



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

January 20, 2021

Brandon Christensen
Christensen Inc.
1060 Jadwin Avenue Suite 225
Richland, WA 99352

RE: Further Action at the following Site:

- **Site Name:** DeBocks Main Street Texaco
- **Site Address:** 100 West, 101 East, & 101 West Wine Country Road, Grandview
- **Facility Site ID No.:** 94369212
- **Cleanup Site ID No.:** 6910
- **VCP Project No.:** CE0488

Dear Brandon Christensen:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the DeBocks Main Street Texaco (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively “substantive requirements of MTCA”). The analysis is provided below.



Summary of Opinion

The Site consists of contamination resulting from releases of petroleum (gasoline) to soil and groundwater at three locations in the vicinity of the intersection of Division Street and Wine Country Road in Grandview. These include properties at 100 West, 101 East, and 101 West Wine Country Road, located at the southwest, northeast, and northwest corners of the intersection, respectively.

Ecology has determined that the Remedial Investigation (RI) phase of the project for the area south of Wine Country Road, associated with the release at 100 West Wine Country Road, is sufficiently complete to select preliminary cleanup levels and identify an appropriate cleanup action(s). Additional investigations are needed to characterize the nature and extent of soil and groundwater contamination north of Wine Country Road, associated with the releases from 101 East and 101 West Wine Country Road.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Petroleum hydrocarbons (gasoline) into soil and groundwater.

Enclosure A includes Site maps and a cross section showing results for gasoline in soil and groundwater.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcels associated with DeBocks Main Street Texaco Site are affected by additional sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

Report Title	Prepared by	Date
Remedial Investigation Report, Former DeBock's Texaco, 100 West Wine Country Road, Grandview, Washington	EES Environmental Consulting, Inc.	November 23, 2020

This document is kept at the Central Regional Office of Ecology (CRO) for review by appointment only. You can make an appointment by calling the CRO public records coordinator at 509-454-7658 or emailing CROPublicRequest@ecy.wa.gov.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site

Ecology has determined your characterization of the Site **is** sufficient to establish preliminary cleanup standards and select a cleanup action for the area south of Wine Country Road; however, the characterization of the Site north of Wine Country Road **is not** sufficient to establish cleanup standards and select a cleanup action.

Previous remedial investigation (RI) activities included the collection of 113 soil samples from 64 locations over the course of 8 investigations conducted between 1995 and 2019. The RI also include the collection of 87 groundwater samples from 41 locations over the same timeframe, and the collection of 9 soil gas samples in 2018.

2. Establishment of cleanup standards.

The 2020 RI report compared soil sampling results with the following cleanup levels:

Contaminant	Maximum Detection in Soil (mg/kg)	Soil Method B Cleanup Level (mg/kg)*	Maximum Detection in Groundwater (µg/L)	Groundwater Method A Cleanup Level (µg/L)
Gasoline Range Organics (GRO)	22,300	2,450	14,500	800
Benzene	0.078	0.027	31	5
Toluene	98	4.5	66	1,000
Ethylbenzene	276	5.9	441	700
Xylenes	1,870	14	936	1,000
Naphthalenes	126	4.5	193**	160**

Bold text indicates a maximum detection concentration in excess of the proposed preliminary cleanup level.

* Method B cleanup levels for soil are based on the most restrictive pathway (soil protective of groundwater for BTEX and Naphthalene, and Ecology's Workbook Tool for Calculating Soil and Groundwater Cleanup Levels (2007) for GRO. Alternatively, Method B direct contact-based cleanup levels may be proposed if MTCA requirements for Empirical Demonstration under WAC 173-340-747 (3)(f) have been met.

** Method A cleanup level for total Naphthalenes. Maximum detection for Naphthalene only.

Ecology has determined that the above cleanup levels (in addition to no measureable free product) appear to meet the substantive requirements of MTCA. Ecology notes that the calculation of the Method B cleanup level for gasoline range organics (GRO) in soil has not yet been verified by Ecology. That is, the approach appears to be consistent with MTCA requirements; however, the calculation remains to be checked. Ecology anticipates checking this calculation after a draft Corrective Action Plan has been submitted.

