005	0.008	<0.005

SCALE : 1" = 40'

FIGURE 1

PLSA ENGINEERING-SURVEYING-PLANNING
YAKIMA, WASHINGTON
(509) 575-6990

MONITORING WELL LOCATIONS AND SAMPLE RESULTS
MAID O'CLOVER
1802 E. NOB HILL BLVD, YAKIMA, WA

DRAWN BY: AKV
DATE: 6-5-92
JOB NO. 91164

CHRISTINE GREGOIRE
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
3601 W. Washington • Yakima, Washington 98903-1164 • (509) 575-2800

February 12, 1991

To: File

From: Tony Valero TV

Subject: Site visit to:
Maid O'Clover, 1802 S 18 St., Yakima, and
Gilstrap Residence, and
Kite Residence

On February 11, 1991, John Wietfeld and I (Tony Valero), visited the subject sites. Upon arriving at the Maid O'Clover (2:28 pm), we discovered that drilling had started. Jeff Martin of ESE was there and informed us that they were going to drill three monitoring wells each to a depth of 55 feet, and they were going to screen 50 feet. Drilling on the first well was in progress, they drilled to 50 feet and broke the shoe, they did contact groundwater at 16'. Jeff informed us that NO signs of contamination were apparent: visually, olfactory or via an organic analyzer (HNu), either in the soil or the groundwater. The drilling method being employed is known as "ODEX".

We arrived at the Cecil Gilstrap (she's a lady) residence at ~2:50 pm, petroleum (gasoline?) odors were evident as soon as we entered her house. Using the TIP meter we measured ~2000 ppm under the floorboards covering her well. Ambient readings in the basement averaged ~100 ppm, and ~50 ppm in the main living area of her house.

We arrived at the Ferman Kite residence at ~3:20 pm. No detectable petroleum odors were present in the main floor or the basement. However, upon removing the floor board covering the shallow hand dug well (water at ~12'), petro (gas?) odors were readily detectable, we lowered the TIP ~3-4 feet into the shaft and obtained a reading of ~280 ppm.

We concluded this site visit at 3:58 pm.

TV:pd

CHRISTINE GREGOIRE
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
3601 W. Washington • Yakima, Washington 98903-1164 • (509) 575-2800

February 6, 1991

Jeff Loudon
202 South Fifth Avenue
Yakima, WA 98902

RE: Maid O'Clover, 1802 South 18th Street, Yakima, WA

Dear Mr. Loudon:

Regarding a suspected or known contaminated site, and under the general authority of the Model Toxics Control Act (MTCA), RCW 70.105D, the following took place:

Washington Department of Ecology (WDOE) received a phone call on January 28, 1991 regarding odors of petroleum fumes in the basements of two nearby residences. Local fire department personnel obtained readings of 100% LEL (Lower Explosion Limit). LEL is defined as the minimum concentration of the material in air which will ignite on contact with an ignition source. In summary, **explosive** concentrations of gasoline fumes were present in at least one of these homes. County health officials recommended sealing of the wells and ventilation. As of February 4, 1991 gasoline odors were still present. We believe the subject facility may be the source of these findings, as you have indicated that you have experienced an estimated release of 50-100 gallons of unleaded gasoline.

WDOE's major concern relevant to this project deals with the potential for groundwater contamination, the migrating fumes, and the timeliness with which you intend to respond. Section 173-340-450 of the MTCA (enclosed) specifically mandates removal of free product "as soon as possible" after discovery. Due to the existence of explosive limits of gasoline fumes in nearby residences I will stress that **immediate action** needs to be taken. In this instance, an immediate response (within 2-3 days) of the occurrence would have been preferred.

Your obligations for notification, pollution prevention, cleanup, and liabilities are well described in federal law 40 CFR, RCW 90.48, RCW 70.105D, and WAC 173-340. Failure to follow the regulations can lead to fiscal liabilities in any future property transfer.

You are certainly encouraged to proceed with cleanup, as well as to keep us informed by submitting the required reports in accordance

with WAC 173-340-450. We can and will provide limited consultation, and will publish notice of your cleanup in the State Site Register. Remember that contaminated groundwater always presents the need for rapid site stabilization, and that Ecology may step in at any time should an inadequately addressed environmental hazard become apparent. Ecology may also issue an Order as provided in RCW 70.105D.050 requiring remedial action. If you fail to comply with this Order, you may be liable for:

- Up to three times the amount of costs incurred by the state; and
- A civil penalty of up to twenty-five thousand dollars for each day the party refuses to comply.

As of the date of this letter, actions to recover free product or to stabilize the site had not yet commenced. I strongly urge that actions be taken immediately. Feel free to call me at (509) 454-4327 with any questions.

Sincerely,

Tony Valero
Site Inspector
Toxics Cleanup Program

TV:vw

Enc: PCS Booklet
WAC-173-340
70.105D RCW

TIGER OIL FILE
YAK CTY

IN THE SUPERIOR COURT OF THE STATE OF WASHINGTON FOR YAKIMA COUNTY

CHARLES EVANS, et al,

Plaintiffs,

vs.

TIGER OIL CO., a Washington corporation,

Defendant and Third-Party Plaintiff,

vs.

B & C EQUIPMENT CO., a Washington corporation,

Third-party Defendant and Third-Party Plaintiff,

vs.

PHIL EELS et ux, et al,

Third-Party Defendants.

No. 80 2 02063 2

AFFIDAVIT OF JAMES MILTON

STATE OF WASHINGTON)
) ss
County of Yakima)

JAMES MILTON, being first duly sworn on oath, deposes and says:

That I am 37 years of age and am the district supervisor in the Environmental Quality Section for the Department of Ecology, which is a department of the state of Washington.

I have a Bachelors Degree in civil engineering from the University of Washington and a Masters Degree in sanitary engineering from the University of Washington. My specialty is environmental quality of water and water treatment.

That in connection with my duties with the Department of Ecology I had occasion in July, August and September of 1980 to investigate water pollution or water contamination and complaints

LAW OFFICES OF
WALTER B. DAUBER
RICHARD H. BARTHELD
419 NORTH 2ND STREET

in the southeast section of Yakima and, in particular, in the vicinity of South 17th Street, south of Nob Hill, which is south and east of a certain Exxon station commonly known as Tiger Oil located near 17th and East Nob Hill.

The first thing which I did was to visit people in this area who had complaints regarding petroleum products in their water system. We plotted these complaints on a map. We were able to determine from our investigation that in 1962 there had been an old oil spill at a Signal oil station which, in 1962, was at the same location where the Exxon station is now situated.

That from a well driller who had drilled wells in the early 60's; we were able to determine which new wells had been drilled subsequent to the 1962 oil spill from the Signal station.

From information which we received concerning the general ground water flow, and from the new wells drilled in 1962, we were able to determine that the present complaints of contamination followed the same line as the new wells which were drilled in 1962.

This information, together with the opening of the new Exxon station and the timing of the complaints, led me to believe that the source of the petroleum product which was entering the ground was from the Exxon station. Upon forming this opinion, we requested that Yakima County supervise the inspection of the Exxon station tanks and system for leaks.

That during the inspection I visited the Tiger Oil station on almost a daily basis for a period of approximately three weeks. During this period of time I witnessed the saturated ground under the piping at the Tiger Oil station. The ground was saturated with gasoline. The ground was very sandy and rocky, which permits gas to travel downward until it hits the water level and then travels laterally or horizontally on top of the water.

That in my professional opinion, the travel of underground

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WALTER B. DAUBER
RICHARD H. BARTHELD
413 NORTH 2ND STREET
YAKIMA, WASHINGTON 98901

water in this area is from the northwest to the southeast, or otherwise put, in a general direction from the Exxon station to the homes of the complainants, who are plaintiffs in the above-encaptioned case.

In my professional opinion, based upon my knowledge, training and investigation, I feel that the gasoline which invaded the premises of the complainants, originated from the Exxon station owned by Tiger Oil, which is located on 17th Street and East Nob Hill in Yakima.

Further affiant sayeth naught.

_____

SUBSCRIBED AND SWORN TO before me this _____ day of July, 1981.

_____

Notary Public in and for the State of Washington, residing at Yakima.

LAW OFFICES OF
WALTER B. DAUBER
RICHARD H. BARTHELD
413 NORTH 2ND STREET

below residences

By KATE MYRA
Of the Herald-Republic

A large quantity of gasoline continues to float below a residential area of East Nob Hill Boulevard despite the fact the source of the leak was found and repaired earlier this week.

County building inspectors found three breaks in gasoline lines at the Exxon service station on East Nob Hill Boulevard. A large break was found in the unleaded gasoline line and two smaller breaks in the regular line.

All three leaks were repaired by Wednesday afternoon.

The Department of Ecology began efforts that day to try and recover the spilled fuel, which is floating on top of the area's groundwater. A 40-foot well was drilled between the station at the home of Hazel Marts across the streets. Marts' basement, along with basements in other homes on 17th Street, is filled with highly explosive fumes.

A portable pump was used Thursday to try to pump the contaminated water up out of the service station well. But Jim Milton, district supervisor for the Department of Ecology's environmental quality section, said the method was not as successful as he had hoped it would be.

"The quantity (of fuel) recovered was not very impressive," Milton said.

Milton checked the water in the well Friday and said eight inches of gasoline was floating on top of the water, which indicated a large amount of gasoline is still floating through the neighborhood on top of the groundwater.

The gasoline has plagued residents in a three-block area south of the service station for about a month. Like Marts' basement, other basements in the area are filled with gasoline fumes while others are unable to use their water because of gasoline mixed in with it.

The president of Tiger Oil, which operates the Exxon station, hired a Seattle environmental firm Friday to try to speed the process of getting the fuel out of the water.

Milton said Friday a 5-foot by 10-foot hole was dug near the well and a 24-inch culvert placed in it.

The hole will be filled with gravel, and representatives of the Seattle firm are bringing over a special pump to separate the gasoline from the water.

Milton said the gravel-filled hole would act like a drain and the pump would be placed in the culvert. He said they are hoping the water will flow into the hole and pool there.

Milton said the recovery work could begin Friday night or this morning.

(Staff photo by Rod Hanson)

Work began Friday on new efforts to recover fuel

DEPT OF ECOLOGY
Received
SEP 28 2004
CENTRAL REGION OFFICE

EBI CONSULTING
PROJECT #24-8092

PHASE II LIMITED SUBSURFACE INVESTIGATION REPORT

Maid O
1802 East Nob Hill Boulevard
Yakima, Washington 98901

July 29, 2004

Prepared for:

AMRESCO Commercial Finance, LLC
412 East Parkcenter Boulevard, Suite 300
Boise, Idaho 83706

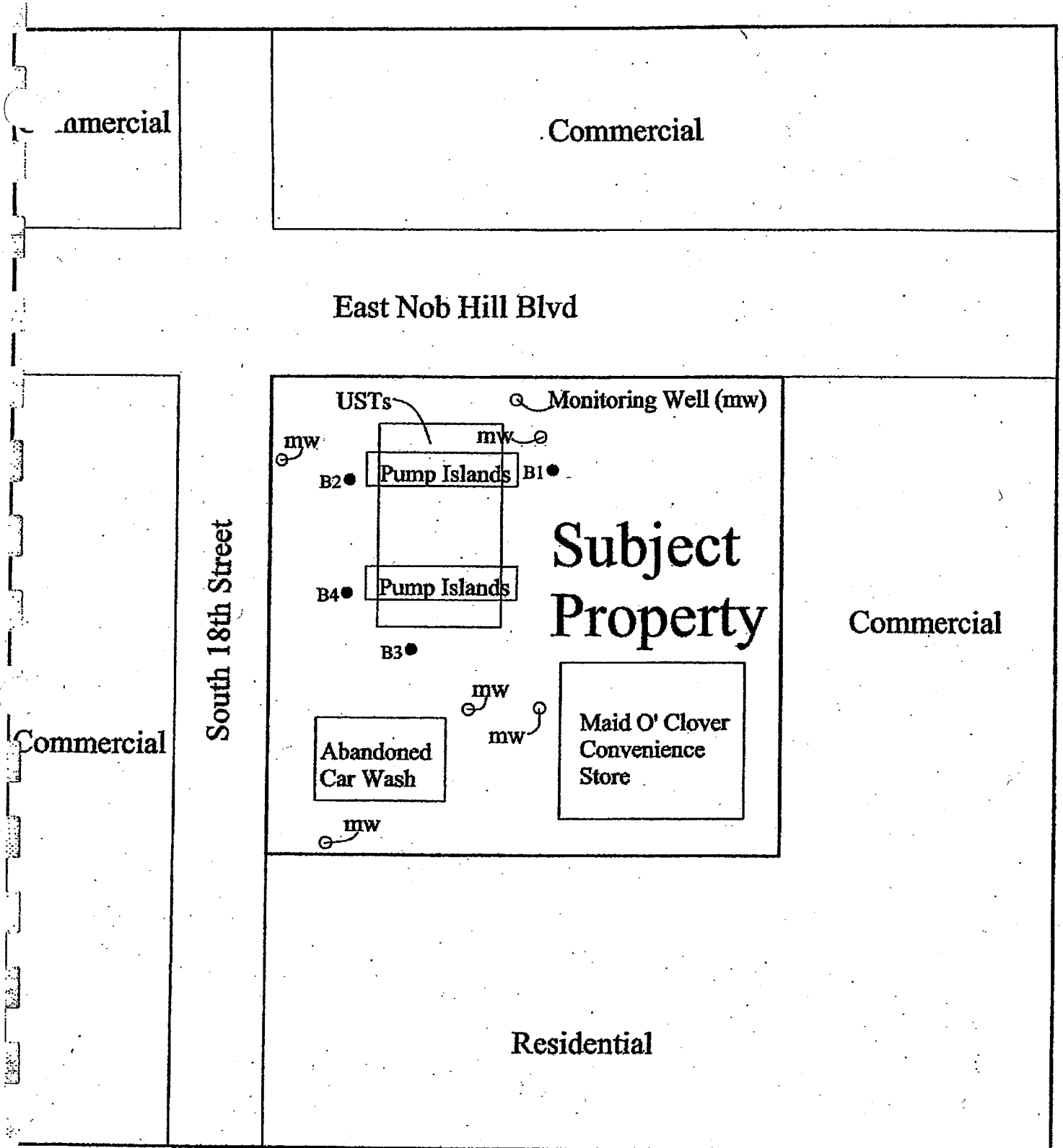
Sample#	Depth (Feet)	Moisture (H-M-L)	PID (PPM)	Soil Description
B1-4	3-4	L	0.3	GM-Olive Brown coarse gravels w/med grained sand & fines
B1-8	7-8	L	0.6	GM-Olive Brown coarse gravels w/med grained sand & fines
B1-12	11-12	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-4	3-4	L	0.2	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-8	7-8	L	0.1	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-12	11-12	L	0.2	GM-Olive Brown coarse gravels w/med grained sand & fines
B3-4	3-4	L	0.3	GM-Light Brown coarse gravels w/med grained sand & fines
B3-8	7-8	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B3-12	11-12	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-4	3-4	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-8	7-8	L	0.1	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-12	11-12	L	0.3	GM-Olive Brown coarse gravels w/med grained sand & fines

Notes: *Groundwater was encountered at 13 feet bgs in all of the borings.

EBI CONSULTING

Soil Boring Log
Field Readings

Project Name/Number: Maid O/24-8092
Location: 1802 East Nob Hill Blvd, Yakima, WA
Driller/ESN
Type: Direct Push/Geoprobe
Date: July 15, 2004
EBI Scientist: Travis E. Maurer
Boring: 1 to 4



EBI CONSULTING

Figure 3: Site Plan

Maid O
1802 East Nob Hill Blvd
Yakima, Washington

N

Not To Scale

DRAFT

RECEIVED
DEC 21 1992
DEPARTMENT OF ECOLOGY
CENTRAL REGION OFFICE

MAID O'CLOVER
1802 EAST NOB HILL BOULEVARD
YAKIMA, WASHINGTON

December 16, 1992

WASHINGTON STATE
DEPARTMENT OF HEALTH
OFFICE OF TOXIC SUBSTANCES
HAZARDOUS WASTE SECTION

DRAFT

Site Description

The Maid O'Clover Facility, at 1802 E. Nob Hill Boulevard, Yakima Washington, is located in an area of residential and commercial properties. Two 6,000 gallon capacity gasoline underground storage tanks, and two 10,000 gallon capacity gasoline underground storage tanks are located on the property. Convenience stores and service stations operating underground storage tanks containing petroleum hydrocarbon products for retail sale are present throughout the area.

Potential Public Health Problem

In January 1991, petroleum odors were reported in residential basements located south of the facility. A site assessment investigation conducted by Environmental Science & Engineering, Inc. (ESE) indicated the presence of petroleum contamination in the soil and groundwater at the site. In addition domestic wells at residences adjacent to the site have shown petroleum contamination.

Environmental Contamination

Three monitoring wells were installed on-site to characterize the extent of the contamination in the soil and groundwater. Samples were analyzed for total recoverable petroleum hydrocarbons (TPH) and volatile organic compounds (VOC's). None of the soil samples collected contained TPH or VOC concentrations above the laboratory limit of detection. Groundwater samples did contain TPH and VOC levels above laboratory detection limits and above Model Toxic Control Act (MTCA) cleanup standards.

Listed in the following tables are contaminants of concern associated with the Maid O'Clover facility. TPH was not evaluated separately because the threat posed by TPH is represented by the contaminants of concern benzene, ethylbenzene, toluene, and xylene. Contaminants of concern are selected from the sampling data by comparing the maximum contaminant concentrations to media specific screening values. The screening values are developed or utilized by the Agency for Toxic Substances and Disease Registry (ATSDR) to evaluate health effects of contaminants commonly found at hazardous waste sites. Screening values used in this investigation to determine noncarcinogenic and carcinogenic contaminants of concern include Reference Dose Media Evaluation

Guides (RMEGs), and Cancer Risk Evaluation Guides (CREGs). Contaminants of concern are not necessarily contaminants that will cause adverse health effects from exposures, rather contaminants that will be further evaluated in the Exposure Pathways section of this Health Investigation.

RMEGs are calculated from EPA's Reference Dose (RFD), and are estimated contaminant concentrations at which daily exposure would be unlikely to result in noncarcinogenic health effects. In addition to containing a toxicity component, the RMEGs also contain an exposure component that is based on the amount of contaminated water or soil that an individual ingests per day. Because water consumption and soil ingestion vary widely in different segments of the population, RMEG values are calculated for a range of exposures rather than for a single, arbitrary exposure value. Exposure to contaminated water or soil is usually greater in children than in adults because children typically ingest more water and soil per unit of body weight than adults. Therefore, at sites were both children and adults may be present, RMEG values derived for children are usually used because they represent the more highly exposed population.

CREGs are estimated contaminant concentrations at which exposure would unlikely result in more than one excess cancer in one million persons exposed for a lifetime of 70 years. CREG's are calculated from EPA cancer slope factors, and exposure variables such as ingestion rate and body weight.

TABLE 1
VOC Concentrations In On-Site Groundwater Sample

Contaminant	Concentration µ/L	Screening Value	
		µ/L	Source
Benzene	ND-3,200	1.2	CREG
Toluene	ND-6,200	2,000	*RMEG
Ethylbenzene	ND-280	1,000	*RMEG
Total Xylenes	ND-11,000	20,000	*RMEG

* Screening Value for a child's exposure
µ/L- Micrograms per Liter or Parts per Billion (ppb)
ND- Not Detected

Data Gaps

The groundwater flow direction has not been accurately evaluated but is believed to be to the southeast. No testing was done to clearly identify the source of petroleum vapors in the neighboring residences. The site is in the vicinity of at least one other documented petroleum release and other past spills may have contributed to the vapor concentrations.

Because the nature and extent of groundwater contamination is not well defined, additional data is necessary to confirm the actual risk to people's health posed by site-related contaminants.

In preparing this health investigation, our Department relies on the information provided in the referenced documents. We assume that adequate quality assurance and quality control measures were followed regarding chain of custody, laboratory procedures, and data reporting. The analyses, conclusions, and recommendations in this health investigation are valid only if the referenced documents are complete and reliable.

Physical And Other Hazards

No physical or other hazards are associated with the site.

Exposure Pathways

An exposure pathway is the process by which an individual is exposed to contaminants that originate from a source of contamination. A pathway consists of five elements: a source of contamination, an environmental medium in which the contaminants may be present or may migrate, points of human exposure, routes of human exposure such as inhalation, ingestion or dermal absorption, and an exposed population. A completed exposure pathway exists if all five of the elements of an exposure pathway are present and exposure to the contaminant has occurred in the past, is currently occurring, or will occur in the future. A potential exposure pathway exists when one or more of the five elements are missing, but indications are that exposure could have occurred in the past, could be occurring now, or could occur in the future. A pathway can be eliminated if one or more of the elements is known not to exist or the pathway is unlikely to occur.

DRAFT

Completed Exposure Pathways: Potentially harmful contaminants have been identified in the soil and groundwater at the site. Workers at the site, residents of the area and employees and customers of nearby businesses could have been exposed to toxic vapors through inhalation (Table 2).

Past, present, and future exposure from contaminated groundwater in private wells used for domestic supply represents a completed exposure pathway. Residents using contaminated water for domestic purposes may be exposed to benzene, toluene and xylene through ingestion of drinking water, inhalation of water vapors and dermal absorption. Inhalation exposure can occur as these compounds volatilize from contaminated water into indoor air during household activities such as showering, bathing, or dishwashing. Residents are currently supplied bottled water for drinking and cooking so the ingestion pathway has been eliminated. The scheduled extension of a municipal water system to the residents will eliminate the inhalation and dermal routes of exposure (Table 2).

