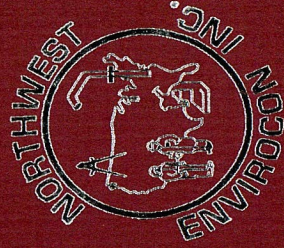


03-93-008



INDUSTRIAL HYGIENE
ENVIRONMENTAL ENGINEERING

OFFICES NATIONWIDE

FOURTH QUARTERLY GROUND WATER MONITORING REPORT

Delco Company (formerly Flying J)
17873 SE McLoughlin Boulevard
Milwaukie, Oregon 97267

Project Number 38-000002
(formerly 16122)

Prepared for:
Devinder Dhillon
14 Longleaf Drive
Hamilton Square, New Jersey

June 22, 1995

Prepared by:
Jeff Jackman

Northwest Envirocon, Inc.
7410 Delaware Lane
Vancouver, Washington 98664
(360) 699-4015

DEPT OF ENVIRONMENTAL QUALITY
RECEIVED

AUG 28 1995

NORTHWEST REGION

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1.0 INTRODUCTION

This report is to summarize the fourth quarterly ground water sampling event that took place on June 20, 1995 at the Milwaukie Fuel Stop/Delco facility (formerly Flying J) in Milwaukie, Oregon. This site is located at 17873 McLoughlin Boulevard, as shown in Figure 1. Ground water was sampled on June 20, 1995 from each of eight (8) monitoring wells on the site. Analytical results indicated that the benzene concentration in wells MW-1, MW-2, MW-4, MW-5, MW-7 and MW-8 exceeds the Oregon Cleanup Level of 5 parts per billion (ppb). The ethylbenzene concentration in MW-3, MW-4, and MW-7 exceeds the Oregon Cleanup Level of 700 ppb. MW-4 and MW-7 also exceed the allowable limit of 10,000 ppb total xylenes, and MW-7 exceeds the limit of 1,000 ppb toluene.

Free product was observed in MW-7 during this sampling event. Manual removal of free product from MW-7 has not been conducted as installation of a groundwater treatment system is imminent. Free product has not been observed in the other seven (7) monitoring wells.

1.1 Objective

The purpose of this investigation was to ascertain the environmental impact of a petroleum hydrocarbon plume to the ground water at the Delco (formerly Flying J) gasoline station in Milwaukie, Oregon.

1.2 Background

In May of 1993, Delta Environmental in Bellevue, Washington conducted a Phase I Environmental Assessment of the Flying J (now Delco) gasoline station in Milwaukie, Oregon. Conclusions based on the results of the Phase I indicated the likelihood the facility may have had an unauthorized release and a Phase II preliminary site characterization was initiated. Geotech Exploration drilled five soil borings in prearranged locations within the property's boundaries. The borings did not penetrate the soil/groundwater interface. Soil samples were collected from each of the borings and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and total petroleum hydrocarbons as gasoline (TPH-G). Concentrations of BTEX and TPH were found in the soil samples in levels high enough to warrant additional drilling on the site. All five borings were subsequently abandoned with concrete after the investigation was concluded.

In June of 1993, Geotech Explorations and Delta Environmental drilled six monitoring wells on site to evaluate the potential environmental impact to ground water. According to the Delta Environmental Phase III report, the wells on the site are constructed of flush-jointed, 2-inch diameter, schedule 40 PVC pipe, fitted with 10-foot long, 0.020-inch factory slotted well screens. In each well, the screen was set at a depth which intersected the groundwater surface observed at the time of the drilling, and was surrounded by a washed silica sand filter pack to a level at least one foot above the top of the screened interval. The remaining borehole was filled with bentonite, and the well was completed with a concrete seal and a flush-mounted locking steel protective well box at the ground surface.

The results of the sampling conducted in June 1993 indicated that soils from borings MW-1 through MW-5 contained concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH) and total petroleum hydrocarbons as gasoline (TPH-G). Benzene and TPH were above Oregon Cleanup Levels in borings MW-1 through MW-5. Ground water was sampled and analyzed from each of the six wells for BTEX, TPH, and TPH-G. Laboratory analysis of the water samples obtained indicated that MW-1 through MW-5 contained concentrations of benzene and TPH which exceeded Oregon cleanup levels. MW-6 however, showed concentrations of benzene and TPH below Oregon cleanup requirements.

Since the completion of Delta Environmental Phase III in June 1993, the ground water on this site had not been sampled until July 1994 when Northwest Envirocon, Inc. was retained by Mr. Devinder Dhillon to sample the ground water from each of the six monitoring wells previously drilled by Geotech Explorations. This July, 1994 sampling event served as the first quarterly monitoring. Since that time, Northwest Envirocon has conducted second and third quarter ground water monitoring at this site.

On January 27, 1995 three (3) new monitoring wells were installed by Tankliners. These wells were designated MW-7, MW-8, and MW-9. MW-7 and MW-8 are four inches in diameter and were installed to accommodate a groundwater treatment system. MW-9 is a two-inch diameter well to be used for ground water monitoring, and was installed hydrologically up-gradient as recommended by the Oregon Department of Environmental Quality. Please refer to the ground water contour map in Appendix B for well locations.

MW-7 and MW-8 are constructed of flush-jointed, 4-inch diameter, schedule 40 PVC pipe, fitted with 15-foot long, 0.020-inch factory slotted well screens. In each well, the screen was set at a depth which intersected the groundwater surface observed at the time of the drilling, and was surrounded by a washed silica sand filter pack to a level at least one foot above the top of the screened interval. The remaining borehole was filled with bentonite, and the well was completed with a concrete seal and a flush-mounted locking steel protective well box at the ground surface. MW-9 is of the same construction except that the diameter is 2" and the screened interval is 10 feet. Copies of the well logs and related documents can be found in Appendix E.

