

TECHNICAL MEMORANDUM

To:	Mr. Aaron Wilcox
From:	David Borys
Date:	May 21, 2017
Subject:	Handy Mart – March 2017 Groundwater Monitoring Results

INTRODUCTION

HydroCon Environmental, LLC (HydroCon) is submitting this technical memorandum to Wilcox & Flegel to document the work completed at 1410 Ocean Beach Highway in Longview, Washington (the site) in March 2017. The work was conducted according to our Master Services Agreement (MSA), dated July 11, 2014.

FIELD ACTIVITIES

On March 15, 2017, HydroCon personnel mobilized to the site to perform the groundwater monitoring. Upon arrival at the site, the well cap on each well was removed and the water level was allowed to equilibrate prior to measuring the depth to water (DTW). The depth to water in each well was measured using a clean electronic water level indicator. Water levels were measured at the scribed reference mark (north end of the top of the PVC casing) at each well. A table detailing the groundwater levels and elevations and a figure indicating the groundwater flow direction are included in the attachments (Table 1 and Figure 4).

HydroCon purged monitoring wells MW-1 through MW-3 with a low flow peristaltic pump equipped with new length of LDPE tubing attached to a new length of silicone tubing. Field parameters (pH, temperature, and specific conductivity) were measured and recorded on a Groundwater Sample Collection field form along with the depth to water measurements (Attachment A). Purging was completed when the field parameters had stabilized.

Samples were collected immediately after purging and placed in labeled laboratory-prepared sample bottles. The samples were shipped in an iced cooler along with chain-of-custody documentation to Apex Laboratory in Tigard, Oregon for analysis.

A total of three groundwater samples were collected for laboratory analysis. Each sample was analyzed for the following set of parameters:

- Gasoline Range Petroleum Hydrocarbons (GRPH) by Northwest Method NWTPH-Gx
- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B.



Depth to water in the wells ranged from 5.13 to 6.78 feet below top of casing. Groundwater elevations were calculated based on an arbitrary measuring point. Groundwater flows towards the east-south at an approximate gradient of 0.0029 feet/foot between MW-3 and MW-1.

SAMPLING RESULTS

GRPH and BTEX were not detected at concentrations above their respective laboratory method reporting limits (MRLs) in any of the submitted samples. A summary data table and the laboratory report are included in Table 2 and Attachment B, respectively.

DISCUSSION

The results of this quarterly groundwater monitoring indicate that all contaminants of concern at all site monitoring wells are below their respective MTCA Method A cleanup level. This is the fourth consecutive quarter where this condition has been observed. Ecology requires four consecutive quarters before a site may be considered for No Further Action (NFA) determination.

Based on the analytical results, HydroCon recommends the following:

 Enter into the Ecology Voluntary Cleanup Program and submit a formal request to Ecology to review site reports and issue an NFA determination for the site.

QUALIFICATIONS

HydroCon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. HydroCon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that HydroCon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

Findings and conclusions resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this monitoring. Subsurface conditions may vary from those encountered at specific sampling locations or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations and findings are based solely upon data obtained at the time and within the scope of these services.



This report is intended for the sole use of **Wilcox & Flegel**. This report may not be used or relied upon by any other party without the written consent of HydroCon. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or reuse of this document or the findings, conclusions, or recommendations is at the risk of said user.

The conclusions presented in this report are, in part, based upon subsurface sampling performed at selected locations and depths. There may be conditions between borings or samples that differ significantly from those presented in this report and which cannot be predicted by this study.

CLOSING

We appreciate the opportunity to perform these services for Wilcox & Flagel. Please contact the undersigned at (360) 703-6079 if you have any questions regarding the information provided in this letter report.