TABLE 2 EXPOSURE PATHWAYS

SOURCE	MEDIUM	POINT OF EXPOSURE	ROUTE OF EXPOSURE	EXPOSED POPULATION	TIME	TYPE OF PATHWAY
Gasoline Spill	Water	Private Wells	Ingestion Inhalation Dermal Absorption	Residents	Past, Present and Future	Completed
Gasoline Spill	Air	Maid O' Clover Site	Inhalation	Workers, Residents	Past	Completed

DRAFT

DRAFT

Community Health Concerns

There are no known community health concerns regarding this site at this time.

Conclusions

Groundwater beneath the Maid O'Clover site is contaminated with potentially harmful levels of the VOC's benzene, toluene, and xylene (Table 1). Residences with a contaminated domestic water supply are currently supplied bottled water for drinking and cooking, which eliminated the ingestion pathway. Exposure to low concentrations of VOC's may currently be occurring through dermal absorption and inhalation. The scheduled extension of the municipal water system to residences in the area will eliminate these routes of exposure. At this time the site poses no immediate public health threat to the known exposed population as a result of short-term, low level exposure to VOC's.

Public Health Recommendations

1. Remediation of the site should continue.

2. Residents should continue to use bottled water for drinking and cooking purposes until they have been connected to the municipal water system.

Preparer of Report

Milo Straus (206) 586-9120 SCAN 321-9120
Public Health Advisor
Washington State Department of Health
Office of Toxic Substances
Hazardous Waste Section

DRAFT

Distribution

Michael Spencer
Washington State Department of Ecology
Toxics Cleanup Program
Olympia, WA 98504-7600

Mark Peterschmidt
Washington State Department of Ecology
Central Regional Office
106 South 6th Avenue
Yakima, WA 98902-3387

Don Steinmetz
Director, Environmental Health
Yakima Health District
104 North First Street
Yakima, WA 98901

References

ATSDR Toxicological Profile, Benzene 1989

ATSDR Toxicological Profile, Ethylbenzene 1990

ATSDR Toxicological Profile, Toluene 1989

ATSDR Toxicological Profile, Xylene 1990

Environmental Science & Engineering, INC. March 25, 1991. Results of a Site Assessment Investigation at Maid O'Clover Facility, 1802 E. Nob Hill Boulevard, Yakima Washington.

HSDB (Hazardous Substance Data Base) for Benzene, Ethylbenzene, Toluene and Xylene

Peterschmidt, Mark. Washington State Department of Ecology Warm Ranking Method Route Score Summary and Ranking Calculation Sheet, Maid O'Clover 1802 E. Nob Hill Boulevard Yakima.

The Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
106 South 6th Ave. • Yakima, Washington 98902-3387 • (509) 575-2490

December 7, 1992

CERTIFIED MAIL
P 868 668 764

Mr. Jeff Louden
Maid O'CLover
202 South 5th Avenue
Yakima, WA 98902

Dear Mr. Louden:

RE: Notice of Potential Liability for the Release of Hazardous Substances Under the Model Toxics Control Act

Chapter 70.105D RCW, the Model Toxics Control Act (Act), requires the Department of Ecology (Ecology) to provide written notice to all persons it believes to be potentially liable for the release of hazardous substances.

It is Ecology's understanding that you, Mr. Jeff Louden, are an owner of the Maid O'Clover located at South 18th Street and East Nob Hill Boulevard, and that credible evidence exists indicating that a release (or threatened release) of a hazardous substance has occurred at this site. The evidence supporting these findings is as follows:

Ecology records on the Maid O'Clover site:

Phone call from Ecology to Jeff Louden on 1/31/91. Mr. Louden reported a leak of approximately 2000 gallons over a period of one month due to a blown turbine gasket.

A Site Assessment Investigation was conducted by Environmental Science & Engineering, Inc. from February 11, 1991 to March 25, 1991. The site assessment was initiated by the Washington State Department of Ecology after they received reports of gasoline odors in residential basements to the south of the Maid O'Clover site. Three monitoring wells were installed and soil and groundwater samples were taken. Groundwater samples taken at monitoring well MW-3 showed concentrations of TPH and other hydrocarbons at levels above MTCA clean-up level guidelines.

The Washington State Department of Ecology performed a Site Hazard Assessment and the site was subsequently ranked.

As a result of this evidence, you have been identified as a person potentially liable for the release of petroleum products at the Maid O'Clover site located at 1802 East Nob Hill Boulevard in Yakima, WA.

Under the Act, you have 30 calendar days from the receipt of this letter to submit written comments to Ecology on your proposed status as a

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potentially liable person (PLP). Following a review of those comments, Ecology will make a final written determination of your status. In the interest of expediting this process without admitting liability, you may wish to accept your status as a Potentially Liable Person by waiving your right to the 30 days notice and comment period. This may be accomplished by signing and returning the enclosed form or sending a letter containing similar information to Ecology.

If you are aware of any other persons who may be potentially liable for the release at this site, Ecology encourages you to provide us with their identity and the reason you believe they are potentially liable.

Ecology intends to conduct the following actions at the site:

> Issue an administrative order to do an Remedial Investigation/Feasibility Study(RI/FS). The purpose of the RI/FS is to determine the full extent of the contamination and provide possible alternatives for remediation.

Ecology's policy is to work cooperatively with PLPs. Please note that cooperating with Ecology in planning or conducting remedial actions at the site is not an admission of guilt or liability and could ultimately result in a more efficient, prompt, and effective cleanup.

To date, Ecology has not proposed any other persons to be found potentially liable.

Enclosed, please find a copy of Chapter 70.105D RCW and Chapter 173-340 WAC for your information. If you have questions, please feel free to contact me at (509) 454-7836.

Sincerely,

John Wietfeld

John Wietfeld
Site Manager
Department of Ecology
Central Regional Office

JOW:JA:vw
g:plpmaid

Enc: Chapter 70.105D RCW
Chapter 173-340 WAC
Waiver Form

Dynamart Nob Hill Station
1802 East Nob Hill Blvd
Yakima

UST 100160

T

[redacted]

CRO-Yakima
100160

Underground Storage Tank

FS # 506

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Check those activities which apply: ☒ Tightness Testing Checklist
☐ Retrofit/Repair checklist
☐ Cathodic Protection Checklist

DEPT OF ECOLOGY Received DEC 15 2005 CENTRAL REGION OFFICE

The attached Underground Storage Tank (UST) checklists are required for each of the listed activities. The checklists certify that Tightness Testing, Retrofit/Repair and/or Cathodic Protection activities are performed and conducted in accordance with Chapter 173.360 WAC. **Complete this form and the corresponding UST checklist for each activity checked above.**

See back of form for instructions.

1. UST SYSTEM LOCATION AND OWNER

UBI Number: _____ (UBI # from Master Business License)

Site ID Number: [redacted] (Available from Ecology if tank is registered)

Site/Business Name: [redacted]

Site Address: 1802 E Nob Hill Blvd (Street) Yakima (County)

[redacted] (City) Washington (State) 98901 (Zip+4 (required))

Telephone: 509-452-8957

UST Owner/Operator: Coleman Oil

Mailing Address: 335 Mill Rd (Street) P.O. Box

Lewiston (City) ID (State) 83501 (Zip+4 (required))

Telephone: 208-799-2019

2. FIRM PERFORMING WORK

Service Company: Northwest Tank & Environmental Services, Inc.

Service Co. Address: 17407 59th Ave SE (Street) Snohomish (County)

Snohomish (City) Washington (State) 98926 (Zip+4 (required))

Certified Supervisor: Richard Wilson

Address: 17407 59th Ave SE (Street) P.O. Box

Snohomish (City) Washington (State) 98926 (Zip+4 (required))

IFCI Certification Number: X 5120193-43 Certification issue Date (Month/Year): 10-5-04 X

Telephone: (425) 742-9622

Ecology is an equal opportunity and affirmative action employer
For special accommodation needs, please contact the Underground Storage Tanks Section at (360) 407-7170.

ECY 010-160 (01/97) Copy - 1

DEC 06 2005
ECOLOGY

4

100160

Underground Storage Tank

Tightness Testing Checklist

Site ID #

Site Address 1802 E Nob Hill Blvd

City Yakima

For more than four UST systems, you may photocopy this form prior to completing.

I. TIGHTNESS TESTING METHOD

Date of Test: 10/26/2005

1 Tightness testing method(s) used (indicate if more than one method was used):

Test method name/version ☒ Accurite (Line) ☐ 2001 / P(Tank) ☐ 2000 / P(Tank) ☐ 2000 / U

Test method Manufacturer ☒ Services and Training Corp(Line)

☐ USTest - Sound Services (Tank) ☒ VMI LDT 890(leak detector)

Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested up to the 95% full level. When underfill volumetric testing methods are used, the tank must be; 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a nonvolumetric method which meets performance standards, for tightness testing.

2. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (required for single wall tanks): n/a

3. Method used for release detection:
- ☐ Weekly manual gauging
- ☐ Daily manual inventory control
- ☒ Automatic tank gauging (ATG)
- ☐ Interstitial monitoring
- ☐ Other (describe)

4. Reason for conducting tightness test:
- ☒ Required for release detection requirement
- ☐ Bring temporarily closed tanks back into service
- ☐ Tank or piping repair
- ☐ Other (describe)

5. Type of test conducted:
- ☐ Tank tightness test only
- ☒ Line tightness test only
- ☐ Total system test (tank and lines tested togeth

6. Test method type:
- ☐ Overfill volumetric
- ☐ Underfill volumetric
- ☐ Nonvolumetric
- ☒ Volumetric

II. TEST METHOD CHECKLIST

The following items shall be initialed by the Certified Supervisor whose signature appears on this form.

	Yes	No	N/A*
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g., detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm of no	☑	☐	☐
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being set up and	☑	☐	☐
3. Was the product level in the tank during the test within the limitations of the test methods performance standards?	☐	☐	☑
4. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (required for single wall tanks)	☐	☐	☑
5. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? (Note: Tank owner must report a failed tightness test as a suspected release within 24 hours to UST staff at the appropriate	☐	☐	☑

* Item not applicable

Site ID #
Site Address 1802 E Nob Hill Blvd
City Yakima

Tightness Testing Checklist (continued)

III. TANK INFORMATION CHECKLIST

	Tank 1	Tank 2	Tank 3	Tank 4
1. Tank ID# (tank name registered with Ecology)				
2. Date installed				
3. Tank capacity in gallons	0	0	0	0
4. Last substance stored	Regular	Midgrade	Premium	Diesel
5. Number of tank compartments				
6. Tank type: (S) single wall; (D) double wall; (P) partitioned				
7. Is overfill device present? (Yes/No)				
8. Percentage of product in tank during test? (Volume % must comply with test method certification requirements)				
9. The test method used can detect a leak of how many GPH?	+/- 0.05	+/- 0.05	+/- 0.05	+/- 0.05
10. The numerical tank test results are? (In gallons per hour)				
11. Based on evaluating test results and conducting any retesting as necessary as per test protocol to obtain conclusive test results; the test results are?				

IV. Line Information

	Line 1	Line 2	Line 3	Line 4
1. Piping type: (S) single wall; (D) double wall	S	S	S	S
2. Pump type: (T) turbine; (S) suction	T	T	T	T
3. (a) If turbine, is leak detector present (Yes/No)	YES	YES	YES	YES
(1) If present, was lead seal intact? (Yes/No N/A)	N/A	N/A	N/A	N/A
(2) Line leak detector results? (Pass/Fail)	PASS	PASS	PASS	PASS
(b) If suction, check valve located at? (T) tank (P) pum	N/A	N/A	N/A	N/A
4. The numerical line test results are? (gallons per hour)	0	0	0	0
5. Line tightness test results? (Pass/Fail)	PASS	PASS	PASS	PASS

* Inconclusive test results for tanks or piping will not be considered as valid tightness test for the purposes of complying with UST release detection regulations.

V. REQUIRED SIGNATURES

I hereby attest, that I have been the Certified Supervisor present during the above listed testing activities, and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures, pertaining to underground storage tanks.

Persons submitting false information are subject to formal enforcement and/or penalties under Chapter 173.360 WAC.

10/26/2005		Richard Wilson
Date	Signature of Certified Supervisor	Printed Name
Date	Signature of Tank Owner/Authorized Representative	Printed Name

RECEIVED
NOV 12 2004
ECOLOGY

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Underground Storage Tank

100160

Check those activities which apply: ☒ Tightness Testing Checklist
☐ Retrofit/Repair checklist
☐ Cathodic Protection Checklist

DEPT. OF ECOLOGY
Received
NOV 17 2004
CENTRAL REGION OFFICE

The attached Underground Storage Tank (UST) checklists are required for each of the listed activities. The checklists certify that Tightness Testing, Retrofit/Repair and/or Cathodic Protection activities are performed and conducted in accordance with Chapter 173.360 WAC. **Complete this form and the corresponding UST checklist for each activity checked above.**

See back of form for instructions.

1. UST SYSTEM LOCATION AND OWNER

UBI Number: _____ (UBI # from Master Business License)

Site ID Number: 100160 (Available from Ecology if tank is registered)

Site/Business Name: Nob Hill Chevron

Site Address: 1802 E Nob Hill Blvd (Street) Yakima (County)

Yakima (City) Washington (State) 98901 (Zip+4 (required))

Telephone: 509-452-8957

UST Owner/Operator: Coleman Oil

Mailing Address: 335 Mill Rd (Street) (P.O. Box)

Lewiston (City) ID (State) 83501 (Zip+4 (required))

Telephone: 208-799-2019

2. FIRM PERFORMING WORK

Service Company: Northwest Tank & Environmental Services, Inc.

Service Co. Address: 1720 100th Pl SE, Suite 101 (Street) Snohomish (County)

Everett (City) Washington (State) 98208-3826 (Zip+4 (required))

Certified Supervisor: Erik Snyder

Address: 1720 100th Pl SE, Suite 101 (Street) (P.O. Box)

Everett (City) Washington (State) 98208-3826 (Zip+4 (required))

IFCI Certification Number: 32-US-32025440 Certification Issue Date (Month/Year): 5/19/2003

Telephone: (425) 742-9622

Ecology is an equal opportunity and affirmative action employer
For special accommodation needs, please contact the Underground Storage Tanks Section at (360) 407-7170.

100160

Underground Storage Tank

Tightness Testing Checklist

Site ID # _____

Site Address 1802 E Nob Hill Blvd

City Yakima

For more than four UST systems, you may photocopy this form prior to completing.

I. TIGHTNESS TESTING METHOD **Date of Test:** 10/15/2004

1 Tightness testing method(s) used (indicate if more than one method was used):

Test method name/version ☒ Accurite (Line) ☐ 2001 / P(Tank) ☐ 2000 / P(Tank) ☐ 2000 / U

Test method Manufacturer ☒ Services and Training Corp(Line)

☐ USTest - Sound Services (Tank) ☒ VMI LDT 890(leak detector)

Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested up to the 95% full level. When underfill volumetric testing methods are used, the tank must be; 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a nonvolumetric method which meets performance standards, for tightness testing.

2. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (required for single wall tanks): n/a

3. Method used for release detection:
- ☐ Weekly manual gauging
- ☐ Daily manual inventory control
- ☒ Automatic tank gauging (ATG)
- ☐ Interstitial monitoring
- ☐ Other (describe)

4. Reason for conducting tightness test:
- ☒ Required for release detection requirement
- ☐ Bring temporarily closed tanks back into service
- ☐ Tank or piping repair
- ☐ Other (describe)

5. Type of test conducted:
- ☐ Tank tightness test only
- ☒ Line tightness test only
- ☐ Total system test (tank and lines tested togeth

6. Test method type:
- ☐ Overfill volumetric
- ☐ Underfill volumetric
- ☐ Nonvolumetric
- ☒ Volumetric

II. TEST METHOD CHECKLIST

The following items shall be initialed by the Certified Supervisor whose signature appears on this form.

	Yes	No	N/A*
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g., detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm of no	☒	☐	☐
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being set up and	☒	☐	☐
3. Was the product level in the tank during the test within the limitations of the test methods performance standards?	☒	☐	☐
4. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (required for single wall tanks)	☐	☐	☒
5. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? (Note: Tank owner must report a failed tightness test as a suspected release within 24 hours to UST staff at the appropriate	☐	☐	☒

* Item not applicable

Site ID #
Site Address 1802 E Nob Hill Blvd
City Yakima

Tightness Testing Checklist (continued)

III. TANK INFORMATION CHECKLIST

	Tank 1	Tank 2	Tank 3	Tank 4
1. Tank ID# (tank name registered with Ecology)				
2. Date installed				
3. Tank capacity in gallons	0	0	0	0
4. Last substance stored	Regular	Midgrade	Premium	diesel
5. Number of tank compartments				
6. Tank type: (S) single wall; (D) double wall; (P) partitioned				
7. Is overfill device present? (Yes/No)				
8. Percentage of product in tank during test? (Volume % must comply with test method certification requirements)				
9. The test method used can detect a leak of how many GPH?	+/- 0.05	+/- 0.05	+/- 0.05	+/- 0.05
10. The numerical tank test results are? (In gallons per hour)				
11. Based on evaluating test results and conducting any retesting as necessary as per test protocol to obtain conclusive test results; the test results are?				

IV. Line Information

	Line 1	Line 2	Line 3	Line 4
1. Piping type: (S) single wall; (D) double wall	s	s	s	s
2. Pump type: (T) turbine; (S) suction	t	t	t	t
3. (a) If turbine, is leak detector present (Yes/No)	yes	yes	yes	yes
(1) If present, was lead seal intact? (Yes/No N/A)	n/a	n/a	n/a	n/a
(2) Line leak detector results? (Pass/Fail)	pass	pass	pass	pass
(b) If suction, check valve located at? (T) tank (P) pum	n/a	n/a	n/a	n/a
4. The numerical line test results are? (gallons per hour)	0	0	0	0
5. Line tightness test results? (Pass/Fail)	pass	pass	pass	pass

* Inconclusive test results for tanks or piping will not be considered as valid tightness test for the purposes of complying with UST release detection regulations.

V. REQUIRED SIGNATURES

I hereby attest, that I have been the Certified Supervisor present during the above listed testing activities, and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures, pertaining to underground storage tanks.

Persons submitting false information are subject to formal enforcement and/or penalties under Chapter 173.360 WAC.

Date	Signature of Certified Supervisor	Printed Name
10/15/2004	[signature]	Erik Snyder
11-9-2004	James C Cach	JAMES C. CACH

Date — Signature of Tank Owner/Authorized Representative — Printed Name

Northwest Tank & Environmental Services, Inc.

Line Test Data Sheet & Leak Detector Data Sheet

Location: Nob Hill Chevron

1802 E Nob Hill Blvd

Yakima WA 98901

Test Date: 10/15/2004

Operator: Erik Snyder

	Reg Master	Midgrade	Super	Diesel
PUMP TYPE	Red Jacket	Red Jacket	Red Jacket	Red Jacket
LEAK DETECTOR MANUFACTURER	VMI	VMI	VMI	VMI
LEAK DETECTOR MODEL #	99ld2200	99ld2200	99ld2200	99ld2200
ISOLATION MECHANISM (Dispenser) Circle one	solenoid	solenoid	solenoid	solenoid
ISOLATION MECHANISM (TANK) Circle one	isolation plug	isolation plug	check valve	check valve
TEST PRESSURE = 150%	45 psi	45 psi	45 psi	45 psi
INITIAL CYLINDER LEVEL	0	0	0	0
FINAL CYLINDER LEVEL	0	0	0	0
LEAK RATE=ICL - FCL	0	0	0	0
TIME STARTED	830	830	830	830
TIME COMPLETED	900	900	900	900
TOTAL TEST TIME	30 min	30 min	30 min	30 min
PIPING (PASS / FAIL) Circle One	pass	pass	pass	pass
LEAK DETECTOR (PASS / FAIL) Circle One	pass	pass	pass	pass

Comments:

Northwest Tank & Environmental Services, Inc.

Monitor Certification Inspection

This letter certifies that the monitor system installed on site is capable of conducting a precision tank test, equipped with annular space sensors or another approved sensor as a form of release detection in accordance with Washington State Department of Ecology UST regulations WAC 173-360-345. The tanks are required to have a .2 GPH passing tank test each month, interstitial monitoring, or other approved means as stated in the regulation. The last twelve passing test results must be saved and available for inspection. The sensors installed in the system must be operational and a visual or audible alarm must sound when sensors are in alarm.

