

* PETROLEUM RELEASE FORM

Please Check All That Apply

1-26-98

-----INCIDENT INFORMATION-----

LOG NBR: 03-92-0125 RECEIVED BY: JEM ☒ REGULATED UST
UST FAC NBR: DATE REPORTED: 5/1/92 ☐ NON-REGULATED UST

SITE NAME: MEADOW BROOK STORE ☐ HEATING OIL TANK

SITE ADDRESS: 16845 HWY 211

SITE CITY: MOLALLA ZIP: 97038

SITE COUNTY: PHONE:

FUNDING

☒ LUST ☐ HSRAF
☐ OHC ☐ FINANCIAL ASST
☐ INVOICE START ☐ INVOICE STOP
☐ NFA SENT

PROJECT MANAGER:

-----MAIL CONTACTS-----

REPORTED BY

NAME: Bob Montgomery
COMPANY:
ADDRESS: PO BOX 130
CITY: SANDY ZIP: 97055
STATE: PHONE:

RESPONSIBLE PARTY

NAME: TONI & JACK FRISON
COMPANY:
ADDRESS: PO BOX 1535 CRR
CITY: TERREBONNE ZIP: 97760
STATE: OR PHONE:

INVOICE CONTACT

NAME:
COMPANY:
ADDRESS:
CITY: ZIP:
STATE: PHONE:

OTHER CONTACT(S)

NAME:
COMPANY:
ADDRESS:
CITY: ZIP:
STATE: PHONE:

-----SITE ASSESSMENT-----

DATE DISCOVERED: 4, 30, 92

☐ EMERGENCY RESP.

☐ ENFORCEMENT

☐ FUTHER CLEANUP REQ.

☐ NO FURTHER CLEANUP REQ.

☐ OFFSITE MIGRATION

L.I.P.S. SCORE (Region)

CONFIRMATION:

☐ SI) STAFF
☐ LD) LAB: DEQ
☐ LR) LAB: RP
☐ LO) LAB: OTHER
☒ RR) RP REPORT
☐ CN) CONTRACTOR
☐ OT) OTHER

DISCOVERY:

☐ RM) ROUTINE MONITORING
☒ DC) DECOMMISSIONING
☐ CP) COMPLAINT
☐ IC) INVENTORY CONTROL
☐ SA) SITE ASSESSMENT
☐ TT) TANK TEST
☐ OT) OTHER

CAUSE:

☒ TL) TANK LEAK
☐ PL) PIPE LEAK
☐ OF) OVERFILL
☐ SS) SURFACE SPILL
☐ PV) PUMP/VALVE LEAK
☐ OT) OTHER
☒ UN) UNKNOWN

CONTAMINANTS - IMPACTS

CONTAMINANTS:

- ☐ UG) UNLEADED GASOLINE
- ☐ LG) LEADED GASOLINE
- ☒ MG) MISC. GASOLINE
- ☐ DS) DIESEL
- ☐ FO) FUEL OIL
- ☐ WO) WASTE OIL
- ☐ LB) LUBRICANT

- ☐ SV) SOLVENT
- ☐ BF) BUNKER FUEL
- ☐ OP) OTHER PET. DIST.
- ☐ CH) CHEMICAL
- ☐ HO) HEATING OIL
- ☐ UN) UNKNOWN
- ☐ OT) OTHER _____

MEDIA/IMPACT:

- ☒ SL) SOIL
- ☒ GW) GROUNDWATER
- ☐ SW) SURFACE WATER
- ☐ DW) DRINKING WATER
- ☐ FV) FACILITY (VAPOR)
- ☐ FP) FACILITY (FREE PROD.)

SITE - MANAGEMENT

RELEASE STOPPED: 4 / 30 / 92

FINAL REQUEST INVOICE DATE: 12 / 2 / 97

CLEANUP STARTED: 4 / 30 / 92

NO FURTHER ACTION: 1 / 26 / 98

SOIL - MANAGEMENT

SWLA PERMIT NUMBER: _____

DATE ISSUED: _____ / _____ / _____

AMOUNT OF SOIL (yds 3) TREATED ON SITE: _____

TREATMENT METHOD:

- ☐ AREATION
- ☐ THERMAL
- ☐ BIOLOGICAL
- ☐ OTHER _____

AMOUNT OF SOIL (yds 3) TREATED OFF SITE: _____

AMOUNT OF SOIL (yds 3) DISPOSED OF: _____ ☐ TREATED

☐ UNTREATED

FINAL DISPOSITION OF SOIL:

- ☐ ONSITE
- ☐ LANDFILL

- ☐ ROAD BASE
- ☐ OTHER _____

NOTES/COMMENTS: _____

This Space Provided For Regional Use

FILE NAME: Meadow Brook Grouse LOG NO. 03 - 92 - 125

NWR'S NFA TRACKING CHECKLIST

ROUTE TO	ACTIVITY	RESPONSIBLE PERSON	DATE COMPLETED
	Draft NFA prepared by Project Manager (PM)	AWP	10/13/97
	Draft NFA approved by Rick Silverman (and/or Rich Reiter, if necessary)	RS	10/14/97
VB	To Victor for Time Accounting/CR entries	UCB	10/14
	SEQUENT updated by Debi Smith (or Victor Beard) with final invoice request date and new green sheet information.	UCB	12/2/97
	ACCESS updated by Debi Smith (or Victor Beard) with final invoice request date and new green sheet information.	UCB	12/2/97
	OPTIONAL STEP: Expedited payment request by responsible party (RP) is handled by =====>>		
	OPTIONAL STEP: Estimated Expedited Payment Amount given to RP by =====>>		
	Final invoice paid notice received from Business Office and PM informed by Andree Pollock	AW	1/26/98
	Final NFA drafted and signed by PM (and Rich Reiter, if necessary)	AWP	1/26/98
DS	SEQUENT updated by Debi Smith (or Victor Beard) with filed closed information.	DS	1/26/98
DS	ACCESS updated by Debi Smith (or Victor Beard) with file closed information.	DS	1/26/98
	Proofreading letter and file closure activities by Victor Beard (or Debi Smith)	UCB	1/26/98
	Copies made and mailed by front desk receptionist	UCB	1/26/98

NFA PROCESS COMPLETE

03-92-125

* L U S T F O R M *

1215

INCIDENT INFORMATION

LUST Incident Nbr: 03-92-125 LUST Log Nbr: _____ UST Facility ID: 7673

Date Received: 5/1/92 Received By: JEM Emergency Resp Taken: Y N

Tank Identification: File Name: Meadowbrook Store

Street: 16845 Hwy 211

City: Mokalla Zip: 97038

County: Clackamas Phone: _____

Notes: see back →

Incident Comments: _____

CONTACT & MAIL TYPES

Reported By: Bob Montgomery LUST Contact: _____ Responsible Party: DON & MARGIE TUMS

Name: _____ Name: _____

Company: Montgomery Company: MEADOWBROOK GRO. & DELI

Street: PO Box 130 Street: PO Box 388

City: Sandy Zip: 97055 City: COLTON Zip: 97017

State: _____ Phone: 668 4847 State: _____ Phone: _____

SITE ASSESSMENT

LUST Incident Nbr: (XXXXXXXXXXXXX)

Date Investigated: 4/30/92 Investigated By: JEM

Release Exists: (Y) N Confirmation Method: A) Staff B) Lab: DEQ C) Lab: RP D) Lab: Other E) RP F) Other

Cleanup Necessary: (Y) N Regulated Tank: (Y) N Exposure Assessment: Y (N)

Off-Site Migration: Y N ? Estimated Gallons Released: _____ Priority: 422

Discovery Date: 4/30/92

How Discovered: (Circle) A) Routine Monitoring B) Inventory Control C) Decommissioning D) Site Assessment

E) Complaint F) Tank Test G) Other

Material Released: (Circle) A) Unleaded Gasoline B) Leaded Gasoline C) Misc. Gasoline

D) Diesel E) Fuel Oil F) Waste Oil

G) Lubricant H) Solvent I) Bunker Fuel

J) Other Pet. Dist. K) Chemical L) Unknown

Source of Release: (Circle) A) Tank Leak B) Pipe Leak C) Overfill D) Surface Spill

E) Pump/Valve Leak F) Other G) Unknown

Impacts: (Circle) Soil Y N % ?

Groundwater Y N % ?

Surface Water Y N % ?

Drinking Water Y N % ?

Facility (Vapor) Y N % ?

Facility (Free Product) Y N % ?

20 yd³ stockpiled
backfilled excav. for
safety - covered excav. with
plastic & filled w/rock
temporarily.

Site Assessment Comments: _____

SITE MANAGEMENT

LUST Incident Nbr: (XXXXXXXXXXXXX)

Date Released Stopped: 4/30/92

Cleanup Activity: Start Date: _____ Under Control Date: _____

End Date: _____ Contractor Name: _____

Cleanup Guideline: Matrix C.A.P. Cleanup Lead: RP SLW/TF SLW/oTF

Free Product Disposal: _____ Soil Disposal: _____

Est. Gallons: _____ Est. Cu/Yds: 38

Resp. Party: _____ Resp. Party: _____

Disposal Location: _____ Disposal Location: on site Area

Removal Date: _____ Removal Date: _____

Enforcement Action: Y N

Cost Recovery Initiated: Y N Source of Cost Recovery: _____

Pct. R.P.: _____

Pct. SLW/TF: _____

Pct. SLW/oTF: _____

Estimations: Cost of Cleanup: _____ Staff Time On Project: _____

Site Management Comments: _____

NWR UST CLEANUP SITE CHECKLIST
(for regional use only)

RP
Toni + Jack Frison
Box 1535 CRR
Terrebonne, OR
(541) 504-8751 97760

This site is:

- ☐ <40 ppm Matrix
- ☐ Regulated Tank
- ☐ Exempt Tank
- ☐ Oil Heat Commission eligible
- ☐ Other (surface spill, non-petroleum UST, etc.)

Assign site to:

- ☐ Staff (your initials or staff for major RP)
- ☐ Unassigned at this time
(matrix only, soil aeration not anticipated)
- ☐ Needs to be tracked (supervisor to assign Reason: _____)

Action:

- ☒ Send Initial Letter (with rules)
- ☐ Send Modified Letter (without rules)
- ☐ Send <40 ppm Letter (without rules)
- ☐ No letter required (sending other letter, etc.)

Regulated Tank Information (Y/N):

- ☒ Tanks registered ID No. #7673
- ☒ Decommissioning notice (30 day) received
- ☐ 3 day notice received
- ☒ Fees current
- ☐ New tanks to be installed

Misc. Notes:

Sampling: groundwater encountered at largest UST. One large aeration, water only: airtured at 19 UST area. Water Sample collected and 2 soil samples from each UST and. kept 3 weeks for results (from 1/15/92)

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

MUST INCIDENT PRIORITIZATION SYSTEM

Scoring Sheet

Date: 6-12-92

Log Number: 03-92-125

Site Name: Meadow Brook Grocery

DEQ Scorer Initials: AVP

Consultant Name: _____

HUMAN HEALTH IMPACTS

Drinking Water

*** NOTE: In this section, all (or none) of the criteria must be scored.

Difficulty in replacing the supply: Hard ☒ Medium ☐ Easy ☐

Type of supply that may be impacted: Community ☐ Intermittent ☐ Private ☒

Size of population served by the supply: Large ☐ Medium ☐ Small ☒

When is impact likely to occur: Current/In Use ☐ Imminent ☐ Current/Alt ☐ Possible ☒

Toxic Vapor Impacts

*** NOTE: In this section, all (or none) of the criteria must be scored.

Level of vapor present: High ☐ Low ☐

Potential population exposed: Large ☐ Medium ☐ Small ☐

ENVIRONMENTAL DAMAGES

*** NOTE: In this section, all (or none) of the criteria must be scored.

Type of environment that may be impacted: Type A ☐ Type B ☐ Type C ☐

Likelihood of impact: High ☐ Medium ☐ Low ☐

RESOURCE DAMAGES

Non-Drinking Water Supply Impacts

Type of supply that may be impacted: Industrial ☐ Agricultural ☐ Non-use ☒

If non-use supply, specify impact to: Groundwater ☒ Surface Water ☐

Utility Corridors: Presence ☐ Damage ☐

TIEBREAKER

Potential for Transport

*** NOTE: In this section, all (or none) of the criteria must be scored.

Mean Annual Rainfall: >45" (H) ☐ 20-45" (M) ☒ <20" (L) ☐

Soil Permeability: High ☒ Medium ☐ Low ☐

Type of Contaminant: Gasoline (G) ☒ Diesel (D) ☐ Waste Oil (W) ☐ Crudes (C) ☐

Magnitude of Release

Number of Gallons Lost: >5000 (V) ☐ 1000-5000 (L) ☐ 500-999 (M) ☒ 100-499 (S) ☐ <100 (E) ☐

Potential Receptors

*** NOTE: In this section, all (or none) of the criteria must be scored.

Aquifer Depth: <25' (1) ☒ 25-50' (2) ☒ 51-100' (3) ☐ >100' (4) ☐

Distance to surface water: <100 yds (N) ☐ 100-500 yds (M) ☐ >500 yds (F) ☒

422

FAX TRANSMITTAL

Date and Time:	September 5, 2002
To:	Henning Larsen
Company:	DEQ
Fax No.:	503 229-6945
From:	Don Williams
Company:	Meadowbrook Grocery
Phone No.:	503 637-3055
Fax No.:	
No. of Pages:	3, including cover

Henning,
Here is the report from Coffey Labs on the well water.

Don

Rick:
Toni & Jack have
sold the store &
moved. Current address/
phone is:
Box 1535 CRR
Terrebonne, OR
97760
(541) 504-8751 Hds



Report Date: September 5, 2002
Job Number: A20829AX
PWSID: 94658
PO Number: None Provided
Project No: None Provided
Project Name: None Provided

Margie Williams
Meadow Brook Grocery
P.O. Box 425
Eagle Creek, OR 97022

Sample Information

Laboratory Sample ID	Field Identification	Matrix	Collection Date	Collection Time
A20829AX-1	Kitchen Sink By Cash Register	Drinking Water	08/29/02	1515

Analytical results are on the following page(s).

Sincerely

Technical Services

The data submitted in this report is for the sole and exclusive use of the above-named client. All samples associated with the work order will be retained a maximum of 15 days from the report date or until the maximum holding time expires. All results pertain only to samples submitted.

Thank you for allowing Coffey Laboratories to be of service to you. If you have questions or need further assistance, please do not hesitate to call our Customer Services Department.

TS/atc



Analytical Data

Meadow Brook Grocery

Job Number: A20829AX
Page Number: 2 of 2

Lab Sample ID: A20829AX-1

Field ID: Kitchen Sink By Cash Register

Date/Time: 08/29/02 1515

Matrix: Drinking Water

EPA Category: Volatile Organic Chemicals

Analysis Performed: Volatile Organics by GC/MS.

Analysis Date: 09/03/02

Analyst: MRD

Parameter	Detection Limit	Analytical Result	EPA Limit	EPA Code
Benzene	5.	ND	----	2990
Ethylbenzene	5.	ND	----	2992
Toluene	5.	ND	----	2991
m,p-Xylene	10.	ND	----	----
o-Xylene	5.	ND	----	2995
Total Xylenes	10.	ND	----	2955
4-Bromofluorobenzene (Surr.)	20.	87%	----	----
Dibromofluoromethane (Surr.)	20.	121%	----	----
Toluene-d8 (Surr.)	20.	102%	----	----

ND means none detected at or above the detection limit listed.

Coffey Laboratories, Inc.

12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

State of Oregon

Department of Environmental Quality

Memorandum

To: **File**
Northwest Region Tanks Program Manager

Date: October 8, 2002

From: Henning Larsen 
Hydrogeologist NWR Tanks Program

Subject: Meadowbrook Grocery (DEQ File 03-92-0125)

On October 4, 2002, the DEQ received the results of monitoring well sampling recently conducted at the Meadowbrook Grocery. Although, the DEQ had not required sampling of the wells, the Department was interested in the results given the Department's recent site inspection and follow up to a complaint filed by PGE in 2000.

The results of the sampling have reaffirmed the Department's decision to not reopen this cleanup project. Consistent with the visual and olfactory observations made during an August 27th, 2002 site inspection, groundwater drawn from the wells contained low levels of gasoline contamination with benzene detected at a maximum concentration of 7.25 ppb. While several compounds were detected at concentrations exceeding their respective drinking water ingestion standards, the observed levels were of similar magnitude as to those detected at the time of closure in 1997. This suggests that conditions have not changed significantly since the time of closure and that there is no evidence of a recent, or on-going, release. At the time of closure it was acknowledged that the ingestion standards had not been met. However, the DEQ had determined that the impacts were tolerable since the groundwater contamination was localized within the shallow aquifer and repeated sampling had shown it was not affecting the on-site drinking water well.

03-92-0125
9165



MARTIN S. BURCK ASSOCIATES, INC.

1832 W Cascade, Hood River, OR 97031

Phone 541.387.4422 Portland 503.977.2401



Geologic and Environmental Consulting Services

FACSIMILE COVER PAGETo: Henning Larson, DEQFax No. 503-229-6945Phone No. 1-800-452-4011From: Martin S Burck Assoc. IncFax No. 541.387.4813Phone No. 541.387.4422Total Pages: 26 + Cover Date: 10/4 2002SUBJECT: Ground Water Monitoring and Sampling - Oct 2002 - Meadbrook

COMMENTS:

.....
Please find attached a copy of subject report.

.....
Please call if you have any questions.

.....
Follow Up:

MARTIN S. BURCK ASSOCIATES, INC.

1832 W Cascade, Hood River, OR 97031
Phone 541.387.4422 Portland 503.977.2401

Geologic and Environmental Consulting Services



October 4, 2002

Mr. Don Williams
39801 S.E. Kitzmiller
Eagle Creek, Oregon 97022

Subject: **Ground Water Monitoring and Sampling - October 2002**
Meadowbrook Grocery
16845 S. Highway 211
Molalla, Oregon

Dear Mr. Williams:

This report presents the results of ground water monitoring and sampling activities performed at the Meadowbrook Grocery facility located at 16845 S. Highway 211, Molalla, Oregon in October 2002, by Martin S. Burck Associates Inc. (MSBA).

INTRODUCTION

The Meadowbrook Grocery site, owned by Don Williams, consists of an active automobile refueling station and grocery store. The legal description of the site location is Clackamas County, Tax Lot No. 800; Township 5S, Range 3E, Section 2. The site location is illustrated on Figure 1. The site features including a grocery store, pump island, former tanks, and three ground water monitoring wells are illustrated on Figure 2.

GROUND WATER LEVEL MONITORING AND SAMPLING

The general scope of work consisted of measuring ground water levels in each of the monitoring wells (MW-1, MW-2, and MW-3) and collecting a ground water sample from each of the wells for laboratory analysis. Monitoring and sampling activities were performed in general accordance with the Field Methods and Procedures presented in Attachment A. The ground water monitoring and sampling activities were performed at the site on October 1, 2002.

Ground Water Level Data Summary

The depth to ground water measured below the top of casing (TOC) in monitoring well MW-1 was 5.03 feet, MW-2 was 5.63 feet, and MW-3 was 5.92 feet. The depth to water measured in each of the wells is summarized in Table 1.

Ground Water Analytical Data Summary

Ground water samples were collected from monitoring wells MW-1, MW-2, and MW-3 for laboratory analysis of benzene, toluene, ethylbenzene, xylenes, 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), methyl tert-butyl ether (MTBE), naphthalene, 1,2,4-trimethylbenzene (124-TMB), 1,3,5-trimethylbenzene (135-TMB), isopropylbenzene (IPB), and n-propylbenzene (NPB) using EPA method 8260B. The ground water samples were also analyzed for dissolved lead using EPA method 6020. The ground water sample analytical data are summarized in Table 1 and are presented below.

Benzene was not detected in well MW-1 and was detected in wells MW-2 and MW-3 at concentrations of 7.25 parts per billion (ppb) and 0.79 ppb, respectively.

Toluene was not detected in wells MW-1 and MW-3 and was detected in well MW-2 at a concentration of 1.52 ppb.

Ethylbenzene was detected in wells MW-1, MW-2, and MW-3 at concentrations of 32.4 ppb, 98.9 ppb and 2.67 ppb, respectively.

Xylene was detected in wells MW-1, MW-2, and MW-3 at concentrations of 17.8 ppb, 282 ppb, and 1.90 ppb, respectively.

EDB, EDC, and MTBE were not detected in any of the wells.

Naphthalene was not detected in well MW-3 and was detected in wells MW-1 and MW-2 at concentrations of 27.2 ppb and 44.7 ppb, respectively.

124-TMB was detected in wells MW-1, MW-2, and MW-3 at concentrations of 77.2 ppb, 173 ppb, and 2.21 ppb, respectively.

135-TMB was detected in wells MW-1, MW-2, and MW-3 at concentrations of 44.9 ppb, 36.5 ppb, and 0.53 ppb, respectively.

IPB was not detected in well MW-3 and was detected in wells MW-1 and MW-2 at concentrations of 13.8 ppb and 15.1 ppb, respectively.

NPB was detected in wells MW-1, MW-2, and MW-3 at concentrations of 59.4 ppb, 35.9 ppb, and 2.28 ppb, respectively.

Dissolved lead was detected in wells MW-1, MW-2, and MW-3 at concentrations of 2.10 ppb, 1.11 ppb, and 1.10 ppb, respectively.

A copy of the ground water sample laboratory report is presented in Attachment 2 and copies of the ground water purge and sample data are presented in Attachment 3.

REMARKS AND SIGNATURES

The information/conclusions/recommendations/proposals contained in this report were arrived at in accordance with currently accepted professional hydrogeologic and environmental practices at this time and location. No warranties are expressed or implied. This report was prepared solely for Mr. Don Williams and MSBA is not responsible for the independent conclusions or actions of others derived from the information presented herein.

Information and opinions presented in this report are based on the collection and review of data from limited portions of the site subsurface. MSBA is not responsible for conditions that may exist in portions of the site that were not investigated; for conditions that were not reported or properly presented to MSBA; and for future activities or investigations that may alter the current condition or understanding of the site.

Prepared by:

MARTIN S. BURCK ASSOCIATES, INC.