Sincerely,

Hydro Con

Brian J Pletcher Senior Geologist/Project Manager

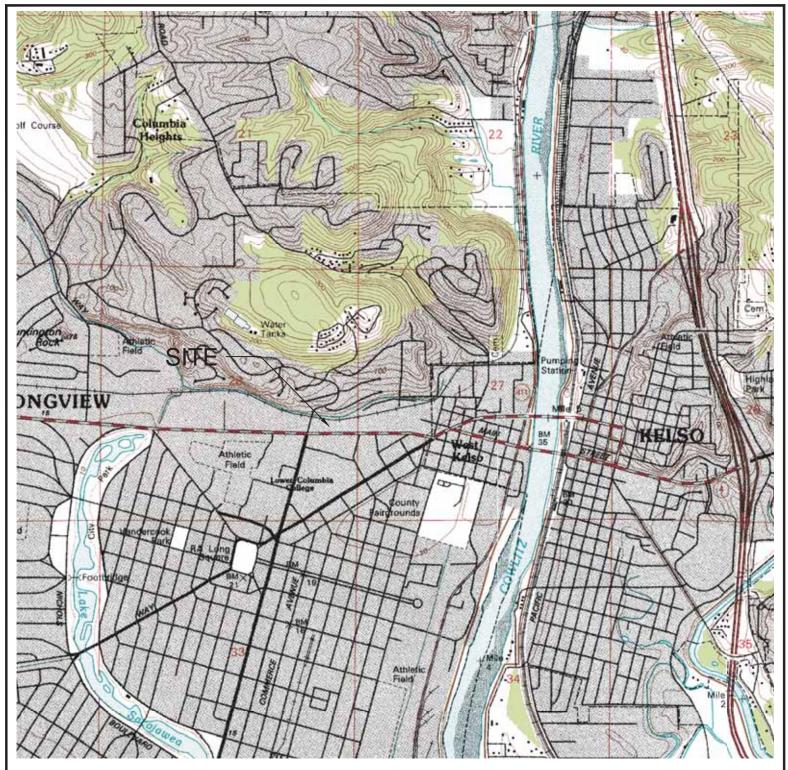
Attachments

Figure 1 – Site Location Map Figure 2 – Site Features Map Figure 3 – Groundwater Analytical Results Figure 4 – Groundwater Elevations and Contour Map Table 1 – Summary of Groundwater Elevations Table 2 – Summary of Groundwater Analytical Results Attachment A - Groundwater Sample Collection Field Forms

Attachment B - Laboratory Report and Chain-of-Custody Documentation

Craig Hultgren, LHG Principal Geologist





NOTE(S):