On February 20, 1995 (after the third quarter monitoring) MW-3 was decommissioned by Geotech Explorations due to repairs to the asphalt in the vicinity of the well. A copy of the well abandonment documentation is included in Appendix F.

The soil which had been stockpiled on the site from earlier tank removal activities was removed from the site and disposed at Roosevelt Regional Landfill in Roosevelt, Washington on March 22, 1995. A copy of the soil disposal records are contained in Appendix G.

2.0 GROUND WATER MONITORING ACTIVITIES

2.1. Groundwater Sampling Methods

To ensure representative ground water samples were obtained, on June 20, 1995 a Northwest Envirocon field technician purged a minimum of three well volumes from each of the monitoring wells using a Voss® disposable bailers. The purged water from each well was collected and is stored in 55-gallon drums on the site until laboratory analytical results determine the proper disposal method. Static water level measurements were taken using a Slope® Water Level Indicator accurate to 0.01 feet. Water samples were collected using a disposable bailer for each well.

The eight wells on site are fast recharging wells; and after purging, each well was allowed to recharge to at least 85 percent of its original volume prior to sampling. The ground water was then sampled using a new, pre-wrapped Voss® single sample disposable bailer and a new set of latex gloves for each well. Nylon twine was replaced between each sampling event to decrease the risk of cross-contamination. Water was discharged from a single check valve on the bottom of the bailer into two (2) 40 milliliter glass VOA vials which were supplied by Wy'East Laboratory. The samples were collected with no headspace in the vials. The water sample vials were labeled and stored in a cooler with ice packs and transported to Wy'East Laboratory in Portland with the appropriate chain-of-custody. All six wells were analyzed for EPA method 8020 (BTEX). Copies of the chain-of-custody and laboratory results are contained in Appendix C.

Static water level measurements were recorded at each well with a Slope® Water Level Indicator. The levels obtained from each well are indicated below.

Groundwater Elevations

<u>Monitoring Well</u>	<u>Depth to ground water</u>	<u>Elevation of Well</u>
MW-1	4.67 feet	99.67 feet
MW-2	3.77 feet	98.79 feet
MW-4	4.28 feet	99.30 feet
MW-5	5.63 feet	100.66 feet
MW-6	5.28 feet	100.29 feet
MW-7	4.61 feet	98.95 feet
MW-8	4.68 feet	99.62 feet
MW-9	4.88 feet	99.71 feet

Based on the ground water measurements, the inferred ground water flow direction for the fourth quarter is to the southeast. A groundwater contour map is contained in Appendix B.

2.2 Ground Water Analysis and Results

Northwest Envirocon conducted the fourth quarterly ground water sampling on June 20, 1995. A total of sixteen 40-milliliter VOA vials (two from each well) were analyzed by Wy'East Laboratory for BTEX. The results were compared to the Oregon UST Cleanup Levels [340-122-242(4)]. Laboratory analysis revealed that six of eight monitoring wells exceed the Oregon cleanup level of 5 parts per billion (ppb) benzene, one well exceeds the 1,000 ppb cleanup level for toluene, two wells exceed the cleanup level of 10,000 ppb xylenes, and two wells exceed the cleanup level of 700 ppb ethylbenzene. The following charts show the laboratory results relative to Oregon Cleanup levels.

Oregon Cleanup Levels [340-122-242(4)]

<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
5 ppb	1,000 ppb	700 ppb	10,000 ppb

Laboratory Analytical Results for BTEX

MW-1	619 ppb*	10 ppb	66 ppb	377 ppb
MW-2	240 ppb*	ND	ND	4 ppb
MW-4	5130 ppb*	281 ppb	3150 ppb*	16400 ppb*
MW-5	150 ppb*	18 ppb	4 ppb	70 ppb
MW-6	ND	ND	ND	ND
MW-7	4230 ppb*	6410 ppb*	11700 ppb*	16700 ppb*
MW-8	2830 ppb*	312 ppb	253 ppb	2830 ppb
MW-9	ND	ND	ND	2 ppb

* Exceeds Oregon Cleanup Levels

MW-7 to the east of the UST basin was the only well that exceeded cleanup levels for **all** BTEX constituents. In addition to MW-7, MW-4 was the only other well that exceeded cleanup levels for more than one constituent (benzene, ethylbenzene, and xylenes). A copy of the laboratory results and chain-of-custody can be found in Appendix C.

3.0 FREE PRODUCT RECOVERY

Free product was observed during this fourth quarterly ground water sampling in MW-7, east of the diesel fuel pump. No free product was observed in the other seven monitoring wells. The bailed free product and ground water from MW-7 is stored in a 55-gallon drum on the site.

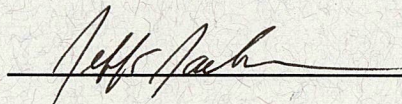
4.0 CONCLUSIONS AND RECOMMENDATIONS

The results of this sampling event indicate an overall increase in BTEX concentration in MW-1 MW-2, MW-5 and MW-6, and an overall decrease in MW-4 since the third quarterly sampling event on January 24, 1995. MW-4 and MW-7 (closest to the UST basin) were the only two wells to exceed Oregon cleanup levels for more than one constituent. Since six of eight monitoring wells on the site detected benzene above Oregon cleanup levels, we recommend the installation of a groundwater cleanup system.

5.0 LIMITATIONS

This assessment has been performed in accordance with generally accepted environmental practices and procedures, as of the date of the report. All services have been performed employing that degree of care and skill ordinarily exercised under similar circumstances by reputable environmental technologists practicing in this, or similar localities. No other warranty or guarantee, expressed or implied, is made or offered.