Ecology notes that if groundwater is cleaned up to below Method A cleanup levels and a lack of further contribution from contaminated soil to groundwater is demonstrated to Ecology's satisfaction [Empirical Demonstration under WAC 173-340-747 (3)(f)], then there is potential to apply Method B direct contact-based cleanup levels for soil rather than the above values based on the soil to groundwater pathway.

Application of a standard point of compliance (throughout the Site) is anticipated for the Site.

Terrestrial Ecological Evaluation (TEE) Table 749-1 has been submitted. The Site is in an urbanized area within the City of Grandview, and the Site qualifies for exclusion from further TEE work.

3. Cleanup.

No final cleanup action plans have yet been developed for the Site. Some cleanup work had been previously completed at the former Texaco property located at 100 West Wine Country Road. An excavation was conducted in 2003 and approximately 50 tons of petroleum contaminated soil was reportedly disposed of at an offsite landfill.

Free product or light non-aqueous phase liquids (LNAPL) has been measured in one monitoring well (MW-2) in recent years. Product recovery efforts from well MW-2 included eight total fluid recovery events conducted between February 2018 and January 2019. Between February 2019 and July 2020, approximately 1.6 gallons of floating free product was removed from MW-2 via passive recovery using absorbent socks. The most recent product measurement in this well was 0.19 feet in April 2020. No product was found in this well in July 2020.

It is anticipated that a cleanup action plan will be developed after the nature and extent of contamination north of Wine Country Road has been characterized, since independent cleanup South of Wine Country Road could result in recontamination of groundwater migrating from the north.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

Brandon Christensen
Christensen Inc.
January 20, 2021
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For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (509) 424-0543 or e-mail at Frank.Winslow@ecy.wa.gov.

Sincerely,



Frank P. Winslow, LHG
Toxics Cleanup Program
Central Regional Office

Enclosure: A – Site Diagrams

cc: Paul Ecker, EES Environmental Consulting
 Robert Michna, AECOM
 Greg A. Vogelpohl, Resource Environmental LLC

Enclosure A

Site Diagrams

APPROXIMATE SCALE IN FEET



APPROXIMATE GROUNDWATER FLOW DIRECTION



B22			
DATE	G	B	N
8/7/19	100U	0.20U	2.0U

B20			
DATE	G	B	N
8/7/19	1,840	0.22	2.0U

B19			
DATE	G	B	N
8/7/19	4,160	0.20U	15

B21			
DATE	G	B	N
8/7/19	1,130	0.20U	3.4

B23			
DATE	G	B	N
8/8/19	100U	0.20U	2.0U

MW-12			
DATE	G	B	N
4/24/18	3,780	5.8	6.0
7/19/18	2,070	2.3	20U
10/24/18	2,060	5.1	8.9
1/23/19	1,160	1.9	2.4
8/8/19	272	0.43	2.0U
2/19/20	1,270	1.82	2.0U

MW-11			
DATE	G	B	N
4/24/18	2,060	0.73	2.0U
7/19/18	834	0.31	2.0U
10/24/18	2,180	0.72	9.4
1/23/19	1,880	0.66	2.0U
8/8/19	800	0.29	2.0U
2/19/20	1,720	0.98	2.0U

B4-W				
DATE	G	B	N	D
3/16/18	5,250	1.3	21	411Y

MW-3				
DATE	G	B	N	D
2/2/18	121	0.20U	2.0U	289X
4/24/18	821	0.20U	2.0U	---
7/18/18	715	0.20U	2.0U	---
10/23/18	584	0.20U	2.0U	---
1/22/19	847	0.20U	2.0U	---