Michael Deely

Michael Deely
Environmental Scientist

10/4/02

Date

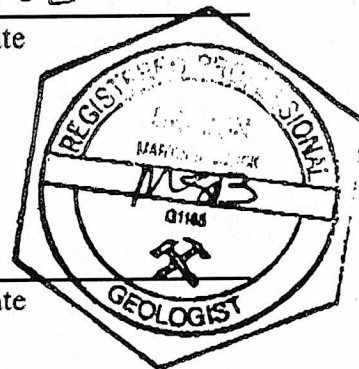
Reviewed By:

Martin S. Burck

Martin S. Burck, RG
Registered Geologist

10/4/02

Date



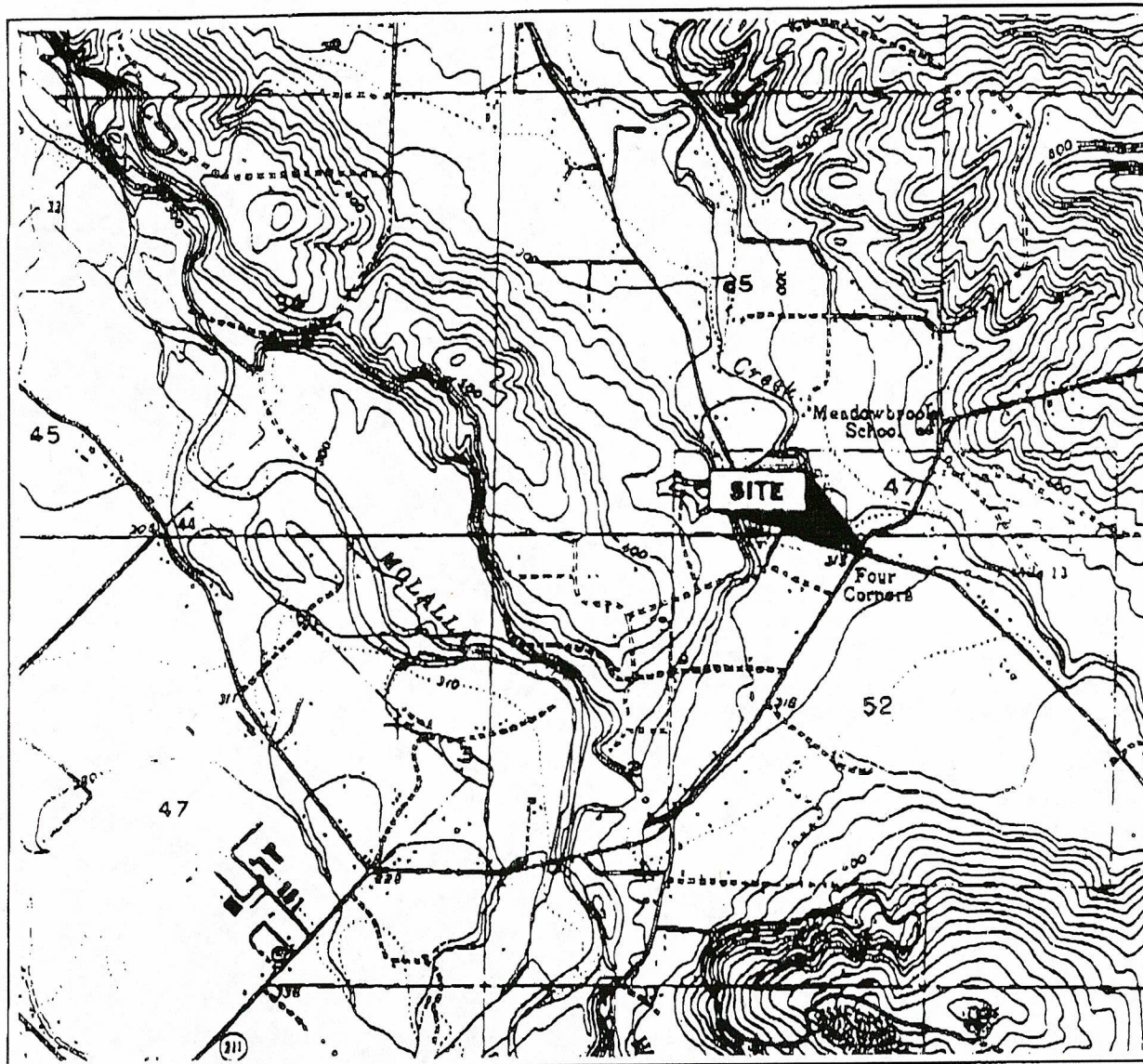
C:\Workfile 0\R&C\Meadowbrook\Oct02gw.wpd

enc: Figure 1:	Site Location Map
Figure 2:	Site Features and Well Location Map
Table 1:	Ground Water Sample Analytical Data and Depth to Water
Attachment 1:	Field Methods and Procedures
Attachment 2:	Ground Water Sample Laboratory Report
Attachment 3:	Ground Water Purge and Sample Data

Figures

Figure 1 Site Location Map

Figure 2 Site Features Map



Scale 1:24,000

Contour Interval 20 Feet

Dotted Lines Represent 10-Foot Contours

National Geodetic Vertical Datum of 1929



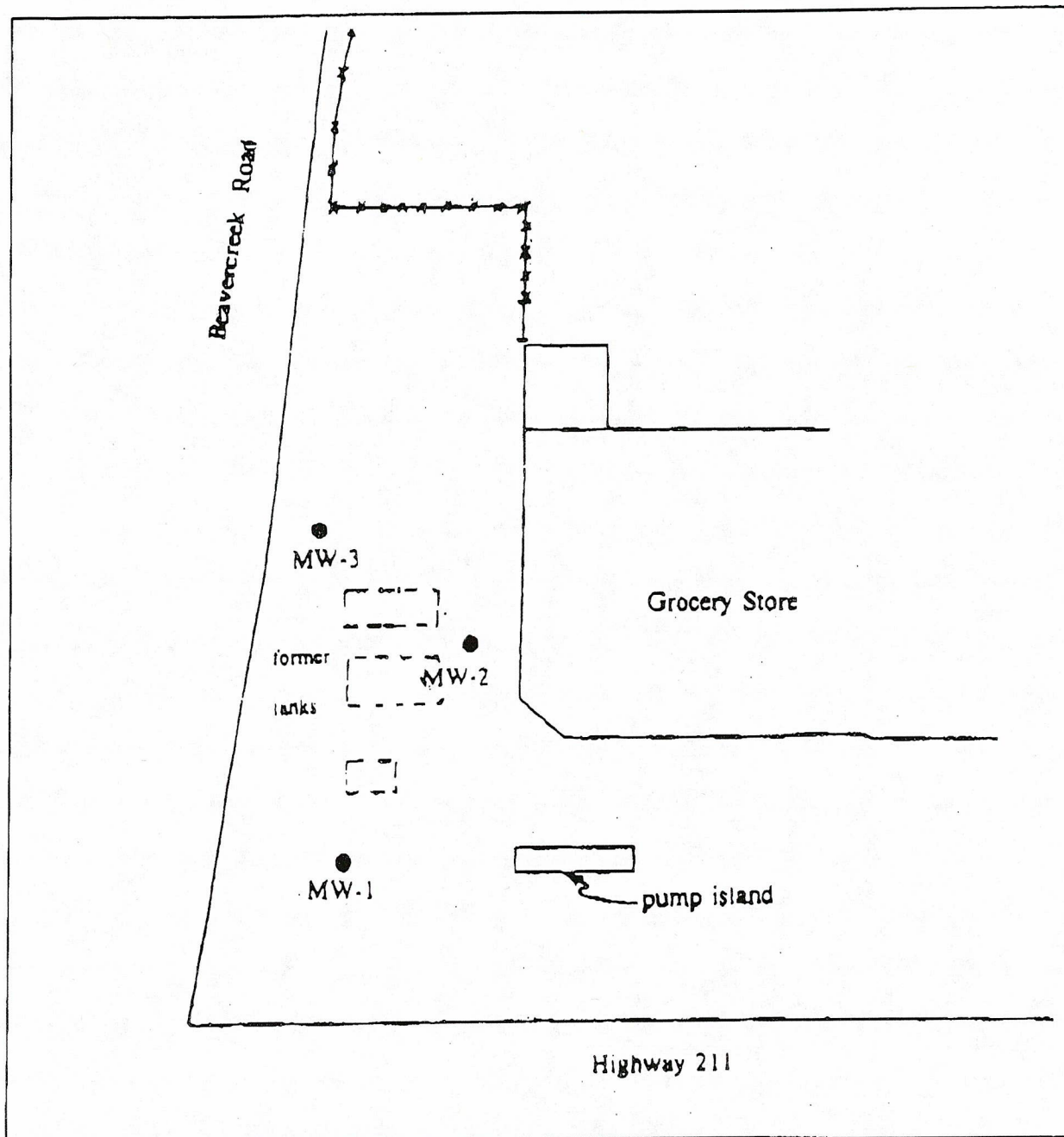
NORTH

MSBA
Martin S. Burck Associates, Inc.
Geologic and Environmental Consulting Services

FIGURE 1

SITE LOCATION MAP

Meadowbrook Grocery
16845 S. Highway 211
Molalla, Oregon



Adapted from Report Prepared by Others



0 10 20
Approximate Scale in Feet

LEGEND

- | | |
|--------|--|
| MW-1 ● | Ground Water Monitoring Well and Label |
| | Former Tank Location Outlines |

MSBA
Martin S. Burck Associates, Inc.
Geologic and Environmental Consulting Services

FIGURE 2

SITE FEATURES MAP

Meadowbrook Grocery
16845 S. Highway 211, Molalla, Oregon

Table

Table 1 Ground Water Sample Analytical Data and Depth to Water

TABLE 1
GROUND WATER SAMPLE ANALYTICAL DATA AND DEPTH TO WATER

Meadowbrook Grocery
16845 S. Highway 211, Molalla, Oregon

Well ID	Depth to Water ^a	Date	Benzene ^b (ppb) ^d	Toluene ^b (ppb)	Ethylbenzene ^b (ppb)	Xylenes ^b (ppb)	EDB ^b (ppb)	EDC ^b (ppb)	MTBE ^b (ppb)	124-TMB ^b (ppb)	135-TMB ^b (ppb)	IPB ^b (ppb)	NPB ^b (ppb)	Naphthalene ^b (ppb)	Lead ^c (ppb)
MW-1	5.03	10/1/02	ND ^e	ND	32.4	17.8	ND	ND	ND	77.2	44.9	13.8	59.4	27.2	2.10
MW-2	5.63	10/1/02	7.25	1.52	98.9	282	ND	ND	ND	173	36.5	15.1	35.9	44.7	1.11
MW-3	5.92	10/1/02	.79	ND	2.67	1.90	ND	ND	ND	2.21	0.53	ND	2.28	ND	1.10

- a** Depth to ground water measured in feet from the top of each well casing to the ground water surface.
- b** Benzene, toluene, ethylbenzene, xylenes, 1,2-dibromoethane (EDB), 1,2-dichloroethane (EDC), methyl tert-butyl ether (MTBE), 1,2,4-trimethylbenzene (124-TMB), 1,3,5-trimethylbenzene (135-TMB), isopropylbenzene (IPB), n-propylbenzene (NPB), and naphthalene analyzed using EPA method 8260B.
- c** Dissolved lead analyzed using EPA method 6020.
- d** Numeric analytical results reported in parts per billion (ppb).
- e** Not detected (nd).

Attachment 1

Field Methods and Procedures

FIELD METHODS AND PROCEDURES

The following section presents the general field methods and procedures that were utilized to complete field activities. These activities included collecting and preserving ground water samples for laboratory analysis. Ground water samples were collected, preserved, transported, and analyzed in general accordance with DEQ methodology as presented in OAR 340-122-345 "Sample Collection Methods," and OAR 340-122-218 "Required Analytical Methods." If not specified by current DEQ regulations, sampling and analytical methods were implemented in general accordance with EPA protocol.

Ground Water Level Monitoring

The top of each well casing is surveyed to within plus or minus (+/-) 0.01-foot relative to a common temporary benchmark. A temporary benchmark was designated with an assumed elevation relative to the approximate surface elevation above mean sea level (msl). The surveyed locations are marked on each casing for future reference and measuring. The purpose of the survey is to allow correlation of measured ground water levels between each of the wells at the site.

The depth to ground water (water level) was measured with an electronic, hand-held, water level indicator. The probe of the indicator is lowered in the well until contact with ground water completes a circuit causing a buzzer and light to activate. The depth to water, measured from the top of the well casing, is read directly from a graduated cord attached to the probe with marked increments of 0.01-foot.

Ground Water Purging and Sampling

Prior to collecting the sample for laboratory analysis, ground water is purged from the well with a bailer. The well is purged to remove potentially stagnant ground water and allow the surrounding formation water to enter the well for sampling. Three to six well volumes are generally required to achieve this objective. The ground water temperature and conductivity were monitored after each well volume was purged. When the final readings were within ten percent of the previous readings for these parameters, following the removal of a minimum of three well volumes, the sample was collected for laboratory analyses.

After purging, a sample is collected when the water level in the well has recharged to within 85 percent of the initial static water level. If the desired amount of recharge is not achieved within a period of 60 minutes, the sample is collected and the water level is recorded.

The sample is collected from the well with a bailer designed to reduce the loss of volatile components. The water was collected from the well by lowering the bailer below the ground water interface and retrieving the bailer with the water contained inside. The water was transferred into two identical 40 mL glass VOA vials with septum lids provided by the laboratory. The glass jars contained 2-5 drops of dilute HCL as a preservative to increase the sample hold time to 14 days. The water was transferred to the glass jars with as little agitation as possible and immediately sealed with the Teflon-lined septum lids. The sample jars were filled so that no headspace was present at the time of collection to help prevent the potential loss of volatiles.

After the samples were properly sealed, they were placed immediately in an ice chest with ice and maintained at a temperature of 4 degrees C or 39 degrees F until being prepared by the laboratory for analysis.

Chain-of-Custody and Labeling

The Chain-of-Custody (COC) is a form that documents the custody of a sample from the time of origin to the time of disposal or destruction. A COC was initiated in the field at the time the samples were collected. The sampler documents such information as the time, date, type of sample, requested analyses. Any individual in custody of the samples, including the laboratory, is required to document the transfer of custody (beginning with the sampler) by signing the COC (including date and time of transfer).

A label was affixed to each sample container designating the sample number, and other critical information including: project name, location, date, time, sampler name. After receiving the samples the laboratory assigns a unique number to each discrete sample for reference and verification.

Equipment Decontamination

Equipment used to collect ground water samples such as: bailers, water level indicators, etc., are decontaminated prior to each use. Strict decontamination procedures are utilized to help eliminate the potential for cross-contamination between samples and sample locations. The decontamination procedure utilized at this site included a thorough washing in TSP or Alconox detergent followed by two rinses in tap water and a third and final rinse using deionized water. If time permitted, the sampling equipment was allowed to air dry.

Disposable latex gloves were worn during sampling to help eliminate the potential for cross-contamination by the sampler. The gloves were discarded after each sample event and a new pair was utilized for each subsequent sampling event.

Attachment 2

Ground Water Sample Laboratory Report



Spokane 465.624.8400 East 11111 Montgomery, Suite B, Spokane, WA 99208-4778
509.824.8200 fax 509.824.8200
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.806.8200 fax 503.806.8210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	P2J0039-01	Water	10/01/02 11:39	10/01/02 13:05
MW-2	P2J0039-02	Water	10/01/02 11:55	10/01/02 13:05
MW-3	P2J0039-03	Water	10/01/02 11:26	10/01/02 13:05

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Environmental Laboratory Network

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425.420.8200 fax 425.420.8210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99208-4776
509.924.9200 fax 509.924.9280
Portland 9405 3rd Nimbus Avenue, Beaverton, OR 97008-7133
903.908.8280 fax 503.908.8210
Send 20332 Empire Avenue, Suite A-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7568

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

Dissolved Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Sampled: 10/01/02 Received: 10/01/02									
MW-1 (P2J0039-01) Water									
Lead	0.00210	0.00100	mg/l	1	EPA 6020	10/02/02	10/03/02	2100076	
Sampled: 10/01/02 Received: 10/01/02									
MW-2 (P2J0039-02) Water									
Lead	0.00111	0.00100	mg/l	1	EPA 6020	10/02/02	10/03/02	2100076	
Sampled: 10/01/02 Received: 10/01/02									
MW-3 (P2J0039-03) Water									
Lead	0.00110	0.00100	mg/l	1	EPA 6020	10/02/02	10/03/02	2100076	

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428.420.9200 fax 428.420.8210
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509.924.9200 fax 509.924.8200
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503.906.9200 fax 503.906.8210
Beaverton 20332 Empire Avenue, Suite F-1, Beaverton, OR 97001-5711
541.383.9310 fax 541.382.7868

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

Selected Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Sampled: 10/01/02 Received: 10/01/02									
MW-1 (P2J0039-01) Water									
1,2-Dibromooethane	ND	0.500	ug/l	1	EPA 8260B	10/02/02	10/02/02	2100054	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	32.4	0.500	"	"	"	"	"	"	
Xylenes (total)	17.8	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Naphthalene	27.2	2.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	77.2	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	44.9	0.500	"	"	"	"	"	"	
Isopropylbenzene	13.8	2.00	"	"	"	"	"	"	
n-Propylbenzene	59.4	0.500	"	"	"	"	"	"	
Surr: 4-BFB	102 %	84.5-124							
Surr: 1,2-DCA-d4	99.0 %	77.9-123							
Surr: Dibromofluoromethane	100 %	83.5-119							
Surr: Toluene-d8	101 %	84.1-116							

Sampled: 10/01/02 Received: 10/01/02									
MW-2 (P2J0039-02) Water									
1,2-Dibromooethane	ND	0.500	ug/l	1	EPA 8260B	10/02/02	10/02/02	2100054	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
Benzene	7.25	0.500	"	"	"	"	"	"	
Toluene	1.52	0.500	"	"	"	"	"	"	
Ethylbenzene	98.9	0.500	"	"	"	"	"	"	
Xylenes (total)	282	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Naphthalene	44.7	2.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	173	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	36.5	0.500	"	"	"	"	"	"	
Isopropylbenzene	15.1	2.00	"	"	"	"	"	"	
n-Propylbenzene	38.9	0.500	"	"	"	"	"	"	
Surr: 4-BFB	102 %	84.5-124							
Surr: 1,2-DCA-d4	101 %	77.9-123							
Surr: Dibromofluoromethane	103 %	83.5-119							
Surr: Toluene-d8	101 %	84.1-116							

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503.806.9200 fax 503.908.9210
Beaverton 20351 Empire Avenue, Suite F-1, Beaverton, OR 97701-5711
541.383.9310 fax 541.382.7588

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

Selected Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Sampled: 10/01/02 Received: 10/01/02									
MW-3 (P2J0039-03) Water									
1,2-Dibromoethane	ND	0.500	ug/l	1	EPA 8260B	10/02/02	10/02/02	2100054	
1,2-Dichloroethane	ND	0.500	"	"	"	"	"	"	
Benzene	0.790	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	2.67	0.500	"	"	"	"	"	"	
Xylenes (total)	1.90	1.00	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.00	"	"	"	"	"	"	
Naphthalene	ND	2.00	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.21	1.00	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.530	0.500	"	"	"	"	"	"	
Isopropylbenzene	ND	2.00	"	"	"	"	"	"	
n-Propylbenzene	2.28	0.500	"	"	"	"	"	"	
Surr: 4-BPB	102 %	84.9-124							
Surr: 1,2-DCA-d4	100 %	77.9-123							
Surr: Dibromofluoromethane	102 %	83.5-119							
Surr: Toluene-d8	102 %	84.1-116							

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 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
 503.906.9200 fax 503.906.9210
 Bend 20322 Empire Avenue, Suite P-1, Bend, OR 97701-6711
 541.383.9310 fax 541.382.7688

Martin S. Burck Associates
 1832 W. Cascade
 Hood River, OR 97031

Project: Meadowbrook
 Project Number: none
 Project Manager: Marty Burck

Reported:
 10/03/02 15:21

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%RBC Limits	RPD	RPD Limit	Notes
Batch 2100076 - EPA 200/3005 Diss										
Blank (2100076-BLK1)				Prepared: 10/02/02 Analyzed: 10/03/02						
Lead	ND	0.00100	mg/l							
LCS (2100076-B51)				Prepared: 10/02/02 Analyzed: 10/03/02						
Lead	0.0987	0.00100	mg/l	0.100		98.7	80-120			
Duplicate (2100076-DUP1)				Prepared: 10/02/02 Analyzed: 10/03/02						
				Source: P2J0026-01						
Lead	ND	0.00100	mg/l		ND				20	
Matrix Spike (2100076-MS1)				Prepared: 10/02/02 Analyzed: 10/03/02						
				Source: P2J0026-01						
Lead	0.0976	0.00100	mg/l	0.100	ND	97.2	75-125			
Matrix Spike (2100076-MS2)				Prepared: 10/02/02 Analyzed: 10/03/02						
				Source: P2I0688-01						
Lead	0.0944	0.00100	mg/l	0.100	ND	94.0	75-125			

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503.908.9200 fax 503.908.9210
Bend 70332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.302.7888

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2100054 - EPA 5030B

Prepared & Analyzed: 10/02/02

Blank (2100054-BLK1)

1,2-Dibromoethane	ND	0.500	ug/l							
1,2-Dichloroethane	ND	0.500	"							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Naphthalene	ND	2.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	0.500	"							
Isopropylbenzene	ND	2.00	"							
n-Propylbenzene	ND	0.500	"							
Surr: 4-BFB	19.7		"	20.0		98.5	84.5-124			
Surr: 1,2-DCA-d4	20.3		"	20.0		102	77.9-123			
Surr: Dibromofluoromethane	20.4		"	20.0		102	83.5-119			
Surr: Toluene-d8	20.4		"	20.0		102	84.1-116			

Prepared & Analyzed: 10/02/02

LCS (2100054-BS1)

Benzene	19.4	0.500	ug/l	20.0		97.0	80-125			
Toluene	19.3	0.500	"	20.0		96.5	80-125			
Ethylbenzene	19.0	0.500	"	20.0		95.0	80-125			
Xylenes (total)	57.8	1.00	"	60.0		96.3	80-125			
Surr: 4-BFB	19.6		"	20.0		98.0	84.5-124			
Surr: 1,2-DCA-d4	20.4		"	20.0		102	77.9-123			
Surr: Dibromofluoromethane	20.9		"	20.0		104	83.5-119			
Surr: Toluene-d8	20.7		"	20.0		104	84.1-116			

Matrix Spike (2100054-MS1)