The conclusions and recommendations stated in this report are based upon observations made by employees of Northwest Envirocon, Inc. and also upon information provided by others. We have no reason to suspect or believe that the information provided is inaccurate. However, we cannot be held responsible for the accuracy of the information provided to us by others.



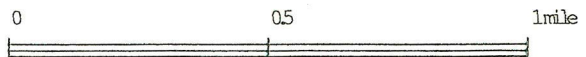
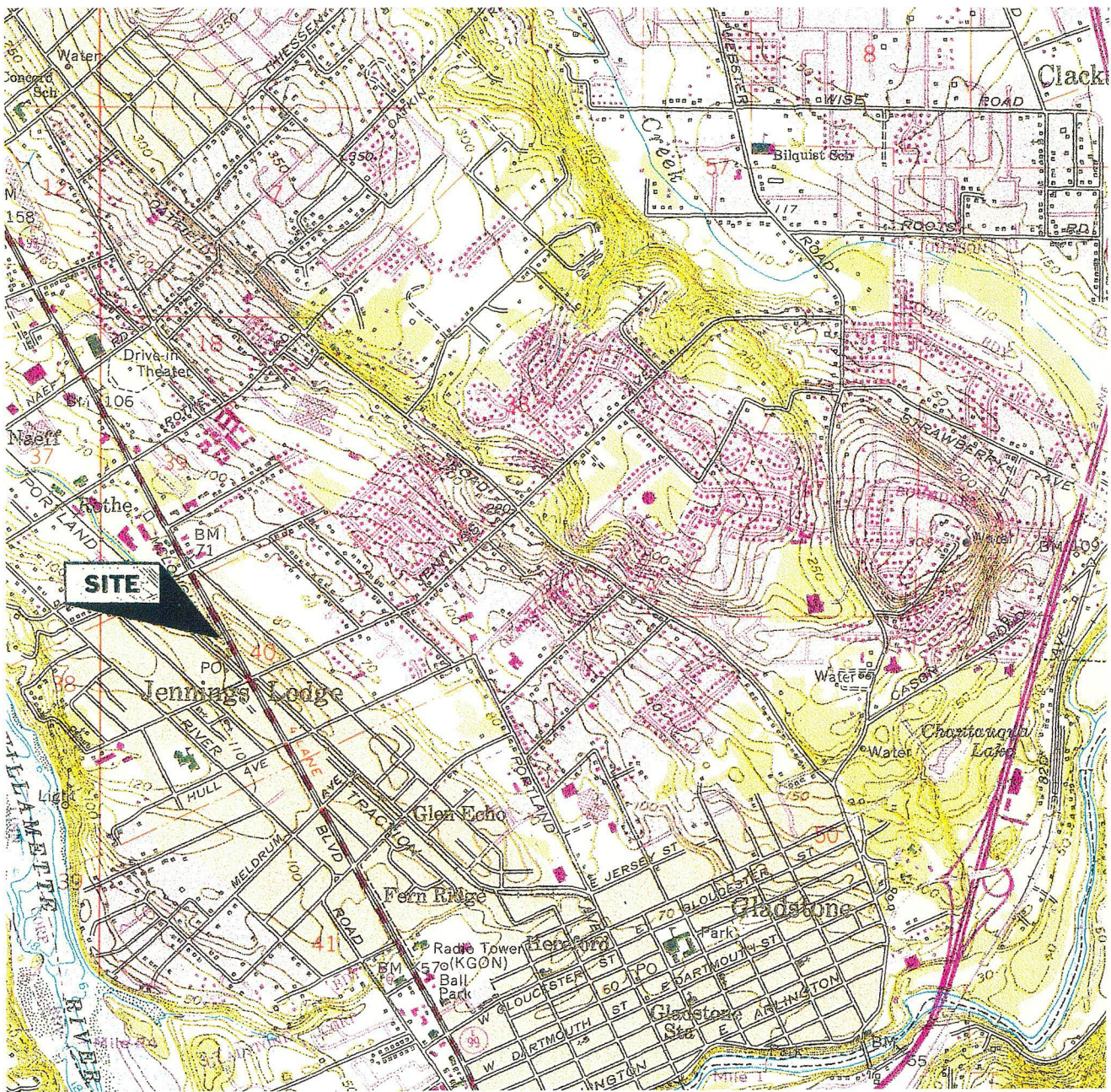
Jeff Jackman
Senior Environmental Assessor

Stan Schoof
Account Executive

6.0 APPENDICES

- A • Topographic Map
- B • Ground Water Contour Map
- C • Laboratory Results and Chain of Custody
- D • Ground Water Elevation Summary
- E • Construction Documentation for Wells 7, 8, and 9
- F • Abandonment Documentation for Well 3
- G • Soil Disposal Documentation