B3-W				
DATE	G	B	N	D
3/16/18	1,440	0.20U	2.0U	348Y

B6-W				
DATE	G	B	N	D
4/3/18	1,280	6.1	4.3	194U

MW-9			
DATE	G	B	N
4/24/18	100U	0.20U	2.0U
7/18/18	100U	0.20U	2.0U
10/23/18	100U	0.20U	2.0U
1/22/19	100U	0.20U	2.0U

MW-8			
DATE	G	B	N
4/25/18	5,860	0.20U	58
***7/18/18	1,590	0.20U	22
***10/24/18	2,390	0.20U	35
***1/23/19	2,980	0.24	62

MW-1				
DATE	G	B	N	D
2/2/18	928	0.20U	2.0U	866X
4/24/18	725	0.20U	2.0U	---
7/18/18	384	0.20U	2.0U	---
10/23/18	250	0.20U	2.0U	---
1/23/19	412	0.20U	2.0U	---

B10-W				
DATE	G	B	N	D
4/4/18	449	0.20U	2.0U	389Y

B8-W				
DATE	G	B	N	D
4/3/18	725	0.20U	2.0U	238Y

MW-6			
DATE	G	B	N
4/25/18	100U	0.20U	2.0U
7/19/18	100U	0.20U	2.0U
10/23/18	100U	0.20U	2.0U
1/22/19	100U	0.20U	2.0U

MW-10			
DATE	G	B	N
***4/24/18	1,210	2.5	2.0U
7/18/18	486	1.2	2.0
10/23/18	1,910	3.5	2.0U
1/23/19	1,450	3.0	2.0U
8/8/19	115	0.47	2.0U
2/19/20	1,930	2.88	2.0U

B1-W				
DATE	G	B	N	D
3/15/18	7,240	31	162	1,070Y

MW-13				
DATE	G	B	N	D
8/8/19	2,580	8.1	30	1,000Z
2/19/20	8,560	15.5	104	---

MW-5			
DATE	G	B	N
4/25/18	390	0.24	2.0U
7/19/18	100U	0.20U	2.0U
10/23/18	767	0.33	2.0U
1/23/19	881	0.32	2.0U
8/8/19	100U	0.20U	2.0U
2/19/20	771	0.30	2.0U

MW-2				
DATE	G	B	N	D
2/1/18	FREE PRODUCT			
4/24/18	FREE PRODUCT			
7/18/18	14,500	12	193	948Y
10/23/18	FREE PRODUCT			
1/23/19	FREE PRODUCT			
8/8/19	FREE PRODUCT			

MW-4			
DATE	G	B	N
4/25/18	521	0.53	2.0U
7/19/18	121	0.21	2.0U
10/23/18	653	1.2	2.0U
1/22/19	628	0.37	2.0U

B8-W				
DATE	G	B	N	D
4/3/18	1,290	0.26	5.2	317Y

MW-7			
DATE	G	B	N
4/25/18	100U	0.20U	2.0U
7/19/18	100U	0.20U	2.0U
10/24/18	100U	0.20U	2.0U
1/22/19	100U	0.20U	2.0U

LEGEND

MW-10 MONITORING WELL

B19 SOIL BORING (EES, 2019)

- HISTORIC AUTOMOTIVE FACILITIES
- HISTORIC LUST OR FUELING FACILITIES
- OTHER HISTORIC CHEMICAL USE
- G= GASOLINE
- B= BENZENE
- N= NAPHTHALENE
- D= DIESEL
- U= NOT DETECTED AT METHOD REPORTING LIMIT

Z= THE RESULT FOR DIESEL IS ESTIMATED DUE TO OVERLAP FROM GASOLINE RANGE ORGANICS OR OTHER VOLATILE ORGANIC COMPOUNDS.

--- NOT ANALYZED
 800 ESTIMATED AREA WHERE GASOLINE CONCENTRATIONS IN GROUNDWATER EXCEED THE MTOA METHOD A CLEANUP LEVEL OF 800 ug/L (MAXIMUM OBSERVED IN 2018-2020)

*** DUPLICATE COLLECTED AT THIS SAMPLE LOCATION. HIGHER VALUE IS SHOWN.

RESULTS SHOWN IN MICROGRAMS PER LITER (ug/L)
 SITE FEATURES ARE APPROXIMATE.