Source: P2J0013-01

Prepared & Analyzed: 10/02/02

Benzene	20.8	0.500	ug/l	20.0	ND	104	80-125			
Toluene	20.8	0.500	"	20.0	ND	104	80-125			
Ethylbenzene	20.9	0.500	"	20.0	ND	104	80-125			
Xylenes (total)	63.8	1.00	"	60.0	ND	106	80-125			
Surr: 4-BFB	19.7		"	20.0		98.5	84.5-124			
Surr: 1,2-DCA-d4	20.4		"	20.0		102	77.9-123			
Surr: Dibromofluoromethane	21.3		"	20.0		106	83.5-119			
Surr: Toluene-d8	20.6		"	20.0		103	84.1-116			

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 541.383.8310 fax 541.382.7588

Martin S. Burck Associates
 1832 W. Cascade
 Hood River, OR 97031

Project: Meadowbrook
 Project Number: none
 Project Manager: Marty Burck

Reported:
 10/03/02 15:21

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2100054 - EPA 5030B

Matrix Spike Dup (2100054-MSD1)		Source: P2J0015-01			Prepared & Analyzed: 10/02/02					
Benzene	20.2	0.500	ug/l	20.0	ND	101	80-125	2.93	25	
Toluene	20.0	0.500	"	20.0	ND	100	80-125	3.92	25	
Ethylbenzene	20.4	0.500	"	20.0	MD	102	80-125	2.42	25	
Xylenes (total)	62.9	1.00	"	60.0	ND	105	80-125	1.42	25	
Surr: 4-BFB	19.7		"	20.0		98.5	84.5-124			
Surr: 1,2-DCA-d4	20.7		"	20.0		104	77.9-123			
Surr: Dibromofluoromethane	20.8		"	20.0		106	68.5-119			
Surr: Toluene-d8	20.3		"	20.0		102	84.1-116			

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541.383.8310 fax 541.382.7588

Martin S. Burck Associates
1832 W. Cascade
Hood River, OR 97031

Project: Meadowbrook
Project Number: none
Project Manager: Marty Burck

Reported:
10/03/02 15:21

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet Sample results reported on a wet weight basis (as received)
RPD Relative Percent Difference

North Creek Analytical - Portland

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North Creek Analytical, Inc.
Environmental Laboratory Network

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CHAIN OF CUSTODY REPORT

Work Order #: P2J0039

CLIENT: MSBA		INVOICE TO: MSBA ← (SAME)		TURNAROUND REQUEST in Business Days*								
REPORT TO: MARTY BURCK				Organic & Inorganic Analyses								
ADDRESS: 1832 W. CASCADE AVE Hood River, OR 97031				STD. Petroleum Hydrocarbon Analyses								
PHONE: 541-387-4422		FAX: 541-387-4813		STD. Please Specify								
PROJECT NAME: Meadowbrook		P.O. NUMBER: MEADOWBROOK		REQUESTED ANALYSES								
PROJECT NUMBER:				(SOLUB) RECAT DISS. HEAR								
SAMPLED BY: M DEELY				MATRIX # OF COMMENTS								
CURRENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		(W, S, O) CONT.								
1	MW-1	10/1/02	1139	X	X					W	5	
2	MW-2	↓	1155	X	X					W	5	
3	MW-3	↓	1126	X	X					W	5	
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

RELINQUISHED BY: Michael Deely
PRINT NAME: MICHAEL DEELY **FIRM:** MSBA
RELINQUISHED BY: [Signature]
PRINT NAME: [Name] **FIRM:** 10-1-02

DATE: 10/1/02
TIME: 12 23
DATE: 10-1-02
TIME: 1300

RECEIVED BY: [Signature]
PRINT NAME: [Name] **FIRM:** NOVA
RECEIVED BY: Kim Davis
PRINT NAME: KIM DAVIS **FIRM:** NOVA

DATE: 10/1/02
TIME: 1300

ADDITIONAL REMARKS: cc: client 3.7°C

(C) 1997 J99

Attachment 3

Ground Water Purge and Sample Data

MARTIN S. BURCK ASSOCIATES, INC

1832 W. Cascade Ave, Hood River, OR 97031

Phone: (541) 387-4422, Ptd: (503) 977-2401

GROUND WATER PURGE & SAMPLE DATA**MSBA**

Sample Order (2)

Project: Meadowbrook Grocery, 16845 S. HWY 211, Molalla, ORDate: 10.1.02 Sampled By: MPD**MONITORING WELL INFORMATION**Well Number MW-1 General Location: well box under 2' sq diam. plateWell Diameter (in) 2 Total Depth (ft) 14 Depth to Ground Water (ft) 5.03Wetted Casing Length (ft) 8.97 One Well Volume (gals) 1.52

2" Well = 0.17 gal/foot 4" Well = 0.66 gal/foot

No. of Well Volumes to Purge 3 Total Purge Volume (gals) 4.57 ~ 4.5**WELL DEVELOPMENT/PURGING INFORMATION**

Time	Depth to Water	Gallons Purged	Cumulative Total	T	C	pH	Comments
10 46	5.03	0	0				STARTED PURGE
10 49		1.5	1.5	64.2	2009	--	well vol.
10 53		1.5	3.0	64.1	2900	--	well vol.
10 57	6.85	1.5	4.5	63.8	2890	--	well vol / STOPPED PURGE
11 39	5.06	0	4.5	Slight	PHC	odor	COLLECTED SAMPLE

Comments: $\geq 85\%$ static water column ≤ 6.37 feet depth to water**GROUND WATER SAMPLE INFORMATION**Collection Time 1139 Appearance ☐ Clear ☒ Cloudy ☐ Turbid Thermal Preservation ☒ Ice Chest & Ice ☐ OtherContainers (3) 40 ml VOAs () 1 liter Amber (1) 500 ml Poly
☒ Preserved ☐ Preserved ☐ Preserved
☐ HCL ☐ HCL ☐ HCL
Requested Analyses: ☐ EPA 8021B ☒ EPA 8260B
☒ PAHs/Pb ☐ OTHERComments Slight PHC odor

MARTIN S. BURCK ASSOCIATES, INC

1832 W. Cascade Ave, Hood River, OR 97031

Phone: (541) 387-4422, Ptd: (503) 977-2401

GROUND WATER PURGE & SAMPLE DATA**MSBA**

Sample Order (3)

Project: Meadowbrook Grocery, 16845 S. HWY 211, Molalla, ORDate: 10/1/02 Sampled By: MPD**MONITORING WELL INFORMATION**Well Number MW-2 General Location: IN PARK SPOT NEXT TO STOREWell Diameter (in) 2 Total Depth (ft) 15 Depth to Ground Water (ft) 5.63Wetted Casing Length (ft) 9.37 One Well Volume (gals) 1.59
2" Well = 0.17 gal/foot 4" Well = 0.66 gal/footNo. of Well Volumes to Purge 3 Total Purge Volume (gals) 4.78 ~ 5**WELL DEVELOPMENT/PURGING INFORMATION**

Time	Depth to Water	Gallons Purged	Cumulative Total	T	C	pH	Comments
11 02	5.63	0	0				STARTED PURGE
11 06		1.5	1.5	63	2540		well vol
11 09		1.5	3.0	62.9	2380		well vol
11 13	8.20	2.0	5.0	63	2460		well vol (STOPPED PURGE)
11 55	5.65	0	5.0	slight	PHC ODOR		COLLECTED SAMPLE

Comments: $\geq 85\%$ static water column ≤ 7.03 feet depth to water**GROUND WATER SAMPLE INFORMATION**Collection Time 11 55 Appearance ☒ Clear ☐ Cloudy ☐ Turbid Thermal Preservation ☒ Ice Chest & Ice ☐ OtherContainers (3) 40 ml VOAs () 1 liter Amber (1) 500 ml Poly
☒ Preserved ☐ Preserved ☐ Preserved
☒ HCL ☐ HCL ☐ HCL
Requested Analyses: ☐ EPA 8021B ☒ EPA 8260B
☒ PAHs ☒ Pb ☐ OTHERComments slight PHC ODOR

MARTIN S. BURCK ASSOCIATES, INC

1832 W. Cascade Ave, Hood River, OR 97031

Phone: (541) 387-4422, Ptd: (503) 977-2401

GROUND WATER PURGE & SAMPLE DATA**MSBA**

Sample Order (1)

Project: Meadowbrook Grocery, 16845 S. HWY 211, Molalla, ORDate: 10/1/02 Sampled By: MPD**MONITORING WELL INFORMATION**Well Number MW-3 General Location: NW ENTR. -- near oil poleWell Diameter (in) 2 Total Depth (ft) 15 Depth to Ground Water (ft) 5.92Wetted Casing Length (ft) 9.08 One Well Volume (gals) 1.54
2" Well = 0.17 gal/foot 4" Well = 0.66 gal/footNo. of Well Volumes to Purge 3 Total Purge Volume (gals) 4.63 ~ 5**WELL DEVELOPMENT/PURGING INFORMATION**

Time	Depth to Water	Gallons Purged	Cumulative Total	T	C	pH	Comments
10 25	5.92	0	0				STARTED PURGE
10 29		1.5	1.5	62	1760	--	well vol
10 32		1.5	3.0	65	1880	--	well vol
10 37	7.85	2.0	5.0	66	1920	--	well vol (STOPPED PURGE)
11 26	5.98	0	5.0	slight	PHC	ODOR	COLLECTED SAMPLE

Comments: $\geq 85\%$ static water column ≤ 7.28 feet depth to water**GROUND WATER SAMPLE INFORMATION**Collection Time 11 26 Appearance ☒ Clear ☐ Cloudy ☐ Turbid Thermal Preservation ☒ Ice Chest & Ice ☐ OtherContainers (3) 40 ml VOAs () 1 liter Amber (1) 500 ml Poly Requested ☐ EPA 8021B ☒ EPA 8260B
Analyses: ☒ PAHs/Pb ☐ OTHER
☒ Preserved HCL ☐ Preserved HCL ☐ Preserved HCLComments slight PHC ODOR

* PETROLEUM RELEASE FORM *

Please Check All That Apply
INCIDENT INFORMATION

LOG NBR: (Dept. use only) _____

RECEIVED BY: (Dept. use only) _____

DATE REPORTED: (today's date) 11.3.01SITE NAME: Sue DoctorSITE ADDRESS: 9525 NE Thompson St.SITE CITY: PDYZIP: 97220SITE COUNTY: Mult.

PHONE: _____

☐ NON-REGULATED UST☐ REGULATED UST & FAC NBR: _____☒ HEATING OIL TANK

MAIL CONTACTS

REPORTED BY (person reporting this release to the Dept.)

NAME: Lynn GreenCOMPANY: Tanks-A-Lot, IncADDRESS: PO Box 80747CITY: PortlandZIP: 97280STATE: OR PHONE: 503-452-5561EMAIL: Lynng@easystreet.com

INVOICE CONTACT (required, may be same as responsible party)

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY: _____

ZIP: _____

STATE: _____

PHONE: _____

RESPONSIBLE PARTY (person responsible for remedial action)

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY: _____

ZIP: _____

STATE: _____

PHONE: _____

EMAIL: _____

OTHER CONTACT(S) (not required)

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY: _____

ZIP: _____

STATE: _____

PHONE: _____

SITE ASSESSMENT

DATE DISCOVERED: 11/3/01DATE TANK IS EMPTY: 11/3/01

CONFIRMATION:

- ☐
- SI) STAFF: DEQ
-
- ☐
- LD) LAB: DEQ
-
- ☐
- LR) LAB: RP
-
- ☒
- LO) LAB: OTHER
-
- ☐
- RR) RP REPORT
-
- ☐
- CN) CONTRACTOR
-
- ☐
- OT) OTHER

DISCOVERY:

- ☐
- RM) ROUTINE MONITORING
-
- ☒
- DC) DECOMMISSIONING
-
- ☐
- CP) COMPLAINT
-
- ☐
- IC) INVENTORY CONTROL
-
- ☐
- SA) SITE ASSESSMENT
-
- ☐
- TT) TANK TEST
-
- ☐
- OT) OTHER

CAUSE:

- ☒
- TL) TANK LEAK
-
- ☐
- PL) PIPE LEAK
-
- ☐
- OF) OVERFILL
-
- ☐
- SS) SURFACE SPILL
-
- ☐
- PV) PUMP/VALVE LEAK
-
- ☐
- OT) OTHER
-
- ☐
- UN) UNKNOWN

CONTAMINANTS

- ☐
- UG) UNLEADED GASOLINE
-
- ☐
- LG) LEADED GASOLINE
-
- ☐
- MG) MISC. GASOLINE
-
- ☐
- DS) DIESEL (motor fuel)

- ☐
- WO) WASTE OIL
-
- ☒
- HO) HEATING OIL
-
- ☐
- LB) LUBRICANT
-
- ☐
- SV) SOLVENT

- ☐
- OP) OTHER PET. DIST
-
- ☐
- CH) CHEMICAL
-
- ☐
- OT) OTHER
-
- ☐
- UN) UNKNOWN

IMPACTS

- ☒
- SL) SOIL
-
- ☐
- GW) GROUNDWATER
-
- ☐
- SW) SURFACE WATER
-
- ☐
- DW) DRINKING WATER

- ☐
- FV) FACILITY OR BUILDING (VAPOR)
-
- ☐
- FP) FACILITY OR BUILDING (FREE PRODUCT.)

SITE-MANAGEMENT (THIS SECTION DEPT. USE ONLY)

RELEASE STOPPED: 11/3/01FINAL REQUEST INVOICE DATE: 11/3/01CLEANUP STARTED: 11/3/01NO FURTHER ACTION: 11/3/01NOTES/COMMENTS: ODEQ#

701849

State of Oregon

Department of Environmental Quality

Memorandum

To: File 03-92-0125
NW Region Tanks Program

Date: September 11, 2002

From: Henning Larsen
NWR Tanks Program

Subject: File Status

Hand written notes at the bottom of a March 3, 2000 pollution complaint form found in the file indicate the project had been reopened by the DEQ based on the complaint and the involvement of SML Associates in the project. This is incorrect, the project status has not changed since it was closed in January 26, 1998. Re-opening the project was to be based on discussions with the property owners, a review of file information, and a site visit. After doing these tasks, the DEQ ultimately decided not to re-open the project



State of Oregon

Department of Environmental Quality

Memorandum

To: Andree Pollock
Northwest Region Tanks Program Manager

Date: September 3, 2002

From: Henning Larsen
Hydrogeologist NWR Tanks Program

Subject: Meadowbrook Grocery (DEQ File 03-92-0125)

Background:

In March 2000, the DEQ was notified by Lolita Carter (PGE Environmental Affairs) that a PGE construction crew had observed gasoline contamination in groundwater during the installation of a utility pole at the intersection of Highway 211 and Beaver Creek Road. This utility pole is located in right-of-way immediately west of the Meadowbrook store (UST Facility No. 7673). The facility has had historical releases of gasoline that were first discovered in 1989. A second release was discovered in 1992 during the decommissioning of three USTs located in the northwest corner of the property. 35 tons of contaminated soil were excavated and treated on-site. Confirmation sampling indicated that soil with gasoline contamination as high as 4,900 ppm remained after finishing the excavation work. Following the decommissioning work, three monitoring wells were installed to evaluate the extent of the groundwater contamination. The results of the monitoring indicated low levels of gasoline constituents were present in shallow groundwater. These levels eventually declined to levels below the 5 ppb drinking water standard. In addition, repeated sampling of an on-site public water supply well did not detect the presence of any petroleum contamination. The site was eventually closed in January 1998.

On August 27, 2002, I made a visit to the Meadowbrook store and met with its owner, Don Williams. I discussed with Mr. Williams the notice we had received from PGE, and asked him to show me around the station. Mr. Williams gave me a tour of the UST system which he indicated was "state of the art" with double-walled piping and tanks, line leak detectors, properly sloped trenches, sealed sumps with sensors, secondary containment beneath the pump islands, and an ATG that performed tightness tests monthly. Mr. Williams indicated his wife reconciled the sales, deliveries, and inventory statistics monthly and had no indication of product losses. I inspected tightness tests printouts from the last four months which indicated the tanks were tight. I consulted with Greg Toran (NWR Compliance) and Greg concurred that the readouts indicated the tanks were tight, but he also pointed out that the paperwork only represented four separate tests of three individual tanks.

During my visit I inspected two of the three groundwater monitoring wells that had been constructed during a previous investigation. . The third well was not visible and may have been paved over during the station upgrade. I used a disposable bailer and removed five full bailers of water from each well making visual and olfactory observations of the water quality. MW-3, located due north of the tank nest did not have any observable sheen or petroleum odor and appeared free of contamination. MW-2, located along the east wall of the former tank nest, did

not have a sheen, but did have a slight petroleum odor. A review of historical groundwater monitoring data indicates low levels of BTEX persisted in the well at the time of closure. My observations were consistent with what was reported in SML (Harold Slavik) reports.

Land use around the station, is residential and agricultural. A house is located immediately north of the station property and is owned by the station owner, Don Williams. To the east is a small Christmas tree farm, also owned by Mr. Williams. To the south is a large Christmas tree farm of 30 acres and to the west is a small farm/ranch that looks to be on the order of five to ten acres in size. The nearest structures, aside from the Williams rental home, appears to be approximately five hundred feet from the station property.

Domestic water in the area is supplied from groundwater wells. The Williams use an on-site well to supply the station and the adjacent house. Mr. Williams did not know any details of the construction of his well. The next nearest well appears to be at least five hundred feet to the west.

I reviewed results of previous water sampling of the William's well contained in the DEQ file. Three separate analyses did not detect the presence of petroleum contamination. In addition, I requested that Mr. Williams perform another test on the well which he has done since my site visit. Mr. Williams called on September 4, 2002 to tell me that Coffey Laboratories had verbally indicated the results were non-detect for petroleum contamination.

Overall Assessment

The observations of the PGE crew indicate the extent of contamination is greater than what had been reported during earlier investigations. The area by the utility pole had not been sampled previously. In general, the extent of soil contamination had never been fully delineated. However, the location of the utility pole is approximately 30 feet from the former tank nest, thus it is not unexpected that residual contamination remains in this area and it is not necessarily evidence that the previous release is significantly more extensive than had been reported or that a new release has occurred.

The monitoring well network shows little evidence of contamination in groundwater. Although, the network is not downgradient of the historical source of contamination at all times of the year it is close in proximity, and is downgradient of the source for the majority of the time. The fact that it is not showing signs of significant contamination suggests the extent of the remaining contamination is very limited.

While the groundwater monitoring at the site was conducted by Harold Slavik, who has since been convicted of falsifying data by the Multnomah DA, my observations were consistent with the conditions reported by Mr. Slavik.

There does not appear to be any evidence that the active UST system is leaking.

There does not appear to be any receptors for the contamination in downgradient areas, and the on-site water well does not appear vulnerable.

Recommendations

I recommend that we do not reopen the file without further evidence of a contamination problem. I have discussed the facility with Greg Toran and he indicated that he may put it on his list of facilities to inspect.



Complaint

Monday, March 06, 2000 09:08:36 AM Page 1 of 1

Complaint Number: NWR-2000-0182 **County:** CLACKAMAS
Date/Time Recv'd: 03/03/2000 11:50:00 AM **By:** Dan Murphy
Observed: 03/03/2000 @ 09:50
Source: Unknown
Pollution Location: NW corner of HWY 211 and Meadow Brook Grocery
Molalla 99999-
Description: PGE crew was excavating a hole along HWY 211 near Molalla to construct a power transmission line anchor when the backhoe operator encountered gasoline odors.

Referred to: Andree Pollock, Tanks
Program: WMC/T **Program Contact:** Andree Pollock

Potential Unknown **Resp. Party Confirmed?** ☐
Resp. Party: NW corner of HWY 211 and Meadow Bro
Molalla OR 99999-

Complainant : Lolita Carter, PGE's Envirn Aff **Confidential?** ☐
OR **Anonymous?** ☐

Phone: **Home:** **Work:** (503) 464-8520

Action Taken:**Contact Date:****Site Visit Date:****Inspector:** RAH**Resolution Date:****Resol. Days:** 0 **Staff Hours:** 0**NON Issue Date:****Enforcement Referral Date:****Permit No:****Facility/Site ID:**

Entered By: Dan Murphy 03/06/2000 09:00:17 AM

Last Updated By: Dan Murphy 03/06/2000 09:08:29 AM

RAH NOTE: Retrieved Archived files, site reopened, SMC was consultant, passed on to Henning Larsen

3/3/00 @ 11:50 hrs

DEQ Duty Officer contacted by Lolita Carter of PGE's Environmental Affairs Group.

Lolita Carter 464-8520 (possibly also Terry Whorl at 464-8519)

PGE crew was excavating a hole along Highway 211 near Molalla to construct a power transmission line anchor when the backhoe operator encountered gasoline odors. (encountered at 9:50 this morning)

The property easement where the excavation was located is owned by a telephone utility (176 Grange Street; 829-1100).

MOLALLA TELEPHONE CO. 97038

PGE was excavating an 8 ft x 6 ft x 10 ft deep hole to construct an 8 ft x 6 ft x 10 ft concrete anchor for a power transmission line.

The lower 2 feet of the excavation encountered river rock. Gasoline odors were released when the river rock was exposed.

Site is near the Northwest corner of Hwy 211 and the Meadow Brook Grocery: Grocery is located across Hwy 211.

16845 MEADOWBROOK GROC
FACT #7673

16835 S Hwy 211, Molalla.

Property is a Christmas Tree farm; Grocery store may have had gasoline tanks.

WST Y
4/29/92
Gasoline
Tank

55 ZE 1B

[Handwritten signature]

property owner ▶

store
(503) 829-9165

▶ meadowbrook Grocery & Deli
16845 S Hwy 211 Molalla 97038

Utility Company ▶ Molalla Telephone Co.

heArby

03-92-0125, close 2 JAN 1998
f 7673

+incident\$lust-

LUST INCIDENT DATABASE SYSTEM

BASIC INCIDENT INFORMATION

To Access the LUST Cost Recovery System, Press ESC-8

LUST Incident Number: 188 LUST Log Nbr: 03-88-0004
Date Received: 16-MAY-1988 Lead Staff Initials: R.J. VOLPEL
Facility Number: Geo Location ID: 24673

Emergency Response? N Regulated Tank? U Admin Closure? N
Heat/Oil Tank? Petroleum Tank?

Site Name: MEADOWBROOK SERVICE STATION (SUSPECTED)
Street Nbr: 16701 Quadrant: S
Street Name: HWY 211 Street Type: HWY
Address: 16701 S HWY 211
City: MOLALLA Zip: 97038 Phone: (503)829-5623
County: 03 (CLACKAMAS)
Date Updated: 01-JUN-1989 Updated By: (OPS\$DJB)

First two digits of log number are the county code of the release site.