Appendix A



Northwest Envirocon, Inc.
Environmental Consulting

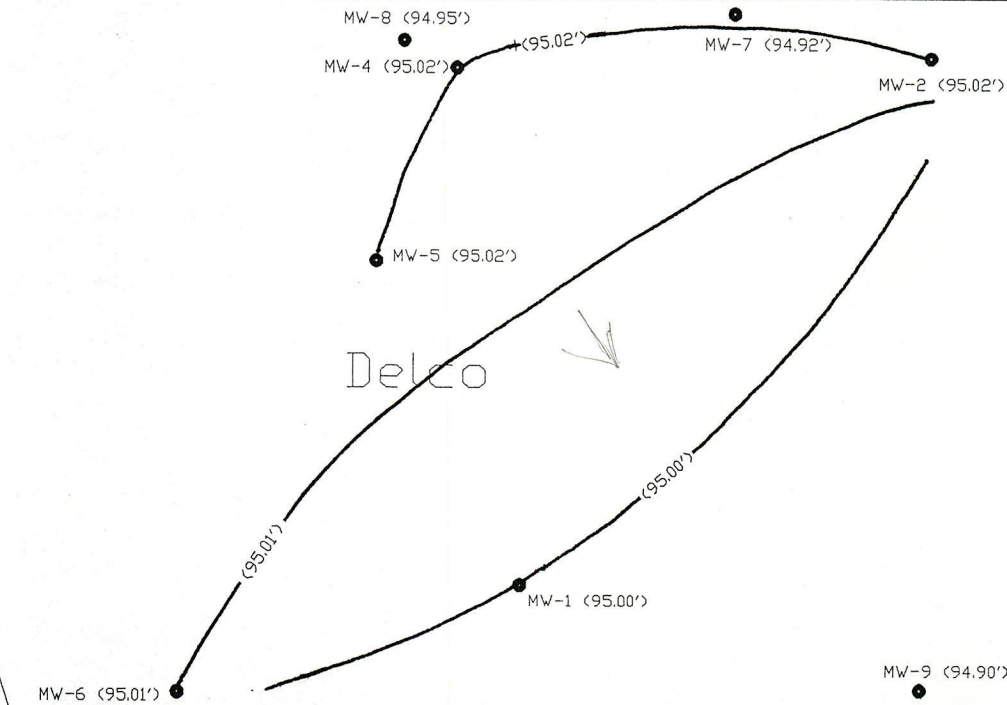
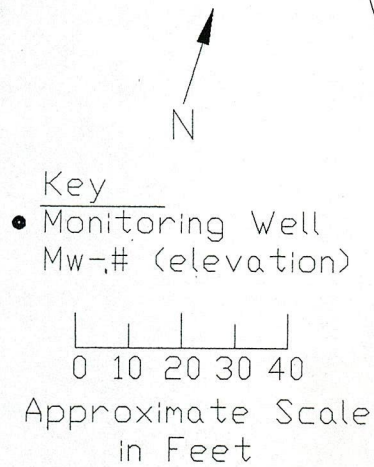
USGS 1:24,000 Topographic Map
Gladstone, Oregon Quadrangle

JOB NUMBER
38-000002

DATE
June 20, 1995

Appendix B

Ed's Muffler



4th Quarterly Groundwater Elevation Diagram

PROJECT Groundwater Monitoring

SURVEY AREA Delco

DRAWN BY Jeff Jackman

DATE 8-8-95

DRAWING #

38-000002-1

Appendix C

LABORATORY REPORT

Northwest Envirocon
7410 Deleware Lane
Vancouver WA 98664

PROJECT NAME/SITE: Delco
PROJECT NUMBER: 38-000002
EXTRACTION DATE: 6/22/95

REPORT NUMBER: 14884
REPORT DATE: 6/23/95
PAGES: 1

EPA 8020

Analyte: BTEX for water (Benzene, Toluene, Ethylbenzene, Xylenes)

Field ID	Lab ID	Identification & Quantification µg/L (ppb)				Surrogate Recovery (%)
		Benzene	Toluene	Ethyl-Benzene	Xylenes	
MW1	20417	619	10	66	377	90
MW2	20418	240	ND	ND	4	84
MW4	20419	5,130	281	3,150	16,400	90
MW5	20420	150	18	4	70	86
MW6	20421	ND	ND	ND	ND	77
MW7	20422	4,230	6,410	11,700	16,700	82
MW8	20423	2,830	312	253	2,830	93
MW9	20424	ND	ND	ND	2	80
BLANK	-	ND	ND	ND	ND	-
Quantification Limits	-	2	2	2	2	-

Surrogate is p-Bromofluorobenzene

ND = Not Detected (below reporting limit or detection limit)

Wy'East

Environmental Sciences, Inc.

Research, Laboratory, and Consulting Services

CHAIN OF CUSTODY

2415 SE 11th Ave. • Portland, Oregon 97214 • (503) 231-9320 • FAX (503) 231-9344

PROJECT # #177 38-000002	PROJECT NAME / SITE De/co	STATE OR	PURCHASE ORDER # 48P-00022
COMPANY NW Environcon	REPORT ATTENTION Jeff	PHONE NUMBER (360) 699-4015	FAX NUMBER (360) 699-5223
SAMPLES COLLECTED BY Jeff Jackson	DATE COLLECTED 6/20/95	TIME COLLECTED 13:10 → 15:50	SAMPLES CHILLED TO 4° C? yes
PRESERVATIVE USED? (HCl, etc.) none			

FIELD ID	MEDIA	CONTAINER	VOLUME ETC.	ANALYSIS REQUIRED	LAB ID
MW 1	water	2/10A	4/0 ml	BTEX	20417
MW 2					20418
MW 4					20419
MW 5					20420
MW 6					20421
MW 7					20422
MW 8					20423
MW 9					20424

RELINQUISHED BY Jeff Jackson	DATE / TIME 6/21/95 10:48	RECEIVED BY [Signature]	DATE / TIME 6-21-95 10:58
RELINQUISHED BY	DATE / TIME	RECEIVED BY LAB	DATE / TIME
REMARKS	SHIPPED BY		

Wy'East will return white copy to client with laboratory report and keep yellow copy for files. Client keeps pink copy.