Job Site: **Nob Hill Chevron**
Address 1802 E Nob Hill Blvd
City Yakima
State WA
Zip Code 98901

Date/Time of Test: 9:00 AM
Friday, October 15, 2004

TYPE AND MODEL OF MONITOR Veeder Root
SERIAL NUMBER 1523 SOFTWARE VERSION _____

SYSTEM FUNCTION:

WHAT TYPE OF TANK RELEASE DETECTION IS THE MONITOR SET UP FOR?
.2GPH TEST x INTERSTITIAL SENSOR _____

IS THE MONITOR CAPABLE OF CONDUCTING A TEST AT .2 GPH?
YES x NO _____

IS THE MONITOR SET UP TO CONDUCT THE TEST...
MANUALLY _____ AUTOMATICALLY x

DOES THE ALARM HORN FUNCTION PROPERLY?
YES _____ NO x

IS THE MONITOR ACCESSIBLE AND VISIBLE TO STATION PERSONNEL?
YES x NO _____

SENSOR FUNCTION:

ANNULAR SPACE
NUMBER OF SENSORS 0 PROPERLY POSITIONED? YES _____ NO _____
ALARM SOUND WHEN TRIPPED? Yes _____ No _____

TURBINE SUMPS
NUMBER OF SENSORS 0 PROPERLY POSITIONED? YES _____ NO _____
ALARM SOUND WHEN TRIPPED? Yes _____ No _____

DISPENSER SUMPS
NUMBER OF SENSORS 0 PROPERLY POSITIONED? YES _____ NO _____
ALARM SOUND WHEN TRIPPED? Yes _____ No _____

LIQUID PROBES
NUMBER OF PROBES 4 PRINT OUT MATCH STICK READINGS? YES x NO _____
FLOATS CLEAN? Yes _____ No _____

COMMENTS _____

REGULATION FOLLOW-UP:

ARE THE LAST TWELVE PASSING TEST RESULTS ON FILE AND ACCESSIBLE?
YES _____ NO x N/A _____

Technician:

Erik Snyder — *Print Name*
Signature
10/15/2004 — *Date*

MASTER LICENSE SERVICE
DEPARTMENT OF LICENSING
PO BOX 9048
OLYMPIA, WA 98507-9048
Telephone: (360) 664-1400

175-1221. 1
2004

Nob Hill Station

600 176 223 1/1 10015
UBI NUMBER
Robert S Coleman Jr
OWNER NAME (Please print clearly)
Coleman Oil Company
FIRM NAME

RECEIVED
JUN 29 2004
ECOLOGY

UNDERGROUND STORAGE TANK ADDENDUM

(For new tanks and change in ownership)

This form must accompany a Master Application.
Please type or print clearly in dark ink.

DEPT OF ECOLOGY Received JUL 06 2004 CENTRAL REGION OFFICE

Keep a copy of the completed form and the instruction sheet for future reference.

I TANK SITE INFORMATION (See page 1and 2 of the instructions for proper codes.)

1. Tank Site Location Address:

1802 Nob Hill Blvd
Location Address

City	State	Zip Code	County
Yakima	WA	98901	Yakima

2a. Operator Information (if other than owner):

Name: SAME
Mailing Address:
City / State / Zip Code:
Phone:

2b. Contact Person for site:

Name: Jim Cach
Mailing Address: PO Box 1308
City / State / Zip Code: Lewiston ID 83501
Phone: (888) 799-2000

3. Ecology UST ID (if known)............ 1 0 0 1 6 0

4. This application is for: old 600 430 669 1/13

- [x] A change of ownership of an existing site (complete sections I & V)
- [ ] A new facility with underground storage tanks (complete sections I, II, III, IV,& V)
- [ ] A new tank installation at existing site (complete sections I, II, III, IV & V)

5. Tank Site Use Type (NAICS Code)............ 4 4 7 1 9 0

6. Financial Responsibility Limits Category............ 3

7. Method of Compliance with Financial Responsibility Requirement............ A

8. Attach the appropriate proof of Financial Responsibility as described in the instructions.

9. If you would like a technical assistance inspection, please check this box............ [ ]

100160

If you need assistance through the Telecommunications Device for the Deaf, call TTY (360) 664-8885. To request this document in an alternate format for the visually impaired, call (360) 664-1400.

Printed on Recycled Paper

UBI #600 176 223

IV INSTALLERS CERTIFICATION

I hereby certify that the installation of the new underground tank system listed on this form was completed according to all applicable regulations, codes and standards and that a certified supervisor was on site during all required installation activities.

Signature of Certified Supervisor

Company Name

Printed name

Certification Number

Address

City State Zip Code

Phone Number (including area code)

Date Signed

V OWNER/OPERATOR AGREEMENT TO TERMS AND CONDITIONS OF UST PERMIT

Owners and operators of petroleum underground storage tanks (USTs) must:

- Maintain proof of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damages caused by petroleum releases. [RCW 90.76.020(1)(g), WAC 173-360-400 through 499]
- Provide release detection for petroleum USTs that can detect a release from any part of the tank and piping; must be installed, calibrated, operated and maintained according to manufacturers' instructions; and must meet the appropriate performance requirements in WAC 173-360-345 or 355. [RCW 90.76.020(1)(d), WAC 173-360-330 through 355]
- Operate and maintain corrosion protection systems in accordance with WAC 173-360-320 for new or upgraded steel tanks and piping installed after December 22, 1988. [RCW 90.76.020(1)(a)(b), WAC 173-360-300 through 325]
- Provide for spill and overfill protection for new or unpgraded tanks installed after December 22, 1988, that are filled with more than 25 gallons at a time. [RCW 90.76.020(1)(a)(b), WAC 173-360-300 through 315]
- Report, investigate and clean up any spills and overfills in accordance with WAC 173-360-375. [RCW 90.76.020(1)(e), WAC 173-360-360 through 375, WAC 173-360-399]
- Use a certified UST supervisor to perform all UST service activities: repairs, tank installation, retrofitting, tank decommissioning, tightness testing, corrosion protection installation and testing and site assessment. [RCW 90.76.020(5), WAC 173-360-600 through 630]
- Notify Ecology of intent to install a new UST system at least 30 days, but not more than 90 days, prior to installation. [RCW 90.76.020(1)(a), WAC 173-360-200(1)]
- Permanently close a tank after it has been temporarily closed or out of service for 12 months and does not meet the performance standards for new UST systems or the upgrading requirements in WAC 173-360-310(2)(3). [RCW 90.76.020(1)(f), WAC 173-360-380 through 385]
- Notify Ecology at least 30 days before beginning either a permanent closure or a change in service. [RCW 90.76.020(1)(c), WAC 173-360-385]
- Have a certified UST supervisor conduct a site assessment at permanent closure or a change-in-service as required under WAC 173-360-385 through 395. [RCW 90.76.020 (1)(f), WAC 173-360-600 through 630]
- Do not operate an UST or accept delivery of regulated substances without a valid permit. [RCW 90.76.020(1)(c), WAC 173-360-130]
- Notify the Department of Ecology within 30 days after bringing any newly installed UST system into use. [RCW 90.76.020(1)(c), WAC 173-360-200(2)]
- Violations of these permit conditions may result in permit revocation and/or civil penalty up to $5,000 for each tank involved, for each day of the violation. [RCW 90.76.080, WAC 173-360-670, WAC 173-360-130(8)]

As the owner and/or operator of the Underground Storage Tank (UST) system described on this application, I certify that I have read and agree to abide by the foregoing terms and conditions, and that I understand that having an UST permit requires that I comply with the provisions contained in chapter 90.76 RCW, the statute governing USTs, and its implementing regulations, chapter 173-360 WAC.

Signature of Underground Storage Tank Owner

6-17-04
Date Signed

Robert S. Coleman JR
PRINTED Name of Person Signing Above

Coleman Oil Co.

335 Mill Road • P. O. Box 1308 • Lewiston, ID 83501
Facsimile (208) 799-2008 • Telephone (208) 799-2019
Email - jim@colemanoil.com

Date: June 23, 2004

To: WA Department of Licensing

ATTN: Brenda

Regarding the underground storage tank addendum for the following sites:

202 S. 5th Avenue
Yakima

1802 Nob Hill Blvd
Yakima

501 Grant Road
E. Wenatchee

Please mark questions 6 with a "3" and question 7 with an "A" for all sites.

Thank You,

James C. Cach

James C. Cach, Wholesale Operations Mgr

MASTER LICENSE SERVICE
DEPARTMENT OF LICENSING
PO BOX 9048
OLYMPIA, WA 98507-9048
Telephone: (360) 664-1400

068-936.2
2004

602.74 2867 2
UBI NUMBER

OWNER NAME (Please print clearly)

FIRM NAME

CRO - Yakima
100160

RECEIVED
MAY 27 2004
ECOLOGY

UNDERGROUND STORAGE TANK ADDENDUM

(For new tanks and change in ownership)

This form must accompany a Master Application.
Please type or print clearly in dark ink.

DEPT OF ECOLOGY
Received
JUN 07 2004
CENTRAL REGION OFFICE

Keep a copy of the completed form and the instruction sheet for future reference.

I TANK SITE INFORMATION (See page 1and 2 of the instructions for proper codes.)

1. Tank Site Location Address:

1802 E. Nob Hill Blvd
Location Address

Yakima — City
WA — State
98901 — Zip Code
Yakima — County

2a. Operator Information (if other than owner):

Sung Soo Kim
Name
1100 SW 300th Place
Mailing Address
Federal Way WA 98023
City State Zip Code
206-228-3606
Phone

2b. Contact Person for site:

Name

Mailing Address

City State Zip Code

Phone

3. Ecology UST ID (if known)....... 1 0 0 1 6 0

4. This application is for: L00430 UA1/2

- [x] A change of ownership of an existing ... (complete sections I & V)
- [ ] A new facility with underground storage tanks (complete sections I, II, III, IV,& V)
- [ ] A new tank installation at existing site (complete sections I, II, III, IV & V)

5. Tank Site Use Type (NAICS Code)....... 4 4 5 1 1 0

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100160

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Printed on Recycled Paper

UBI # _____

IV INSTALLERS CERTIFICATION

I hereby certify that the installation of the new underground tank system listed on this form was completed according to all applicable regulations, codes and standards and that a certified supervisor was on site during all required installation activities.

Signature of Certified Supervisor	Company Name
Printed name	Certification Number
Address	City / State / Zip Code
Phone Number (including area code)	Date Signed

V OWNER/OPERATOR AGREEMENT TO TERMS AND CONDITIONS OF UST PERMIT

Owners and operators of petroleum underground storage tanks (USTs) must:

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- Violations of these permit conditions may result in permit revocation and/or civil penalty up to $5,000 for each tank involved, for each day of the violation. [RCW 90.76.080, WAC 173-360-670, WAC 173-360-130(8)]

As the owner and/or operator of the Underground Storage Tank (UST) system described on this application, I certify that I have read and agree to abide by the foregoing terms and conditions, and that I understand that having an UST permit requires that I comply with the provisions contained in chapter 90.76 RCW, the statute governing USTs, and its implementing regulations, chapter 173-360 WAC.

Sung Soo Kim — 3/1/04

Signature of Underground Storage Tank Owner — Date Signed

Sung Soo Kim

PRINTED Name of Person Signing Above

Underground Storage Tank

RECEIVED
DEC 0 8 2003
Ecology

100160

DEPT OF ECOLOGY Received DEC 12 2003 CENTRAL REGION OFFICE

Check those activities which apply: ☒ Tightness Testing Checklist
☐ Retrofit/Repair checklist
☐ Cathodic Protection Checklist

The attached Underground Storage Tank (UST) checklists are required for each of the listed activities. The checklists certify that Tightness Testing, Retrofit/Repair and/or Cathodic Protection activities are performed and conducted in accordance with Chapter 173.360 WAC. **Complete this form and the corresponding UST checklist for each activity checked above.**

See back of form for instructions.

1. UST SYSTEM LOCATION AND OWNER

UBI Number: _____ (UBI # from Master Business License)

Site ID Number: _____ (Available from Ecology if tank is registered)

Site/Business Name: Maid O' Clover #202

Site Address: 1802 E Nob Hill Blvd (Street) Yakima (County)

Yakima (City) Washington (State) 98901 (Zip+4 (required))

Telephone: 509-452-8957

UST Owner/Operator: Maid O'Clover

Mailing Address: 207 S 6th Ave (Street) (P.O. Box)

Yakima (City) Washington (State) 98902 (Zip+4 (required))

Telephone: 509-248-3562 Ext. 112

2. FIRM PERFORMING WORK

Service Company: Northwest Tank & Environmental Services, Inc.

Service Co. Address: 1720 100th Pl SE, Suite 101 (Street) Snohomish (County)

Everett (City) Washington (State) 98208-3826 (Zip+4 (required))

Certified Supervisor: Richard Wilson

Address: 1720 100th Pl SE, Suite 101 (Street) (P.O. Box)

Everett (City) Washington (State) 98208-3826 (Zip+4 (required))

IFCI Certification Number: 5120193-U3

Certification issue Date (Month/Year): 3/29/2003

Telephone: (425) 742-9622

Ecology is an equal opportunity and affirmative action employer
For special accommodation needs, please contact the Underground Storage Tanks Section at (360) 407-7170.

ECY 010-160 (01/97) Copy

100160

Checklist Instructions

After completing these checklist(s), return to: **Underground Storage Tank Section**
Department of Ecology
P.O. Box 47655
Olympia, WA 98504-7655

Please Read Carefully

Checklist(s) are to be completed by a Certified UST Supervisor and submitted to Ecology within 30 days of the tank work being performed. The Owner/Operator is responsible for ensuring that the work is performed and that the checklist(s) are submitted to Ecology. Mark the appropriate box(es) for Tank Tightness Testing, Retrofitting/Repair, and/or Cathodic Protection. Complete the appropriate checklist for the UST Activity performed. On each checklist, complete the Site ID number and/or the UBI number, site address and site city on each page (if copied on a single side). Submit the coversheet that contains the site and owner information with the checklist. The checklist should show all tank information that was worked on. For more than four UST systems, please photocopy the checklist prior to completing. Be sure that the Owner or the Authorized Representative **AND** Certified Supervisor sign the appropriate checklist.

Cover Sheet

Site and Owner Information
Fill in the site and owner information. Include the Ecology Site ID number, if known, and/or UBI number (Uniform Business Identification) from the master business license. Also be sure to provide telephone number so that any problems can be resolved quickly.

Firm and Certified Supervisor Information
List the firm performing the work as well as the Certified Supervisor's name and Certification Number. Ask to see the Supervisor's Tightness Testing, Retrofitting/Repair and/or Cathodic Protection IFCI Certification and make sure that the Supervisor signs the appropriate checklist for work performed.

Please Note Individuals performing services MUST be certified by the International Fire Code Institute (IFCI), *or other recognized association by which they demonstrate* appropriate knowledge pertaining to UST's or have passed another qualifying exam

Checklists

The Tightness Testing Checklist shall be completed and signed by a Certified Tightness Testing Supervisor. The supervisor shall be on site during all tank tightness testing activities. Up to four tanks per site may be reported on a single checklist; additional tanks will require additional checklists. A Tightness Testing Checklist must be completed for each UST system (tank and associated piping) being tested as well as following most retrofit/repairs.

The tank owner or operator must report a failed tightness test as a suspected release to UST staff at the appropriate Ecology regional office within 24 hours.

The Retrofitting/Repair Checklist shall be completed and signed by a IFCI Certified Installation and Retrofitting Supervisor. The Certified Supervisor shall be on site when all retrofitting/repair activities are

The Cathodic Protection Checklist shall be completed and signed by an IFCI Certified Cathodic Protection Supervisor. The Certified Supervisor shall be on site when all cathodic protection activities are being conducted. Retrofitting and/or repairs to a Cathodic Protection system should be indicated on the Cathodic Protection Checklist.

Underground Storage Tank

Tightness Testing Checklist

Site ID # _____
Site Address 1802 E Nob Hill Blvd
City Yakima

For more than four UST systems, you may photocopy this form prior to completing.

I. TIGHTNESS TESTING METHOD

Date of Test: 9/25/2003

1 Tightness testing method(s) used (indicate if more than one method was used):

Test method name/version ☑ Accurite ☐ 2001 / P ☐ 2000 / P ☐ 2000 / U

Test method Manufacturer ☑ Services and Training Corp

☐ USTest - Sound Services

Note: A tank must be tested up to the product level limited by the overfill prevention device. If an overfill prevention device is not installed, a tank must be tested up to the 95% full level. When underfill volumetric testing methods are used, the tank must be; 1) filled with product to the 95% full level or 2) the portion of the tank above the product level must be tested using a nonvolumetric method which meets performance standards, for tightness testing.

2. Indicate the method used to determine if groundwater was present above the bottom of the tank during the test (required for single wall tanks): N/A

3. Method used for release detection:
- ☐ Weekly manual gauging
- ☐ Daily manual inventory control
- ☑ Automatic tank gauging (ATG)
- ☐ Interstitial monitoring
- ☐ Other (describe)

4. Reason for conducting tightness test:
- ☑ Required for release detection requirement
- ☐ Bring temporarily closed tanks back into service
- ☐ Tank or piping repair
- ☐ Other (describe)

5. Type of test conducted:
- ☐ Tank tightness test only
- ☑ Line tightness test only
- ☐ Total system test (tank and lines tested togeth

6. Test method type:
- ☐ Overfill volumetric
- ☐ Underfill volumetric
- ☑ Nonvolumetric
- ☐ Volumetric

II. TEST METHOD CHECKLIST

The following items shall be initialed by the Certified Supervisor whose signature appears on this form.

	Yes	No	N/A*
1. Has the tightness testing method used been demonstrated to meet the performance standard specified in the UST rules for the conditions under which the test was conducted? (e.g., detecting a 0.10 gallon per hour leak rate with probability of detection of at least 95% and a probability of false alarm of no	☑ KC	☐	☐
2. Have all written testing procedures developed by the manufacturer of the testing equipment and method been followed while the test was being set up and	☑ KC	☐	☐
3. Was the product level in the tank during the test within the limitations of the test methods performance standards?	☐	☐	☑ KC
4. If groundwater was present above the bottom of the tank, have the testing procedures accounted for its presence? (required for single wall tanks)	☐	☐	☑ N/A
5. If the tightness test is considered a failed test, has the owner/operator been notified of the test results? (Note: Tank owner must report a failed tightness test as a suspected release within 24 hours to UST staff at the appropriate	☐	☐	☑ KC

* Item not applicable

Site I.
Site Address 1802 E Nob Hill Blvd
City Yakima

Tightness Testing Checklist (continued)

III. TANK INFORMATION CHECKLIST

	Tank 1	Tank 2	Tank 3	Tank 4
1. Tank ID# (tank name registered with Ecology)				
2. Date installed				
3. Tank capacity in gallons	Reg	Mid	Sup	Die
4. Last substance stored				
5. Number of tank compartments				
6. Tank type: (S) single wall; (D) double wall; (P) partitioned				
7. Is overfill device present? (Yes/No)				
8. Percentage of product in tank during test? (Volume % must comply with test method certification requirements)				
9. The test method used can detect a leak of how many GPH?	+/- 0.05	+/- 0.05	+/- 0.05	+/- 0.05
10. The numerical tank test results are? (In gallons per hour)				
11. Based on evaluating test results and conducting any retesting as necessary as per test protocol to obtain conclusive test results; the test results are?				

IV. Line Information

	Line 1	Line 2	Line 3	Line 4
1. Piping type: (S) single wall; (D) double wall	S	S	S	S
2. Pump type: (T) turbine; (S) suction	T	T	T	T
3. (a) If turbine, is leak detector present (Yes/No)	yes	yes	yes	yes
(1) If present, was lead seal intact? (Yes/No N/A)	N/A	N/A	N/A	N/A
(2) Line leak detector results? (Pass/Fail)	PASS	PASS	PASS	PASS
(b) If suction, check valve located at? (T) tank (P) pump	N/A	N/A	N/A	N/A
4. The numerical line test results are? (gallons per hour)	0.0	0.0	0.0	0.0
5. Line tightness test results? (Pass/Fail)	PASS	PASS	PASS	PASS

* Inconclusive test results for tanks or piping will not be considered as valid tightness test for the purposes of complying with UST release detection regulations.

V. REQUIRED SIGNATURES

I hereby attest, that I have been the Certified Supervisor present during the above listed testing activities, and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures, pertaining to underground storage tanks.

Persons submitting false information are subject to formal enforcement and/or penalties under Chapter 173.360 WAC.