Count: 1

v

<List><Replace>

```

+--incdnt$lust--+-----+-----+
|               | LUST INCIDENT DATABASE SYSTEM |               |
|               +-----+-----+               |
|               | BASIC INCIDENT INFORMATION |               |
|               +-----+-----+               |
|               | To Access the LUST Cost Recovery System, Press ESC-8 |               |
|               |                               |               |
| LUST Incident Number: 3706      LUST Log Nbr: 03-92-0125 |
| Date Received: 01-MAY-1992 Lead Staff Initials: JEM |
| Facility Number: 7673      Geo Location ID: 23197 |
|                               |               |
| Emergency Response? N      Regulated Tank? Y      Admin Closure? N |
| Heat/Oil Tank?           Petroleum Tank? |
|                               |               |
| Site Name: MEADOWBROOK GROCERY |
| Street Nbr: 16845      Quadrant: SW |
| Street Name: HWY 211      Street Type: HWY |
| Address: 16845 SW HWY 211 |
| City: MOLALLA      Zip: 97038      Phone: (503)829-9165 |
| County: 03 (CLACKAMAS ) |
| Date Updated: 27-JAN-1998 Updated By: ( OPS$DXS ) |
+-----+-----+

```

First two digits of log number are the county code of the release site.
Count: 23 ^ v <List><Replace>

UST Compliance Query

----- Facility -----

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038

Comments

----- Tanks -----

Tank ID	1	Contents:	
Tank Status	REMOVED	Empty	
Date Decomm.	29APR1992	Petroleum	GASOLINE
Permit #	FFEC	Haz. Material	
Permit Status	TERMINATED	Unknown	
Installed		Construction	STEEL
Capacity	2000	External Prot	PAINTED
Overfill			
Leak Detect			

Count: 2

v

<Replace>

UST Compliance Query

Facility

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038
 Comments

Tanks

Tank ID	1A	Contents:	
Tank Status	ACTIVE	Empty	
Date Decomm.		Petroleum	GASOLINE
Permit #	BEKDE	Haz. Material	
Permit Status	ACTIVE	Unknown	
Installed	25JUL1997	Construction	STEEL
Capacity	12000	External Prot	FRP
Overfill	YES		
Leak Detect	BETWEEN WALLS,		

Count: 2 ^ v

<Replace>

UST Compliance Query

----- Facility -----

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038
 Comments

----- Tanks -----

Tank ID	2	Contents:	
Tank Status	REMOVED	Empty	
Date Decomm.	29APR1992	Petroleum	GASOLINE
Permit #	FFED	Haz. Material	
Permit Status	TERMINATED	Unknown	
Installed		Construction	STEEL
Capacity	1000	External Prot	PAINTED
Overfill			
Leak Detect			

Count: 3 ^ v

<Replace>

UST Compliance Query

----- Facility -----

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038
 Comments

----- Tanks -----

Tank ID	2A	Contents:	
Tank Status	ACTIVE	Empty	
Date Decomm.		Petroleum	GASOLINE
Permit #	BEKDF	Haz. Material	
Permit Status	ACTIVE	Unknown	
Installed	25JUL1997	Construction	STEEL
Capacity	6000	External Prot	FRP
Overfill	YES		
Leak Detect	BETWEEN WALLS,		

Count: 4 ^ v

<Replace>

UST Compliance Query

----- Facility -----

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038
 Comments

----- Tanks -----

Tank ID	2B	Contents:	
Tank Status	ACTIVE	Empty	
Date Decomm.		Petroleum	DIESEL
Permit #	BEKDG	Haz. Material	
Permit Status	ACTIVE	Unknown	
Installed	25JUL1997	Construction	STEEL
Capacity	6000	External Prot	FRP
Overfill	YES		
Leak Detect	BETWEEN WALLS,		

Count: 5 ^ v

<Replace>

UST Compliance Query

----- Facility -----

Facility ID 7673 SIC LUST facility Y
 Facility Name MEADOWBROOK GROCERY
 Facility Address 16845 SW HWY 211
 City, ST Zip MOLALLA OR 97038

Comments

----- Tanks -----

Tank ID	3	Contents:	
Tank Status	REMOVED	Empty	
Date Decomm.	29APR1992	Petroleum	GASOLINE
Permit #	FFEE	Haz. Material	
Permit Status	TERMINATED	Unknown	
Installed		Construction	STEEL
Capacity	550	External Prot	PAINTED
Overfill			
Leak Detect			

Count: *6

^

<Replace>

NE 1/4 SEC. 2 T.5S. R.2E. W.M.
CLACKAMAS COUNTY

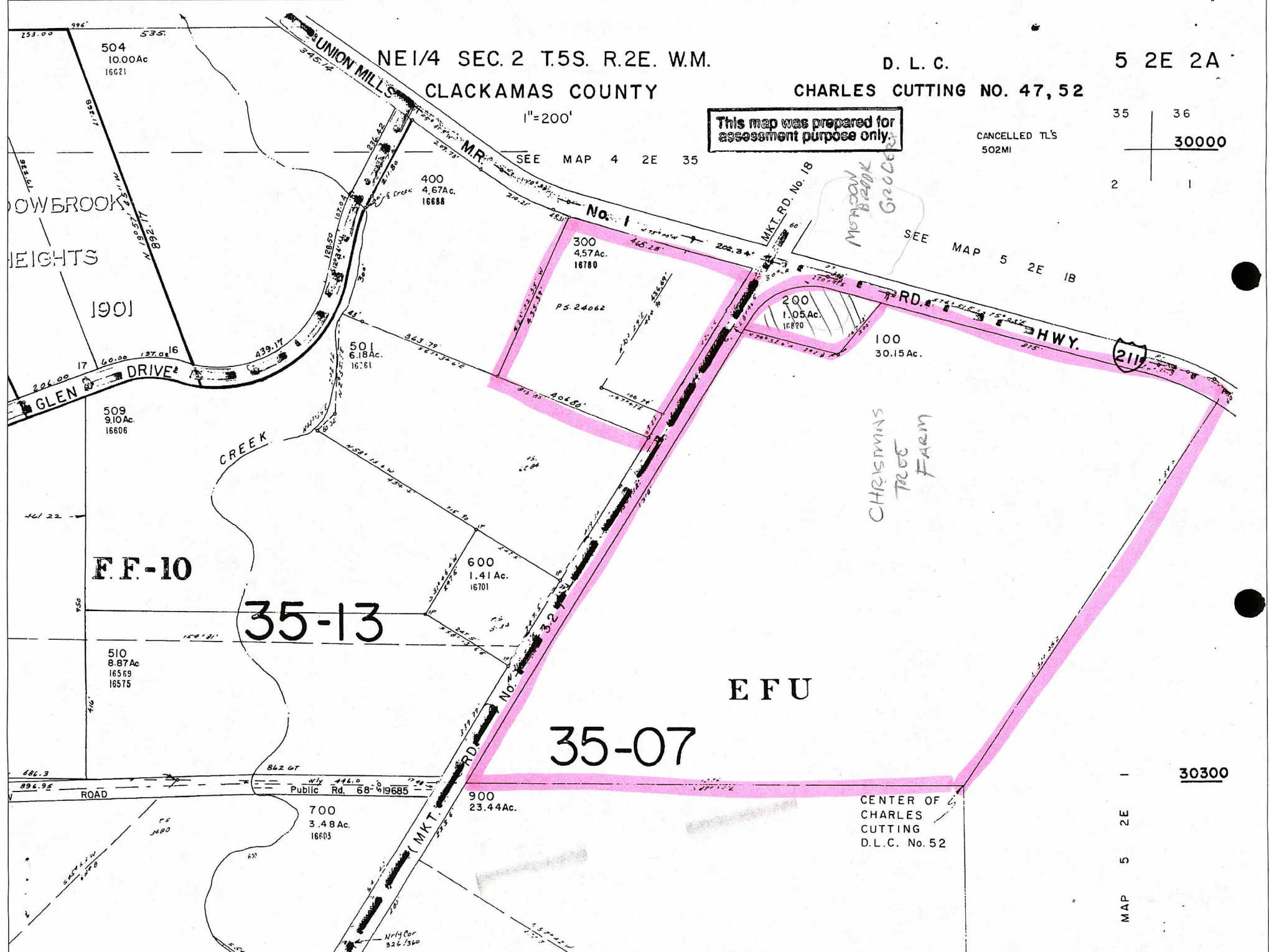
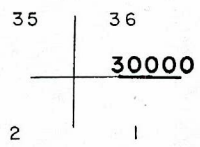
D. L. C.
CHARLES CUTTING NO. 47, 52

5 2E 2A

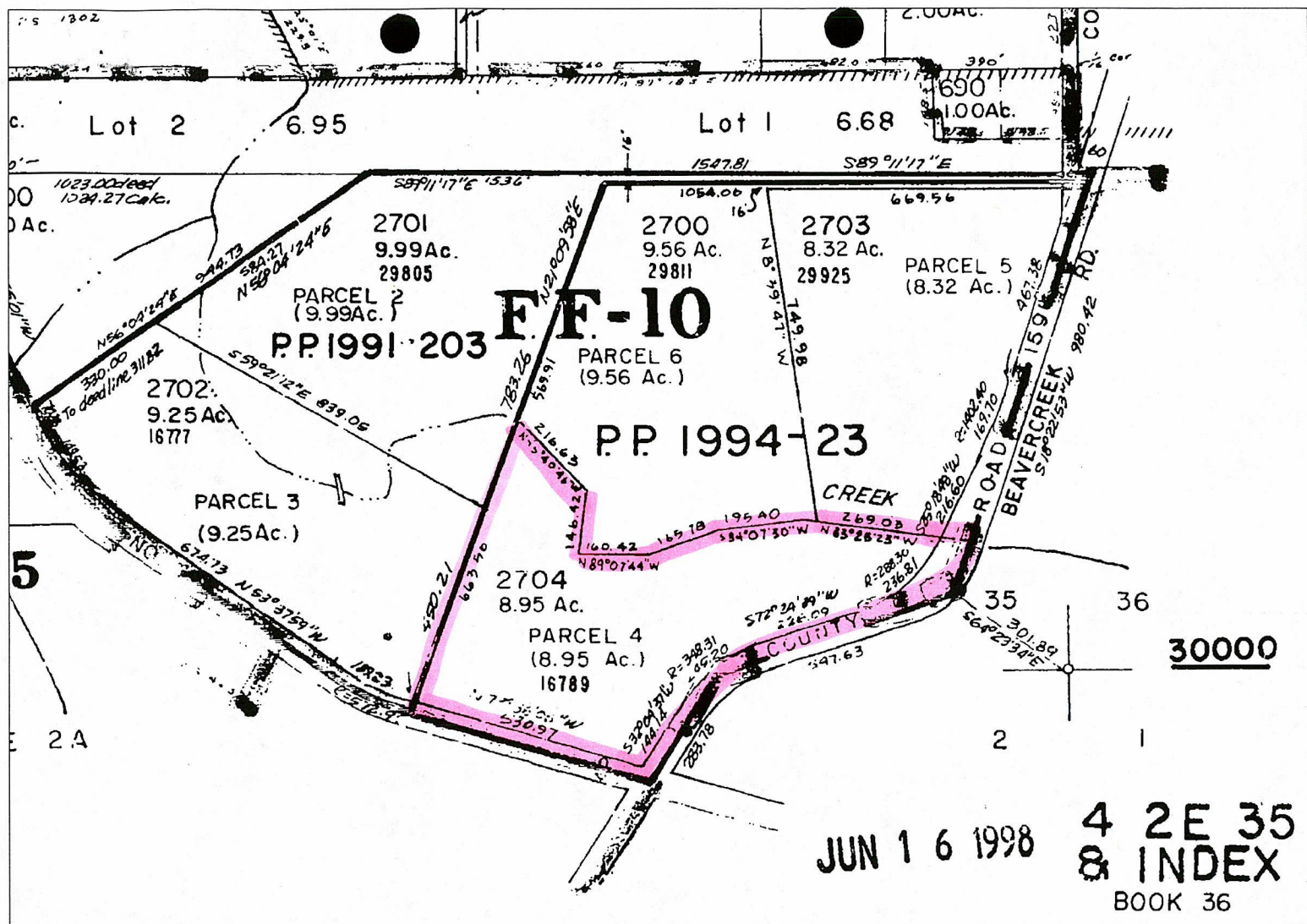
1"=200'

This map was prepared for
assessment purpose only.

CANCELLED T.L'S
502MI



-----: MetroScan / Clackamas :-----	
Owner :Low Joseph T & Zola L	Parcel :01084533
Site :*No Site Address*	Ref Par :R52E02A 00100
Mail :20006 S Unger Rd Beaver Creek Or 97004	Xferd :
Use :640 Vacant, Forest Land	Tot AV :\$11,180
MapGrid :	Price :
Bedrm: Bth: YearBlt:1900 BldgSF: Acres:30.15	
-----: MetroScan / Clackamas :-----	
Owner :Molalla Telephone Co	Parcel :01084542
Site :*No Site Address*	Ref Par :R52E02A 00200
Mail :PO Box 360 Molalla Or 97038	Xferd :
Use :003 Misc, Centrally Assessed	Tot AV :
MapGrid :	Price :
Bedrm: Bth: YearBlt:1900 BldgSF: Acres:	
-----: MetroScan / Clackamas :-----	
Owner :Veltman Kip A & Karen R	Parcel :01084551
Site :16780 S Union Mills Rd Mulino 97042	Ref Par :R52E02A 00300
Mail :16780 S Union Mills Rd Mulino Or 97042	Xferd :11/04/1993
Use :401 Tract, Tract Land, Improved	Tot AV :\$238,790
MapGrid :	Price :\$136,800
Bedrm:3 Bth:2.00 YearBlt:1993 BldgSF:1,475 Acres:4.57	



*-----: **MetroScan / Clackamas** :-----*

Owner:	Hart Arlen & Mary	Parcel	:01603429
Site	:16789 S Union Mills Rd Mulino 97042	Ref Par	:R42E35 02704
Mail	:PO Box 1234 Canby Or 97013	Xferd	:11/01/1990
Use	:641 For,Forest Land,Improved	Tot AV	:\$175,560
MapGrid	:	Price	:\$195,000
Bedrm:	Bth:2.00	YearBlt:1993	BldgSF:2,463
			Acres:8.95

This map was prepared for assessment purpose only.

NW1/4 SEC.1 T.5S. R.2E. W.M. CLATSOP COUNTY

5 2E 1B

1"=200'

SEE MAP 4 2E 36

D.L.C.

CHARLES CUTTING NO.47852

CANCELLED NOS.
TL 790
709
711
719
706E1
1400

30000

SEE MAP 4 2E 36

TBR

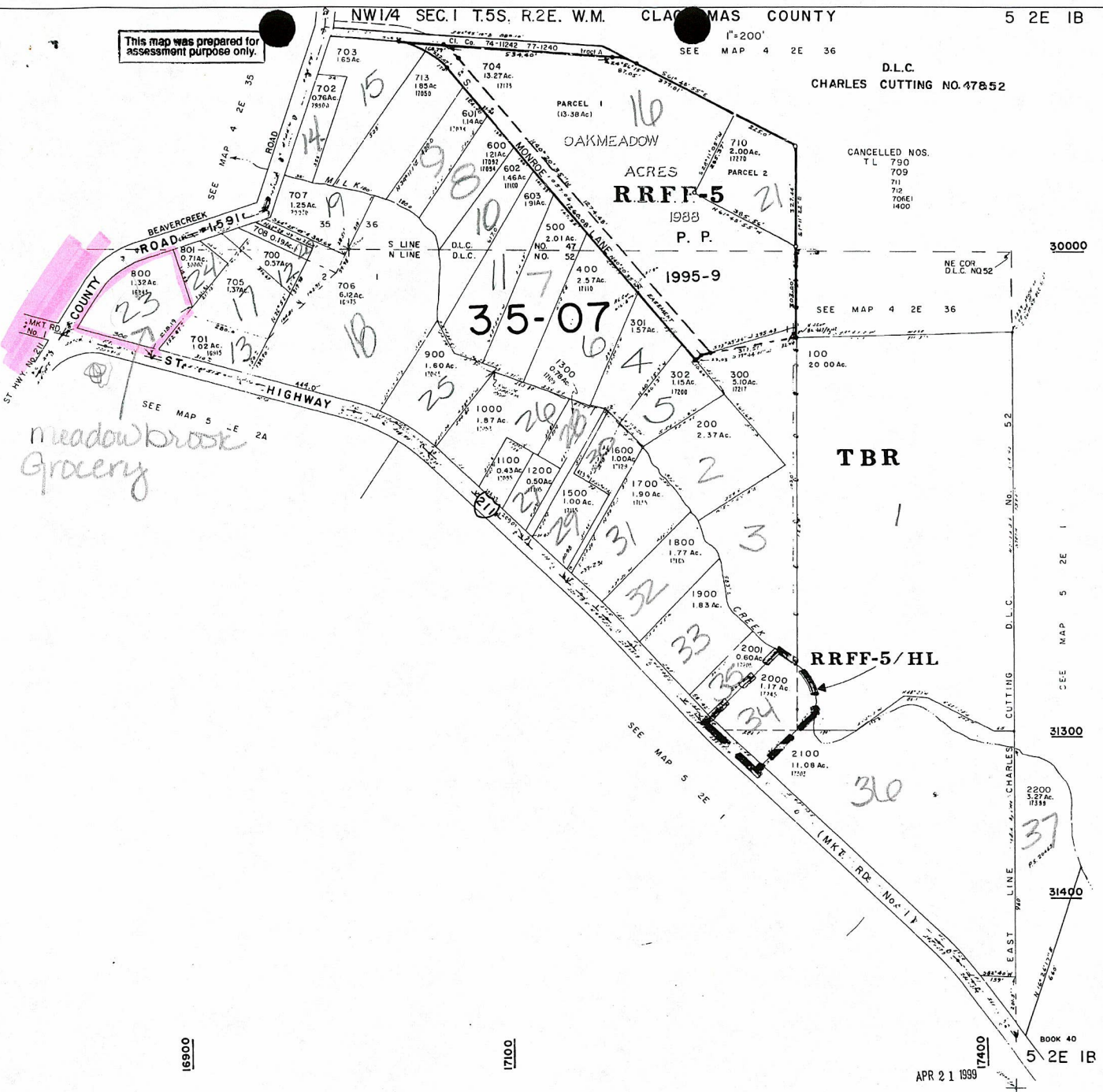
RRFF-5/HL

31300

31400

APR 21 1999

meadowbrook
Grocery



MetroScan / Clackamas

Owner :Bue Robert L Trustee
 Site :*No Site Address*
 Mail :
 Use :640 Vacant,Forest Land
 MapGrid :
 Bedrm: Bth: YearBlt:1900

Parcel :01083856
 Ref Par :R52E01B 00100
 Xferd :12/12/1997
 Tot AV :\$840
 Price :
 Acres:20.00

MetroScan / Clackamas

Owner :Monroe William A & Beverly J
 Site :*No Site Address*
 Mail :
 Use :100 Vacant,Residential Land
 MapGrid :
 Bedrm: Bth: YearBlt:1900

Parcel :01083865
 Ref Par :R52E01B 00200
 Xferd :09/12/1997
 Tot AV :\$34,440
 Price :\$70,000
 Acres:2.37

MetroScan / Clackamas

Owner :Monroe Douglas P & Geraldine L
 Site :17217 S Monroe Ln Mulino 97042
 Mail :17217 S Monroe Ln Mulino Or 97042
 Use :401 Tract,Tract Land,Improved
 MapGrid :
 Bedrm:4 Bth:3.50 YearBlt:1997

Parcel :01083874
 Ref Par :R52E01B 00300
 Xferd :02/29/1996
 Tot AV :\$409,480
 Price :
 Acres:4.99

MetroScan / Clackamas

Owner :Conn Steven E & Lollie J
 Site :*No Site Address*
 Mail :17109 S Highway 211 Molalla Or 97038
 Use :101 Res,Residential Land,Improved
 MapGrid :
 Bedrm: Bth: YearBlt:1900

Parcel :01083883
 Ref Par :R52E01B 00301
 Xferd :09/01/1997
 Tot AV :\$18,320
 Price :
 Acres:1.57

MetroScan / Clackamas

Owner :Alford Dorman Otto & Haruko
 Site :17200 S Monroe Ln Mulino 97042
 Mail :17200 S Monroe Ln Mulino Or 97042
 Use :101 Res,Residential Land,Improved
 MapGrid :
 Bedrm:3 Bth:2.00 YearBlt:1995

Parcel :01083892
 Ref Par :R52E01B 00302
 Xferd :12/01/1991
 Tot AV :\$240,420
 Price :
 Acres:1.15

MetroScan / Clackamas

Owner :Robertson David S & Carole A
 Site :17110 S Monroe Ln Mulino 97042
 Mail :17053 S Highway 211 Molalla Or 97038
 Use :100 Vacant,Residential Land
 MapGrid :
 Bedrm: Bth: YearBlt:1900

Parcel :01083909
 Ref Par :R52E01B 00400
 Xferd :05/01/1993
 Tot AV :\$18,730
 Price :\$20,000
 Acres:2.57

MetroScan / Clackamas

Owner :Robertson David S
 Site :*No Site Address*
 Mail :17053 S Highway 211 Molalla Or 97038
 Use :100 Vacant,Residential Land
 MapGrid :
 Bedrm: Bth: YearBlt:1900

Parcel :01083918
 Ref Par :R52E01B 00500
 Xferd :05/01/1995
 Tot AV :\$17,630
 Price :\$19,000
 Acres:2.01

MetroScan / Clackamas

Owner :Ford Lynnden K & Linda J
 Site :17092 S Monroe Ln Mulino 97042
 Mail :17094 S Monroe Ln Mulino Or 97042
 Use :101 Res,Residential Land,Improved
 MapGrid :
 Bedrm:2 Bth:2.00 YearBlt:1969

Parcel :01083927
 Ref Par :R52E01B 00600
 Xferd :12/01/1991
 Tot AV :\$147,690
 Price :\$54,900
 Acres:1.21

MetroScan / Clackamas

Owner :Hines Teresa
 Site :17084 S Monroe Ln Mulino 97042
 Mail :17084 S Monroe Ln Mulino Or 97042
 Use :101 Res,Residential Land,Improved
 MapGrid :
 Bedrm:2 Bth:1.00 YearBlt:1965

Parcel :01083936
 Ref Par :R52E01B 00601
 Xferd :07/01/1992
 Tot AV :\$90,020
 Price :\$42,000
 Acres:1.14