Appendix D

Ground Water Elevation Summary

June 20,1995

Well #	Top of riser elevation	measured depth to ground water (in feet)	Product layer	Ground water elevation
MW-1	99.67	4.67	none	95.00
MW-2	98.79	3.77	none	95.02
MW-4	99.30	4.28	none	95.02
MW-5	100.66	5.63	none	95.02
MW-6	100.29	5.28	none	95.01
MW-7	98.96	4.03	1 inch	94.92
MW-8	99.63	4.63	none	94.95
MW-9	99.72	4.88	none	94.90

Appendix E

FOR WATER RESOURCES DEPARTMENT USE ONLY

Date Postmarked

Date Hand-delivered

Watermaster Initials

W- 52293

WRD Receipt

Date Fee Received

CHECK NO. 14896

START CARD

NOTICE OF BEGINNING OF WELL CONSTRUCTION

(as required by ORS 537.762)

This form must be completed, signed by both the owner (or authorized agent) and constructor, and the original mailed or delivered to the Water Resources Department, 3850 Portland Road NE, Salem, OR 97310, no later than the day construction, alteration, conversion or abandonment work begins. A **\$75 fee shall accompany all notices for new well construction or conversion of an existing hole not previously used as a water well** (make checks payable to the Water Resources Department). Notices meeting this requirement but received without the required fee will not be accepted as properly and timely filed. The Water Resources Commission has authority to impose civil penalties for failure to submit the required \$75 fee with the start card and for failure to submit cards prior to beginning any construction, alteration, conversion or abandonment work.

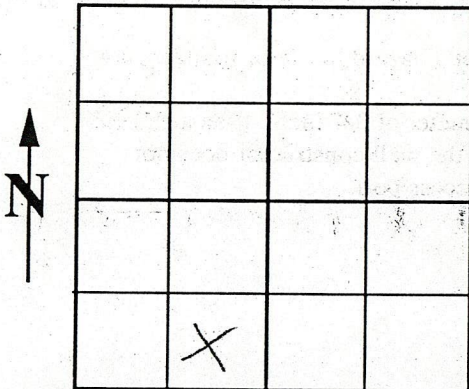
Owner's name and mailing address Divender Dhillon
14 Long Leaf Dr.
Hamilton Square, N.J. 08690

Check type of work: Fee Required ☒ New construction ☐ Conversion No Fee Required ☐ Repair ☐ Deepening ☐ Recondition ☐ Abandonment

Proposed Commencement Date 1-27-95 Existing or Proposed Well Depth 20 ft Diameter 4 inch

Check Use: ☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation ☒ Monitoring
☐ Thermal ☐ Injection ☐ Other

Proposed Well Location: County Clackamas Owner's Well Id. No. _____
 Township 2S (N or S) Range 2E (E or W) Section 18



1. S/E 1/4 of S/W 1/4 of above section

2. Street address of well location 17873 S.E. McLoughlin
Milwaukie, OR

3. Tax lot number of well location _____

4. Attach map with location identified.
 (See reverse of this form for approved maps)

5. Show well location within 1/4, 1/4 of section grid at left.

We hereby certify that we have read the back of this form, and that to the best of our knowledge the information provided herein is accurate and the well is being properly located from septic tanks, septic drain fields and other hazards. (See #2 on back)

Owner's signature

Bonded Water / Monitor Well Constructor

Title

Date

License No.

Home phone

Work phone

Company

NOTE: This is not a water right application. The owner is responsible for obtaining a water right through the Water Resources Department, if required.

THIS COPY TO CUSTOMER

FOR WATER RESOURCES DEPARTMENT USE ONLY

Date Postmarked

Date Hand-delivered

Watermaster Initials

W-52294

WRD Receipt

Date Fee Received

CHECK NO. 14896

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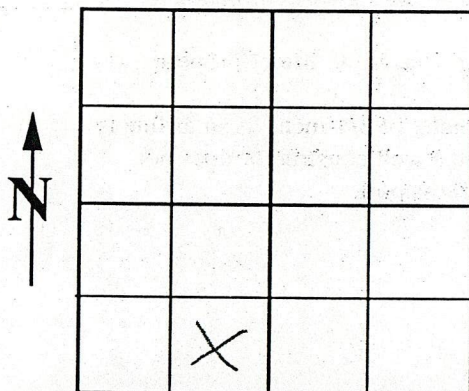
Owner's name and mailing address Divender Dhillon
14 Long Leaf Dr.
Hamilton Square, N.J. 08690

Check type of work: Fee Required ☒ New construction ☐ Conversion No Fee Required ☐ Repair ☐ Deepening ☐ Recondition ☐ Abandonment

Proposed Commencement Date 1-27-95 Existing or Proposed Well Depth 20 ft. Diameter 4 inch

Check Use: ☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation ☒ Monitoring
☐ Thermal ☐ Injection ☐ Other

Proposed Well Location: County Clackamas Owner's Well Id. No. _____
 Township 2S (N or S) Range 2E (E or W) Section 18



- SE 1/4 of SW 1/4 of above section
- Street address of well location 17873 S.E. McLoughlin
Milwaukie, Or.
- Tax lot number of well location _____
- Attach map with location identified.
 (See reverse of this form for approved maps)
- Show well location within 1/4, 1/4 of section grid at left.

We hereby certify that we have read the back of this form, and that to the best of our knowledge the information provided herein is accurate and the well is being properly located from septic tanks, septic drain fields and other hazards. (See #2 on back)

Owner's signature

Bonded Water / Monitor Well Constructor

Title

Date

License No. 10128

Home phone

Work phone

Company Tank Liners Inc.

NOTE: This is not a water right application. The owner is responsible for obtaining a water right through the Water Resources Department, if required.