Date	Signature of Certified Supervisor	Printed Name
9/25/2003	[signature]	Richard Wilson
12/3/03	Jane Lawrence	Jane Lawrence

Date — Signature of Tank Owner/Authorized Representative — Printed Name

CENTRAL REGIONAL OFFICE
UST INSPECTION FORM

DATE: 4-10-02 TIME:

SITE NAME: Mark O Clover	SITE ID NUMBER: 10116D TAG NUMBER: AD622
SITE ADDRESS: Nob Hill	VAILID PERMITS: YES ☐ NO ☐ EXPIRES:
SITE CITY: Yakima	NUMBER OF TANKS: 4
CONTACT/OWNER:	COUNTY Yakima
TELEPHONE: 248-3562	UBI NUMBER:

INSPECTION TYPE:

CLOSURE / DECOM ☐	NEW INSTALL / RETRO-REPAIR: ☐	RELEASE DETECTION: ☐
TIGHTNESS TEST: ☐		TECH. ASSISTANCE: ☐

FIRM NAME / PRODUCT DISTRIBUTOR:	TELEPHONE:
FIRM ADDRESS:	
SUPERVISOR:	IFCI #:
SITE ASSESSOR:	

TANK INFORMATION:

	TANK NO.	TANK NO.	TANK NO.	TANK NO.	TANK NO.
1. Tank ID: (i.e. Tank Name)	1	2	3	4	
Product (UNL / DSL)					
Temporarily out of Use					
Installed after 5/7/85					
Installed after 12/22/88					
2. Tank Capacity (gallons)					
3. Tank Age or Install Date					

4. Tank Construction Material and Protection (Check all that apply)					
Steel (Bare Steel or Asphalt Coated Steel)					
Tank With Lined Interior					
Steel Clad With Fiberglass					
Fiberglass Reinforced Plastic (FRP)	X	X	X	X	
Cathodically Protected at installation					
Cathodically Protection Added After					
Double walled or Secondary Barrier					
Other					

5. Piping Construction Materials and Protection Associated With Tank (Check all that apply)					
Bare Steel or Galvanized Steel					
Fiberglass Reinforced Plastic	X	X	X	X	
Cathodically Protected at Installation					
Cathodically Protection Add after Inst.					
Piping /Double walled\ Secondary barrier					
Piping Not Used With Tank					
Flexible Piping					
Other					

6. Type of Piping System (i.e. type of pumping system; check appropriate)					
Suction					
Pressurized	X	X	X	X	

7. Leak Detection Used for each tank (Check all that apply)					
Manual Tank Gauging					
Inventory Control					
Statistical Inventory Reconciliation (SIR)					
Tightness Testing					
Automatic Tank Gauging					
Interstitial Monitoring					
Ground Water Monitoring					
Vapor Monitoring					
None					
Other (Specify)					
None Inventory Only					

8. Leak Detection for Piping Associated With Each Tank (Check all that apply)					
Line Testing (Annual)	X	X	X	X	
Line Testing (Three Year) (suction)					
Suction Check Value located (tank/pump)					
Line Leak Detector (~~pressurized piping~~)					
LLD present	X	X	X	X	
LLD last tested					
Statistical Inventory Control (SIR)					
Ground Water Monitoring					
Vapor Monitoring					
Interstitial Monitoring (Sumps)					
NONE					
Other (Specify)					

9. Spill and Overfill Protection (Tanks that receive more than 25 gallons at one filling)					
Catchment Basin or Overflow Bucket	X	X	X	X	
Automatic Shutoff Device					
Ball Float Valve					
Overfill Alarm					
None					
Unknown					

ADDITIONAL TANK INFORMATION

Proof of Financial Responsibility? (WAC 173-360-400):
Were UST records made available? [R\D, TT, Inventory]:
Corrosion: Test / Records available N/A

NOTES: TL 5-250 not doing, STP needs to do Manuals and W test - install date was 87 needs to meet upgrade for Release detection for Tanks

Inspector: _____

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR

APR 10, 2000
10:49 AM

TANK 1
REGULAR UNLEADED
6886 GALLONS FUEL
59.64 INCHES FUEL
0.0 INCHES WATER
55.3 DEGREES F

TANK 2
UNLEADED 2
2239 GALLONS FUEL
25.76 INCHES FUEL
2.4 INCHES WATER
55.1 DEGREES F

TANK 3
DIESEL
1150 GALLONS FUEL
22.95 INCHES FUEL
3.0 INCHES WATER
53.6 DEGREES F

TANK 4
SUPER UNLEADED
2651 GALLONS FUEL
40.91 INCHES FUEL
0.0 INCHES WATER
56.1 DEGREES F

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR

APR 10, 2000
10:50 AM

TANK 1
REGULAR UNLEADED
6886 GALLONS FUEL
59.64 INCHES FUEL
0.0 INCHES WATER
55.3 DEGREES F

TANK 2
UNLEADED 2
2237 GALLONS FUEL
25.75 INCHES FUEL
2.4 INCHES WATER
55.1 DEGREES F

TANK 3
DIESEL
1150 GALLONS FUEL
22.94 INCHES FUEL
3.0 INCHES WATER
53.6 DEGREES F

TANK 4
SUPER UNLEADED
2651 GALLONS FUEL
40.92 INCHES FUEL
0.0 INCHES WATER
56.1 DEGREES F

START LEAK MONITOR

SINGLE TANK TEST

VEEDER-ROOT
TLS-250
TANK LEVEL SENSOR

APR 10, 2000
10:50 AM

TANK 1
REGULAR UNLEADED
6887 GALLONS FUEL
59.65 INCHES FUEL
0.0 INCHES WATER
55.3 DEGREES F

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Proof of Financial Responsibility Due!

Mensaje Importante!

중요사항 알려드림!

Financial responsibility is now required for all petroleum underground storage tanks. As a tank owner or operator you need to show proof of financial responsibility by January 1, 1995.

Since 1990, Ecology has implemented the financial responsibility compliance deadlines exclusively through education and technical assistance. Ecology will continue this emphasis. However, inspectors will now step up enforcement using field tickets, formal orders, and penalties to obtain compliance with the requirements. Those who have not provided proof by January will be targeted for inspections.

Any further delay in enforcement is unfair to those who have already complied and poses risk to human health and the environment. Owners and operators who cannot demonstrate compliance with this requirement will not be issued tank permits in 1995.

If you have any questions regarding the financial responsibility requirements, please contact Dale Jensen at (206) 407-7176.

Please fill out the lower portion of this form with all the information requested.
Refold the entire letter with Ecology's address showing on the outside.
DO NOT SEPARATE, TEAR OR CUT THIS SHEET. Tape or seal closed and drop this form in the mail. You do not need to put a stamp on it.

Method of Compliance with Financial Responsibility Requirement

Acceptable methods for compliance with the financial responsibility requirement are defined in WAC 173-360-410. Please indicate which of these methods is being used by checking the appropriate box below.

100158 100335
100159 100637
100160 000297
100334 000298
102460

☒	A.	Pollution liability insurance or risk retention coverage.
☐	B.	Self-Insured.
☐	C.	Financial Guarantee.
☐	D.	Surety bond.
☐	E.	Letter of Credit.
☐	F.	Trust fund.
☐	G.	Combination of methods. Please check all methods used.
☐	H.	State or Federal Government self-insured.
☐	I.	None.
☐	J.	Bond rating test.
☐	K.	Local government self-insured.
☐	L.	Government guarantee.
☐	M.	Maintenance of a local fund balance.

000299
000300
003380
102460

Insurer (if applicable). Please write in the name of your insurance coverage provider.

E	N	V	I	R	O	M	E	N	T	A	L		I	N	S	U	R	A	N	C	E		A	G	E	N	C	Y	

Policy Number (if applicable). Please write in your insurance policy number.

B	P	L	0	0	0	4	8	7				

Si necesita ayuda para interpretar este documento, favor de hablar con Antonio Valero al numero (509) 454-7833.

상기 양식에 대하여 의문이 있으시면 박헌석씨 1-800-822-3905 에게 연락하시기 바랍니다.

Ecology is an Equal Opportunity and Affirmative Action Employer. If you have special accommodation needs please contact the Toxics Cleanup Program at (206) 407-7212 (Voice) or (206) 407-7155 (TDD).

9/8/94

3/94 page, and fill in any missing/incorrect information in the corrected information column on the right.

1. TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
OWNER NUMBER:	00004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 60 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	

2. TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
SITE COUNTY:	YAKIMA	
CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	

3. TANK INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
TANK ID:	1	
TANK STATUS:	OPERATIONAL	
SUBSTANCE STORED:	LEADED GASOLINE	
TANK SIZE:	10000-19999 GALLONS	
INSTALLATION DATE:	06-19-1987	

4. TANK FEE INFORMATION

The Annual Fee is for the Period 7/01/94 - 6/30/95

Tanks that are temporarily closed will not receive a permit but are subject to annual tank fees. Payments should be made by check or money order - no cash please. Return update form and payment to the Department of Ecology, P.O. Box 5128, Lacey, WA 98503-0210, or use return envelope provided.

Disputes must be made in writing. If you have general questions, please call 1-800-826-7716 (Voice) or (206) 407-7155 (TDD)

ANNUAL FEE INFORMATION FOR ALL TANKS AT THIS SITE:

INVOICE NUMBER: UST48154 SITE NUMBER: 100160
4 TANKS AT $75.00 EACH: DUE FOR CURRENT YEAR: $300 : TOTAL DUE FOR ALL YEARS: $300
DATE DUE: JUNE 1, 1994

PREVIOUS YEARS' OUTSTANDING FEES:
1990: $0 1991: $0 1992: $0 1993: $0 1994: $0

5. OWNER MUST SIGN IN THIS BLOCK TO RECEIVE VALID PERMITS

SWORN STATEMENT: I hereby swear under penalty of law that, based on my knowledge of the tank identified by the tank ID number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statements may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE. Kristi Heilman
Name of UST owner or Authorized Representative

Kristi Heilman
Signature of UST Owner or Authorized Representative

7-11-94
Date Signed

509-248-3562
Telephone Number

(DO NOT DETACH - RETURN ALL PARTS OF THIS FORM TO ECOLOGY)

6/94 page and fill in any missing incorrect information in the corrected information column on the right

1. TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
OWNER NUMBER:	UB004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	

2. TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
SITE COUNTY:	YAKIMA	
CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	

3. TANK INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
TANK ID:	2	
TANK STATUS:	OPERATIONAL	
SUBSTANCE STORED:	UNLEADED GASOLINE	
TANK SIZE:	10000-19999 GALLONS	
INSTALLATION DATE:	06-19-1987	

4. TANK FEE INFORMATION

The Annual Fee is for the Period 7/01/94 - 6/30/95

Tanks that are temporarily closed will not receive a permit but are subject to annual tank fees. Payments should be made by check or money order - no cash please. Return update form and payment to the Department of Ecology, P.O. Box 5128, Lacey, WA 98503-0210, or use return envelope provided.

Disputes must be made in writing. If you have general questions, please call 1-800-826-7716 (Voice) or (206) 407-7155 (TDD)

ANNUAL FEE INFORMATION FOR ALL TANKS AT THIS SITE:

5. OWNER MUST SIGN IN THIS BLOCK TO RECEIVE VALID PERMITS

SWORN STATEMENT: I hereby swear under penalty of law that, based on my knowledge of the tank identified by the tank ID number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statements may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE. Kristi Heilman

Name of UST owner or Authorized Representative

Kristi Heilman

Signature of UST Owner or Authorized Representative

4-4-94 Date Signed

509-248-3562 Telephone Number

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6/94 ... page, and fill in any missing or incorrect information in the corrected information column on the right.

1. TANK OWNER INFORMATION

Current Information		Corrected Information (PRINT OR TYPE)
OWNER NUMBER:	U0004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	

2. TANK SITE INFORMATION

Current Information		Corrected Information (PRINT OR TYPE)
SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
SITE COUNTY:	YAKIMA	
CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	

3. TANK INFORMATION

Current Information		Corrected Information (PRINT OR TYPE)
TANK ID:	3	
TANK STATUS:	OPERATIONAL	
SUBSTANCE STORED:	UNLEADED GASOLINE	
TANK SIZE:	5000-9999 GALLONS	
INSTALLATION DATE:	06-19-1987	

4. TANK FEE INFORMATION

The Annual Fee is for the Period 7/01/94 - 6/30/95

Tanks that are temporarily closed will not receive a permit but are subject to annual tank fees. Payments should be made by check or money order - no cash please. Return update form and payment to the Department of Ecology, P.O. Box 5128, Lacey, WA 98503-0210, or use return envelope provided.

Disputes must be made in writing. If you have general questions, please call 1-800-826-7716 (Voice) or (206) 407-7155 (TDD)

ANNUAL FEE INFORMATION FOR ALL TANKS AT THIS SITE:

5. OWNER MUST SIGN IN THIS BLOCK TO RECEIVE VALID PERMITS

SWORN STATEMENT: I hereby swear under penalty of law that, based on my knowledge of the tank identified by the tank ID number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statements may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE. Kristi Heilman

Name of UST owner or Authorized Representative

Kristi Heilman — 4-1-94 — 509-248 3562

Signature of UST Owner or Authorized Representative — Date Signed — Telephone Number

(DO NOT DETACH - RETURN ALL PARTS OF THIS FORM TO ECOLOGY)

page, and fill in any missing or incorrect information in the corrected information column on the right.

1. TANK OWNER INFORMATIO

	Current Information	Corrected Information (PRINT OR TYPE)
OWNER NUMBER:	U0004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	

2. TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
SITE COUNTY:	YAKIMA	
CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	

3. TANK INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
TANK ID:	4	
TANK STATUS:	OPERATIONAL	
SUBSTANCE STORED:	DIESEL FUEL	
TANK SIZE:	5000-9999 GALLONS	
INSTALLATION DATE:	06-19-1987	

4. TANK FEE INFORMATION

The Annual Fee is for the Period 7/01/94 - 6/30/95

Tanks that are temporarily closed will not receive a permit but are subject to annual tank fees. Payments should be made by check or money order - no cash please. Return update form and payment to the Department of Ecology, P.O. Box 5128, Lacey, WA 98503-0210, or use return envelope provided.

Disputes must be made in writing. If you have general questions, please call 1-800-826-7716 (Voice) or (206) 407-7155 (TDD)

ANNUAL FEE INFORMATION FOR ALL TANKS AT THIS SITE:

5. OWNER MUST SIGN IN THIS BLOCK TO RECEIVE VALID PERMITS

SWORN STATEMENT: I hereby swear under penalty of law that, based on my knowledge of the tank identified by the tank ID number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statements may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE. Kristi Heilman

Name of UST owner or Authorized Representative

Kristi Heilman

Signature of UST Owner or Authorized Representative

6-14-94

Date Signed

509-248-3562

Telephone Number

DO NOT DETACH - RETURN ALL PARTS OF THIS FORM TO ECOLOGY!

UNDERGROUND STORAGE TANK INFORMATION UPDATE

Please check all of the information on this page to make sure it is correct. Make any changes on this page, and fill in any missing or incorrect information in the corrected information column on the right.

OWNER MUST SIGN THE BACK OF THIS FORM TO RECEIVE A VALID PERMIT

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	U0004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	
B. OWNER TYPE:	A - PRIVATE	[A] [B] [C] [D] [E] [F] [O]_____

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	
C. SITE TYPE:	D - CONVENIENCE STORE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]:_____

TANK INFORMATION

	Current Information	Corrected Information
		Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.
FEES PAID (If no, please call Ecology):		
1989-1990: YES	1990-1991: YES	
1991-1992: YES	1992-1993: YES	
1993-1994: PLEASE PAY ENCLOSED INVOICE		
A. TANK ID:	1	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:	06-19-1987	/ /
D. TANK SIZE:	E - 10000-19999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [F] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS:	1	[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	H - STATISTICAL INVENTRY	[A] [B] [C] [D] [E] [F] [G] [H]
I. TANK CORROSION PROTECTION:	D - CORR RESISTANT MATL	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	A - CATCHMENT BASIN	[A] [B] [C]
K. OVERFILL PREVENTION:	A - AUTOMATIC SHUTOFF	[A] [B] [C] [D] [E]
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [D] [E] [O]:_____
N. PUMPING SYSTEM	A - PRESSURIZED	[A] [B] [C] [D] [E]
O. PIPING RELEASE DETECTION:	N/A - *** UNKNOWN ***	[A] [B] [C] [D] [E] [F] [G] [H]
P. PIPING CORROSION PROTECTION:	C - CORR RESIST MATERIAL	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	A - LEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	A - MOTOR FUEL FOR VEHICLES	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

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UNDERGROUND STORAGE TANK INFORMATION UPDATE

Please check all of the information on this page to make sure it is correct. Make any changes on this page, and fill in any missing or incorrect information in the corrected information column on the right.

OWNER MUST SIGN THE BACK OF THIS FORM TO RECEIVE A VALID PERMIT

TANK OWNER INFORMATION

Current Information	Corrected Information *(PRINT OR TYPE)*
A. OWNER NUMBER: V000B4424 OWNER NAME: MAID O'CLOVER INC OWNER ADDRESS: 202 SO 5TH AVE YAKIMA, WA 98902-3436 OWNER PHONE: (509) 248-3562 B. OWNER TYPE: A - PRIVATE	[A] [B] [C] [D] [E] [F] [O]_____

TANK SITE INFORMATION

Current Information	Corrected Information *(PRINT OR TYPE)*
A. SITE NUMBER: 180160 SITE NAME: MAID O'CLOVER INC SITE ADDRESS: 1802 EAST NOB HILL YAKIMA, WA 98901-3663 B. CONTACT PERSON: GUY LOUDON CONTACT PHONE: (509) 248-3562 C. SITE TYPE: D - CONVENIENCE STORE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]:_____

TANK INFORMATION

Current Information	Corrected Information
FEES PAID (If no, please call Ecology): 1989-1990: YES 1990-1991: YES 1991-1992: YES 1992-1993: YES 1993-1994: PLEASE PAY ENCLOSED INVOICE	Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.
A. TANK ID: 2	
B. TANK STATUS: A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE: 06-19-1987	/ /
D. TANK SIZE: E - 10000-19999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL: C - FRP	[A] [B] [C] [D] [E] [F] [O]:_____
F. TANK CONSTRUCTION: A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS: 1	[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION: H - STATISTICAL INVENTRY	[A] [B] [C] [D] [E] [F] [G] [H]
I. TANK CORROSION PROTECTION: D - CORR RESISTANT MATL	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION: A - CATCHMENT BASIN	[A] [B] [C]
K. OVERFILL PREVENTION: A - AUTOMATIC SHUTOFF	[A] [B] [C] [D] [E]
L. PIPING MATERIAL: C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION: A - SINGLE WALL	[A] [B] [C] [D] [E] [O]:_____
N. PUMPING SYSTEM: A - PRESSURIZED	[A] [B] [C] [D] [E]
O. PIPING RELEASE DETECTION: X/A - *** UNKNOWN ***	[A] [B] [C] [D] [E] [F] [G] [H]
P. PIPING CORROSION PROTECTION: C - CORR RESIST MATERIAL	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED: B - UNLEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE: A - MOTOR FUEL FOR VEHICLES	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS: B - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD: A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

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UNDERGROUND STORAGE TANK INFORMATION UPDATE

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OWNER MUST SIGN THE BACK OF THIS FORM TO RECEIVE A VALID PERMIT

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	U0004424	[A] [B] [C] [D] [E] [F]
OWNER NAME:	MAID O'CLOVER INC	[O]_____
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	
B. OWNER TYPE:	A - PRIVATE	

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]
SITE NAME:	MAID O'CLOVER INC	[K] [L] [M] [N] [P] [Q] [R] [S] [T]
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	[O]:_____
B. CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	
C. SITE TYPE:	D - CONVENIENCE STORE	

TANK INFORMATION

	Current Information	Corrected Information
FEES PAID (If no, please call Ecology):		Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.
1989-1990: YES	1990-1991: YES	
1991-1992: YES	1992-1993: YES	
1993-1994: PLEASE PAY ENCLOSED INVOICE		
A. TANK ID: 3		
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:	06-19-1987	/ /
D. TANK SIZE:	D - 5000-9999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [F] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [D]:_____
G. COMPARTMENTS:	1	[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	H - STATISTICAL INVENTRY	[A] [B] [C] [D] [E] [F] [G] [H]
I. TANK CORROSION PROTECTION:	D - CORR RESISTANT MATL	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	A - CATCHMENT BASIN	[A] [B] [C]
K. OVERFILL PREVENTION:	A - AUTOMATIC SHUTOFF	[A] [B] [C] [D] [E]
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [D] [E] [O]:_____
N. PUMPING SYSTEM	A - PRESSURIZED	[A] [B] [C] [D] [E]
O. PIPING RELEASE DETECTION:	B(1)(A - *** UNKNOWN ***	[A] [B] [C] [D] [E] [F] [G] [H]
P. PIPING CORROSION PROTECTION:	C - CORR RESIST MATERIAL	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	B - UNLEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	A - MOTOR FUEL FOR VEHICLES	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

DO NOT DETACH - RETURN ALL PARTS OF THIS FORM TO ECOLOGY

UNDERGROUND STORAGE TANK INFORMATION UPDATE

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OWNER MUST SIGN THE BACK OF THIS FORM TO RECEIVE A VALID PERMIT

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	U0004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	
B. OWNER TYPE:	A - PRIVATE	[A] [B] [C] [D] [E] [F] [O]_____

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	GUY LOUDON	
CONTACT PHONE:	(509) 248-3562	
C. SITE TYPE:	D - CONVENIENCE STORE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]:_____

TANK INFORMATION

Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.

	Current Information	Corrected Information
FEES PAID (If no, please call Ecology):		
1989-1990: YES	1990-1991: YES	
1991-1992: YES	1992-1993: YES	
1993-1994: PLEASE PAY ENCLOSED INVOICE		
A. TANK ID:	4	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:	08-19-1987	/ /
D. TANK SIZE:	D - 5000-9999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [F] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS:	1	[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	H - STATISTICAL INVENTRY	[A] [B] [C] [D] [E] [F] [G] [H]
I. TANK CORROSION PROTECTION:	D - CORR RESISTANT MATL	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	A - CATCHMENT BASIN	[A] [B] [C]
K. OVERFILL PREVENTION:	A - AUTOMATIC SHUTOFF	[A] [B] [C] [D] [E]
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [D] [E] [O]:_____
N. PUMPING SYSTEM	A - PRESSURIZED	[A] [B] [C] [D] [E]
O. PIPING RELEASE DETECTION:	B/C/A - *** UNKNOWN ***	[A] [B] [C] [D] [E] [F] [G] [H]
P. PIPING CORROSION PROTECTION:	C - CORR RESIST MATERIAL	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	D - DIESEL FUEL	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	A - MOTOR FUEL FOR VEHICLES	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

DO NOT DETACH - RETURN ALL PARTS OF THIS FORM TO ECOLOGY

UNDERGROUND STORAGE TANK INFORMATION UPDATE

Please check all of the information on this page to make sure it is correct. Make any changes on this page, and fill in any missing or incorrect information in the corrected information column.