*-----: **MetroScan / Clackamas** :-----*

Owner :Hopkins Larry M & Martha O Parcel :01083945
 Site :17100 S Monroe Ln Mulino 97042 Ref Par :R52E01B 00602
 Mail :17100 S Monroe Ln Mulino Or 97042 Xferd :02/28/1996
 Use :101 Res, Residential Land, Improved Tot AV :\$92,930
 MapGrid : Price :\$127,000
 Bedrm: Bth: YearBlt:1990 BldgSF:924 Acres:1.46

*-----: **MetroScan / Clackamas** :-----*

Owner :Holman Paul B Trustee Parcel :01083954
 Site :*No Site Address* Ref Par :R52E01B 00603
 Mail : Xferd :04/09/1998
 Use :101 Res, Residential Land, Improved Tot AV :\$10,020
 MapGrid : Price :
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.91

*-----: **MetroScan / Clackamas** :-----*

Owner :Lehman James W & Evelyn Parcel :01083963
 Site :*No Site Address* Ref Par :R52E01B 00700
 Mail :30000 S Beaver Creek Rd Mulino Or 97042 Xferd :
 Use :101 Res, Residential Land, Improved Tot AV :\$5,370
 MapGrid : Price :
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:.57

*-----: **MetroScan / Clackamas** :-----*

Owner :Country Ch Inc Nondenomintl Parcel :01083972
 Site :16915 S Highway 211 Molalla 97038 Ref Par :R52E01B 00701
 Mail :16915 S Highway 211 Molalla Or 97038 Xferd :09/08/1995
 Use :100 Vacant, Residential Land Tot AV :\$47,110
 MapGrid :807 J6 Price :\$85,000
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.02

*-----: **MetroScan / Clackamas** :-----*

Owner :Hess Martin A & June M Parcel :01083981
 Site :29900 S Beaver Creek Rd Mulino 97042 Ref Par :R52E01B 00702
 Mail :29900 S Beaver Creek Rd Mulino Or 97042 Xferd :07/01/1989
 Use :101 Res, Residential Land, Improved Tot AV :\$146,270
 MapGrid : Price :\$69,000
 Bedrm:2 Bth:1.00 YearBlt:1970 BldgSF:1,560 Acres:.76

*-----: **MetroScan / Clackamas** :-----*

Owner :Hess Martin A & June M Parcel :01083990
 Site :*No Site Address* Ref Par :R52E01B 00703
 Mail :29900 S Beaver Creek Rd Mulino Or 97042 Xferd :07/01/1989
 Use :100 Vacant, Residential Land Tot AV :\$15,970
 MapGrid : Price :\$69,000
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.65

*-----: **MetroScan / Clackamas** :-----*

Owner :Monroe Douglas P/Geraldine L Parcel :01084007
 Site :17173 S Monroe Ln Mulino 97042 Ref Par :R52E01B 00704
 Mail :17217 S Monroe Ln Mulino Or 97042 Xferd :04/05/1999
 Use :401 Tract, Tract Land, Improved Tot AV :\$138,860
 MapGrid : Price :\$1,500
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:13.38

*-----: **MetroScan / Clackamas** :-----*

Owner :Lehman James W & Evelyn Parcel :01084016
 Site :*No Site Address* Ref Par :R52E01B 00705
 Mail :30000 S Beaver Creek Rd Mulino Or 97042 Xferd :
 Use :101 Res, Residential Land, Improved Tot AV :\$19,930
 MapGrid : Price :
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.37

*-----: **MetroScan / Clackamas** :-----*

Owner :The Country Church Inc Parcel :01084025
 Site :16975 S Highway 211 Molalla 97038 Ref Par :R52E01B 00706
 Mail :16975 S Highway 211 Molalla Or 97038 Xferd :
 Use :401 Tract, Tract Land, Improved Tot AV :\$1,139,740
 MapGrid : Price :
 Bedrm: Bth: YearBlt:1976 BldgSF: Acres:6.12

*-----: **MetroScan / Clackamas** :-----*

19
Owner :Berget Antoinette Parcel :01084043
Site :29970 S Beaver creek Rd Mulino 97042 Ref Par :R52E01B 00707
Mail :29970 S Beaver creek Rd Mulino Or 97042 Xferd :05/31/1996
Use :101 Res, Residential Land, Improved Tot AV :\$130,260
MapGrid : Price :\$145,900
Bedrm:3 Bth:1.00 YearBlt:1955 BldgSF:1,378 Acres:1.25

*-----: **MetroScan / Clackamas** :-----*

20
Owner :Lehman James W & Evelyn Parcel :01084052
Site :*No Site Address* Ref Par :R52E01B 00708
Mail :30000 S Beaver creek Rd Mulino Or 97042 Xferd :
Use :101 Res, Residential Land, Improved Tot AV :\$1,770
MapGrid : Price :
Bedrm: Bth: YearBlt:1900 BldgSF: Acres:.19

*-----: **MetroScan / Clackamas** :-----*

21
Owner :Taylor Teddi A Trustee Parcel :01084061
Site :17270 S Hallbacka Ln Mulino 97042 Ref Par :R52E01B 00710
Mail :PO Box 1163 Mulino Or 97042 Xferd :03/01/1995
Use :101 Res, Residential Land, Improved Tot AV :\$73,310
MapGrid : Price :
Bedrm: Bth: YearBlt:1900 BldgSF: Acres:

*-----: **MetroScan / Clackamas** :-----*

22
Owner :Ellington Carol E Parcel :01084070
Site :17050 S Monroe Ln Mulino 97042 Ref Par :R52E01B 00713
Mail :17050 S Monroe Ln Mulino Or 97042 Xferd :02/15/1996
Use :101 Res, Residential Land, Improved Tot AV :\$77,260
MapGrid : Price :\$95,000
Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.85

*-----: **MetroScan / Clackamas** :-----*

23
Owner :Williams D L & Marjorie M Parcel :01084089
Site :16845 S Highway 211 Molalla 97038 Ref Par :R52E01B 00800
Mail :16845 S Highway 211 Molalla Or 97038 Xferd :05/01/1997
Use :201 Com, Commercial Land, Improved Tot AV :\$275,740
MapGrid :807 J6 Price :\$345,000
Bedrm: Bth: YearBlt:1957 BldgSF: Acres:1.32

*-----: **MetroScan / Clackamas** :-----*

24
Owner :Lehman James W & Evelyn P Parcel :01084098
Site :30000 S Beaver creek Rd Mulino 97042 Ref Par :R52E01B 00801
Mail :30000 S Beaver creek Rd Mulino Or 97042 Xferd :
Use :101 Res, Residential Land, Improved Tot AV :\$152,400
MapGrid : Price :
Bedrm:3 Bth:1.00 YearBlt:1971 BldgSF:1,320 Acres:.71

*-----: **MetroScan / Clackamas** :-----*

25
Owner :Holman Paul B & Reina V Parcel :01084105
Site :17045 S Highway 211 Molalla 97038 Ref Par :R52E01B 00900
Mail :17045 S Highway 211 Molalla Or 97038 Xferd :
Use :101 Res, Residential Land, Improved Tot AV :\$167,520
MapGrid : Price :
Bedrm:3 Bth:2.00 YearBlt:1970 BldgSF:1,658 Acres:1.60

*-----: **MetroScan / Clackamas** :-----*

26
Owner :Robertson David S & Carole A Parcel :01084114
Site :17053 S Highway 211 Molalla 97038 Ref Par :R52E01B 01000
Mail :17053 S Highway 211 Molalla Or 97038 Xferd :05/15/1992
Use :101 Res, Residential Land, Improved Tot AV :\$167,520
MapGrid : Price :\$4,000
Bedrm:3 Bth:1.00 YearBlt:1945 BldgSF:2,752 Acres:1.87

*-----: **MetroScan / Clackamas** :-----*

27
Owner :Krupicka Joseph F & Virginia Mae Parcel :01084132
Site :17105 S Highway 211 Molalla 97038 Ref Par :R52E01B 01200
Mail :17105 S Hwy #211 Molalla Or 97038 Xferd :
Use :101 Res, Residential Land, Improved Tot AV :\$99,490
MapGrid : Price :
Bedrm:3 Bth:1.00 YearBlt:1948 BldgSF:1,420 Acres:.50

*-----: **MetroScan / Clackamas** :-----*

Owner :Conn Steven E & Lollie J Parcel :01084141
 Site :17109 S Highway 211 Molalla 97038 Ref Par :R52E01B 01300
 Mail :17109 S Highway 211 Molalla Or 97038 Xferd :09/10/1997
 Use :101 Res, Residential Land, Improved Tot AV :\$112,230
 MapGrid : Price :
 Bedrm:1 Bth:1.00 YearBlt:1962 BldgSF:864 Acres:.78

*-----: **MetroScan / Clackamas** :-----*

Owner :Alford Dorman O & Haruko Parcel :01084169
 Site :17115 S Highway 211 Molalla 97038 Ref Par :R52E01B 01500
 Mail :17200 S Monroe Ln Mulino Or 97042 Xferd :05/01/1994
 Use :101 Res, Residential Land, Improved Tot AV :\$100,440
 MapGrid : Price :\$53,000
 Bedrm:2 Bth:1.00 YearBlt:1950 BldgSF:768 Acres:1.00

*-----: **MetroScan / Clackamas** :-----*

Owner :Hutchinson William Trustee Parcel :01084178
 Site :17129 S Highway 211 Molalla 97038 Ref Par :R52E01B 01600
 Mail :PO Box 591 Molalla Or 97038 Xferd :02/01/1999
 Use :101 Res, Residential Land, Improved Tot AV :\$152,250
 MapGrid : Price :
 Bedrm:2 Bth:1.00 YearBlt:1964 BldgSF:1,618 Acres:1.00

*-----: **MetroScan / Clackamas** :-----*

Owner :Morris Athalie Parcel :01084187
 Site :17135 S Highway 211 Molalla 97038 Ref Par :R52E01B 01700
 Mail :17135 S Highway 211 Molalla Or 97038 Xferd :
 Use :101 Res, Residential Land, Improved Tot AV :\$159,820
 MapGrid : Price :
 Bedrm:4 Bth:1.50 YearBlt:1961 BldgSF:1,920 Acres:1.90

*-----: **MetroScan / Clackamas** :-----*

Owner :Donnell Larry R & Lois E Parcel :01084196
 Site :17165 S Highway 211 Molalla 97038 Ref Par :R52E01B 01800
 Mail :17165 S Highway 211 Molalla Or 97038 Xferd :12/01/1979
 Use :101 Res, Residential Land, Improved Tot AV :\$110,030
 MapGrid : Price :\$20,000
 Bedrm:2 Bth:1.00 YearBlt:1925 BldgSF:1,052 Acres:1.77

*-----: **MetroScan / Clackamas** :-----*

Owner :Bohlander John E Trustee Parcel :01084203
 Site :*No Site Address* Ref Par :R52E01B 01900
 Mail :1326 Oppek St NE Salem Or 97303 Xferd :12/01/1992
 Use :100 Vacant, Residential Land Tot AV :\$54,830
 MapGrid : Price :\$26,000
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:1.83

*-----: **MetroScan / Clackamas** :-----*

Owner :Cook Neal W Jr & Muriel M Parcel :01084212
 Site :17245 S Highway 211 Molalla 97038 Ref Par :R52E01B 02000
 Mail :17245 S Hwy #211 Molalla Or 97038 Xferd :
 Use :101 Res, Residential Land, Improved Tot AV :\$101,950
 MapGrid : Price :
 Bedrm:3 Bth:1.00 YearBlt:1932 BldgSF:1,308 Acres:1.17

*-----: **MetroScan / Clackamas** :-----*

Owner :Aguilera Juan & Sara Parcel :01084221
 Site :17205 S Highway 211 Molalla 97038 Ref Par :R52E01B 02001
 Mail :17205 S Highway 211 Molalla Or 97038 Xferd :01/15/1993
 Use :101 Res, Residential Land, Improved Tot AV :\$69,120
 MapGrid : Price :\$87,000
 Bedrm: Bth: YearBlt:1900 BldgSF: Acres:.60

*-----: **MetroScan / Clackamas** :-----*

Owner :Bue Robert L Trustee Parcel :01084230
 Site :17400 S Highway 211 Molalla 97038 Ref Par :R52E01B 02100
 Mail :17400 S Highway 211 Molalla Or 97038 Xferd :12/12/1997
 Use :641 For, Forest Land, Improved Tot AV :\$70,720
 MapGrid : Price :
 Bedrm:2 Bth:1.00 YearBlt:1956 BldgSF:864 Acres:11.08

*-----: **MetroScan / Clackamas** :-----*

31
Owner : Schiewe Rosalee & William P
Site : 17399 S Highway 211 Molalla 97038
Mail : 17445 S Highway 211 Molalla Or 97038
Use : 641 For, Forest Land, Improved
MapGrid :
Bedrm: Bth: YearBlt: 1900

Parcel : 01084249
Ref Par : R52E01B 02200
Xferd : 11/01/1987
Tot AV : \$6,870
Price : \$10,000
Acres: 3.27

BldgSF:

January 26, 1998

TONI AND JACK FRISON
BOX 1535 CRR
TERREBONNE OREGON 97760

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

NORTHWEST REGION

Re: Meadow Brook Grocery
File No. 03-92-0125
Facility ID. No. 7636

Dear Toni and Jack:

The Department of Environmental Quality has completed its review of the information submitted to date concerning the underground storage tank (UST) decommissioning and cleanup conducted at 16845 Highway 211 in Molalla, Oregon. The Department has determined that the cleanup appears to have met the requirements of Oregon Administrative Rules (OAR) 340-122-205 through 340-122-360 and that no further action is required at this time.

This determination is a result of our evaluation and judgment based on the regulations and facts as we now understand them, including:

1. A 550, a 1,000 and a 2,000 gallon UST were decommissioned at this location. The tanks were recycled at Schnitzer Steel Products in Portland, Oregon.
2. Gasoline contamination was discovered during the decommissioning. Approximately 38 tons of contaminated soil were excavated and treated onsite. After treatment was complete, no gasoline was detected remaining in the soil. The soil was spread out onsite and covered with clean fill.
3. After excavation of contaminated soil was complete, up to 4,900 parts per million (ppm) gasoline was detected remaining in the soil. In addition, gasoline constituents were detected in the groundwater.
4. To address the remaining soil and groundwater contamination, three monitoring wells were installed. Benzene was the only contaminant of concern to be detected in the groundwater above its cleanup standard (5 parts per billion (ppb)). The maximum concentration of benzene detected in the wells was 64 ppb.
5. Four consecutive quarters of compliance monitoring have been conducted pursuant to OAR 340-122-242. During these last four quarters of sampling, a maximum of 4 ppb benzene was detected.

John A. Kitzhaber
Governor



2020 SW Fourth Avenue
Suite 400
Portland, OR 97201-4987
(503) 229-5263 Voice
TTY (503) 229-5471
DEQ-1

Toni and Jack Frison
January 26, 1998
Page 2

The Department's approval to leave soil contamination is based on the site conditions described in the report as they exist today. Should any contaminated soil be excavated in the future, the Department must be notified and the soil taken to an permitted treatment or disposal facility. You are also responsible for notifying potential purchasers of the property about this remaining contamination.

The Department's determination will not be applicable if new or undisclosed facts show that the cleanup does not comply with the referenced rules. The Department's determination also does not apply to any conditions at the site other than the release of the petroleum product specifically addressed in the report(s).

Please note that pursuant to OAR 340-122-360(2), a copy of your report must be retained until ten (10) years after the first transfer of the property. We recommend that a copy of this information be kept with the permanent facility records.

Your efforts to comply with the regulations to ensure that your facility has been adequately cleaned up have been appreciated. If you have any questions, please feel free to contact me at (503) 229-5474.

Sincerely,

A handwritten signature in cursive script, appearing to read "Andree Pollock".

Andree Pollock
UST Cleanup Specialist

cc: Don and Margie Williams
Meadow Brook Grocery
P.O. Box 388
Colton, Oregon 97017

(avp:AVP)

SML Associates Inc.

CCB # 120112
1774 Sunset Ave.
West Linn, Oregon 97068
(503) 656-3625
Fax: 656-3627

DEPT OF ENVIRONMENTAL QUALITY
RECEIVED

OCT 08 1997

NORTHWEST REGION

October 7, 1997

Mr. Rick Silverman
Oregon Department of Environmental Quality
Northwest Region, UST Section
2000 SW Fourth Ave., Suite 400
Portland, Oregon 97201
(503) 229-5477

Re: Quarterly groundwater monitoring, Meadowbrook Grocery, 16845 S. Hwy. 211, Molalla,
Oregon. DEQ file #03-92-125

Dear Mr. Silverman:

This letter and the accompanying documents presents the results of the most recent groundwater monitoring for the above named property, as outlined in the modified CAP.

Background

Prior to sampling the total depth and depth to groundwater was measured in each well using a Solinst 100 interface probe. This information was recorded on a sampling event data sheet, one of which was recorded for each well. Copies of the data sheets are attached. The probe was decontaminated before and between each measurement by washing in tap water and Alconox, a biodegradable laboratory cleaner and degreaser, and rinsing in fresh tap water.

Sample Collection

The measurements obtained were used to calculate the well volume so that at least three volumes were purged prior to sampling. Purging was accomplished utilizing an ES-60 Purger submersible pump. Purged water was placed in individual, dedicated 55 gallon, DOT approved drums. Each drum was labeled with the monitoring well number and stored in a secured area between the store and the Frison home. The pump and tubing were decontaminated before and between sample events by submergence in a tap water and Alconox solution and flushing approximately five gallons through the pump and tubing. They were then flushed with approximately five gallons of tap water. The flushed water and Alconox solutions were placed in the appropriate 55 gallon drum.

The samples were collected in three laboratory supplied 40 ml VOA bottles. The samples were immediately refrigerated, information recorded on a chain of custody and hand delivered to the laboratory within 24 hours. Copies of the chain of custody and the analytical results are attached.

Groundwater Flow Direction

On August 12, 1995 the wells were surveyed by a registered surveyor. A copy of his survey was submitted with the first monitoring report. Utilizing the information from the survey and the measurement data collected during sampling, the groundwater flow direction for this sampling event has been determined to be to the northwest, specifically N. 56° W. A copy of the determination is attached.

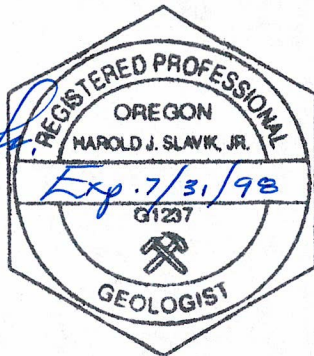
Analytical Results and Recommendations

The results of the current and previous sampling are presented in Table 1. Results indicate levels in all three wells have continued below regulatory compliance limits for a full hydrogeological cycle. Very slight fluctuations in constituents, we believe, may be the result of seasonal high groundwater encountering a very small residual pocket of hydrocarbons. Groundwater flow direction, as will be seen in previous reports, is generally to the north-northwest. Reversals in flow direction, we believe, may be due to groundwater usage at a nearby Christmas tree farm. A groundwater reversal has occurred on three occasions during the nine quarters we have been monitoring.

The dissolved lead levels during the first monitoring event were well below the drinking water standards. Therefore, with your verbal approval, we have discontinued the lead analysis. Based upon the foregoing, on behalf of the Frison's we respectfully request a letter of No Further Action be issued. When the letter is received we will proceed with well abandonment according to Department of Water Resources regulation.

Sincerely,
SML Associates, Inc.

H. J. Slavik, Jr.
Harold J. Slavik, Jr., PG
President



for

Toni Frison

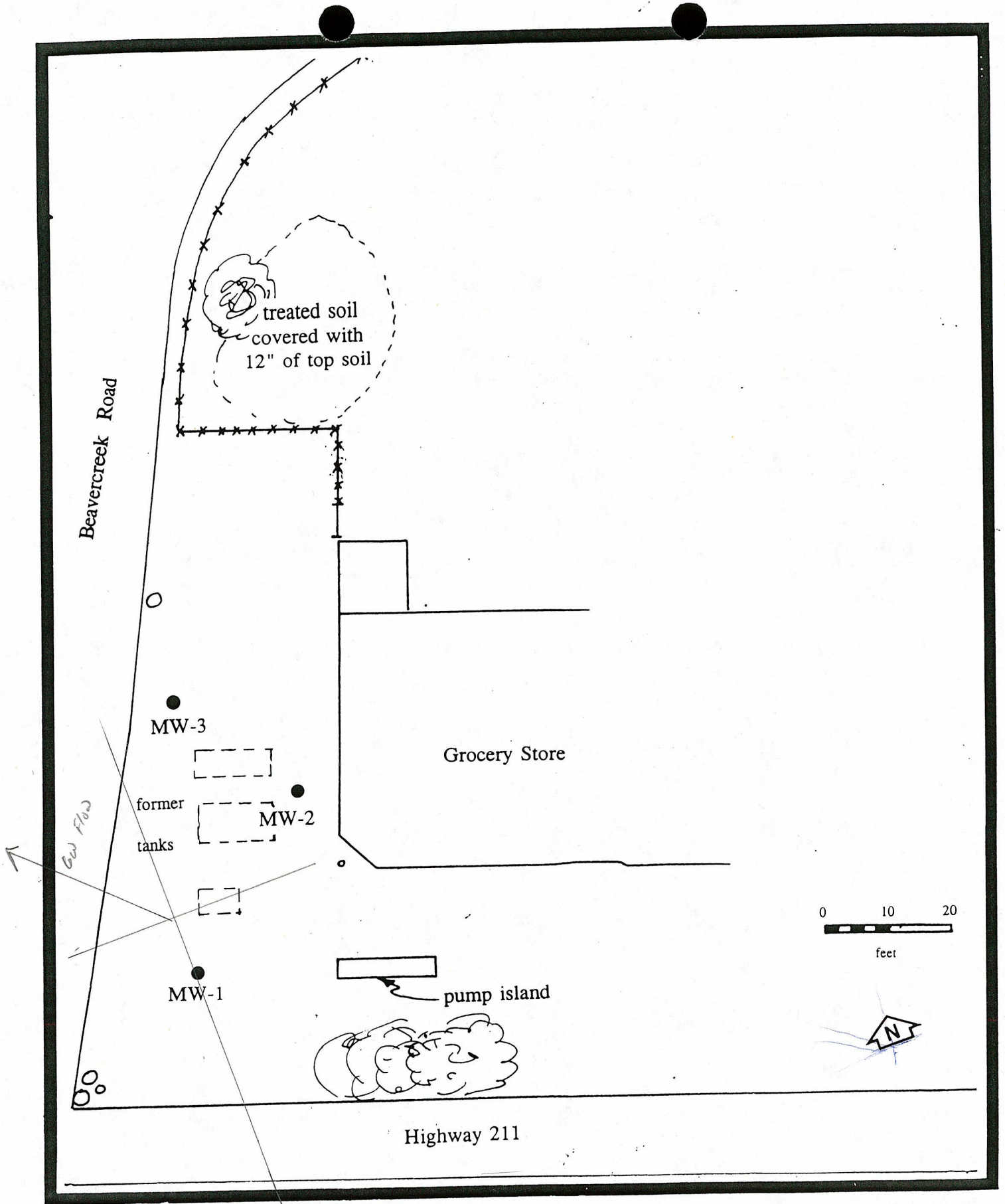
encs.