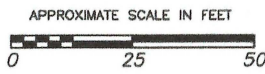
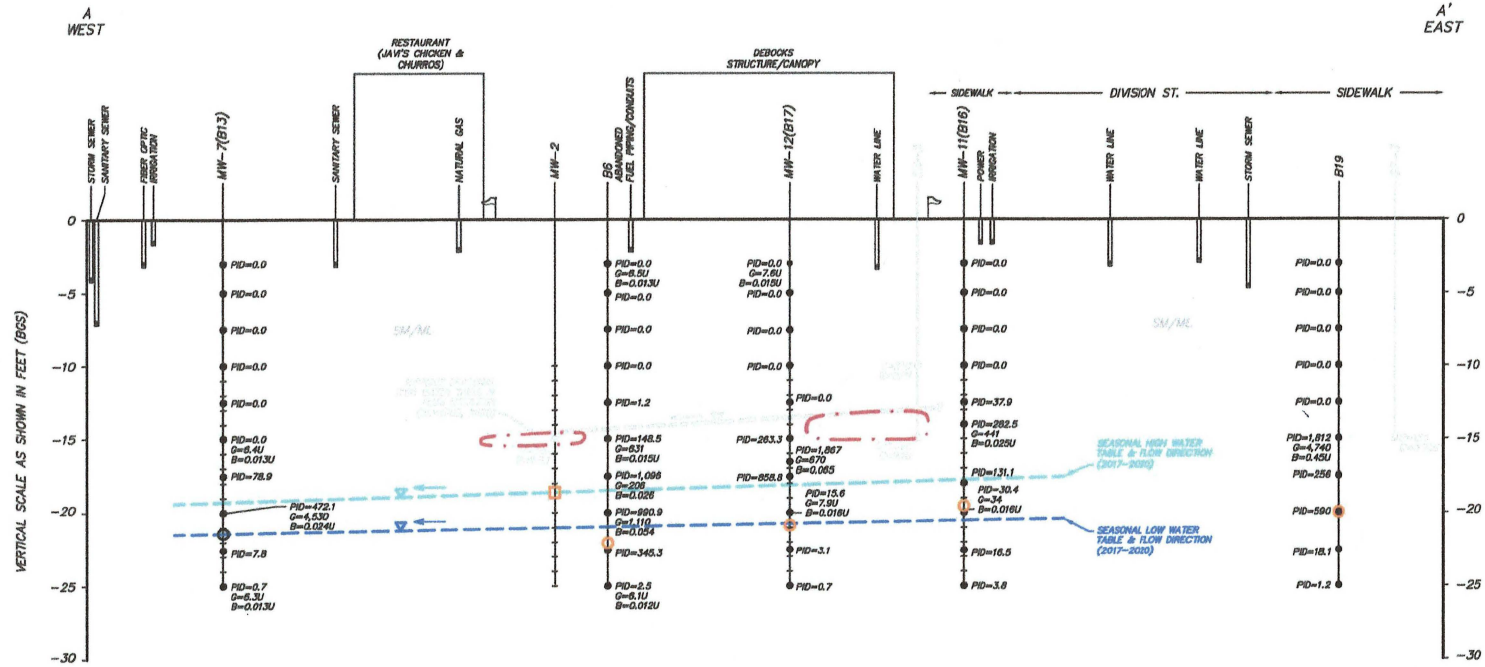
PROJECT NO.	2093-01
FIGURE NO.	11
DATE:	8-28-20
FILE:	2093-01
DRAWN:	JJT
APPROVED:	CR

GROUNDWATER ANALYTICAL RESULTS
 (FEBRUARY 2018 - FEBRUARY 2020)

DEBOCK'S TEXACO
 100 WEST MAIN ST.
 GRANDVIEW, WA.