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	00284624	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	
B. OWNER TYPE:	-	[A] [B] [C] [D] [E] [F] [O]_____

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	160160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	Guy Loudow	
CONTACT PHONE:	509-248-3562	
C. SITE TYPE:	-	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]:_____

TANK INFORMATION

	Current Information	Corrected Information
A. TANK ID: 1	FEE PAID: YES	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:		6/91
D. TANK SIZE:	E - 10000-19999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS:		[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [H] [O]:_____
I. TANK CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	-	[A] [B] [C] [O]:_____
K. OVERFILL PREVENTION:	-	[A] [B] [C] [D] [E] [O]:_____
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	-	[A] [B] [C] [D] [E] [O]:_____
N. PRODUCT DELIVERY METHOD:	-	[A] [B] [C] [D] [E] [O]:_____
O. PIPING RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [O]:_____
P. PIPING CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	A - LEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	-	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.

SWORN STATEMENT: I hereby swear under penalty of law that, based on my review of the underground storage tank self-certification of compliance and tank information update and my knowledge of the tank identified by the above tank id number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statement may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE: Guy Loudon III Pres

Name and Official Title of UST Owner or UST Owner's Authorized Representative

Guy Loudon III

Signature of UST Owner or Authorized Representative

4/15/92

Date Signed

509-248-3562

Telephone Number

UNDERGROUND STORAGE TANK INFORMATION UPDATE

Please check all of the information on this page to make sure it is correct. Make any changes on this page, and fill in any missing or incorrect information in the corrected information column.

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	U0004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	[A] [B] [C] [D] [E] [F]
B. OWNER TYPE:	-	[O]_____

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	Guy Loudon	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]
CONTACT PHONE:	509-248-3562	[K] [L] [M] [N] [P] [Q] [R] [S] [T]
C. SITE TYPE:	-	[O]:_____

TANK INFORMATION

	Current Information	Corrected Information
		Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.
A. TANK ID: 2	FEE PAID: YES	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:		6/1/82
D. TANK SIZE:	E - 10000-19999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS:		[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [O]:_____
I. TANK CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	-	[A] [B] [C] [D]:_____
K. OVERFILL PREVENTION:	-	[A] [B] [C] [D] [E] [O]:_____
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	-	[A] [B] [C] [D] [E] [O]:_____
N. PRODUCT DELIVERY METHOD:	-	[A] [B] [C] [D] [E] [O]:_____
O. PIPING RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [O]:_____
P. PIPING CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	B - UNLEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	-	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

SWORN STATEMENT: I hereby swear under penalty of law that, based on my review of the underground storage tank self-certification of compliance and tank information update and my knowledge of the tank identified by the above tank id number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statement may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE: Guy Loudon III Pres.
Name and Official Title of UST Owner or UST Owner's Authorized Representative

Signature of UST Owner or Authorized Representative | Date Signed: 4/15/92 | Telephone Number: 509-248-3562

UNDERGROUN. STORAGE TANK INFORMAT. N UPDATE

Please check all of the infor on this page to make sure it is correc ake any changes on this page, and fill in any missing or incorrect information in the corrected information column.

TANK OWNER INFORMATION

Current Information		Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	UG004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248 3562	
B. OWNER TYPE:	-	[A] [B] [C] [D] [E] [F] [O] ________

TANK SITE INFORMATION

Current Information		Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	Guy Loudon	
CONTACT PHONE:	509-248-3562	
C. SITE TYPE:	-	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]: ________

TANK INFORMATION

Corrected Information: Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.

Current Information		Corrected Information
A. TANK ID: 3	FEE PAID: YES	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:		6/1/82
D. TANK SIZE:	D - 5000-9999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [O]: ________
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]: ________
G. COMPARTMENTS:		[1] [2] [3] [4] [O]: ________
H. TANK RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [H] [O]: ________
I. TANK CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]: ________
J. SPILL PREVENTION:	-	[A] [B] [C] [O]: ________
K. OVERFILL PREVENTION:	-	[A] [B] [C] [D] [E] [O]: ________
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]: ________
M. PIPING CONSTRUCTION:	-	[A] [B] [C] [D] [E] [O]: ________
N. PRODUCT DELIVERY METHOD:	-	[A] [B] [C] [D] [E] [O]: ________
O. PIPING RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [O]: ________
P. PIPING CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]: ________
Q. SUBSTANCE STORED:	B - UNLEADED GASOLINE	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]: ________
R. SUBSTANCE USE:	-	[A] [B] [C] [D] [E] [O]: ________
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

SWORN STATEMENT: I hereby swear under penalty of law that, based on my review of the underground storage tank self-certification of compliance and tank information update and my knowledge of the tank identified by the above tank id number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statement may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE: Guy Loudon Pres.

Name and Official Title of UST Owner or UST Owners's Authorized Representative

[signature]

Signature of UST Owner or Authorized Representative

4/15/92

Date Signed

509-248-3562

Telephone Number

UNDERGROUND STORAGE TANK INFORMATION UPDATE

Please check all of the information on this page to make sure it is correct. Make any changes on this page, and fill in any missing or incorrect information in the corrected information column.

TANK OWNER INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. OWNER NUMBER:	00004424	
OWNER NAME:	MAID O'CLOVER INC	
OWNER ADDRESS:	202 SO 5TH AVE YAKIMA, WA 98902-3436	
OWNER PHONE:	(509) 248-3562	
B. OWNER TYPE:	-	[A] [B] [C] [D] [E] [F] [O]_____

TANK SITE INFORMATION

	Current Information	Corrected Information (PRINT OR TYPE)
A. SITE NUMBER:	100160	
SITE NAME:	MAID O'CLOVER INC	
SITE ADDRESS:	1802 EAST NOB HILL YAKIMA, WA 98901-3663	
B. CONTACT PERSON:	Guy Loudon	
CONTACT PHONE:	509-248-3562	
C. SITE TYPE:	-	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J] [K] [L] [M] [N] [P] [Q] [R] [S] [T] [O]:_____

TANK INFORMATION

	Current Information	Corrected Information
		Mark out the correct choice for each item by coloring between the brackets. If the Current Information is correct, you do not need to fill in that item. See the example and instruction booklet for more information on using this form.
A. TANK ID: 4	FEE PAID: YES	
B. TANK STATUS:	A - OPERATIONAL	[A] [B]
C. INSTALLATION DATE:		6 1/4 187
D. TANK SIZE:	D - 5000-9999 GALLONS	[A] [B] [C] [D] [E] [F] [G] [H]
E. TANK MATERIAL:	C - FRP	[A] [B] [C] [D] [E] [O]:_____
F. TANK CONSTRUCTION:	A - SINGLE WALL	[A] [B] [C] [O]:_____
G. COMPARTMENTS:		[1] [2] [3] [4] [O]:_____
H. TANK RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [H] [O]:_____
I. TANK CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
J. SPILL PREVENTION:	-	[A] [B] [C] [O]:_____
K. OVERFILL PREVENTION:	-	[A] [B] [C] [D] [E] [O]:_____
L. PIPING MATERIAL:	C - FIBERGLASS	[A] [B] [C] [D] [E] [O]:_____
M. PIPING CONSTRUCTION:	-	[A] [B] [C] [D] [E] [O]:_____
N. PRODUCT DELIVERY METHOD:	-	[A] [B] [C] [D] [E] [O]:_____
O. PIPING RELEASE DETECTION:	-	[A] [B] [C] [D] [E] [F] [G] [O]:_____
P. PIPING CORROSION PROTECTION:	-	[A] [B] [C] [D] [E] [O]:_____
Q. SUBSTANCE STORED:	D - DIESEL FUEL	[A] [B] [C] [D] [E] [F] [G] [H] [I] [O]:_____
R. SUBSTANCE USE:	-	[A] [B] [C] [D] [E] [O]:_____
S. FIN. RESP. CLASS:	D - 13-99 TANKS	[A] [B] [C] [D] [E] [F] [G] [H] [I]
T. FIN. RESP. METHOD:	A - INS/GROUP CVRG	[A] [B] [C] [D] [E] [F] [G] [H] [I] [J]

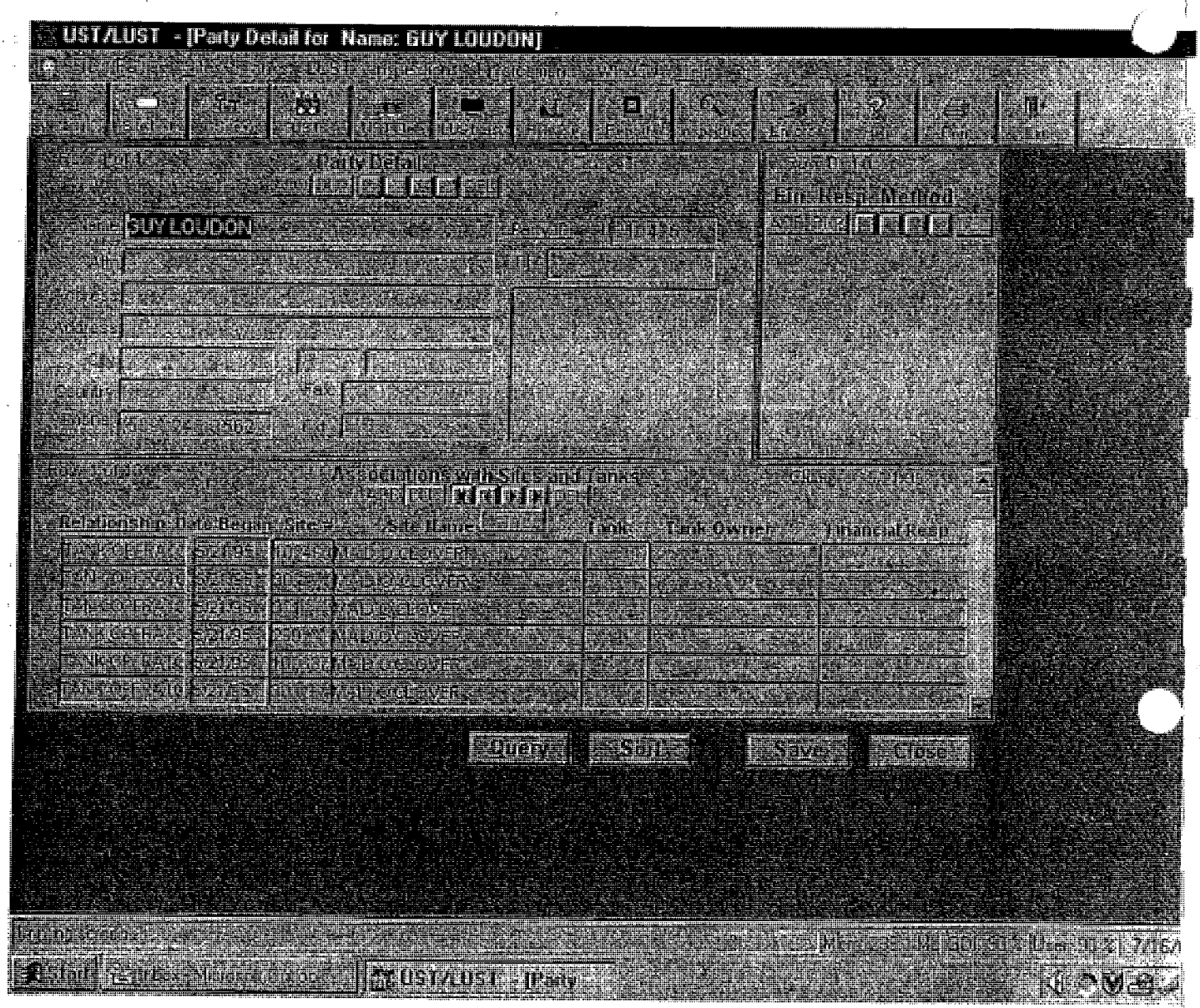
SWORN STATEMENT: I hereby swear under penalty of law that, based on my review of the underground storage tank self-certification of compliance and tank information update and my knowledge of the tank identified by the above tank id number, this tank is in compliance with applicable state requirements. Also, any new or corrected information required on this form has been entered accurately. I understand that false statement may result in this permit being immediately revoked and I may be subject to penalties under Chapter 173-360 WAC.

PRINT OR TYPE: Guy Loudon III Pres.
Name and Official Title of UST Owner or UST Owners's Authorized Representative

Guy Loudon III
Signature of UST Owner or Authorized Representative

4/15/92
Date Signed

509-248-3562
Telephone Number



Site
100160
427114
299
298
106137

mail them main office

EBI CONSULTING
PROJECT #24-8092

PHASE II LIMITED SUBSURFACE INVESTIGATION REPORT

Maid O
1802 East Nob Hill Boulevard
Yakima, Washington 98901

July 29, 2004

Prepared for:

AMRESCO Commercial Finance, LLC
412 East Parkcenter Boulevard, Suite 300
Boise, Idaho 83706

EBI
CONSULTING
ENVIROBUSINESS, INC.
COPRORATE HEADQUATERS
FOUR A STREET, BURLINGTON, MA 01803
TEL 781-273-2500 FAX 781-273-3311
www.ebiconsulting.com

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SEATTLE, WA
WARWICK, RI
YORK, PA

July 23, 2004

Ms. Trish Amundson
AMRESCO Commercial Finance, LLC
412 East Parkcenter Boulevard, Suite 300
Boise, Idaho 83706

Re: Limited Phase II Investigation Assessment Report
Maid O' Clover Service Station
1802 East Nob Hill Boulevard
Yakima, Washington 98901
EBI Project # 24-8092

Dear Ms. Amundson:

In accordance with EBI Consulting proposal dated July 9, 2004, EBI CONSULTING (EBI) is pleased to submit our *Limited Phase II Investigation Assessment (Report)* for the Maid O' Clover property at 1802 East Nob Hill Boulevard (the Subject Property).

The conclusions of this *Report* are based on a study limited to the areas investigated, field observations, screening results and laboratory analyses, and are subject to the terms and conditions of our contract for the work and the limitations included in the report. EBI renders no opinion as to the condition of the subsurface in areas of the Subject Property not investigated.

It has been a pleasure to prepare this *Report*. Please call us if you have any questions, comments, or if we can be of further assistance.

Respectfully Submitted,
EBI Consulting

Travis E. Maurer
Author/Project Scientist

William J. Gibbons, PG, LSP
Reviewer/Group Manager

Thomas Tobin
Managing Consultant

TABLE OF CONTENTS

1.0 INTRODUCTION

In accordance with our Proposal and Standard Conditions For Engagement, EBI Consulting (EBI) is pleased to submit our *Limited Subsurface Investigation Report (Report)* on the property identified as *Maid O* located in Yakima, Washington at *1802 East Nob Hill Boulevard* (the Subject Property). Travis E. Maurer of EBI Consulting conducted the investigation at the Subject Property on July 15, 2004.

Mr. Travis E. Maurer of EBI prepared this Report for AMRESCO Commercial Finance, LLC. Mr. Maurer has over 3 years of experience as an environmental consultant/scientist, and has completed/managed over 250 site assessments and intrusive investigations throughout the United States. EBI is an independent contractor, whose compensation was not based on the findings or recommendations made in this *Report*, or on the closing of any business transaction.

2.0 PURPOSE AND SCOPE OF WORK

The primary purpose of this investigation was to evaluate the potential presence of petroleum, volatile organic compounds (VOCs), and/or lead contamination in the soils and/or shallow groundwater at the Maid O' Clover Gasoline Station located at 1802 East Nob Hill Boulevard, in Yakima, Washington. The investigation focused on one specific area of the Subject Property: immediate vicinity of the pump islands and the underground storage tanks (USTs).

In order to achieve the objectives of this investigation, EBI performed the following tasks:

- Contacted One Call, which arranges the identification of underground utilities by member utility companies prior to drilling and sampling on-site. Ticket number 4219959 was assigned to the property.

- Advanced one boring approximately 10 feet east of the northeast pump island; one boring approximately 18.5feet west-southwest of the northwest pump island; one boring approximately 18.5 feet west-southwest of the southwest pump island; and one boring approximately 21 feet south and 10 feet east of the southwest pump island. All borings were advanced using a truck-mounted hydraulic direct-push rig. Soil samples were collected continuously using 4-foot macro-core samplers. The borings were advanced to a depth of 16 feet bgs. A detailed description of field activities is provided in *Section 5.0* of this report.

- Retained an independent laboratory to analyze selected soil samples and groundwater samples for VOCs via EPA 8260, lead via EPA Method 6010B, and TPH via Washington Department of Ecology's (WADOE) Method NWTPH-Dx and NWTPH-Gx.

  All samples were properly labeled, logged onto a chain-of-custody form and immediately placed on ice and delivered to the laboratory in accordance with current Federal EPA SW-846 (3rd ed.). Copies of both the analytical results and the chain-of-custody documentation are included in Appendix A.

- Backfilled borings with soil cuttings and asphalt/bentonite grout mixture following sampling

- Provided a summary of pertinent information obtained during this investigation including accompanying illustrations and appendices, along with EBI's findings and preliminary conclusions regarding the presence and nature of contamination in soils beneath the Subject Property in the areas investigated.

3.0 BACKGROUND

The Subject Property is known as a Maid O' Clover Chevron gasoline station and is located at 1802 East Nob Hill Boulevard in Yakima, Washington. The Subject Property has a total land area of approximately 0.58 acre and is improved with a gasoline station and convenience store. The Subject Building occupies approximately ¼ of the land area while the remaining area is occupied by five gasoline pumps on two islands and an asphalt parking lot.

3.1 Subject Property History

Based on the activities of the current tenant of the Subject Property, this subsurface Phase II assessment was conducted as part of a due diligence effort for AMRESCO Commercial Finance, LLC. The goal of this Phase II assessment was to recognize and begin to delineate possible subsurface contamination caused by the use and storage of hazardous substances during the timeframe the Subject Property has been a gasoline station. Six existing monitoring wells were noted on the Subject Property, and according to Mr. Calvin Wilson, Retail Operations Manager with Maid O Clover, the Subject Property is a Leaking Underground Storage Tank (LUST) Site. Washington Department of Ecology (DOE) records were not reviewed or provided to EBI prior to assessing the Subject Property. The age and construction specifications of the existing wells are unknown, as is their current functionality for environmental monitoring.

3.2 Potential Contaminants of Concern

EBI was retained to assess and quantify the soil and/or groundwater quality at the Subject Property in regards to potential subsurface contamination in the form of VOCs, lead, and total petroleum hydrocarbons (TPH). Potential contaminants of concern at gasoline stations include gasoline constituents such as benzene, toluene, ethylbenzene, xylenes (BTEX), trimethylbenzenes, methyl-tertiary butyl ether (MtBE), tetraethyl lead, petroleum (motor oils, hydraulic oils, lubrication oil), and degreasing solvents.

4.0 METHODS

4.1 Rationale for Soil Boring Placement

On Thursday, July 15, 2004, EBI conducted a limited subsurface investigation to assess subsurface conditions at the Subject Property. The areas investigated and the associated boring numbers are described below:

Approximately 10 feet east of the northeast pump island – Boring B1

Approximately 18.5 feet west-southwest of the northwest pump island – Boring B2

Approximately 18.5 feet west-southwest of the southwest pump island – Boring B3

Approximately 21 feet south and 10 feet east of the southwest pump island – Boring B4

4.2 Pre-Drilling Activities

A utility mark-out (One Call) was requested on July 12, 2004. Clearance for drilling at the Subject Property was granted for after 3:30 PM on July 14, 2004. Additionally, EBI retained Locating, Inc. to privately clear a five-foot radius around the proposed boring locales to identify any underground lines that could have been missed by One Call.

4.3 Advancement of Soil Borings

A total of four borings were advanced at the Subject Property. All of the soil borings were advanced using a Geoprobe direct-push sampling rig operated by Environmental Services Network (ESN) Northwest of Lacey, Washington. The information in the table below illustrates the depths of each of the soil borings and whether groundwater was encountered.

SOIL BORING INFORMATION		
BORING	DEPTH (FEET BGS)	GROUNDWATER DEPTH (FEET BGS)
B1	16	13
B2	16	13
B3	16	13
B4	16	13

The locations of the borings are illustrated on *Figure 2, Soil Boring Location Map.*

4.4 Soil Sampling and Analysis

Soil samples were collected continuously during the advancement of the borings. Field screening of soil samples for total ionizable VOCs was performed using a photoionization detector (PID). No visual or olfactory evidence of soil contamination was identified in borings B1, B2, B3, or B4. There were no significant PID readings encountered at any of the borings. The highest PID reading was 0.6 parts per million (PPM) in B1 at a depth of 8 feet bgs.

Soil conditions for each boring are described in Section 5.2 and on Soil Boring Logs, which are included in Appendix C.

Selected soil samples from each boring were collected in laboratory-provided 2-ounce glass jars, 4-ounce plastic jars, 40-milliliter volatile organics analysis (VOA) vials containing sodium bisulfate solution, and VOA vials containing methanol solution. Each sample was labeled/logged onto a chain-of-custody form, and placed in a cooler with ice for preservation in accordance with current Federal EPA SW-846 (3rd ed.). After collection, the samples were submitted to an independent qualified laboratory (Test America, Nashville, Tennessee) for analyses. The samples were analyzed for VOCs via EPA 8260, lead via EPA Method 6010B, and TPH via Washington Department of Ecology's Method NWTPH-Dx and NWTPH-Gx.