THIS COPY TO CUSTOMER

FOR WATER RESOURCES DEPARTMENT USE ONLY

Date Postmarked

Date Hand-delivered

Watermaster Initials

W-52292

WRD Receipt

Date Fee Received

CHECK NO. 14896

START CARD

NOTICE OF BEGINNING OF WELL CONSTRUCTION

(as required by ORS 537.762)

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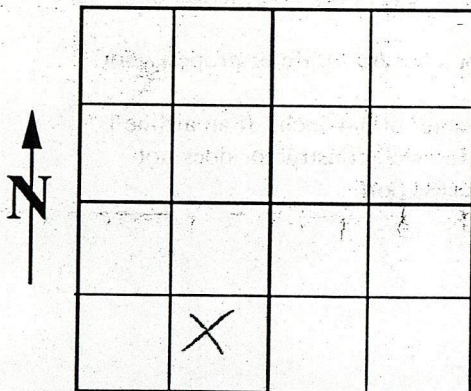
Owner's name and mailing address Divender Dhillon
14 Long Leaf Dr.
Hamilton Square, N.J. 08690

Check type of work: Fee Required ☒ New construction ☐ Conversion No Fee Required ☐ Repair ☐ Deepening ☐ Recondition ☐ Abandonment

Proposed Commencement Date 1-27-95 Existing or Proposed Well Depth 20 ft. Diameter 2 inch

Check Use: ☐ Domestic ☐ Community ☐ Industrial ☐ Irrigation ☒ Monitoring ☐ Thermal ☐ Injection ☐ Other

Proposed Well Location: County Clackamas Owner's Well Id. No. _____
 Township 2S (N or S) Range 2E (E or W) Section 18



1. SE 1/4 of SW 1/4 of above section

2. Street address of well location 17873 S.E. McLoughlin
Milwaukie, OR.

3. Tax lot number of well location _____

4. Attach map with location identified.
 (See reverse of this form for approved maps)

5. Show well location within 1/4, 1/4 of section grid at left.

We hereby certify that we have read the back of this form, and that to the best of our knowledge the information provided herein is accurate and the well is being properly located from septic tanks, septic drain fields and other hazards. (See #2 on back)

Owner's signature _____ Bonded Water / Monitor Well Constructor

Title _____ Date _____ License No. 10128

Home phone _____ Work phone _____ Company Tank Liners Inc.

NOTE: This is not a water right application. The owner is responsible for obtaining a water right through the Water Resources Department, if required.

THIS COPY TO CUSTOMER

SOIL BORING LOG AND WELL CONSTRUCTION

DELCO Service Station
17873 S.E. McLoughlin
Milwaukie, Oregon

Boring Number

MW-7

Page Number

1 of 1

Drilling Contractor

Tank - Liners, Inc.

Drilling Method

Hollow-Stem-Auger

Start (Date - Time)

1/27/95 - 8:50

Finish (Date - Time)

1/27/95 - 9:30

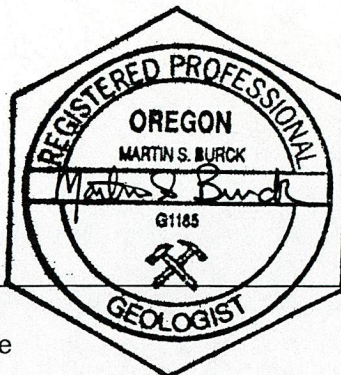
Elevation (Surface / Top of Well Casing)

not available

Logged By

Martin S. Burck R.G.

Sample Number	Blow Count (per 6 inches)	Sample Recovery (inches)	Depth (feet) Sample Interval	Sample Description and Subsurface Conditions	Monitoring Well Construction Diagram
MW-7-5	2 for 24"	12	0	Asphalt and Gravel Base (Boulders)	
			5	Silty Sand, grey, very wet, medium grained, some clay and gravel, may be fill material or interbedded (?), (SW)	
				Clayey Silt, grey, wet-saturated, (ML)	
			10		
			15		
				Based on Drilling Change	
			20	Silty Sand, grey, saturated, (SM)	
				Total Depth 19 feet	
			25		



Comments: * Based on approximate msl elevation.
ND = Not Detected, NA = Not Available

Auger Dimensions:

12" O.D., 6 5/8" I.D.

Casing:

4" I.D., Sched. 40 PVC

SOIL BORING LOG AND WELL CONSTRUCTION

DELCO Service Station
17873 S.E. McLoughlin
Milwaulkie, Oregon

Boring Number

MW-8

Page Number

1 of 1

Drilling Contractor

Tank - Liners, Inc.

Drilling Method

Hollow-Stem-Auger

Start (Date - Time)

1/27/95 - 10:15

Finish (Date - Time)

1/27/95 - 11:30

Elevation (Surface / Top of Well Casing)

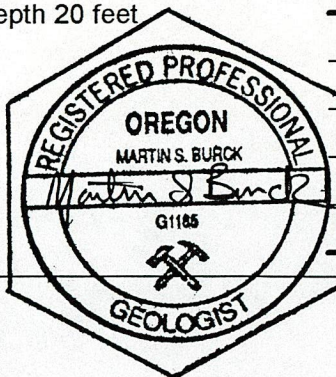
not available

Logged By

Martin S. Burck R.G.

Sample Number	Blow Count (per 6 inches)	Sample Recovery (inches)	Depth (feet) Sample Interval	Sample Description and Subsurface Conditions	Monitoring Well Construction Diagram
MW-8-5	3 for 24"	12	0	Asphalt and Gravel Base	
			5	Clayey Silt, grey, wet-saturated, (ML)	
MW-8-10	5 for 24"	12	10	Clayey Silt, grey, wet-saturated, (ML)	
			15	Based on Drilling Change Silty Sand, grey, saturated, (SM)	
			20	Total Depth 20 feet	Auger Dimensions: 12" O.D., 6 5/8" I.D. Casing: 4" I.D., Sched. 40 PVC
			25		

Comments: * Based on approximate msl elevation.
ND = Not Detected, NA = Not Available



SOIL BORING LOG AND WELL CONSTRUCTION

DELCO Service Station
17873 S.E. McLoughlin
Milwaulkie, Oregon

Boring Number
MW-9

Page Number
1 of 1

Drilling Contractor
Tank - Liners, Inc.