EES Environmental Consulting, Inc.
 2000 1st Avenue, Grandview, WA 98930
 509.851.2200 • WWW.EESCONSULTING.COM

C:\Users\Josh\Desktop\Autocad\Files\EEES-Autocad\2018-01 DEBock's Texaco\2020\093-01_EA-082620.dwg



LEGEND

- SOIL SAMPLE (EES, 2018-2019)
- HISTORIC SOIL SAMPLE (BY OTHER METHOD)
- ▬ PROPERTY LINE
- SOIL RESULTS SHOWN IN MILLIGRAMS PER KILOGRAM (mg/kg)
- APPROXIMATE EXTENT OF GASOLINE CONTAMINATION IN SOIL GREATER THAN THE MTCA METHOD B CLEANUP LEVEL FOR DIRECT CONTACT (2,451 mg/kg BETWEEN GROUND SURFACE & 15' DEPTH)
- G = GASOLINE
- B = BENZENE
- U = CONCENTRATION NOT DETECTED ABOVE METHOD REPORTING LIMIT
- PID = VOLATILE ORGANIC COMPOUNDS MEASURED WITH PHOTOIONIZATION DETECTOR. RESULTS SHOWN IN PARTS PER MILLION BY VOLUME (ppmv)
- GROUNDWATER SAMPLE BELOW MTCA METHOD A (<800 ug/L GASOLINE) IN 2018-2020
- GROUNDWATER SAMPLE EXCEEDING MTCA METHOD A (<800 ug/L GASOLINE) IN 2018-2020
- GASOLINE FLOATING FREE PRODUCT OBSERVED IN 2017-2020
- GROUNDWATER SAMPLES SHOWN AT WATER TABLE DEPTH DURING MAXIMUM OBSERVED GASOLINE CONCENTRATION IN 2018-2020

DATE: B-28-20	PROJECT NO. 2093-01
FILE: 2093-01	FIGURE NO. 9B
DRAWN: JJT	CR
APPROVED:	

CROSS SECTION A-A'

DEBOCK'S TEXACO
100 WEST MAIN ST.
GRANDVIEW, WA.

EES Environmental Consulting, Inc.
2500 N. 19th St., Suite 100, Grandview, WA 98723
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LEGEND

- PROPERTY LINE
- MONITORING WELL
- LINE OF MONITORING WELL
- WELL BOUNDARY (ITS 2018)
- SOIL GAS SAMPLE LOCATION-5' DEPTH (EES, 2018)
- DAVEY BASIN
- DRAIN
- UST TANK FORT