4.5 Monitoring Well Installation

Monitoring wells were not constructed during this assessment.

4.6 Groundwater Sampling and Analysis

Groundwater samples from each boring were collected in laboratory-provided 250-mL plastic bottles, 1000-mL amber glass bottles with HCl preservative, and VOA vials containing hydrochloric acid (HCl) preservative. Each sample was labeled/logged onto a chain-of-custody form, and placed in a cooler with ice for preservation in accordance with current Federal EPA SW-846 (3rd ed.). After collection, the samples were submitted to an independent, State of Washington accredited laboratory (Test America, Nashville, Tennessee) for analyses. The samples were analyzed for VOCs via EPA 8260, and TPH via WADOE's Method NWTPH-Dx and NWTPH-G/ 8021.

Groundwater was collected via a peristaltic pump using ½-inch disposable plastic tubing connected to a disposable, screened liner that was placed in the hollow metal pushrod that was left in the ground. The pushrod has an expandable tip that was raised approximately two feet from the termination of each boring to allow groundwater to collect through the screen. After the groundwater samples were collected, the tubing was discarded, the probe was removed, and the borings were abandoned. Six VOAs preserved with HCl were collected at borings B1, B2, and B3 to be analyzed for VOCs and NWTPH-Gx; and one 250-mL plastic bottle and two 1000-mL amber glass bottles were collected at borings B1, B2, and B3 to be analyzed for NWTPH-Dx and NWTPH-G/ 8021.

4.7 Abandonment of Borings

Upon completion of the soil sampling activities, each soil boring was filled with the soil cuttings generated during the sampling activities. The remaining void in each borehole was filled with bentonite chips. The top two to four inches were backfilled with asphalt and compacted.

5.0 RESULTS

5.1 Geology/Hydrogeology

The geology in the Yakima River basin is varied. The mountainous areas in the western part consist of many different types of rock, including basalt and andesite. Representative soils that formed in loess (wind-blown silt) mixed with material derived from basalt and in residuum and colluvium in these areas are those of the Jumpe, Sutkin, Sapkin, and Naxing series. The principal rock in the central and eastern parts is Yakima Basalt, which is the younger flow of Columbia River Basalt. This basalt originated from large fissures or rifts along which the fluid lava swelled to the surface and spread. Soils such as those in the Ritzville, Starbuck, Shano, and Bickelton series formed in areas where loess is underlain by basalt. Soils such as those in the Bakeoven, Lickskillet, Kiona, McDaniel, and Rock Creek series formed in colluvium and residuum derived from basalt.

Overlying the Yakima Basalt in many areas that flank foothills and ridges are the light-colored tuffacious sandstone, siltstone, and conglomerate of the Ellensburg Formation. This stream-deposited sediment was derived from volcanic material ejected during the early development of the Cascade Range. The formation occurs extensively in the Wenas Valley, in the lower reaches of the Naches valley, in areas west of Yakima, and along the southern part of Rattlesnake Ridge. The formation is more than 1,800 feet thick in some places. Soils that formed in loess mixed with material derived from the Ellensburg Formation are those of the Harwwod, Gorst, Cowiche, and Taneum series.

Subsequent folding of the basalt has formed a series of east-trending ridges. The Ellensburg Formation was deposited during the early stages of basalt folding; therefore, it is on highly dissected terraces. The uplifting of these folds was so slow that the Yakima River was able to down cut rapidly enough to maintain its course. The tributaries to the Yakima River formed as a result of the basalt folding. In a few areas of the Wenas Valley and near Pamona, the Ellensburg Formation is capped by a late lava flow.

The upper and lower parts of the Yakima River have been filled with material that was deposited by normal stream activity and glacial outwash. These areas include low terraces and floodplains. Representative soils that formed in recent alluvium are those in the Esquatzel, Weirman, Ashue, Wenas, Toppenish, and Umapine series. Extensive areas in the lower part of Yakima Valley are mantled by loess underlain by lake sediment that was deposited during glacial flooding in the late Pleistocene. This sediment occurs at elevations of as much as 1,000 feet.

According to the Soil Survey of Yakima County, the soil type beneath the Subject Property is classified as Ashue Loam, 0 to 2 percent slopes. This soil consists of very deep, well-drained soils on low terraces in stream valleys, formed in alluvium. The surface layer typically is dark brown loam approximately 10-inches thick. The first subsoil is yellowish brown very gravelly heavy loam approximately 5-inches thick. The second subsoil is yellowish brown very gravelly sandy clay loam approximately 14-inches thick. The substratum in the upper part is dark yellowish brown very gravelly sandy loam approximately 5-inches thick. The substratum in the lower part is dark grayish brown extremely gravelly sand to a depth of approximately 70 inches. The available water capacity is low. The depth to bedrock is typically greater than 60 inches.

In general, soils encountered during boring activities consisted primarily of olive-gray, poorly graded silty gravels with up to 1.5-inch cobbles and fines. Groundwater was encountered at a depth of 13 feet below ground surface (bgs) in all of the boring locations. No abnormal staining or discernable odors were

detected in any of the boring locations. General soil classifications and field observations are presented on the Soil Boring Logs/Analytical Summary attached as Appendix B.

The surface drainage on the Subject Property occurs over land to the surrounding streets, primarily to the southeast. There is no evidence of ground subsidence, high water table, or cracking foundations (where visible). No soil studies or soil boring data were presented to EBI for review, nor were any identified during the course of our investigation. No indication of cross-lot runoff, swales, drainage flows, or active rills or gullies were observed on the Subject Property. No visual indications of filled ground were observed. Based on the physical conditions of the Subject Property and surrounding properties, shallow groundwater flow is anticipated to be to the southeast.

5.2 Soil Analysis Results

Soil Analytical Results

Soil Boring & Depth (feet)	TPH Gasoline Range (mg/kg)	TPH Diesel Range (mg/kg)	TPH Oil Range (mg/kg)	VOCs (mg/kg)	Metals-Lead (mg/kg)
B1 – 12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	
B2 – 12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	
B3 – 12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	
B4 – 12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	

5.3 Groundwater Analysis Results

Groundwater Analytical Results

Soil Boring	TPH Gasoline Range (µg/l)	TPH Diesel Range (mg/l)	TPH Oil Range (mg/l)	BTEX (µg/l)	VOCs (µg/l)
B1-GW	Non-Detect	Non-Detect	Non-Detect	Non-Detect	16.7 tetrachloroethene
B2-GW	Non-Detect	Non-Detect	Non-Detect	Non-Detect	38.2 tetrachloroethene
B3-GW	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect

6.0 CONCLUSIONS

- Based on the analytical results and the findings of the limited subsurface investigation at the Subject Property, it is EBI's opinion that the onsite USTs have not adversely impacted the Subject Property.

- A condition for which WADOE notification is required in accordance with Washington administrative Code WAC 173-340-720 exists at the Subject Property based on the presence of tetrachloroethene (a.k.a. perchloroethene (PCE)) concentrations in groundwater samples from borings B-1 and B-2 at level above the United States EPA and WADOE Maximum Contaminant Level allowable for drinking water of 5 micrograms per liter (µg/l).

- WADOE regulations require that notification be provided to WADOE within 90-days of the owner/operator having knowledge of the reportable condition. Notification can be provided by submitting this report to the WADOE's Central Regional Office at 15 West Yakima Avenue, Suite 200, Yakima, WA 98902-3452 or by calling Ms. Gwynn Clear at 509-575-2012.

- The source and extent of the PCE contamination is unknown, however based on the inferred direction of groundwater flow to the southeast and the absence of detectable PCE in the groundwater from the downgradient boring B-3 the extent of the PCE contamination at the Subject Property appears limited. The PCE contamination appears to have originated from an off-site source based on the absence of readily identifiable sources of PCE contamination on the Subject Property in the vicinity of borings B-1 and B-2. PCE is most commonly associated with electronics manufacturing and dry cleaning. According to the WADOE a large PCE groundwater contamination plume exists in the Yakima area. It is unknown if this known PCE plume exists in the area of the Subject Property.

- Subsequent to WADOE notification, the WADOE will determine the need for additional actions if warranted. Additional actions could include the determination of the extent of contamination and the risk posed by the contamination. If a condition of no significant risk can be shown to exist using WADOE risk assessment protocols, then an application for site closure can be made. Based on the likely off-site source of the contamination, no further action may be required subsequent to WADOE notification.

7.0 RECOMMENDATIONS

Based on the results and conclusions of this limited subsurface investigation, EBI recommends the following:

- The WADOE Central Regional Office should be notified of the detection of PCE in groundwater at levels above the maximum contaminant levels for drinking water.

8.0 LIMITATIONS

This *Report* was prepared for the use of AMRESCO Commercial Finance, LLC. It was performed in accordance with generally accepted practices of other Consulting undertaking similar studies at the same time and in the same locale under like circumstances; as well as in accordance with the Scope or Work provided by Universal Solutions, Inc. and the alterations to that Scope of Work as verbally discussed. The conclusions provided by EBI are based solely on the information obtained during the subsurface investigation. EBI renders no opinion as to the presence of potential contamination in the areas not investigated. The observations in this *Report* are valid on the date of the investigation. Any additional information that becomes available concerning the Subject Property should be provided to EBI so that our conclusions may be revised and modified, if necessary. This *Report* has been prepared in accordance with the proposal approved by AMRESCO Commercial Finance, LLC and with the limitations described in *Attachment A*, all of which are integral parts of this *Report.* No other warranty, expressed or implied, is made.

ATTACHMENT A
LIMITATIONS

1. The observations described in this *Report* were made under the conditions stated herein. The conclusions presented are based solely upon the services described, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this *Report* was carried out in accordance with terms and conditions in our *Authorization Letter* and *Agreement for Environmental Services* regarding the Site, which are incorporated herein by references.
2. In preparing this *Report*, EBI has relied on certain information provided by state and other referenced parties, and on information contained in the files of federal, state and/or local agencies available to EBI at the time of the assessment. Although there may have been some degree of overlap in the information provided by these various sources, EBI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of these *Environmental Services*.
3. Observations were made of the Site and of structures on the Site as indicated within the *Report*. Where access to portions of the Site or to structures on the Site was unavailable or limited, EBI renders no opinion as to the presence of oil or hazardous materials (OHM) in that portion of the Site or structure. In addition, EBI renders no opinion as to the presence of OHM or the presence of indirect evidence relating to OHM where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces. No representations concerning insulating material is expressed or implied.
4. EBI did not perform testing or analyses to determine the presence or concentration of asbestos, radon, or lead at the Site unless specifically stated otherwise in the *Report*. Similarly, no investigation of dust or air quality was conducted unless specifically stated otherwise in the *Report*.
5. The purpose of this *Report* is to assess the physical characteristics of the Site with respect to the presence of OHM in the environment. No specific attenipt was made to determine the compliance of present or past owners or operators of the Site with federal, state, or local laws or regulations (environmental or otherwise).
6. Except as noted in the *Report*, no quantitative laboratory testing was performed as part of the assessment. Where such analyses have been conducted by an outside laboratory, EBI has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
7. Any qualitative or quantitative information regarding the Site, which was not available to EBI at the time of this assessment may result in a modification of the representations made herein.
8. It is acknowledged that EBI judgments shall not be based on scientific or technical test or procedures beyond the scope of the Services or beyond the time and budgetary constraints imposed by Client. It is acknowledged further that EBI conclusions shall not rest on pure science but on such considerations as economic feasibility and available alternatives. Client also acknowledges that, because geologic and soil formations are inherently random, variable, and indeterminate in nature, the Services and opinions provided under this Agreement with respect to such Services, are not guaranteed to be a representation of actual conditions on the Site, which are also subject to change with time as a result of natural or man-made processes, including water permeation. In performing the Services, EBI shall use that degree of care and skill ordinarily exercised by environmental Consulting or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely at the time the Services are rendered and not according to standards utilized at a later date. The Services shall be rendered without any other warranty, expressed or implied, including, without limitation, the warranty of merchant ability and the warranty of fitness for a particular purpose.
9. Client and EBI agree that to the fullest extent permitted by law, EBI shall not be liable to Client for any special, indirect or consequential damages whatsoever, whether caused by EBI'S negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause of causes whatsoever.

APPENDIX A
LABORATORY ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

TestAmerica
ANALYTICAL TESTING CORPORATION

2960 Foster Creighton Drive • Nashville, Tennessee 37204
800-765-0980 • 615-726-3404 Fax

7/30/04

CASE NARRATIVE

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: MAID O
Project Number: 248092.
Laboratory Project Number: 382985.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accredidation.

Sample Identification	Lab Number	Collection Date
N-B-1-GW	04-A111176	7/15/04
N-B-2-GW	04-A111177	7/15/04
N-B-3-GW	04-A111178	7/15/04
N-B-1-12	04-A111179	7/15/04
N-B-2-12	04-A111180	7/15/04
N-B-3-12	04-A111181	7/15/04
N-B-4-12	04-A111182	7/15/04

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Sample Identification	Lab Number	Collection Date

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: Roxanne L Connor Report Date: 7/29/04

Johnny A. Mitchell, Operations Manager
Michael H. Dunn, M.S., Technical Director
Pamela A. Langford, Technical Services
Eric S. Smith, QA/QC Director
Sandra McMillin, Technical Services
Gail A. Lage, Technical Services
Glenn L. Norton, Technical Services
Kelly S. Comstock, Technical Services
Roxanne L. Connor, Technical Services

Laboratory Certification Number: C249

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111176
Sample ID: N-B-1-GW
Sample Type: Water
Site ID:

Date Collected: 7/15/04
Time Collected: 12:30
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/l	0.100	1.0	7/21/04	23:36	H. Wagner	NWTPH-Gx	694
TPH (Oil Range)	ND	mg/l	0.100	1.0	7/23/04	11:25	M.Jarrett	NWTPH-Dx	2824
TPH (Diesel Range)	ND	mg/l	0.100	1.0	7/23/04	11:25	M.Jarrett	NWTPH-Dx	2824
VOLATILE ORGANICS									
Benzene	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
Toluene	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
Ethylbenzene	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
Xylenes (Total)	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2-Dibromoethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Methyl-t-butyl ether	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
tert-amyl methyl ether	ND	mg/L	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
Bromochloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Carbon tetrachloride	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Chlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Chloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Chloroform	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Chloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
2-Chlorotoluene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
4-Chlorotoluene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1.0	7/26/04	18:00	B.Herford	8260B	5262
Dibromochloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,3-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,4-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Dichlorodifluoromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111176
Sample ID: N-B-1-GW
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2-Dichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,3-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
2,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Hexachlorobutadiene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Methylene chloride	ND	mg/l	0.00250	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Tetrachloroethene	0.0167	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1,1-Trichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,1,2-Trichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Trichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2,3-Trichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,2,4-Trimethylbenzene	ND	mg/l	0.0010	1.0	7/26/04	18:00	B.Herford	8260B	5262
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Vinyl chloride	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Bromodichloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Trichlorofluoromethane	ND	mg/l	0.00100	1.0	7/26/04	18:00	B.Herford	8260B	5262
Diisopropyl ether	ND	mg/l	0.00500	1.0	7/26/04	18:00	B.Herford	8260B	5262
METALS									
Lead, Dissolved	ND	mg/l	0.0050	1.0	7/22/04	13:28	C. Martin	6010B	1589

Sample report continued . . .

APPENDIX B
SOIL BORING LOGS

Sample#	Depth (Feet)	Moisture (D-M-L)	PID (PPM)	Soil Description
B1-4	3-4	L	0.3	GM-Olive Brown coarse gravels w/med grained sand & fines
B1-8	7-8	L	0.6	GM-Olive Brown coarse gravels w/med grained sand & fines
B1-12	11-12	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-4	3-4	L	0.2	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-8	7-8	L	0.1	GM-Olive Brown coarse gravels w/med grained sand & fines
B2-12	11-12	L	0.2	GM-Olive Brown coarse gravels w/med grained sand & fines
B3-4	3-4	L	0.3	GM-Light Brown coarse gravels w/med grained sand & fines
B3-8	7-8	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B3-12	11-12	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-4	3-4	L	0.4	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-8	7-8	L	0.1	GM-Olive Brown coarse gravels w/med grained sand & fines
B4-12	11-12	L	0.3	GM-Olive Brown coarse gravels w/med grained sand & fines

Notes: *Groundwater was encountered at 13 feet bgs in all of the borings.

EBI CONSULTING

Soil Boring Log
Field Readings

Project Name/Number: Maid O/24-8092
Location: 1802 East Nob Hill Blvd, Yakima, WA