Drilling Method
Hollow-Stem-Auger

Start (Date - Time)
1/27/95 - 14:00

Finish (Date - Time)
1/27/95 - 14:53

Elevation (Surface / Top of Well Casing)
not available

Logged By
Martin S. Burck R.G.

Sample Number	Blow Count (per 6 inches)	Sample Recovery (inches)	Depth (feet) Sample Interval	Sample Description and Subsurface Conditions	Monitoring Well Construction Diagram
MW-9-5	3 for 24"	18	0	Asphalt and Gravel Base Silty Gravelly Sand, (Fill Material) dark brown, moist, pebbles, cobbles and boulders, (SW)	
MW-9-10	7 for 24"	18	5	Clayey Silt, dark brown, moist-wet, (ML)	
MW-9-15	6 for 24"	24	10	Clayey Silt, dark brown, saturated, (ML)	
			15	Clayey Silt, grey/tan, saturated, (ML)	
				Total Depth 15 feet	
					Auger Dimensions: 8" O.D., 4.25" I.D. Casing: 2" I.D., Sched. 40 PVC

Comments: * Based on approximate msl elevation.
ND = Not Detected, NA = Not Available

Appendix F

Date Postmarked _____
 Date Hand-delivered _____
 Watermaster Initials _____

w74238

WRD Receipt _____
 Date Fee Received _____

Check No. _____

START CARD

NOTICE OF BEGINNING OF WELL CONSTRUCTION

(as required by ORS 537.762)

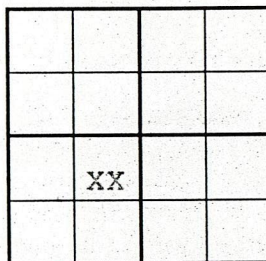
This form must be completed, signed by both the owner (or authorized agent) and constructor, and the original mailed or delivered to the Water Resources Department, 158 12th St. NE, Salem, OR 97310, no later than the day construction, alteration, conversion or abandonment work begins. A \$75 fee shall accompany all notices for new well construction or conversion of an existing hole not previously used to obtain water (make checks payable to the Water Resources Department). Notices meeting this requirement but received without the required fee will not be accepted as properly and timely filed. In addition, the constructor shall provide the "Watermaster Copy" of this notice to the office of the district watermaster within which the well is being constructed, altered, converted or abandoned using one of the following options: (a) by regular mail no later than three (3) calendar days (72 hours) prior to commencement of work; or, (b) by hand delivery, during regular office hours, no later than the day work is commenced; or, (c) by FAX no later than the day work is commenced. If this method is used, the original "Watermaster copy" of this notice shall also be mailed or delivered to the office of the district watermaster no later than the day work is commenced. The Water Resources Commission has authority to impose civil penalties for failure to submit the required \$75 fee with the start card and for failure to submit cards prior to beginning any construction, alteration, conversion or abandonment work.

Owner's name and mailing address: MR. DEVINDER DHILLON14 LONGLEAF DRIVEHAMILTON SQUARE, N.J. 08690

Check type of work: Fee Required ☐ New construction ☐ Conversion No Fee Required ☐ Alteration (Repair/Recondition) ☐ Deepening ☐ Abandonment Original Start Card Number _____

Proposed Commencement Date 2-20-95 Existing or Proposed Well Depth 20' Diameter 2"

Check Use: ☐ Domestic ☐ Public System (Community) ☐ Industrial ☐ Irrigation ☒ Monitoring
☐ Thermal ☐ Injection ☐ Other _____

Proposed Well Location: County CLACKAMAS Owner's Well Id. No. _____Township 2 S (N or S) Range 2 E (E or W) Section 18

- N.E. 1/4 of S.W. 1/4 of above section
- Street address of well location 17860 S.E. McLOUGHLIN
MILWAUKIE, OREGON
- Tax lot number of well location _____
- Attach map with location identified.
See reverse of this form for approved maps.
- Show well location within 1/4, 1/4 of section grid at left.

I hereby certify that the information provided herein is accurate and the well is being properly located from septic tanks, septic drain fields and other hazards. (See #2 on back)

G. McInnisLicense No. 10011Company GEO-TECH

Bonded Water/Monitor Well Constructor

NOTE: This is not a water right application. The owner is responsible for obtaining a water right through the Water Resources Department, if required. Public Systems require plans to be submitted to and approved by the Oregon Health Division prior to construction.

THIS COPY TO CUSTOMER

(as required by ORS 537.765 & OAR 690-240-095)

Start Card # 74235

WELL NO.

Name Mr. Devinder Dhillon
Address 14 Longleaf Dr.
City Hamilton State NY Zip 12169