Table 1

Groundwater Analytical Results
Meadowbrook Grocery
16845 So. Highway 211
Molalla, Oregon

Results are presented, in parts per billion (ppb), as benzene / toluene / ethylbenzene / xylenes. ND means below instrument detection limits (<2 ppb).

Sample Date	MW-1	MW-2	MW-3
July 26, 1995	7 / 4 / 98 / 190	26 / 36 / 110 / 390	ND / ND / 2 / 5
November 1, 1995	7 / 7 / 120 / 220	64 / 220 / 520 / 2200	6 / 15 / 36 / 150
February 15, 1996	14 / 13 / 140 / 260	25 / 35 / 150 / 1000	10 / 8 / 29 / 150
May 11, 1996	7 / 4 / 47 / 45	10 / 7 / 47 / 94	ND / ND / ND / ND
September 4, 1996	4 / 3 / 14 / 16	7 / 4 / 9 / 16	ND / ND / ND / ND
December 6, 1996	ND / ND / ND / ND	ND / ND / ND / ND	ND / ND / ND / ND
March 6, 1997	ND / ND / 32 / 35	4 / 7 / 56 / 160	ND / ND / ND / ND
June 14, 1997	ND / ND / ND / ND	2 / ND / 15 / 23	ND / ND / 22 / 21
September 21, 1997	ND / ND / ND / ND	ND / ND / ND / ND	ND / ND / ND / ND



Site Location

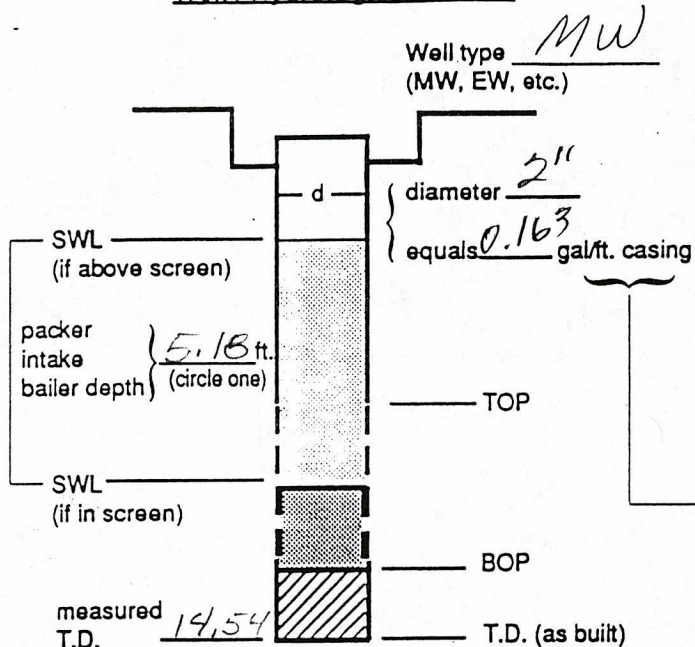
SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-1

PROJECT 95-044 Meadowbrook EVENT Drily SAMPLER H. Slavik DATE 9/21/97

Well / Hydrologic statistics



Action	Time	Pump rate	IWL (low yield)
Start pump / Begin	1230		
Stop	1240		
Sampled	1245		
(Final IWL)			

Purge calculation

0.163 gal/ft. * 9.36 ft. = 1.53 gals x 3 = 4.59 gals.

SWL to BOP or packer to BOP one volume purge volume- 3 casings

Head purge calculation (Airlift only)

gal/ft. * ft. = gals.

packer to SWL

Equipment Used / Sampling Method / Description of Event:

See MW-3 sheet

Actual gallons purged 5

Actual volumes purged 3 +

Well yield $\oplus$ _____

(see below)

COC #	Analysis	Lab
Sample I.D.		

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

$\oplus$ HY- Minimal W.L. drop MY- WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-2

PROJECT 95-044 Meadowbrook EVENT Qtrly SAMPLER H. Slavik DATE 9/21/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing SWL (if above screen) packer intake bailer depth <u>5.47</u> ft. (circle one) SWL (if in screen) measured T.D. <u>13.28</u> TOP BOP T.D. (as built)		Start pump / Begin	<u>1150</u>		
		Stop	<u>1210</u>		
		Sampled	<u>1215</u>		
		(Final IWL)			
Purge calculation <u>0.163</u> gal/ft. * <u>7.8</u> ft. = <u>1.27</u> gals x 3 = <u>3.81</u> gals. SWL to BOP or one volume packer to BOP volume purge volume- 3 casings					
Head purge calculation (Airlift only) gal/ft. * ft. = gals. packer to SWL					

Equipment Used / Sampling Method / Description of Event:

See MW-3 sheet

Actual gallons purged 5

Actual volumes purged 3.3

Well yield (see below) 4.1

COC #	Analysis	Lab
Sample I.D.		

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

⊕ HY- Minimal W.L. drop MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

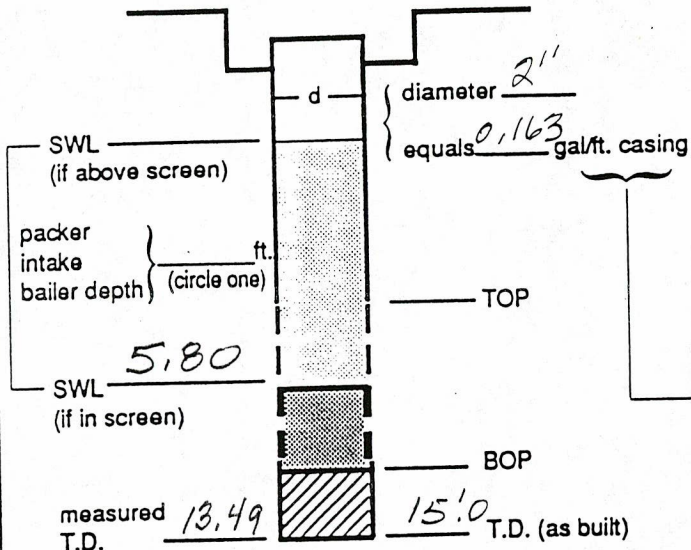
WELL OR LOCATION MW-3

PROJECT 95-044 Meadowbrook EVENT Q4/16

SAMPLER H. Slavik DATE 9/21/97

Well / Hydrologic statistics

Well type MW
(MW, EW, etc.)



Action	Time	Pump rate	IWL (low yield)
Start pump / Begin	1110		
Stop	1130		
Sampled	1135		
(Final IWL)			

Purge calculation

$$0.163 \text{ gal/ft.} \cdot 7.69 \text{ ft.} = 1.25 \text{ gals} \times 3 = 3.75 \text{ gals.}$$

SWL to BOP or one volume
packer to BOP volume
purge volume- 3 casings

Head purge calculation (Airlift only)

$$\text{gal/ft.} \cdot \text{ft.} = \text{gals.}$$

packer to SWL

Equipment Used / Sampling Method / Description of Event:

ES-60 purger pump
disposable teflon bailers
100' Solinst probe

Actual gallons purged 5.0
Actual volumes purged 3.3
Well yield $\oplus$ HY
(see below)

COC # _____
Sample I.D. _____ Analysis _____ Lab _____

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

$\oplus$ HY- Minimal W.L. drop

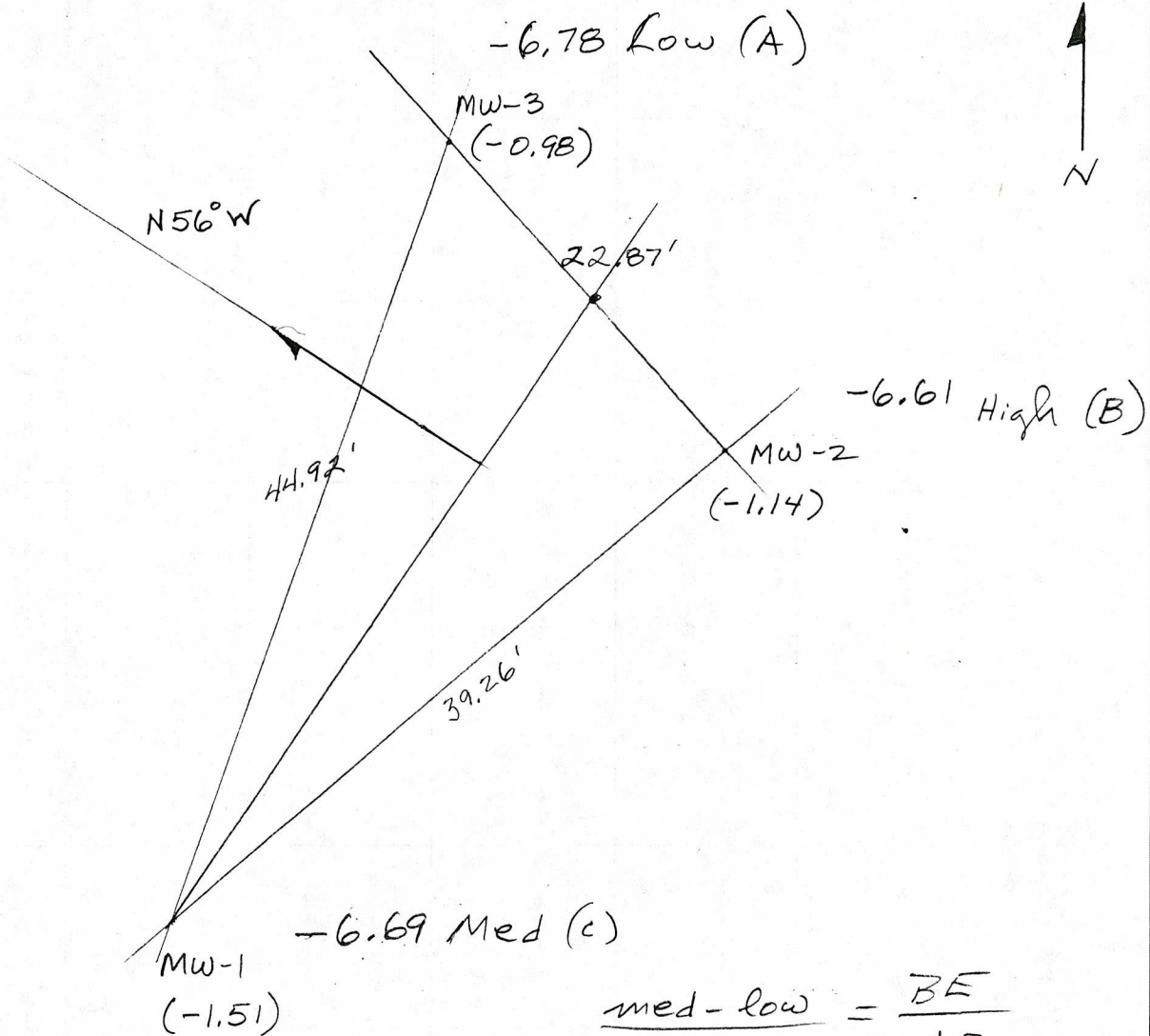
MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

Meadowbrook Groc.
Sampling/GW Flow
Calculation 9/21/97

1" = 10'



$$\frac{\text{med} - \text{low}}{\text{high} - \text{low}} = \frac{BE}{AB}$$

$$\frac{(-6.69) - (-6.78)}{(-6.61) - (-6.78)} = \frac{x}{22.87}$$

$$\frac{0.09}{0.17} = \frac{x}{22.87}$$

$$0.53(22.87) = 12.12$$



Oregon
Analytical
Laboratory

14855 S.W. Old Scholls Ferry Rd.
Beaverton, Oregon 97007
(503) 590-5300
FAX (503) 590-1404

CHAIN OF CUSTODY RECORD LABORATORY ANALYSIS REQUEST

No

5272

Page 1 of 1

Client Information

Company Meadowbrook Grocery

Contact Toni Frison

Address Box 1535 CRR

Terrebonne, OR 97760

Phone # (541) 504-8751 FAX # (503) 656-3627

Project Name Meadowbrook Groc.

Project Number 95-044

P.O. Number

Comments Send/Fax copy results

To SML Assoc. - Harold

Sampler's Name Harold Slavik

Signature H. J. Slavik, Jr.

Sampling Date 9/21/97

Provide Verbal Results ☐ Yes ☒ No

Provide FAX Results ☒ Yes ☐ No

SAMPLE IDENTIFICATION						DATE	TIME	OAL #	# of Containers	MATRIX			ANALYSES																	Turnaround	REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
										Soil	Water	Other (Note in Remarks)	Volatiles 624/8260 (circle)	All Aromatic Halogenated	Semivolatiles 625/8270 (circle)	All PAH(SIM) Phenol Phthalate	Organochlorinateds 608/8080	All PCB Pesticide (circle)	Chlorinated Herbicides 8150	TPH-HCID OR-DEQ Quantify? Yes No	TPH Quantification (circle)	G D 418.1M 418.1	BTEX 602/8020	TCLP Metals (circle)	As Ba Cd Cr Pb Hg Se Ag	TCLP Organics (circle)	Vol Semivol Pest Herb	Metals ☐ Dissolved ☐ Total	list																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1	MW 3-9			9/21/97		1135	L3532-1		3		X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

Relinquished	
Signature <u>H. J. Slavik, Jr.</u>	Date <u>9/22/97</u>
Print Name <u>H. J. Slavik, Jr.</u>	Time <u>1235</u>
Company <u>SML Associates, Inc.</u>	
Received	
Signature	Date
Print Name	Time
Company	

Relinquished	
Signature	Date
Print Name	Time
Company	
Received	
Signature <u>Cindy Hagan</u>	Date <u>9/22/97</u>
Print Name <u>Cindy Hagan</u>	Time <u>12:35</u>
Company <u>OAL</u>	

Shipped Via <u>Hand delivered</u>	
Received @ _____ °C	
Appropriate Containers ☒ Yes ☐ No	
3/sample	4oz./8oz. Jars
	VOA Vials
	Plastic Bottles
	Glass Bottles
	other



L3532

Sample Summary

<u>Sample ID</u>	<u>Lab #</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
MW 3-9	L3532-1	water	09/21/97 11:35	09/22/97
MW 2-9	L3532-2	water	09/21/97 11:35	09/22/97
MW 1-9	L3532-3	water	09/21/97 11:35	09/22/97

Definition of Terms

ND Analytical result was below the reporting limit.

OREGON ANALYTICAL LABORATORY
A Division of Portland General Electric

5 S.W. Old Scholls Ferry Road, Beaverton, OR 97005

Phone 503-590-5300 • Fax 503-590-1404



L3532

Client: *Meadowbrook Grocery*
Contact: *Toni Frison*

BTEX
by EPA 8020

<i>Sample ID</i>	<i>Matrix</i>				<i>Lab Number</i>
Analyte		Result	Reporting Limit	Units (ppb)	Comment

<i>MW 3-9</i>	<i>Water</i>				Sampled: 09/21/97 Analyzed: 09/25/97	<i>L3532-1</i>
Benzene		ND	2.	µg/L		
Ethylbenzene		ND	2.	µg/L		
Toluene		ND	2.	µg/L		
Total Xylenes		ND	2.	µg/L		
	Surrogate Bromofluorobenzene				Recovery 90. %	Limit 50. - 150.

<i>MW 2-9</i>	<i>Water</i>				Sampled: 09/21/97 Analyzed: 09/25/97	<i>L3532-2</i>
Benzene		ND	2.	µg/L		
Ethylbenzene		ND	2.	µg/L		
Toluene		ND	2.	µg/L		
Total Xylenes		ND	2.	µg/L		
	Surrogate Bromofluorobenzene				Recovery 98. %	Limit 50. - 150.

<i>MW 1-9</i>	<i>Water</i>				Sampled: 09/21/97 Analyzed: 09/25/97	<i>L3532-3</i>
Benzene		ND	2.	µg/L		
Ethylbenzene		ND	2.	µg/L		
Toluene		ND	2.	µg/L		
Total Xylenes		ND	2.	µg/L		
	Surrogate Bromofluorobenzene				Recovery 99. %	Limit 50. - 150.

OREGON ANALYTICAL LABORATORY

A Division of Portland General Electric

14855 S.W. Old Scholls Ferry Road, Beaverton, OR 97007

Phone 503-590-5300 • Fax 503-590-1404

SML Associates Inc.

CCB # 120112
1774 Sunset Ave.
West Linn, Oregon 97068
(503) 656-3625
Fax: 656-3627

DEPT OF ENVIRONMENTAL QUALITY
RECEIVED

JUN 23 1997

June 18, 1997

NORTHWEST REGION

Mr. Rick Silverman
Oregon Department of Environmental Quality
Northwest Region, UST Section
2000 SW Fourth Ave., Suite 400
Portland, Oregon 97201
(503) 229-5477

Re: Quarterly groundwater monitoring, Meadowbrook Grocery, 16845 S. Hwy. 211, Molalla, Oregon. DEQ file #03-92-125

Dear Mr. Silverman:

This letter and the accompanying documents presents the results of the most recent groundwater monitoring for the above named property, as outlined in the modified CAP.

Background

Prior to sampling the total depth and depth to groundwater was measured in each well using a Solinst 100 interface probe. This information was recorded on a sampling event data sheet, one of which was recorded for each well. Copies of the data sheets are attached. The probe was decontaminated before and between each measurement by washing in tap water and Alconox, a biodegradable laboratory cleaner and degreaser, and rinsing in fresh tap water.

Sample Collection

The measurements obtained were used to calculate the well volume so that at least three volumes were purged prior to sampling. Purging was accomplished utilizing an ES-60 Purger submersible pump. Purged water was placed in individual, dedicated 55 gallon, DOT approved drums. Each drum was labeled with the monitoring well number and stored in a secured area between the store and the Frison home. The pump and tubing were decontaminated before and between sample events by submergence in a tap water and Alconox solution and flushing approximately five gallons through the pump and tubing. They were then flushed with approximately five gallons of tap water. The flushed water and Alconox solutions were placed in the appropriate 55 gallon drum.

The samples were collected in three laboratory supplied 40 ml VOA bottles. The samples were immediately refrigerated, information recorded on a chain of custody and hand delivered to the laboratory within 24 hours. Copies of the chain of custody and the analytical results are attached.

Groundwater Flow Direction

On August 12, 1995 the wells were surveyed by a registered surveyor. A copy of his survey was submitted with the first monitoring report. Utilizing the information from the survey and the measurement data collected during sampling, the groundwater flow direction for this sampling event has been determined to be to the northwest, specifically N. 9° W. A copy of the determination is attached.

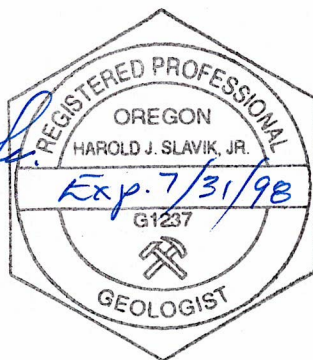
Analytical Results and Recommendations

The results of the current and previous sampling are presented in Table 1. Results indicate levels in all three wells continue below regulatory compliance limits. Very slight fluctuations in constituents, we believe, may be the result of seasonal high groundwater encountering a very small residual pocket of hydrocarbons. Groundwater flow direction, as will be seen in previous reports, is generally to the north-northwest. Reversals in flow direction, we believe, may be due to groundwater usage at a nearby Christmas tree farm. A groundwater reversal has occurred on three occasions during the eight quarters we have been monitoring.

The dissolved lead levels during the first monitoring event were well below the drinking water standards. Therefore, with your verbal approval, we have discontinued the lead analysis. The next sampling is scheduled for September 1997.

Sincerely,
SML Associates, Inc.

H. J. Slavik, Jr.
Harold J. Slavik, Jr., PG
President



for

Toni Frison

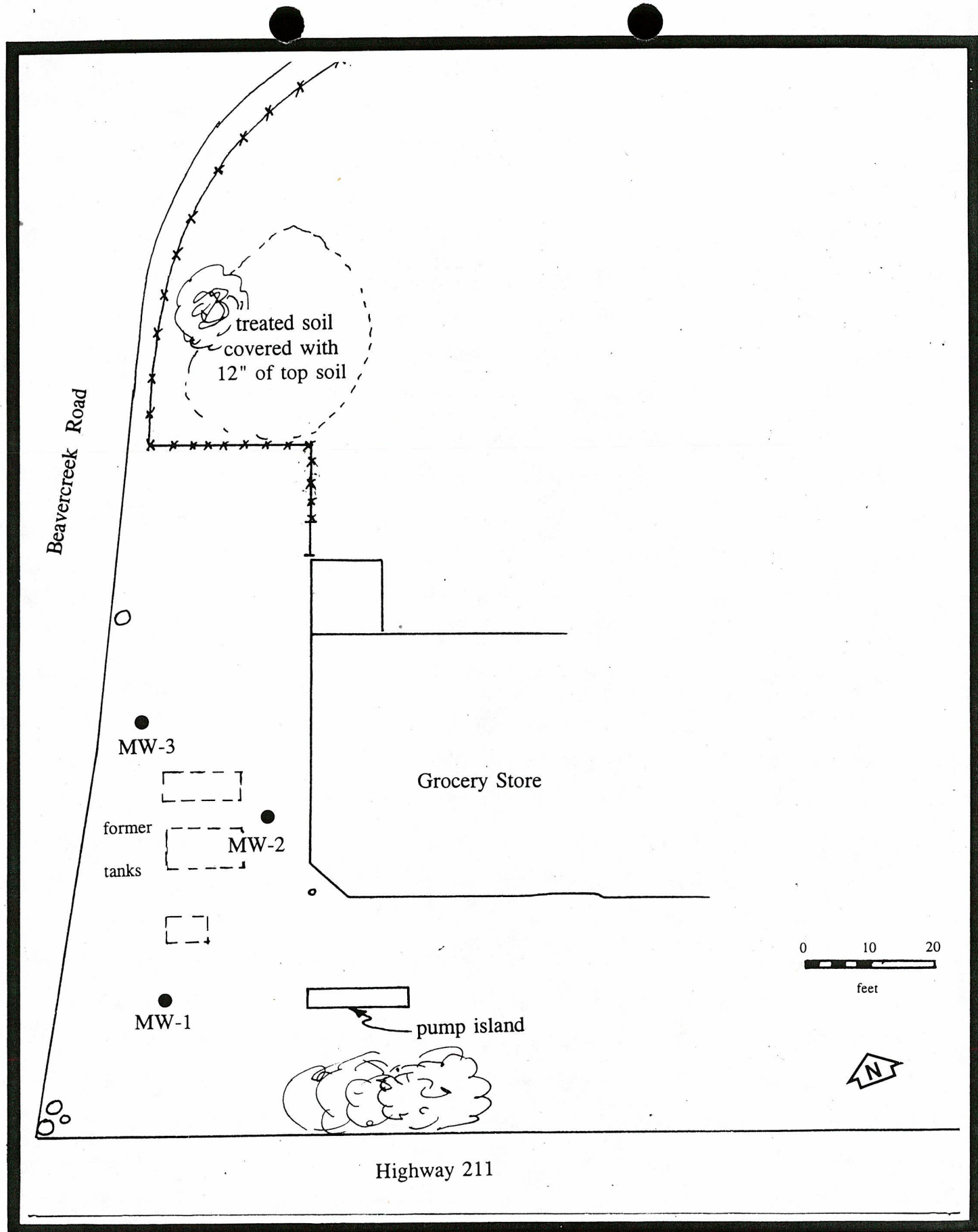
encs.