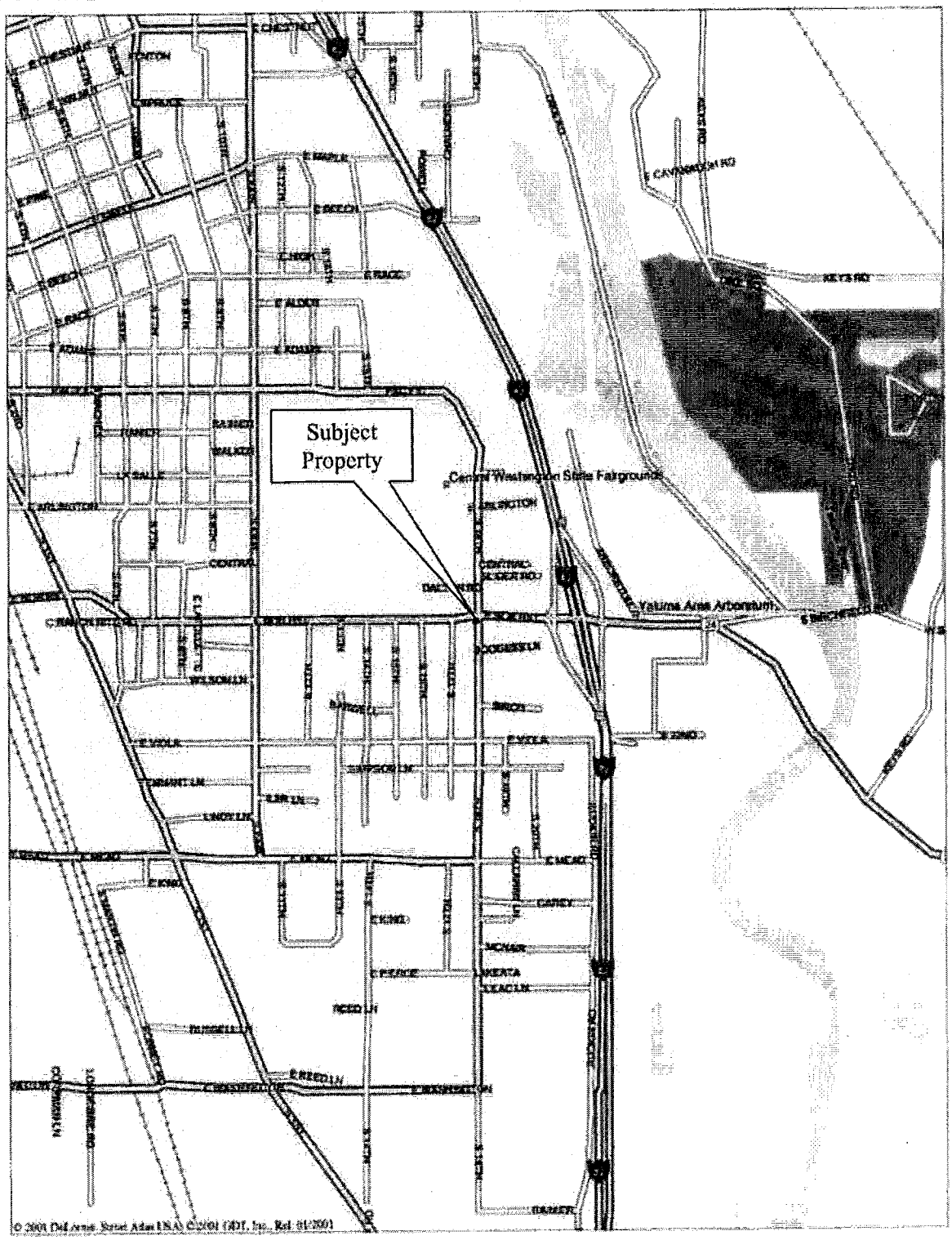
Driller/ESN
Type: Direct Push/Geoprobe

Date: July 15, 2004

EBI Scientist: Travis E. Maurer

Boring: 1 to 4

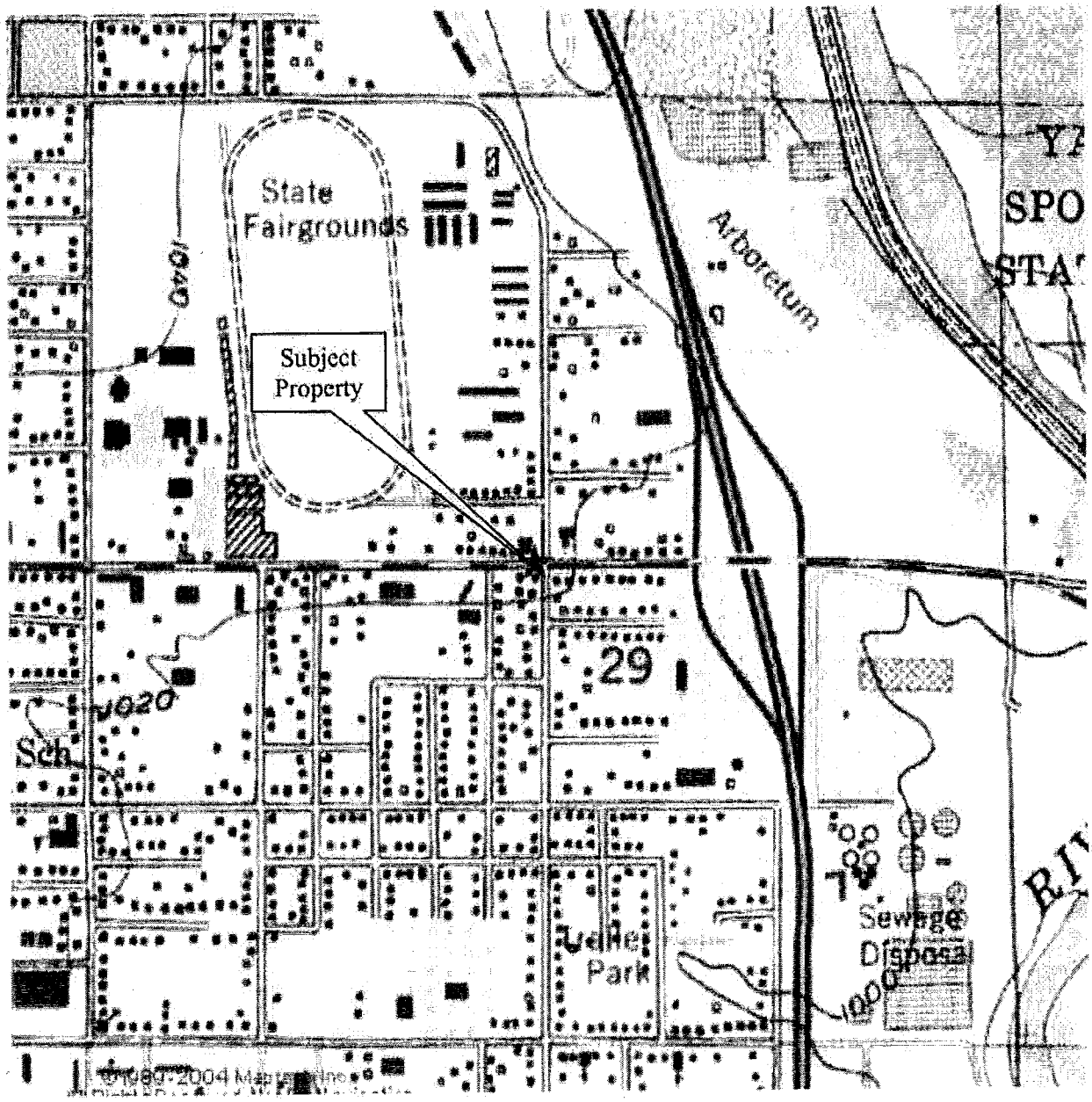
FIGURES



EBI CONSULTING

Figure 1: Location Map

Maid O
1802 East Nob Hill Boulevard
Yakima, Washington 98901



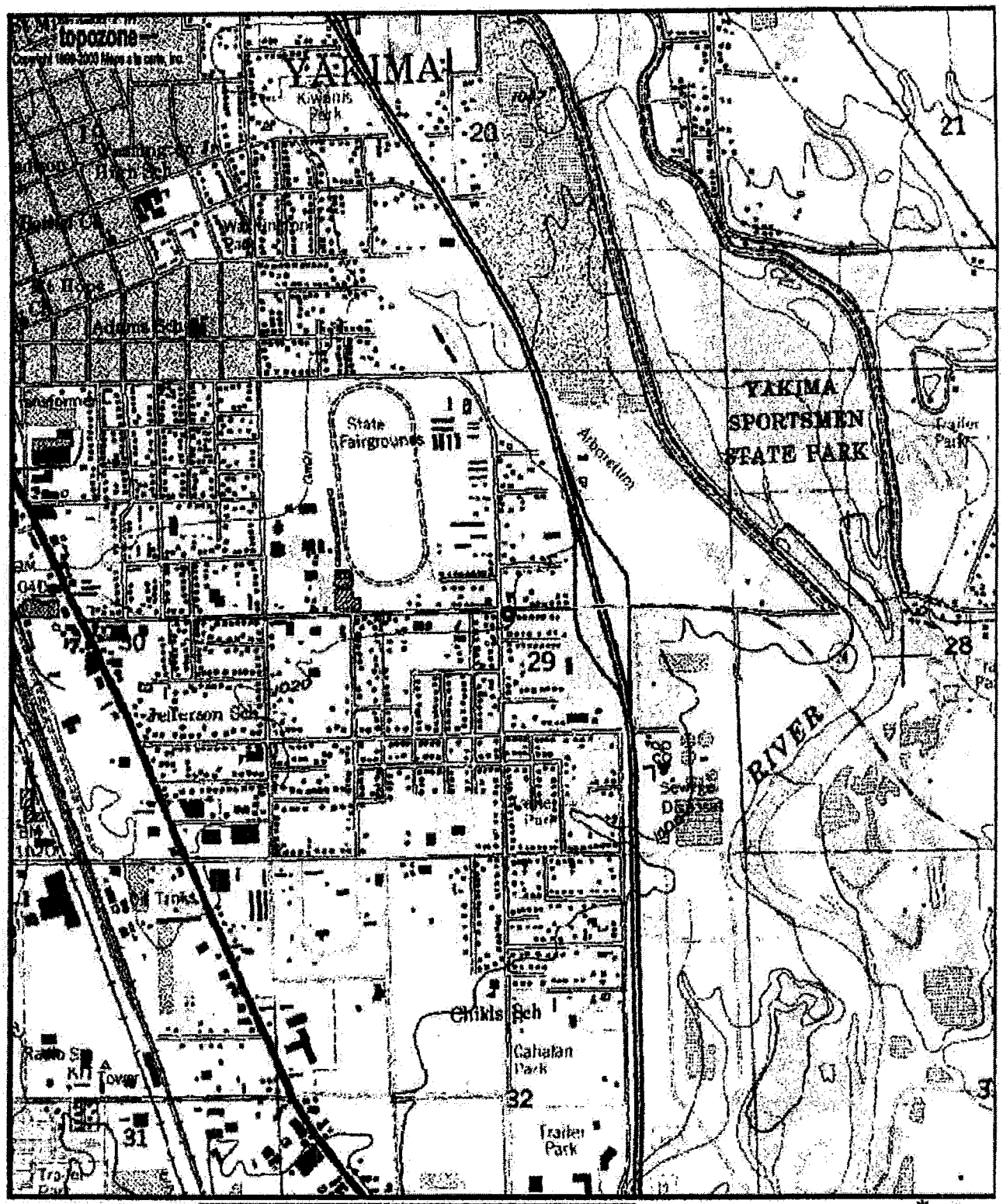
EBI CONSULTING

A portion of the Yakima, Washington
USGS 7.5x15 Minute Quadrangle

Maid O
1802 East Nob Hill Boulevard
Yakima, Washington 98901

N

Figure 2: Locus Map



Map center is UTM 10 693276E 5162149N (WGS84/NAD83)
Yakima East quadrangle
Projection is UTM Zone 10 NAD83 Datum

M=17.496
G=1.834

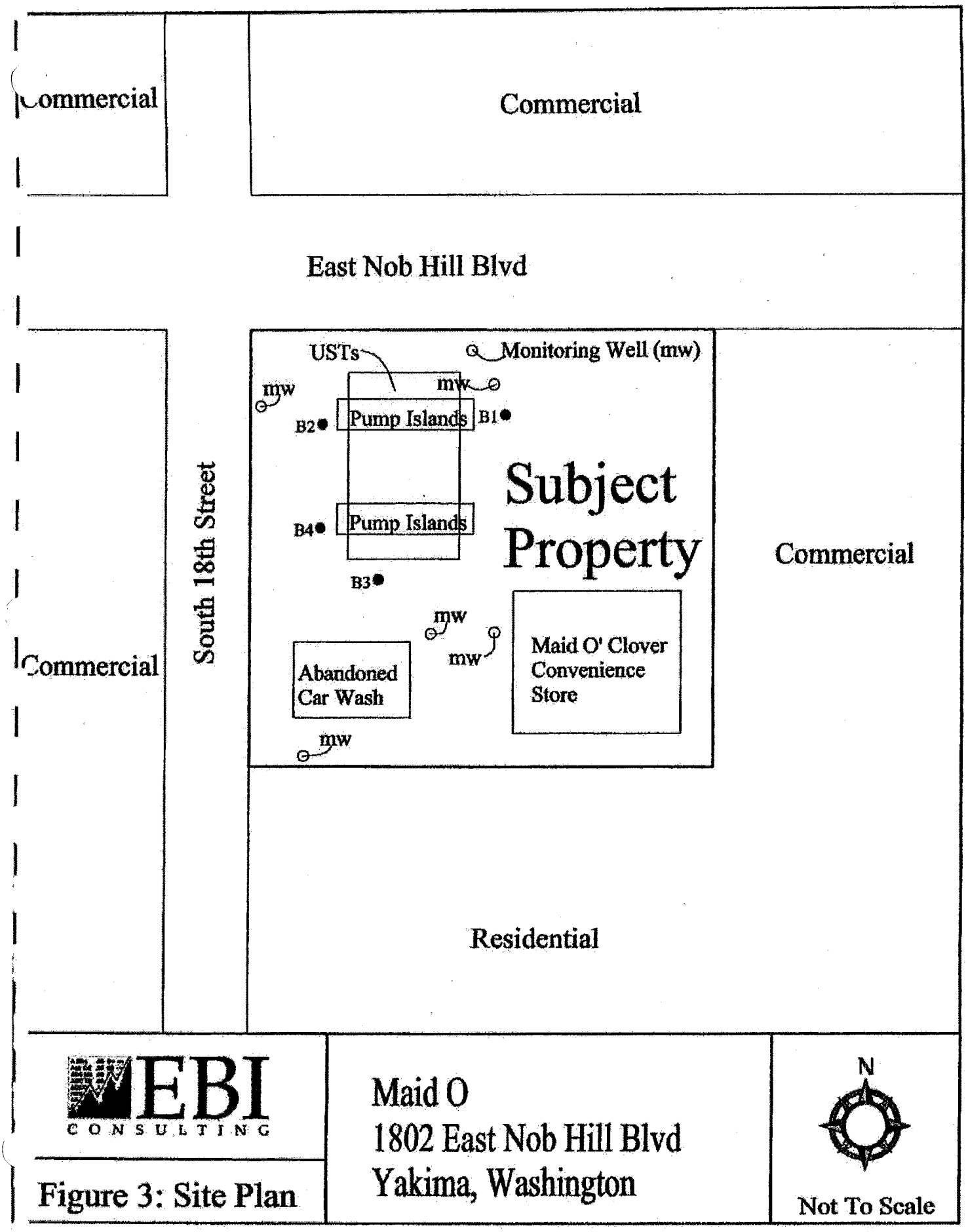
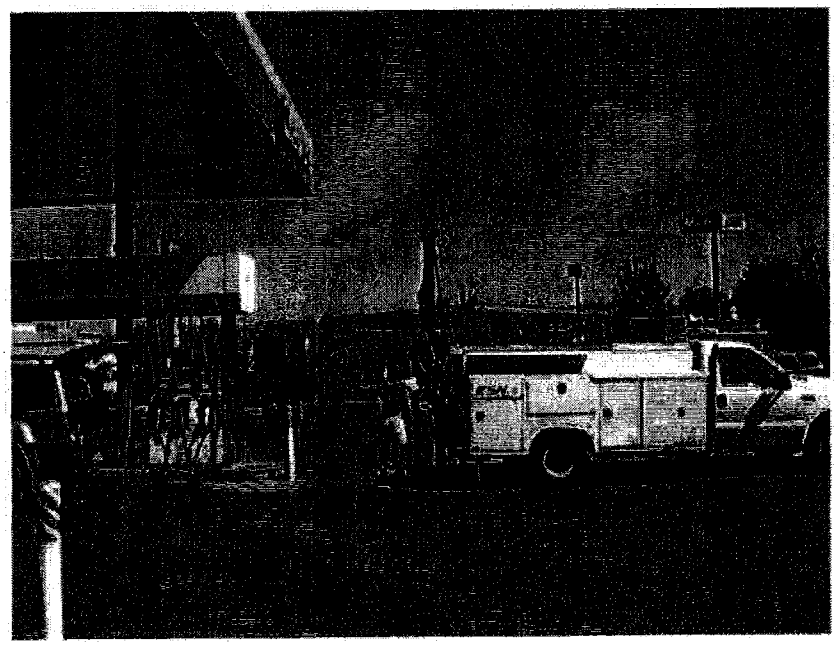


Figure 3: Site Plan

PHOTOGRAPHS

1. Subject Property viewed from East Nob Hill Blvd.



2. Drilling at B1.

3. Drilling at B2.

4. Drilling at B4.

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ANALYTICAL REPORT

Laboratory Number: 04-A111176
Sample ID: N-B-1-GW
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	1000 ml	1.00 ml	7/21/04		K. Turner	3510

Surrogate	% Recovery	Target Range
Surr-o-Terphenyl	74.	50. - 141.
BTEX/GRO Surr., a,a,a-TFT	77.	62. - 136.
VOA Surr 1,2-DCA-d4	96.	71. - 128.
VOA Surr Toluene-d8	95.	77. - 119.
VOA Surr, 4-BFB	103.	79. - 123.
VOA Surr, DBFM	96.	78. - 124.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111177
Sample ID: N-B-2-GW
Sample Type: Water
Site ID:

Date Collected: 7/15/04
Time Collected: 14:00
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/l	0.100	1.0	7/22/04	0:07	H. Wagner	NWTPH-Gx	694
TPH (Oil Range)	ND	mg/l	0.100	1.0	7/23/04	11:41	M.Jarrett	NWTPH-Dx	2824
TPH (Diesel Range)	ND	mg/l	0.100	1.0	7/23/04	11:41	M.Jarrett	NWTPH-Dx	2824
VOLATILE ORGANICS									
Benzene	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
Toluene	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
Ethylbenzene	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
Xylenes (Total)	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2-Dibromoethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Methyl-t-butyl ether	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
tert-amyl methyl ether	ND	mg/L	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
Bromochloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Carbon tetrachloride	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Chlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Chloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Chloroform	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Chloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
2-Chlorotoluene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
4-Chlorotoluene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1.0	7/26/04	18:28	B.Herford	8260B	5262
Dibromochloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,3-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,4-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Dichlorodifluoromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111177
Sample ID: N-B-2-GW
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2-Dichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,3-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
2,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Hexachlorobutadiene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Methylene chloride	ND	mg/l	0.00250	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Tetrachloroethene	0.0382	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1,1-Trichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,1,2-Trichloroethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Trichloroethene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2,3-Trichloropropane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,2,4-Trimethylbenzene	ND	mg/l	0.0010	1.0	7/26/04	18:28	B.Herford	8260B	5262
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Vinyl chloride	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Bromodichloromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Trichlorofluoromethane	ND	mg/l	0.00100	1.0	7/26/04	18:28	B.Herford	8260B	5262
Diisopropyl ether	ND	mg/l	0.00500	1.0	7/26/04	18:28	B.Herford	8260B	5262
METALS									
Lead, Dissolved	ND	mg/l	0.0050	1.0	7/22/04	13:28	C. Martin	6010B	1589

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111177
Sample ID: N-B-2-GW
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	1000 ml	1.00 ml	7/21/04		K. Turner	3510

Surrogate	% Recovery	Target Range
Surr-o-Terphenyl	78.	50. - 141.
BTEX/GRO Surr., a,a,a-TFT	78.	62. - 136.
VOA Surr 1,2-DCA-d4	100.	71. - 128.
VOA Surr Toluene-d8	95.	77. - 119.
VOA Surr, 4-BFB	101.	79. - 123.
VOA Surr, DBFM	103.	78. - 124.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111178
Sample ID: N-B-3-GW
Sample Type: Water
Site ID:

Date Collected: 7/15/04
Time Collected: 15:15
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/l	0.100	1.0	7/22/04	0:38	H. Wagner	NWTPH-Gx	694
TPH (Oil Range)	ND	mg/l	0.100	1.0	7/23/04	11:57	M.Jarrett	NWTPH-Dx	2824
TPH (Diesel Range)	ND	mg/l	0.100	1.0	7/23/04	11:57	M.Jarrett	NWTPH-Dx	2824
VOLATILE ORGANICS									
Benzene	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
Toluene	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
Ethylbenzene	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
Xylenes (Total)	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2-Dibromoethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Methyl-t-butyl ether	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
tert-amyl methyl ether	ND	mg/L	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
Bromochloromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Carbon tetrachloride	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Chlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Chloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Chloroform	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Chloromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
2-Chlorotoluene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
4-Chlorotoluene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2-Dibromo-3-chloropropane	ND	mg/l	0.00500	1.0	7/22/04	15:40	B.Herford	8260B	3265
Dibromochloromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,3-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,4-Dichlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Dichlorodifluoromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111178
Sample ID: N-B-3-GW
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2-Dichloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1-Dichloroethene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
cis-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
trans-1,2-Dichloroethene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,3-Dichloropropane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
2,2-Dichloropropane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1-Dichloropropene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
cis-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
trans-1,3-Dichloropropene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Hexachlorobutadiene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Methylene chloride	ND	mg/l	0.00250	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1,1,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1,2,2-Tetrachloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Tetrachloroethene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2,3-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2,4-Trichlorobenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1,1-Trichloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,1,2-Trichloroethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Trichloroethene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2,3-Trichloropropane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,2,4-Trimethylbenzene	ND	mg/l	0.0010	1.0	7/22/04	15:40	B.Herford	8260B	3265
1,3,5-Trimethylbenzene	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Vinyl chloride	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Bromodichloromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Trichlorofluoromethane	ND	mg/l	0.00100	1.0	7/22/04	15:40	B.Herford	8260B	3265
Diisopropyl ether	ND	mg/l	0.00500	1.0	7/22/04	15:40	B.Herford	8260B	3265
METALS									
Lead, Dissolved	ND	mg/l	0.0050	1.0	7/22/04	13:28	C. Martin	6010B	1589

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111178
Sample ID: N-B-3-GW
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	1000 ml	1.00 ml	7/21/04		K. Turner	3510

Surrogate	% Recovery	Target Range
surr-o-Terphenyl	96.	50. - 141.
BTEX/GRO Surr., a,a,a-TFT	79.	62. - 136.
VOA Surr 1,2-DCA-d4	96.	71. - 128.
VOA Surr Toluene-d8	97.	77. - 119.
VOA Surr, 4-BFB	101.	79. - 123.
VOA Surr, DBFM	96.	78. - 124.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111179
Sample ID: N-B-1-12
Sample Type: Soil
Site ID:

Date Collected: 7/15/04
Time Collected: 12:30
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	96.8	%		1	7/29/04	13:39	B.Plett	CLP	8484
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/kg	5.17	1	7/27/04	23:19	J. Redmond	NWTPH-Gx	5062
TPH (Diesel Range)	ND	mg/kg	10.1	1	7/23/04	12:13	M.Jarrett	NWTPH-Dx	5317
TPH (Oil Range)	ND	mg/kg	10.1	1	7/23/04	12:13	M.Jarrett	NWTPH-Dx	5317
VOLATILE ORGANICS									
Methyl-t-amyl ether	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Benzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Bromochloromethane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
Carbon tetrachloride	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Chlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Chloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Chloroform	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Chloromethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
2-Chlorotoluene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
4-Chlorotoluene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.00517	1	7/22/04	22:35	J. Yun	8260B	3968
Dibromochloromethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,2-Dibromoethane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,2-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,3-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,4-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Dichlorodifluoromethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111179
Sample ID: N-B-1-12
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,2-Dichloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,1-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
cis-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
trans-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,2-Dichloropropane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,3-Dichloropropane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
2,2-Dichloropropane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,1-Dichloropropene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
cis-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
trans-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Ethylbenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Methylene chloride	0.0095	mg/Kg	0.0052	1	7/22/04	22:35	J. Yun	8260B	3968
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Tetrachloroethene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Toluene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,2,3-Trichlorobenzene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,2,4-Trichlorobenzene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,1,1-Trichloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,1,2-Trichloroethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Trichloroethene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,2,3-Trichloropropane	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
1,2,4-Trimethylbenzene	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
1,3,5-Trimethylbenzene	ND	mg/Kg	0.00207	1	7/22/04	22:35	J. Yun	8260B	3968
Vinyl chloride	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Xylenes (Total)	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Bromodichloromethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Trichlorofluoromethane	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Methyl-t-butyl ether	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
Diisopropyl ether	ND	mg/Kg	0.0021	1	7/22/04	22:35	J. Yun	8260B	3968
METALS									
Lead	1.13	mg/kg	0.99	1	7/29/04	12:50	C.Johnson	6010B	8254

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111179
Sample ID: N-B-1-12
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	10.2 gm	1.0 ml	7/21/04		M. Ricke	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	90.	60. - 130.
EPH surr-o-Terphenyl	65.	49. - 145.
VOA Surr 1,2-DCA-d4	102.	59. - 134.
VOA Surr Toluene-d8	93.	57. - 129.
VOA Surr, 4-BFB	100.	60. - 134.
VOA Surr, DBFM	100.	67. - 126.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.
All reported results for metals or Organic analyses have been corrected for dry weight

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111180
Sample ID: N-B-2-12
Sample Type: Soil
Site ID:

Date Collected: 7/15/04
Time Collected: 14:00
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	96.3	%		1	7/29/04	13:39	B.Platt	CLP	8494
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/kg	5.19	1	7/27/04	23:54	J. Redmond	NWTPH-Gx	5062
TPH (Diesel Range)	ND	mg/kg	10.9	1	7/23/04	12:29	M.Jarrett	NWTPH-Dx	5317
TPH (Oil Range)	15.5	mg/kg	10.9	1	7/23/04	12:29	M.Jarrett	NWTPH-Dx	5317
VOLATILE ORGANICS									
Methyl-t-amyl ether	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Benzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Bromochloromethane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
Carbon tetrachloride	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Chlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Chloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Chloroform	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Chloromethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
2-Chlorotoluene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
4-Chlorotoluene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.00519	1	7/22/04	23:05	J. Yun	8260B	3968
Dibromochloromethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,2-Dibromoethane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,2-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,3-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,4-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Dichlorodifluoromethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111180
Sample ID: N-B-2-12
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,2-Dichloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,1-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
cis-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
trans-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,2-Dichloropropane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,3-Dichloropropane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
2,2-Dichloropropane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,1-Dichloropropene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
cis-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
trans-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Ethylbenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Methylene chloride	ND	mg/Kg	0.0052	1	7/22/04	23:05	J. Yun	8260B	3968
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Tetrachloroethene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Toluene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,2,3-Trichlorobenzene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,2,4-Trichlorobenzene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,1,1-Trichloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,1,2-Trichloroethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Trichloroethene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,2,3-Trichloropropane	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
1,2,4-Trimethylbenzene	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
1,3,5-Trimethylbenzene	ND	mg/Kg	0.00208	1	7/22/04	23:05	J. Yun	8260B	3968
Vinyl chloride	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Xylenes (Total)	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Bromodichloromethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Trichlorofluoromethane	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Methyl-t-butyl ether	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
Diisopropyl ether	ND	mg/Kg	0.0021	1	7/22/04	23:05	J. Yun	8260B	3968
METALS									
Lead	2.23	mg/kg	1.02	1	7/29/04	12:50	C.Johnson	6010B	8254

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111180
Sample ID: N-B-2-12
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	9.54 gm	1.0 ml	7/21/04		M. Ricke	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	94.	60. - 130.
EPH surr-o-Terphenyl	79.	49. - 145.
VOA Surr 1,2-DCA-d4	105.	59. - 134.
VOA Surr Toluene-d8	94.	67. - 129.
VOA Surr, 4-BFB	98.	60. - 134.
VOA Surr, DBFM	102.	67. - 126.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.
All reported results for metals or Organic analyses have been corrected for dry weight

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111181
Sample ID: N-B-3-12
Sample Type: Soil
Site ID:

Date Collected: 7/15/04
Time Collected: 15:15
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	96.9	%		1	7/29/04	13:39	B.Plett	CLP	8484
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/kg	5.16	1	7/28/04	0:28	J. Redmond	NWTPH-Gx	5062
TPH (Diesel Range)	ND	mg/kg	10.3	1	7/23/04	12:45	M.Jarrett	NWTPH-Dx	5317
TPH (Oil Range)	15	mg/kg	10.3	1	7/23/04	12:45	M.Jarrett	NWTPH-Dx	5317
VOLATILE ORGANICS									
Methyl-t-amyl ether	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Benzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Bromochloromethane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
Carbon tetrachloride	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Chlorobenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Chloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Chloroform	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Chloromethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
2-Chlorotoluene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
4-Chlorotoluene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.00516	1	7/23/04	18:28	J. Yun	8260B	3981
Dibromochloromethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,2-Dibromoethane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,2-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,3-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,4-Dichlorobenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Dichlorodifluoromethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981

Sample report continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 248092
Project Name: MAID O
Page: 25
Laboratory Receipt Date: 7/20/04

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Xylenes (Total)	< 0.0013	mg/kg	3872	7/22/04	8:48
Xylenes (Total)	< 0.0013	mg/kg	3968	7/22/04	22:04
Xylenes (Total)	< 0.0013	mg/kg	3981	7/23/04	10:25
Bromodichloromethane	< 0.00030	mg/l	3265	7/22/04	15:12
Bromodichloromethane	< 0.00030	mg/l	3265	7/23/04	3:03
Bromodichloromethane	< 0.00030	mg/l	5262	7/26/04	11:49
Bromodichloromethane	< 0.0009	mg/kg	3872	7/22/04	8:48
Bromodichloromethane	< 0.0009	mg/kg	3968	7/22/04	22:04
Bromodichloromethane	< 0.0009	mg/kg	3981	7/23/04	10:25
Trichlorofluoromethane	< 0.00040	mg/l	3265	7/22/04	15:12
Trichlorofluoromethane	< 0.00040	mg/l	3265	7/23/04	3:03
Trichlorofluoromethane	< 0.00040	mg/l	5262	7/26/04	11:49
Trichlorofluoromethane	< 0.0005	mg/kg	3872	7/22/04	8:48
Trichlorofluoromethane	< 0.0005	mg/kg	3968	7/22/04	22:04
Trichlorofluoromethane	< 0.0005	mg/kg	3981	7/23/04	10:25
Methyl-t-butyl ether	< 0.0005	mg/l	3265	7/22/04	15:12
Methyl-t-butyl ether	< 0.0005	mg/l	3265	7/23/04	3:03
Methyl-t-butyl ether	< 0.0005	mg/l	5262	7/26/04	11:49
Methyl-t-butyl ether	< 0.0006	mg/kg	3872	7/22/04	8:48
Methyl-t-butyl ether	< 0.0006	mg/kg	3968	7/22/04	22:04
Methyl-t-butyl ether	< 0.0006	mg/kg	3981	7/23/04	10:25
Diisopropyl ether	< 0.00030	mg/l	3265	7/22/04	15:12
Diisopropyl ether	< 0.00030	mg/l	3265	7/23/04	3:03
Diisopropyl ether	< 0.00030	mg/l	5262	7/26/04	11:49
Diisopropyl ether	< 0.0006	mg/kg	3872	7/22/04	8:48
Diisopropyl ether	< 0.0006	mg/kg	3968	7/22/04	22:04
Diisopropyl ether	< 0.0006	mg/kg	3981	7/23/04	10:25

Project QC continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111182
Sample ID: N-B-4-12
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,2-Dichloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,1-Dichloroethene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
cis-1,2-Dichloroethene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
trans-1,2-Dichloroethene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,2-Dichloropropane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,3-Dichloropropane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
2,2-Dichloropropane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,1-Dichloropropene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
cis-1,3-Dichloropropene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
trans-1,3-Dichloropropene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Ethylbenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Methylene chloride	0.0052	mg/Kg	0.0051	1	7/22/04	18:27	J. Yun	8260B	3872
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Tetrachloroethene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Toluene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,2,3-Trichlorobenzene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,2,4-Trichlorobenzene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,1,1-Trichloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,1,2-Trichloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Trichloroethene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,2,3-Trichloropropane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,2,4-Trimethylbenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,3,5-Trimethylbenzene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
Vinyl chloride	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Xylenes (Total)	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Bromodichloromethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Trichlorofluoromethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Methyl-t-butyl ether	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Diisopropyl ether	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
METALS									
Lead	1.42	mg/kg	1.01	1	7/29/04	12:50	C.Johnson	6010B	8254

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111181
Sample ID: N-B-3-12
Project: 248092

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
1,1-Dichloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,2-Dichloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,1-Dichloroethene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
cis-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
trans-1,2-Dichloroethene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,2-Dichloropropane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,3-Dichloropropane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
2,2-Dichloropropane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,1-Dichloropropene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
cis-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
trans-1,3-Dichloropropene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Ethylbenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Methylene chloride	0.0055	mg/Kg	0.0052	1	7/23/04	18:28	J. Yun	8260B	3981
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Tetrachloroethene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Toluene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,2,3-Trichlorobenzene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,2,4-Trichlorobenzene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,1,1-Trichloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,1,2-Trichloroethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Trichloroethene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,2,3-Trichloropropane	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
1,2,4-Trimethylbenzene	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
1,3,5-Trimethylbenzene	ND	mg/Kg	0.00206	1	7/23/04	18:28	J. Yun	8260B	3981
Vinyl chloride	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Xylenes (Total)	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Bromodichloromethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Trichlorofluoromethane	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Methyl-t-butyl ether	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
Diisopropyl ether	ND	mg/Kg	0.0021	1	7/23/04	18:28	J. Yun	8260B	3981
METALS									
Lead	42.9	mg/kg	1.00	1	7/29/04	12:50	C.Johnson	6010B	8254

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111181
Sample ID: N-B-3-12
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	10.0 gm	1.0 ml	7/21/04		M. Ricke	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	93.	60. - 130.
EPH surr-o-Terphenyl	74.	49. - 145.
VOA Surr 1,2-DCA-d4	102.	59. - 134.
VOA Surr Toluene-d8	94.	67. - 129.
VOA Surr, 4-BFB	97.	60. - 134.
VOA Surr, DBFM	97.	67. - 126.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.
All reported results for metals or Organic analyses have been corrected for dry weight

End of Sample Report.

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ANALYTICAL REPORT

EBI CONSULTANTS 10966

FOUR A STREET
BURLINGTON, MA 01803

Project: 248092
Project Name: MAID O
Sampler: TRAVIS MAURER

Lab Number: 04-A111182
Sample ID: N-B-4-12
Sample Type: Soil
Site ID:

Date Collected: 7/15/04
Time Collected: 16:30
Date Received: 7/17/04
Time Received: 8:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS									
% Dry Weight	97.6	%		1	7/29/04	13:39	B.Plett	CLP	8484
ORGANIC PARAMETERS									
TPH (Gasoline Range)	ND	mg/kg	5.12	1	7/28/04	1:03	J. Redmond	NWTPH-Gx	5062
TPH (Diesel Range)	ND	mg/kg	10.5	1	7/23/04	13:01	M.Jarrett	NWTPH-Dx	5317
TPH (Oil Range)	35.8	mg/kg	10.5	1	7/23/04	13:01	M.Jarrett	NWTPH-Dx	5317
VOLATILE ORGANICS									
Methyl-t-amyl ether	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Benzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Bromochloromethane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
Carbon tetrachloride	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Chlorobenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Chloroethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Chloroform	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Chloromethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
2-Chlorotoluene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
4-Chlorotoluene	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.00512	1	7/22/04	18:27	J. Yun	8260B	3872
Dibromochloromethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,2-Dibromoethane	ND	mg/Kg	0.00205	1	7/22/04	18:27	J. Yun	8260B	3872
1,2-Dichlorobenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,3-Dichlorobenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
1,4-Dichlorobenzene	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872
Dichlorodifluoromethane	ND	mg/Kg	0.002	1	7/22/04	18:27	J. Yun	8260B	3872

Sample report continued . . .

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ANALYTICAL REPORT

Laboratory Number: 04-A111182
Sample ID: N-B-4-12
Project: 248092

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
NWTPH-Dx	9.79 gm	1.0 ml	7/21/04		M. Ricke	3550

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	80.	60. - 130.
EPH surr-o-Terphenyl	74.	49. - 146.
VOA Surr 1,2-DCA-d4	103.	59. - 134.
VOA Surr Toluene-d8	93.	67. - 129.
VOA Surr, 4-BFB	98.	60. - 134.
VOA Surr, DBFM	102.	67. - 126.

LABORATORY COMMENTS:
ND = Not detected at the report limit.
B = Analyte was detected in the method blank.
J = Estimated Value below Report Limit.
E = Estimated Value above the calibration limit of the instrument.
# = Recovery outside Laboratory historical or method prescribed limits.
All reported results for metals or Organic analyses have been corrected for dry weight

End of Sample Report.

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PROJECT QUALITY CONTROL DATA
Project Number: 248092
Project Name: MAID O
Page: 1
Laboratory Receipt Date: 7/20/04

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Samp
UST ANALYSIS								
TPH (Gasoline Range)	mg/kg	< 5.00	5.46	10.0	55	36. - 155.	5062	04-A1111
TPH (Diesel Range)	mg/kg	< 10.5	35.9	40.0	90	26. - 151.	5317	04-A1114
TPH (Gasoline Range)	mg/l	0.457	1.15	1.00	69	61. - 138.	694	111105
TPH (Diesel Range)	mg/l	< 0.100	0.966	1.00	97	20. - 141.	2824	blank
VOA PARAMETERS								
Benzene	mg/l	< 0.0005	0.0582	0.0500	116	73 - 135	3265	BLANK
Benzene	mg/l	< 0.0005	0.0541	0.0500	108	73 - 135	5262	BLANK
Benzene	mg/kg	< 0.0020	0.0397	0.0500	79	33 - 139	3872	111182
Benzene	mg/kg	0.0008	0.0346	0.0500	68	33 - 139	3968	04-A1111
Benzene	mg/kg	0.0028	0.0528	0.0500	100	33 - 139	3981	111197
Chlorobenzene	mg/l	< 0.00020	0.0536	0.0500	107	77 - 130	3265	BLANK
Chlorobenzene	mg/l	< 0.00020	0.0516	0.0500	103	77 - 130	5262	BLANK
Chlorobenzene	mg/kg	< 0.0020	0.0371	0.0500	74	22 - 144	3872	111182
Chlorobenzene	mg/kg	< 0.0020	0.0203	0.0500	41	22 - 144	3968	04-A1111
Chlorobenzene	mg/kg	< 0.0020	0.0500	0.0500	100	22 - 144	3981	111197
1,1-Dichloroethene	mg/l	< 0.00060	0.0590	0.0500	118	71 - 143	3265	BLANK
1,1-Dichloroethene	mg/l	< 0.00060	0.0591	0.0500	118	71 - 143	5262	BLANK
1,1-Dichloroethene	mg/kg	< 0.0020	0.0355	0.0500	71	42 - 142	3872	111182
1,1-Dichloroethene	mg/kg	< 0.0020	0.0379	0.0500	76	42 - 142	3968	04-A1111
1,1-Dichloroethene	mg/kg	< 0.0020	0.0460	0.0500	92	42 - 142	3981	111197
Toluene	mg/l	< 0.0006	0.0550	0.0500	110	69 - 139	3265	BLANK
Toluene	mg/l	< 0.0006	0.0532	0.0500	106	69 - 139	5262	BLANK
Toluene	mg/kg	0.0008	0.0373	0.0500	73	18 - 150	3872	111182
Toluene	mg/kg	0.0011	0.0255	0.0500	49	18 - 150	3968	04-A1111
Toluene	mg/kg	0.0026	0.0506	0.0500	96	18 - 150	3981	111197
Trichloroethene	mg/l	0.00070	0.0686	0.0500	136	72 - 141	3265	BLANK

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 248092
Project Name: MAID O
Page: 2
Laboratory Receipt Date: 7/20/04

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Samp
Trichloroethene	mg/l	< 0.00040	0.0505	0.0500	101	72 - 141	5262	BLANK
Trichloroethene	mg/kg	< 0.0020	0.0391	0.0500	78	32 - 142	3872	111182
Trichloroethene	mg/kg	< 0.0020	0.0311	0.0500	62	32 - 142	3968	04-A1111(
Trichloroethene	mg/kg	< 0.0020	0.0533	0.0500	107	32 - 142	3981	111197
Tetrachloroethene	mg/l	< 0.00040	0.0510	0.0500	102	68 - 140	3265	BLANK
Tetrachloroethene	mg/l	< 0.00040	0.0514	0.0500	103	68 - 140	5262	BLANK
Tetrachloroethene	mg/kg	< 0.0020	0.0349	0.0500	70	19 - 145	3872	111182
Tetrachloroethene	mg/kg	< 0.0020	0.0230	0.0500	46	19 - 145	3968	04-A1111(
Tetrachloroethene	mg/kg	< 0.0020	0.0519	0.0500	104	19 - 145	3981	111197
VOA Surr 1,2-DCA-d4	% Rec				100	59 - 134	3872	
VOA Surr 1,2-DCA-d4	% Rec				99	59 - 134	3968	
VOA Surr 1,2-DCA-d4	% Rec				104	59 - 134	3981	
VOA Surr Toluene-d8	% Rec				93	67 - 129	3872	
VOA Surr Toluene-d8	% Rec				93	67 - 129	3968	
VOA Surr Toluene-d8	% Rec				94	67 - 129	3981	
VOA Surr, 4-BFB	% Rec				97	60 - 134	3872	
VOA Surr, 4-BFB	% Rec				97	60 - 134	3968	
VOA Surr, 4-BFB	% Rec				98	60 - 134	3981	
VOA Surr, DBFM	% Rec				100	67 - 126	3872	
VOA Surr, DBFM	% Rec				99	67 - 126	3968	
VOA Surr, DBFM	% Rec				100	67 - 126	3981	
METALS								
Lead, Dissolved	mg/l	0.0030	0.0500	0.0500	94	80. - 120.	1589	'110205
Lead	mg/kg	< 0.96	101.	100.	101	75. - 125.	8254	04-A1159'

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 248092
Project Name: MAID O
Page: 3
Laboratory Receipt Date: 7/20/04

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
TPH (Gasoline Range)	mg/kg	5.46	7.33	29.24#	16.	5062
TPH (Diesel Range)	mg/kg	35.9	38.8	7.76	41.	5317
TPH (Gasoline Range)	mg/l	1.15	1.19	3.42	17.	694
TPH (Diesel Range)	mg/l	0.966	0.940	2.73	60.	2824
BTEX/GRO Surr., a,a,a-TFT	% Recovery		86.			694
VOA PARAMETERS						
Benzene	mg/l	0.0582	0.0535	8.42	21.	3265
Benzene	mg/l	0.0541	0.0528	2.43	21.	5262
Benzene	mg/kg	0.0397	0.0438	9.82	43.	3872
Benzene	mg/kg	0.0346	0.0358	3.41	43.	3968
Benzene	mg/kg	0.0528	0.0459	13.98	43.	3981
Chlorobenzene	mg/l	0.0536	0.0537	0.19	19.	3265
Chlorobenzene	mg/l	0.0516	0.0512	0.78	19.	5262
Chlorobenzene	mg/kg	0.0371	0.0416	11.44	46.	3872
Chlorobenzene	mg/kg	0.0203	0.0213	4.81	46.	3968
Chlorobenzene	mg/kg	0.0500	0.0443	12.09	46.	3981
1,1-Dichloroethene	mg/l	0.0590	0.0556	5.93	21.	3265
1,1-Dichloroethene	mg/l	0.0591	0.0564	4.68	21.	5262
1,1-Dichloroethene	mg/kg	0.0355	0.0400	11.92	42.	3872
1,1-Dichloroethene	mg/kg	0.0379	0.0395	4.13	42.	3968
1,1-Dichloroethene	mg/kg	0.0460	0.0405	12.72	42.	3981
Toluene	mg/l	0.0550	0.0541	1.65	24.	3265
Toluene	mg/l	0.0532	0.0523	1.71	24.	5262
Toluene	mg/kg	0.0373	0.0417	11.14	48.	3872
Toluene	mg/kg	0.0255	0.0264	3.47	48.	3968
Toluene	mg/kg	0.0506	0.0449	11.94	48.	3981
Trichloroethene	mg/l	0.0686	0.0602	13.04	21.	3265

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 248092
Project Name: MAID O
Page: 4
Laboratory Receipt Date: 7/20/04

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Trichloroethene	mg/l	0.0505	0.0485	4.04	21.	5262
Trichloroethene	mg/kg	0.0391	0.0437	11.11	43.	3872
Trichloroethene	mg/kg	0.0311	0.0319	2.54	43.	3968
Trichloroethene	mg/kg	0.0533	0.0465	13.63	43.	3981
Tetrachloroethene	mg/l	0.0510	0.0505	0.99	21.	3265
Tetrachloroethene	mg/l	0.0514	0.0499	2.96	21.	5262
Tetrachloroethene	mg/kg	0.0349	0.0400	13.62	45.	3872
Tetrachloroethene	mg/kg	0.0230	0.0240	4.26	45.	3968
Tetrachloroethene	mg/kg	0.0519	0.0459	12.27	45.	3981
VOA Surr 1,2-DCA-d4	% Rec		96.			3265
VOA Surr 1,2-DCA-d4	% Rec		98.			5262
VOA Surr 1,2-DCA-d4	% Rec		100.			3872
VOA Surr 1,2-DCA-d4	% Rec		101.			3968
VOA Surr 1,2-DCA-d4	% Rec		102.			3981
VOA Surr Toluene-d8	% Rec		99.			3265
VOA Surr Toluene-d8	% Rec		100.			5262
VOA Surr Toluene-d8	% Rec		94.			3872
VOA Surr Toluene-d8	% Rec		94.			3968
VOA Surr Toluene-d8	% Rec		94.			3981
VOA Surr, 4-BFB	% Rec		97.			3265
VOA Surr, 4-BFB	% Rec		101.			5262
VOA Surr, 4-BFB	% Rec		98.			3872
VOA Surr, 4-BFB	% Rec		97.			3968
VOA Surr, 4-BFB	% Rec		97.			3981
VOA Surr, DBFM	% Rec		97.			3265
VOA Surr, DBFM	% Rec		103.			5262
VOA Surr, DBFM	% Rec		100.			3872
VOA Surr, DBFM	% Rec		100.			3968
VOA Surr, DBFM	% Rec		99.			3981

Project QC continued . . .