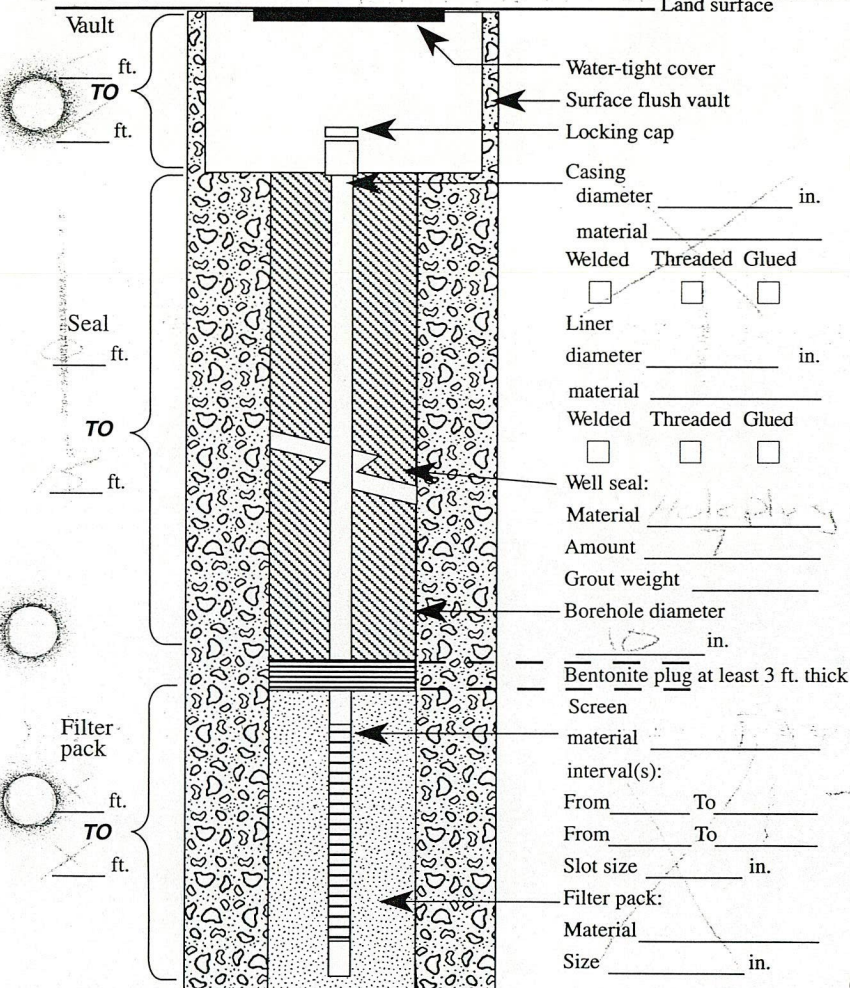
☐ New construction ☐ Alteration (Repair/Recondition)
☐ Conversion ☐ Deepening ☒ Abandonment

☐ Rotary Air ☐ Rotary Mud ☐ Cable
☒ Hollow Stem Auger ☐ Other _____

Special Standards ☐ Yes ☒ No

Depth of completed well 142 ft.

Land surface 142 ft.



☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
 Permeability _____ Yield _____ GPM
 Conductivity _____ PH _____
 Temperature of water _____ °F/C Depth artesian flow found _____ ft.
 Was water analysis done? ☐ Yes - ☒ No
 By whom? _____
 Depth of strata to be analyzed. From _____ ft. to _____ ft.
 Remarks: _____

Name of supervising Geologist/Engineer TECO

Well Location: County Chickasaw
Township 2 (N or S) Range 2 (E or W) Section 18

1. NE 1/4 of SW 1/4 of above section.
2. **Either** Street address of well location 17469 S. Milwaukee
McLaughlin
or Tax lot number of well location

3. ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

6.2 Ft. below land surface. Date 2-20-75
Artesian Pressure lb/sq. in. Date

Depth at which water was first found N/A

[illegible]

Ground elevation

[illegible]

Date started 4-2-73 Completed 4-20-73

(unbonded) Monitor Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to the best knowledge and belief.

knowledge and belief. _____ MWC Number _____
Signed _____ Date _____

(bonded) Monitor Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

Signed _____ MWC Number 100
Date 2/10/95

Appendix G



REGIONAL DISPOSAL COMPANY

A WASHINGTON JOINT VENTURE

March 29, 1995

Delco Petroleum Co.
17873 SE McLoughlin Blvd.
Milwaukie, OR
Fax (509) 627-5263
Attn: Peter Trabusiner

Dear Mr. Trabusiner,

Per your request, I tracked the soil generated from UST Site closure in Milwaukie, OR. On March 22, 1995 (between 3:19 & 3:23 PM), Sunrise Express trucked a total of 147.79 tons from site to Roosevelt Regional Landfill in Roosevelt, WA. If you have any questions or I can be of any further assistance, please give me a call.

Thank You,

Debbie Jones
Regional Disposal

CORPORATE OFFICE: 200 - 112TH AVE. N.E., SUITE 300 • BELLEVUE, WASHINGTON 98004

LANDFILL SITE: 1800 ROOSEVELT GRADE ROAD • P.O. BOX 338 • ROOSEVELT, WASHINGTON 99356

(206) 646-2400 • FAX (206) 646-2440

(509) 374-5841 • FAX (509) 374-5881

TOTAL P. 02

03/29/95 10:08:01

4135C

ACCOUNT: Delco Petroleum

REGIONAL DISPOSAL COMPANY
RECAP OF WEIGHT TICKETS

TICKET #	TIME	TRUCK#	GROSS	TARE	NET POUNDS	NET TONS	TYPE	JOB CODE	CONTAINER
DATE: 03/22/95									
168620	15:19	171	90560	34700	55860	27.930	PCS	95-1132	
168621	15:20	169	96360	35000	61360	30.680	PCS	95-1132	
168625	15:21	159	89620	34480	55140	27.370	PCS	95-1132	
168626	15:22	00115	96780	36340	60440	30.220	PCS	95-1132	
168627	15:23	199	100340	37560	62780	31.390	PCS	95-1132	
					295580	147.790			
TOTAL FOR: 03/22/95					295580	147.790			
TOTALS FOR: Delco Petroleum					295580	147.790			
REPORT TOTALS:					295580	147.790			

ENVIRONMENTAL
ENGINEERING

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HYGIENE

CONSTRUCTION
MANAGEMENT

LABORATORY
SERVICES

MAINTENANCE
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ASBESTOS
SERVICES/TRAINING

PHASE I
ASSESSMENTS

LEAD
SERVICES

OFFICES NATIONWIDE
1-800-395-0352