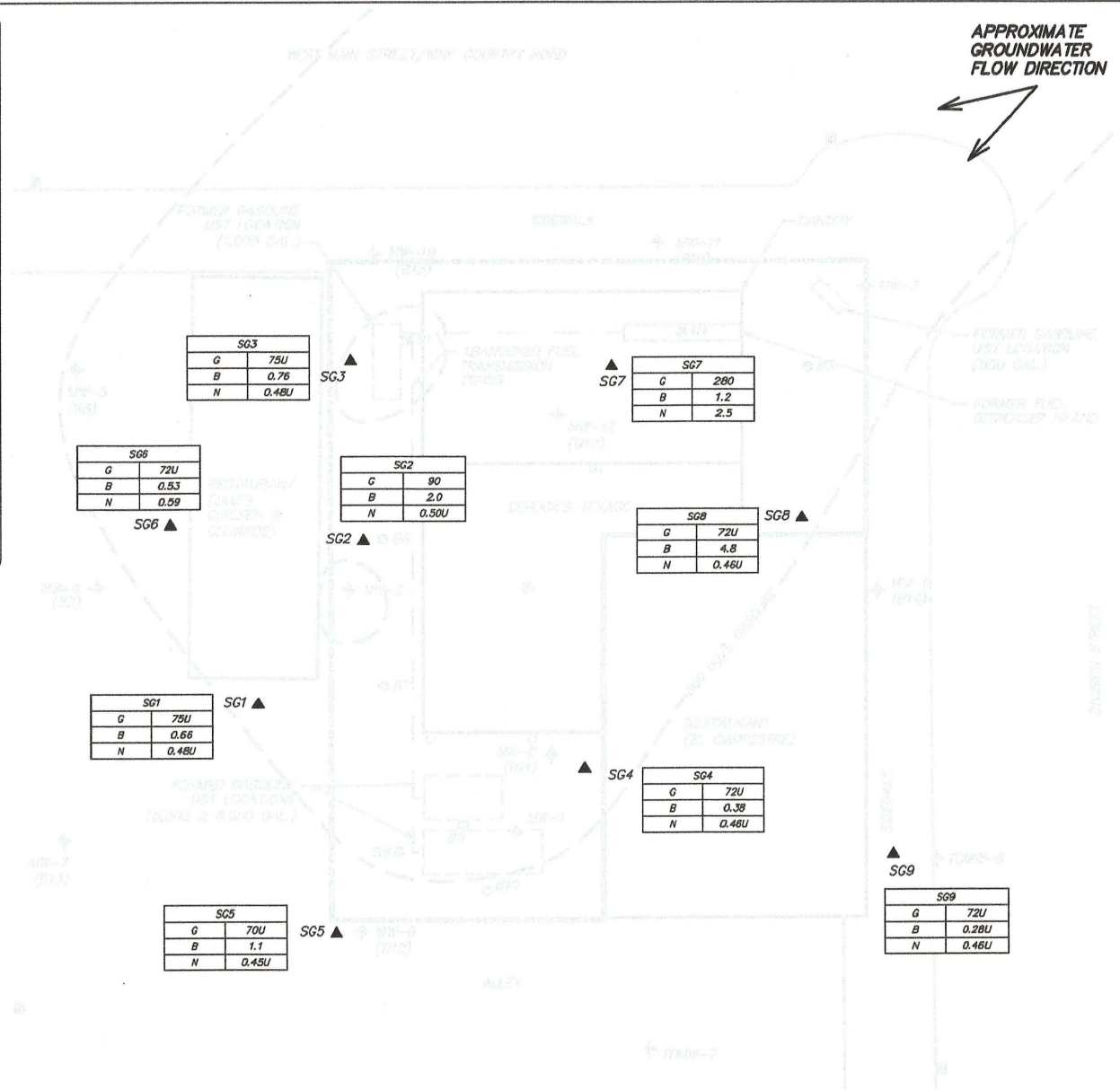
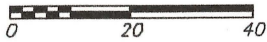
- G= GASOLINE
- B= BENZENE
- N= NAPHTHALENE
- U= NOT DETECTED AT METHOD REPORTING LIMIT

SOIL GAS ANALYTICAL RESULTS IN MICROGRAMS PER CUBIC METER (ug/m³)

ESTIMATED AREAS WHERE GASOLINE CONCENTRATIONS IN GROUNDWATER EXCEED THE MTCA METHOD A CLEANUP LEVEL OF 800 ug/L (MAXIMUM OBSERVED IN 2018-2020)

SITE FEATURES ARE APPROXIMATE.

APPROXIMATE SCALE IN FEET



SG3	
G	75U
B	0.76
N	0.48U

SG7	
G	280
B	1.2
N	2.5

SG6	
G	72U
B	0.53
N	0.59

SG2	
G	90
B	2.0
N	0.50U

SGB	
G	72U
B	4.8
N	0.46U

SG1	
G	75U
B	0.66
N	0.48U

SG4	
G	72U
B	0.39
N	0.46U

SG5	
G	70U
B	1.1
N	0.45U

SG9	
G	72U
B	0.28U
N	0.46U

APPROXIMATE GROUNDWATER FLOW DIRECTION



DATE: B-28-20	PROJECT NO. 2093-01
FILE: 2093-01	FIGURE NO. 12
DRAWN: JUT	APPROVED: CR

SOIL GAS ANALYTICAL RESULTS
(MARCH 2018)

DEBOCK'S TEXACO
100 WEST MAIN ST.
GRANDVIEW, WA.

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