Table 1

Groundwater Analytical Results
Meadowbrook Grocery
16845 So. Highway 211
Molalla, Oregon

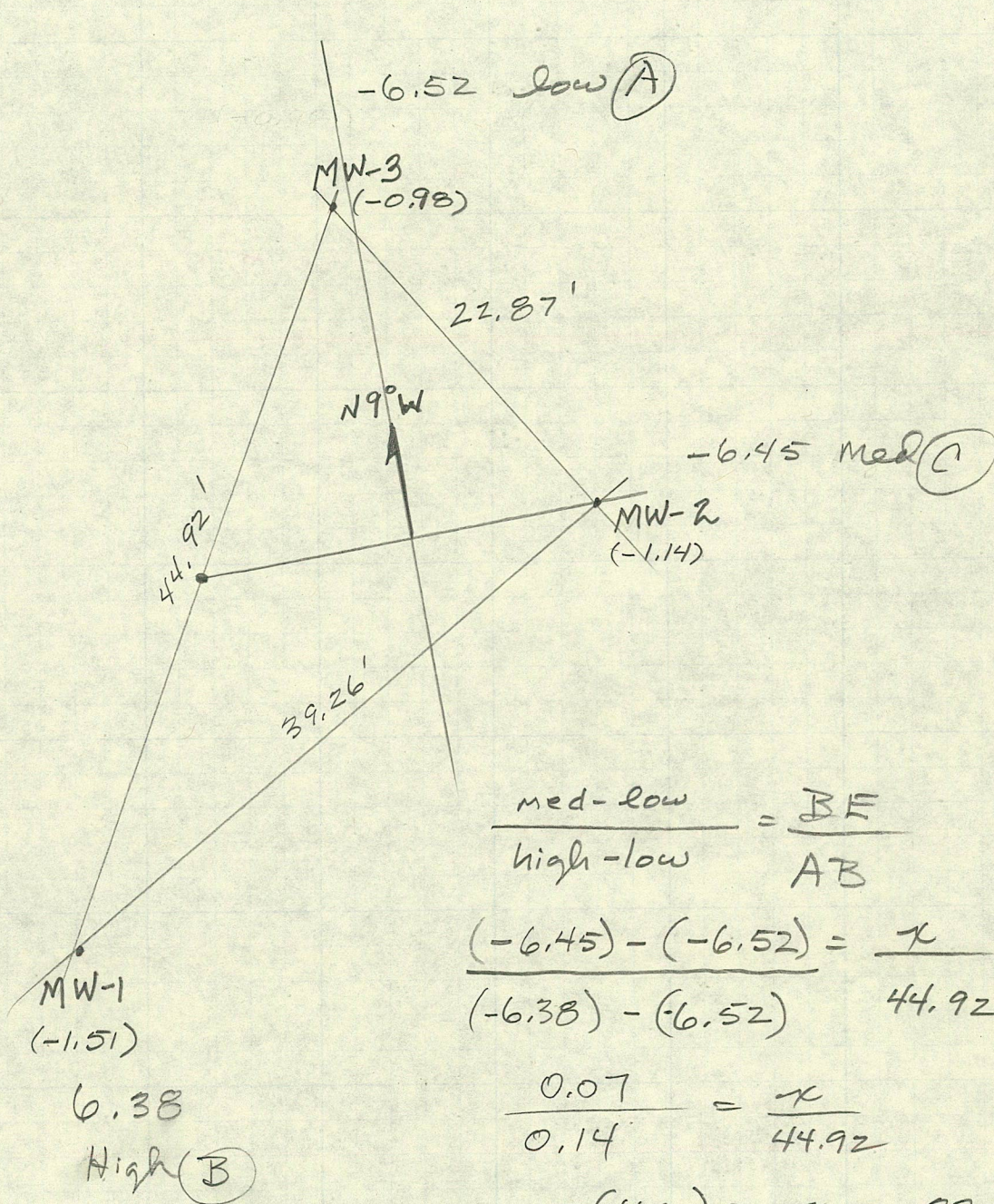
Results are presented, in parts per billion (ppb), as benzene / toluene / ethylbenzene / xylenes. ND means below instrument detection limits (<2 ppb).

Sample Date	MW-1	MW-2	MW-3
July 26, 1995	7 / 4 / 98 / 190	26 / 36 / 110 / 390	ND / ND / 2 / 5
November 1, 1995	7 / 7 / 120 / 220	64 / 220 / 520 / 2200	6 / 15 / 36 / 150
February 15, 1996	14 / 13 / 140 / 260	25 / 35 / 150 / 1000	10 / 8 / 29 / 150
May 11, 1996	7 / 4 / 47 / 45	10 / 7 / 47 / 94	ND / ND / ND / ND
September 4, 1996	4 / 3 / 14 / 16	7 / 4 / 9 / 16	ND / ND / ND / ND
December 6, 1996	ND / ND / ND / ND	ND / ND / ND / ND	ND / ND / ND / ND
March 6, 1997	ND / ND / 32 / 35	4 / 7 / 56 / 160	ND / ND / ND / ND
June 14, 1997	ND / ND / ND / ND	2 / ND / 15 / 23	ND / ND / 22 / 21



Site Location

1" = 10"



SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-3

PROJECT Meadowbrook Gr EVENT Q'tly Monit. SAMPLER H. Slavik DATE 6/14/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing SWL (if above screen) _____ packer intake } ft. bailer depth } (circle one) SWL <u>5.54</u> (if in screen) measured T.D. <u>13.47</u> TOP _____ BOP _____ T.D. (as built) _____		Start pump / Begin			
		Stop			
		Sampled	<u>1140</u>		
		(Final IWL)			
Purge calculation					
$0.163 \text{ gal/ft.} \cdot 7.93 \text{ ft.} = 1.29 \text{ gals} \times 3 = 3.87 \text{ gals.}$					
SWL to BOP or one volume packer to BOP volume purge volume- 3 casings					
Head purge calculation (Airlift only)					
gal/ft. * ft. = gals. packer to SWL					

Equipment Used / Sampling Method / Description of Event:

- ES 60 punger submersible pump
- Solinst 100 probe
- Timco disposable Teflon bailer

Actual gallons purged 5

Actual volumes purged 3+

Well yield $\oplus$ HY
(see below)

COC # 1574

Sample I.D. MW3-B

Analysis BTEX

Lab OAL

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

$\oplus$ HY- Minimal W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-2

PROJECT Meadowbrook Grac. EVENT Qthly. Maint. SAMPLER H. Slavik DATE 6/14/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing SWL (if above screen) _____ packer intake bailer depth _____ ft. (circle one) SWL <u>5.31</u> (if in screen) measured T.D. <u>14.28</u> TOP BOP T.D. (as built)		Start pump / Begin			
		Stop			
		Sampled	<u>1210</u>		
		(Final IWL)			
Purge calculation <u>0.163</u> gal/ft. * <u>8.97</u> ft. = <u>1.46</u> gals x 3 = <u>4.38</u> gals. SWL to BOP or one volume packer to BOP volume purge volume- 3 casings					
Head purge calculation (Airlift only) _____ gal/ft. * _____ ft. = _____ gals. packer to SWL					

Equipment Used / Sampling Method / Description of Event:

See MW-3 sheet

Actual gallons purged 6

Actual volumes purged 3+

Well yield $\oplus$ HY

COC # 1574

Sample I.D.	Analysis	Lab
<u>MW2-8</u>	<u>BTEX</u>	<u>OAL</u>

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

$\oplus$ HY - Minimal W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-1

PROJECT Meadowbrook Grv. EVENT Qty Mont. SAMPLER H. Slavik DATE 6/14/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) SWL <u>4.87</u> (if above screen) packer intake bailer depth } ft. (circle one) SWL _____ (if in screen) measured <u>14.54</u> T.D. d — diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing TOP BOP T.D. (as built)		Start pump / Begin			
		Stop			
		Sampled	<u>1235</u>		
		(Final IWL)			
		Purge calculation <u>0.163</u> gal/ft. * <u>9.67</u> ft. = <u>1.58</u> gals x 3 = <u>4.74</u> gals. SWL to BOP or one purge volume- packer to BOP volume 3 casings			
		Head purge calculation (Airlift only) _____ gal/ft. * _____ ft. = _____ gals. packer to SWL			

Equipment Used / Sampling Method / Description of Event:

Actual gallons purged 6

Actual volumes purged 3+

Well yield ⊕ MY
(see below)

COC # <u>1574</u>		
Sample I.D. <u>MW1-B</u>	Analysis <u>BTEX</u>	Lab <u>OAL</u>

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

⊕ HY- Minimal W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

MEADOWBROOK GROCERY
16845 S. HIGHWAY 211
MOLALLA, OR 97038

ANALYST REVIEW BY: WB
DATA PACK REVIEW BY: SL

DATE: 6-18-97
DATE: 6/18/97

TONI FRISON
(503)829-9165/FX 829-9079
P/N:95-044

BTEX
BY EPA 602/8020/8021 OR 624/8240

SAMPLE ID:	MW3-8	MW2-8	MW1-8
OAL ID: 25-J251-	59614	59615	59616
SAMPLE DATE:	6/14/97	6/14/97	6/14/97
MATRIX:	WATER	WATER	WATER
EXTRACTION DATE:	NA	NA	NA
ANALYSIS DATE:	6/17/97	6/17/97	6/17/97
BENZENE PPB	ND	2.	ND
TOLUENE PPB	ND	ND	ND
ETHYLBENZENE PPB	ND	15.	22.
XYLENES PPB	ND	23.	21.
SURR.RECOVERY %	95.	100.	98.
ANALYST:	WB	WB	WB

BROMOFLUOROBENZENE WAS USED AS THE SURROGATE

PPB = UG/KG, SOLIDS PPB = UG/L, LIQUIDS

NA = NOT ANALYZED

MI = MATRIX INTERFERENCE WITH SURROGATE RECOVERY.

ND = NOT DETECTED

REPORTING LIMITS:	WATER	SOIL
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
XYLENES	<2.0	<2.0

OREGON ANALYTICAL LABORATORY

A Division of Portland General Electric

14855 S.W. Old Scholls Ferry Road, Beaverton, OR 97007

Phone 503-590-5300 • Fax 503 590 1404

Shipped Via Hand delivered
Received @ 4 °C
Appropriate Containers ☒ Yes ☐ No

X 4oz./8oz. Jars
VOA Vials
Plastic Bottles
Glass Bottles

DEPT OF ENVIRONMENTAL QUALITY
RECEIVED

MAR 14 1997

NORTHWEST REGION

SML Associates Inc.

CCB # 120112
1774 Sunset Ave.
West Linn, Oregon 97068
(503) 656-3625
Fax: 656-3627

March 13, 1997

Mr. Rick Silverman
Oregon Department of Environmental Quality
Northwest Region, UST Section
2000 SW Fourth Ave., Suite 400
Portland, Oregon 97201
(503) 229-5477

Re: Quarterly groundwater monitoring, Meadowbrook Grocery, 16845 S. Hwy. 211, Molalla, Oregon. DEQ file #03-92-125

Dear Mr. Silverman:

This letter and the accompanying documents presents the results of the most recent groundwater monitoring for the above named property, as outlined in the modified CAP.

Background

Prior to sampling the total depth and depth to groundwater was measured in each well using a Solinst 100 interface probe. This information was recorded on a sampling event data sheet, one of which was recorded for each well. Copies of the data sheets are attached. The probe was decontaminated before and between each measurement by washing in tap water and Alconox, a biodegradable laboratory cleaner and degreaser, and rinsing in fresh tap water.

Sample Collection

The measurements obtained were used to calculate the well volume so that at least three volumes were purged prior to sampling. Purging was accomplished utilizing an ES-60 Purger submersible pump. Purged water was placed in individual, dedicated 55 gallon, DOT approved drums. Each drum was labeled with the monitoring well number and stored in a secured area between the store and the Frison home. The pump and tubing were decontaminated before and between sample events by submergence in a tap water and Alconox solution and flushing approximately five gallons through the pump and tubing. They were then flushed with approximately five gallons of tap water. The flushed water and Alconox solutions were placed in the appropriate 55 gallon drum.

The samples were collected in three laboratory supplied 40 ml VOA bottles. The samples were immediately refrigerated, information recorded on a chain of custody and hand delivered to the laboratory within 24 hours. Copies of the chain of custody and the analytical results are attached.

Groundwater Flow Direction

On August 12, 1995 the wells were surveyed by a registered surveyor. A copy of his survey was submitted with the first monitoring report. Utilizing the information from the survey and the measurement data collected during sampling, the groundwater flow direction for this sampling event has been determined to be to the northeast, specifically N. 82° E. A copy of the determination is attached.

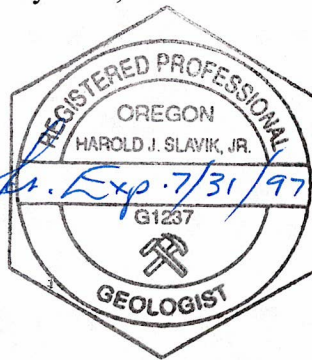
Analytical Results and Recommendations

The results of the current and previous sampling are presented in Table 1. Results indicate levels in all three wells continue below regulatory compliance limits. The very slight increase in MW-2 we believe may be the result of seasonal high groundwater encountering a very small residual pocket of hydrocarbons. Groundwater flow direction, as will be seen in previous reports, is generally to the north-northwest. A reversal in flow direction, we believe, may be due to groundwater usage at a nearby Christmas tree farm. A groundwater reversal has occurred on at least three occasions during the seven quarters we have been monitoring.

The dissolved lead levels during the first monitoring event were well below the drinking water standards. Therefore, with your verbal approval, we have discontinued the lead analysis. The next sampling is scheduled for early June, 1997.

Sincerely,
SML Associates, Inc.

H. J. Slavik, Jr.
Harold J. Slavik, Jr., PG
President



for

Toni Frison, Owner
Meadowbrook Grocery

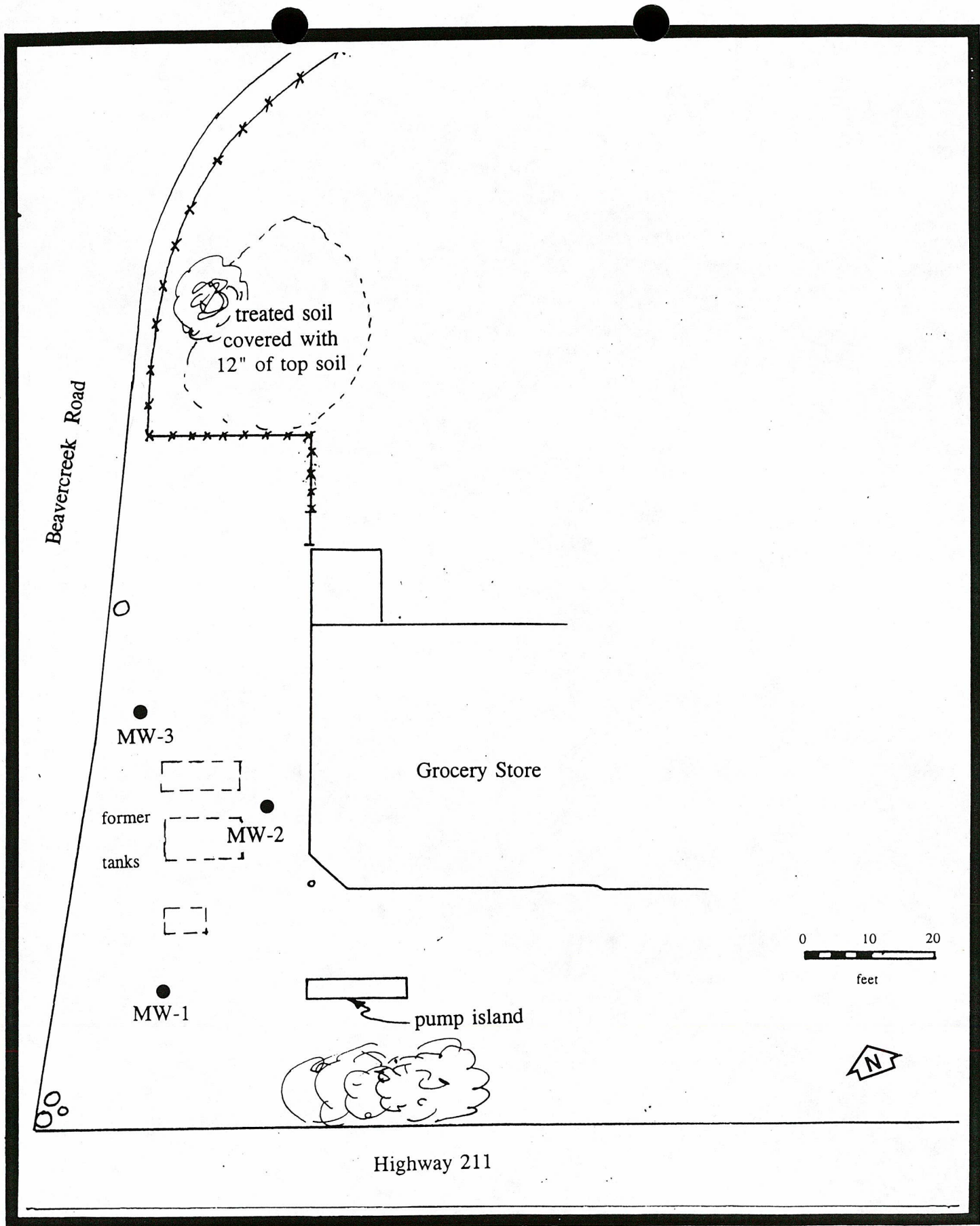
encs.

Table 1

Groundwater Analytical Results
Meadowbrook Grocery
16845 So. Highway 211
Molalla, Oregon

Results are presented, in parts per billion (ppb), as benzene / toluene / ethylbenzene / xylenes. ND means below instrument detection limits (<2 ppb).

Sample Date	MW-1	MW-2	MW-3
July 26, 1995	7 / 4 / 98 / 190	26 / 36 / 110 / 390	ND / ND / 2 / 5
November 1, 1995	7 / 7 / 120 / 220	64 / 220 / 520 / 2200	6 / 15 / 36 / 150
February 15, 1996	14 / 13 / 140 / 260	25 / 35 / 150 / 1000	10 / 8 / 29 / 150
May 11, 1996	7 / 4 / 47 / 45	10 / 7 / 47 / 94	ND / ND / ND / ND
September 4, 1996	4 / 3 / 14 / 16	7 / 4 / 9 / 16	ND / ND / ND / ND
December 6, 1996	ND / ND / ND / ND	ND / ND / ND / ND	ND / ND / ND / ND
March 6, 1997	ND / ND / 32 / 35	4 / 7 / 56 / 160	ND / ND / ND / ND



Site Location



MEADOWBROOK GROCERY
16845 S. HIGHWAY 211
MOLALLA, OR 97038

ANALYST REVIEW BY: RJ
DATA PACK REVIEW BY: SL

DATE: 3/11/97

DATE: 3/11/97

TONI FRISON
(503)829-9165/FX 829-9079
P/N:95-044

BTEX
BY EPA 602/8020/8021 OR 624/8240

SAMPLE ID:	MW3-7	MW2-7	MW1-7
OAL ID: 25-J251-	56351	56352	56353
SAMPLE DATE:	3/6/97	3/6/97	3/6/97
MATRIX:	WATER	WATER	WATER
EXTRACTION DATE:	NA	NA	NA
ANALYSIS DATE:	3/10/97	3/10/97	3/10/97
BENZENE PPB	ND	4.	ND
TOLUENE PPB	ND	7.	ND
ETHYLBENZENE PPB	ND	56.	32.
XYLENES PPB	ND	160.	35.
SURR. RECOVERY %	96.	103.	95.
ANALYST:	RJ	RJ	RJ

BROMOFLUOROBENZENE WAS USED AS THE SURROGATE
WATER MATRIX UNITS ARE UG/L (PPB)
SOLIDS MATRIX UNITS ARE UG/KG (PPB)
NA = NOT ANALYZED
MI = MATRIX INTERFERENCE WITH SURROGATE RECOVERY.
ND = NOT DETECTED

REPORTING LIMITS:	WATER	SOIL
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
XYLENES	<2.0	<2.0

OREGON ANALYTICAL LABORATORY

A Division of Portland General Electric
14855 S.W. Old Scholls Ferry Road
Beaverton, OR 97007

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-1

PROJECT meadowbrook GROC EVENT 7th MW Sampling SAMPLER H. Slavik DATE 3/6/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) SWL <u>3.38</u> (if above screen) packer intake } ft. bailer depth } (circle one) SWL _____ (if in screen) measured <u>14.54</u> T.D. diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing TOP BOP T.D. (as built)		Start pump / Begin	<u>1100</u>		
		Stop	<u>1110</u>		
		Sampled	<u>1110</u>		
		(Final IWL)			
Purge calculation <u>0.163</u> gal/ft. * <u>11.16</u> ft. = <u>1.82</u> gals x 3 = <u>5.46</u> gals. SWL to BOP or one } purge volume- packer to BOP } volume } 3 casings					
Head purge calculation (Airlift only) _____ gal/ft. * _____ ft. = _____ gals. packer to SWL					

Equipment Used / Sampling Method / Description of Event: <u>Same as MW-3</u>	Actual gallons purged	<u>7+</u>
	Actual volumes purged	<u>3+</u>
	Well yield (see below)	<u>HY</u>
Additional comments:	COC #	<u>3870</u>
	Sample I.D.	<u>MW1-7</u>
	Analysis	<u>BTEX</u>
	Lab	<u>OAL</u>

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

⊕ HY- Minimal W.L. drop MY- WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY- Able to purge 3 volumes by returning later or next day.

VLY- Minimal recharge - unable to purge 3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-3

PROJECT Meadowbrook GROC. EVENT 7th MW Sampling SAMPLER H. Slavit DATE 3/6/97

Well / Hydrologic statistics		Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) SWL <u>4.21</u> (if above screen) packer intake } ft. bailer depth } (circle one) SWL _____ (if in screen) measured T.D. <u>13.47</u> diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing TOP BOP T.D. (as built)		Start pump / Begin	<u>0931</u>		
		Stop	<u>0946</u>		
		Sampled	<u>0948</u>		
		(Final IWL)			
Purge calculation					
$\frac{0.163 \text{ gal/ft.} \cdot 9.26 \text{ ft.}}{\text{SWL to BOP or packer to BOP}} = \frac{1.51 \text{ gals}}{\text{one volume}} \times 3 = \frac{4.53 \text{ gals.}}{\text{purge volume-3 casings}}$					
Head purge calculation (Airlift only)					
$\text{gal/ft.} \cdot \text{ft.} = \text{gals.}$ packer to SWL					

Equipment Used / Sampling Method / Description of Event:

Solinst 100' probe
ES60 purger pump
disposable teflon bailer

Actual gallons purged 5

Actual volumes purged 3+

Well yield $\oplus$ HY
(see below)

COC # 3870

Sample I.D. Analysis Lab

MW3-7 BTEX OAL

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

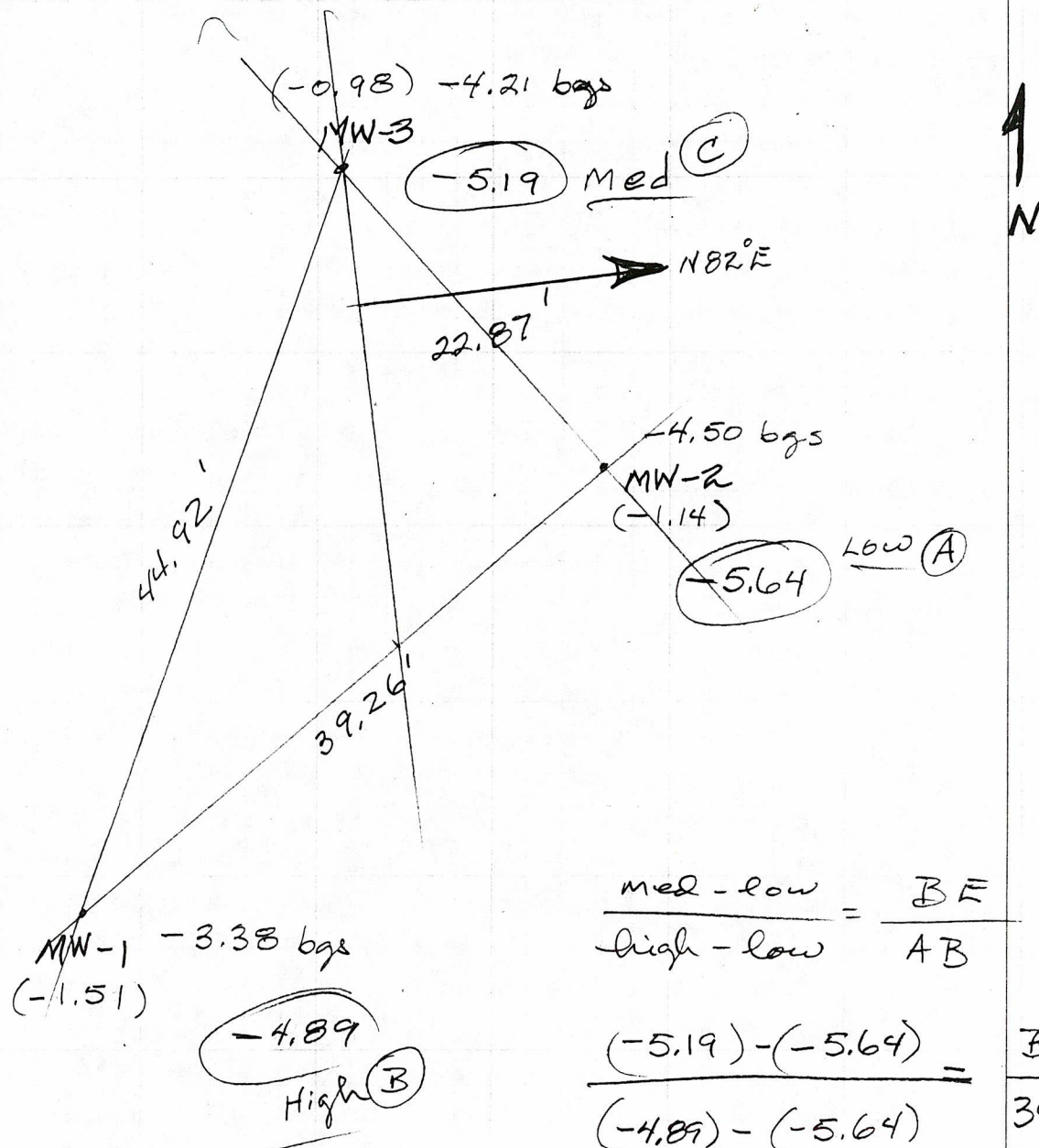
$\oplus$ HY- Minimal W.L. drop

MY- WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY- Able to purge 3 volumes by returning later or next day.

VLY- Minimal recharge - unable to purge 3 volumes.

Meadowbrook Groc.
 MW Sampling/GW Flow
 calculation 3/6/97
 1" = 10'



$$\frac{\text{med} - \text{low}}{\text{high} - \text{low}} = \frac{BE}{AB}$$

$$\frac{(-5.19) - (-5.64)}{(-4.89) - (-5.64)} = \frac{BE}{39.26}$$

$$39.26 \left(\frac{0.45}{0.75} \right) = BE = 23.56$$

SML Associates Inc.
6920 SW 92nd Avenue, Unit 10
Portland, Oregon 97223
(503) 768-4512
Fax: 768-3902

DEPT OF ENVIRONMENTAL QUALITY
RECEIVED

DEC 31 1996

NORTHWEST REGION

December 27, 1996

Mr. Rick Silverman
Oregon Department of Environmental Quality
Northwest Region, UST Section
2000 SW Fourth Ave., Suite 400
Portland, Oregon 97201
(503) 229-5477

Re: Quarterly groundwater monitoring, Meadowbrook Grocery, 16845 S. Hwy. 211, Molalla, Oregon. DEQ file #03-92-125

Dear Mr. Silverman:

This letter and the accompanying documents presents the results of the most recent groundwater monitoring for the above named property, as outlined in the modified CAP.

Background

Prior to sampling the total depth and depth to groundwater was measured in each well using a Solinst 100 interface probe. This information was recorded on a sampling event data sheet, one of which was recorded for each well. Copies of the data sheets are attached. The probe was decontaminated before and between each measurement by washing in tap water and Alconox, a biodegradable laboratory cleaner and degreaser, and rinsing in fresh tap water.

Sample Collection

The measurements obtained were used to calculate the well volume so that at least three volumes were purged prior to sampling. Purging was accomplished utilizing an ES-60 Purger submersible pump. Purged water was placed in individual, dedicated 55 gallon, DOT approved drums. Each drum was labeled with the monitoring well number and stored in a secured area between the store and the Frison home. The pump and tubing were decontaminated before and between sample events by submergence in a tap water and Alconox solution and flushing approximately five gallons through the pump and tubing. They were then flushed with approximately five gallons of tap water. The flushed water and Alconox solutions were placed in the appropriate 55 gallon drum.

The samples were collected in three laboratory supplied 40 ml VOA bottles. The samples were immediately refrigerated, information recorded on a chain of custody and hand delivered to the laboratory within 24 hours. Copies of the chain of custody and the analytical results are attached.

Groundwater Flow Direction

On August 12, 1995 the wells were surveyed by a registered surveyor. A copy of his survey was submitted with the first monitoring report. Utilizing the information from the survey and the measurement data collected during sampling, the groundwater flow direction for this sampling event has been determined to be to the southeast, specifically S. 13° E. A copy of the determination is attached.

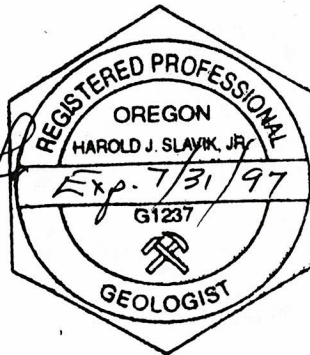
Analytical Results and Recommendations

The results of the current and previous sampling are presented in Table 1. Results indicate continuing decrease in all three wells. Groundwater flow direction, as will be seen in previous reports, is to the north-northwest. The reversal in flow direction, we believe, may be due to groundwater usage at a nearby Christmas tree farm. A groundwater reversal has occurred on at least two other occasions during the last year and one half.

The dissolved lead levels during the first monitoring event were well below the drinking water standards. Therefore, with your verbal approval, we have discontinued the lead analysis. The next sampling is scheduled for early March, 1997.

Sincerely,
SML Associates, Inc.

H. J. Slavik, Jr.
Harold J. Slavik, Jr., PG
President



for

Toni Frison, Owner
Meadowbrook Grocery

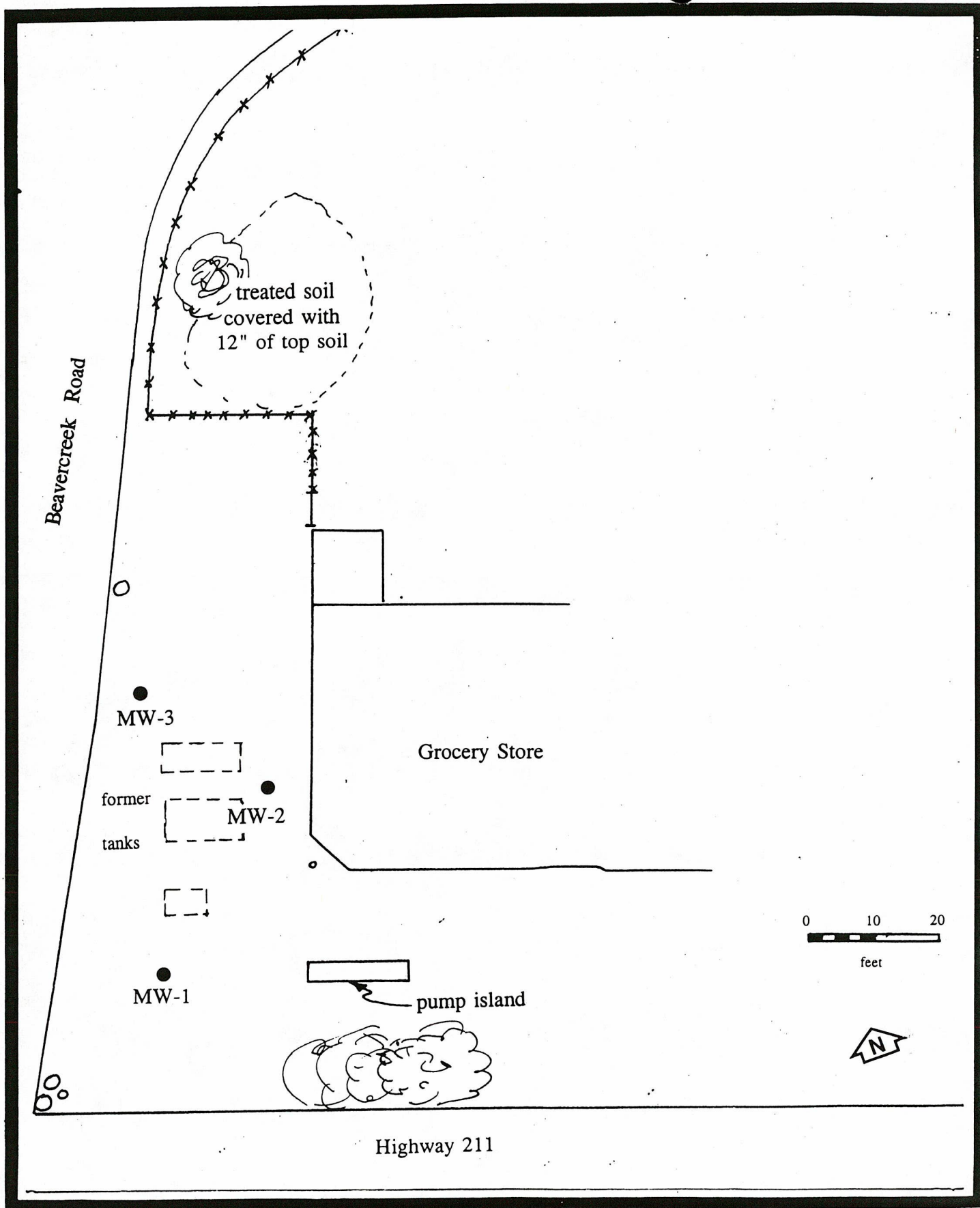
encs.

Table 1

Groundwater Analytical Results
Meadowbrook Grocery
16845 So. Highway 211
Molalla, Oregon

Results are presented, in parts per billion (ppb), as benzene / toluene / ethylbenzene / xylenes. ND means below instrument detection limits (<2 ppb).

Sample Date	MW-1	MW-2	MW-3
July 26, 1995	7 / 4 / 98 / 190	26 / 36 / 110 / 390	ND / ND / 2 / 5
November 1, 1995	7 / 7 / 120 / 220	64 / 220 / 520 / 2200	6 / 15 / 36 / 150
February 15, 1996	14 / 13 / 140 / 260	25 / 35 / 150 / 1000	10 / 8 / 29 / 150
May 11, 1996	7 / 4 / 47 / 45	10 / 7 / 47 / 94	ND / ND / ND / ND
September 4, 1996	4 / 3 / 14 / 16	7 / 4 / 9 / 16	ND / ND / ND / ND
December 27, 1996	ND / ND / ND / ND	ND / ND / ND / ND	ND / ND / ND / ND



Site Location



MEADOWBROOK GROCERY
16845 S. HIGHWAY 211
MOLALLA, OR 97038

ANALYST REVIEW BY: WB
DATA PACK REVIEW BY: SL

DATE: 12-12-96
DATE: 12/12/96

TONI FRISON
(503)829-8609/FX 768-3902
PN:95-044

BTEX
BY EPA 602/8020/8021 OR 624/8240

SAMPLE ID:	MW1-5	MW2-5	MW3-5
OAL ID: 25-J251-	54019	54020	54021
SAMPLE DATE:	12/6/96	12/6/96	12/6/96
MATRIX:	WATER	WATER	WATER
EXTRACTION DATE:	NA	NA	NA
ANALYSIS DATE:	12/10/96	12/11/96	12/10/96
BENZENE PPB	ND	ND	ND
TOLUENE PPB	ND	ND	ND
ETHYLBENZENE PPB	ND	ND	ND
XYLENES PPB	ND	ND	ND
SURR.RECOVERY %	109.	106.	91.
ANALYST:	WB	WB	WB

BROMOFLUOROBENZENE WAS USED AS THE SURROGATE

WATER MATRIX UNITS ARE UG/L (PPB)

SOLIDS MATRIX UNITS ARE UG/KG (PPB)

NA = NOT ANALYZED

MI = MATRIX INTERFERENCE WITH SURROGATE RECOVERY.

ND = NOT DETECTED

REPORTING LIMITS:	WATER	SOIL
BENZENE	<2.0	<2.0
TOLUENE	<2.0	<2.0
ETHYLBENZENE	<2.0	<2.0
XYLENES	<2.0	<2.0

OREGON ANALYTICAL LABORATORY

A Division of Portland General Electric

14855 S.W. Old Scholls Ferry Road, Beaverton, OR 97007

Phone 503-590-5300 • Fax 503-590-1404



Client Information

Company Meadowbrook Grocery
Contact Joni Frison
Address 16845 S. Hwy. #211
Malilla, OR 97038
Phone # 829-8609 FAX # 768-3902

Project Name Meadowbrook Groc.
Project Number 95-044
P.O. Number _____
Comments Report Results to
- SML Associates

Sampler's Name Michael Boyer
 Signature Michael Boyer
 Sampling Date 12-6-96

Provide Verbal Results ☐ Yes ☐ No
Provide FAX Results ☒ Yes ☐ No

[illegible]

Signature		Date	
Mike Boyer		12-6-92	
Print Name		Time	
Mike Boyer		6:22	
Company			
SML ASSOCIATES			

Signature		Date	
H. Slavik for.		12/6/92	
Print Name		Time	
Harold Slavik		1822	
Company			
SML Associates Inc.			

Signature		Date
H. Slavik for		12/9/98
Print Name		Time
Harold Slavik		0805
Company		
SML Associates Inc.		
Received		
Signature		Date
Doug McKenzie		12/9/98
Print Name		Time
Doug McKenzie		0805
Company		
OAL		

Shipped Via Hand delivered
Received @ 4 °C
Appropriate Containers ☒ Yes ☐ No

9 4oz./8oz. Jars
VOA Vials
Plastic Bottles
Glass Bottles
other

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-1

PROJECT Meadowbrook EVENT 5th grt SAMPLER N. Boyer DATE 12-6-96

Well / Hydrologic statistics	Action	Time	Pump rate	IWL (low yield)
	Start pump / Begin	3:02		
	Stop			
	Sampled			
	(Final IWL)	3:34		
Purge calculation $0.163 \text{ gal/ft.} \cdot 13.08 \text{ ft.} = 2.13 \text{ gals} \times 3 = 6.4 \text{ gals.}$ SWL to BOP or one volume purge volume- packer to BOP 3 casings				
Head purge calculation (Airlift only) _____ gal/ft. * _____ ft. = _____ gals. packer to SWL				

Equipment Used / Sampling Method / Description of Event:

*Solinst 100 interprobe
ES 60 purger pump*

Actual gallons purged 6.47
 Actual volumes purged 3+
 Well yield $\oplus$ MY
 (see below)

COC #	Analysis	Lab
<u>MW1-5</u>	<u>BTEX</u>	<u>QAL</u>
<u>1 of 3</u>		
<u>2 of 3</u>		
<u>3 of 3</u>		

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

$\oplus$ HY - Minimal W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

(fill out completely)

WELL OR LOCATION

PROJECT

EVENT

5th qtr

SAMPLER

M. Boyer

DATE 12-6-96

Well / Hydrologic statistics

Well type M
(MW, EW, etc.)

diameter 2
equals 0.163 gal./ft. casing

(if above screen)

packer
 intake
 bailer depth

} _____ ft.
 (circle one)

SWL _____
(if in screen)

measured
T.D. -

 TOP

BOP

T.D. (as built)

Equipment Used / Sampling Method / Description of Event:

sol/inst 100 interpha. probe
ES 60 purger pump

Actual gallons purged

Actual volumes purged

Well yield
(see below)

COC #

Sample I.D.

Analysis

Lab

MW2-5

RTX

CAL

1 of 3

2043

3 of 3

Additional comments:

Gallons purged *

TEMP °C / °F
(circle one)

EC
($\mu\text{s} / \text{cm}$)

PH

TURBIDITY
(NTU)

1.

2.

3.

4.

5.

* Take measurement at approximately each casing volume purged.

⊕ HY- Minimal
W.L. drop

MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge -
unable to purge
3 volumes.

SAMPLING EVENT DATA SHEET

(fill out completely)

WELL OR LOCATION MW-3

PROJECT Mendowbrook EVENT 5th gr SAMPLER M. Boyer DATE 12-6-96

Well / Hydrologic statistics	Action	Time	Pump rate	IWL (low yield)
Well type <u>MW</u> (MW, EW, etc.) SWL <u>1.91</u> (if above screen) packer intake bailer depth } ft. (circle one) SWL _____ (if in screen) measured <u>14.46</u> T.D. diameter <u>2"</u> equals <u>0.163</u> gal/ft. casing TOP BOP T.D. (as built)	Start pump / Begin	<u>3:40</u>		
Purge calculation <u>0.163</u> gal/ft. * <u>12.55</u> ft. = <u>2.05</u> gals x 3 = <u>6.15</u> gals. SWL to BOP or one volume packer to BOP volume purge volume - 3 casings				
Head purge calculation (Airlift only) _____ gal/ft. * _____ ft. = _____ gals. packer to SWL				

Equipment Used / Sampling Method / Description of Event:

Solinst 100 interprobe
ES 60 Purger pump

Actual gallons purged 6.20 +
Actual volumes purged 3 +
Well yield + MY
(see below)

COC #	Sample I.D.	Analysis	Lab
<u>MW3-5</u>	<u>10F3</u>	<u>BTEX</u>	<u>QAL</u>
	<u>20F3</u>		
	<u>30F3</u>		

Additional comments:

Gallons purged *	TEMP °C / °F (circle one)	EC (µs / cm)	PH	TURBIDITY (NTU)		
1.						
2.						
3.						
4.						
5.						

* Take measurement at approximately each casing volume purged.

⊕ HY - Minimal W.L. drop

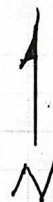
MY - WL drop - able to purge 3 volumes during one sitting by reducing pump rate or cycling pump.

LY - Able to purge 3 volumes by returning later or next day.

VLY - Minimal recharge - unable to purge 3 volumes.

MW Sampling 12/6/96
 & GW Flow
 1" = 10'

EGW Flow

$$1'' = 10'$$


$$\frac{(-4.02) - (-4.93)}{(-3.4) - (-4.93)} = \frac{BF}{44.92}$$

$$44.92 \left(\frac{0.91}{1.53} \right) = 26.72$$

$$\tan \alpha = \frac{(-4.02) - (-4.93)}{26.72} = 0.034 \text{ or } 1.95^\circ$$