1. USGS, KELSO QUADRANGLE WASHINGTON 7.5 MINUTE SERIES (TOPOGRAPHIC)

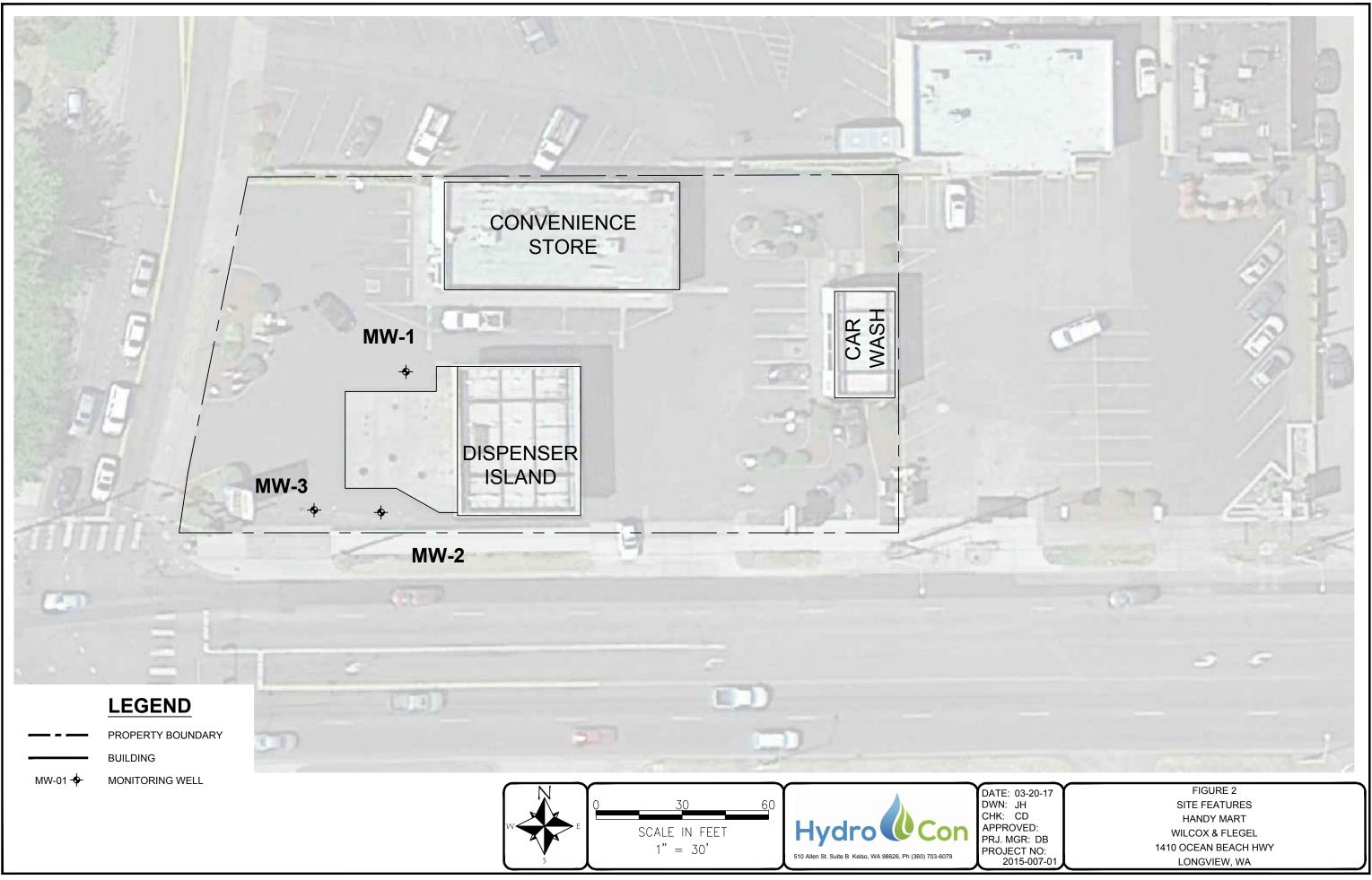


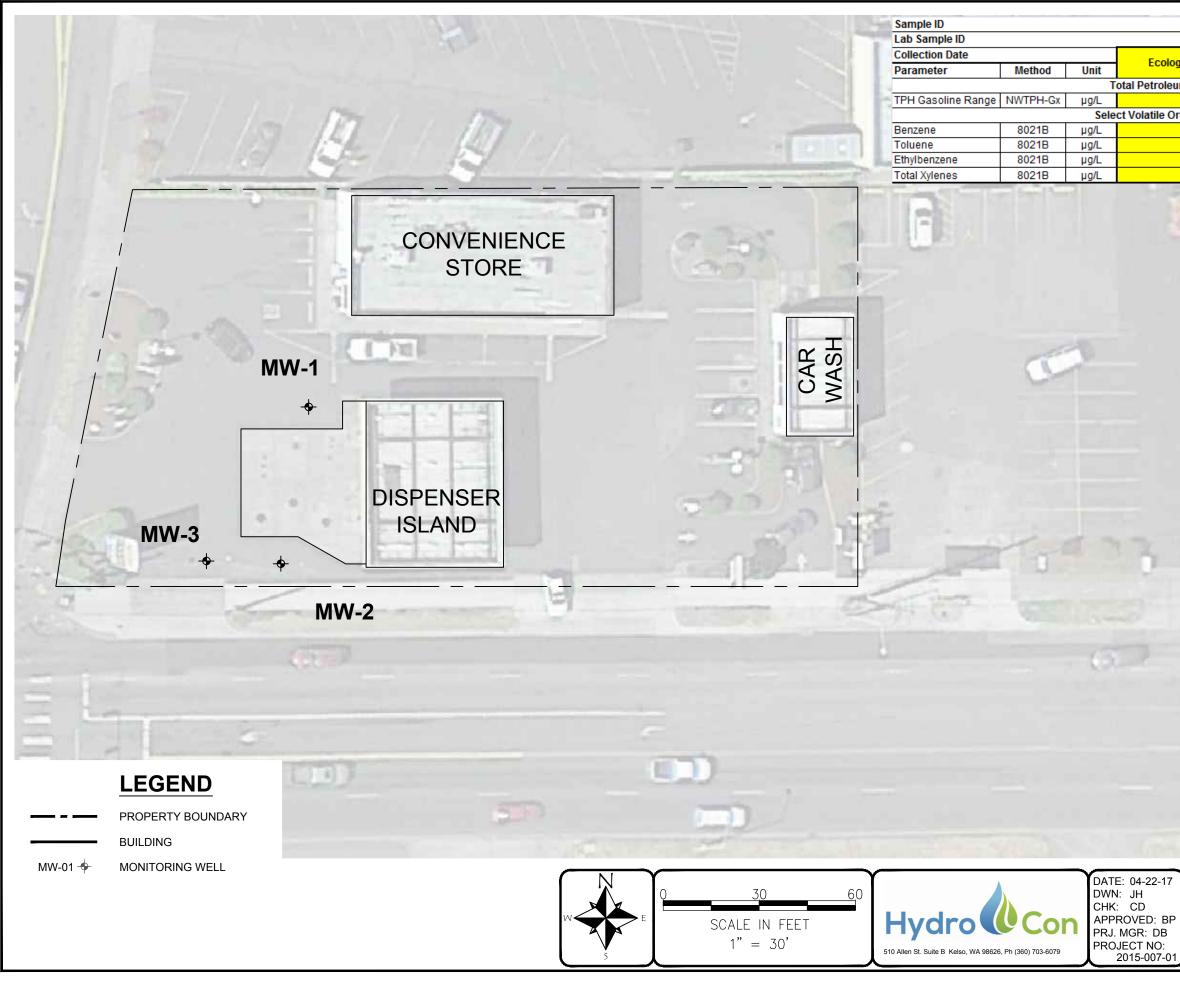
20<u>00</u> SCALE IN FEET 1" = 2000'



2015-007-01

FIGURE 1 SITE LOCATION HANDY MART WILCOX & FLEGEL 1410 OCEAN BEACH HWY LONGVIEW, WA





MW01		MW02		MW03	
A7C0452-02		A7C0452	-03	A7C0452-0	
3/15/17	7	3/15/17		3/15/17	7
Value	Q	Value	Q	Value	Q
)					
<100		<100		<100	
)Cs)					
<0.2		<0.2		<0.2	
< <u>1</u>		<1		<1	
<0.5		<0.5		<0.5	
<1.5		<1.5		<1.5	
	A7C0452 3/15/17 Value) <100 Cs) <0.2 <1 <0.5	A7C0452-02 3/15/17 Value Q <100 Cs) <0.2 <1 <0.5	A7C0452-02 A7C0452-02 3/15/17 3/15/17 Value Q Value <100	A7C0452-02 A7C0452-03 3/15/17 3/15/17 Value Q Value Q <100	A7C0452-02 A7C0452-03 A7C0452 3/15/17 3/15/17 3/15/17 Value Q Value Q Value <100

FIGURE 3 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS MARCH 2017 WILCOX & FLEGEL - HANDY MART 1410 OCEAN BEACH HWY LONGVIEW, WA

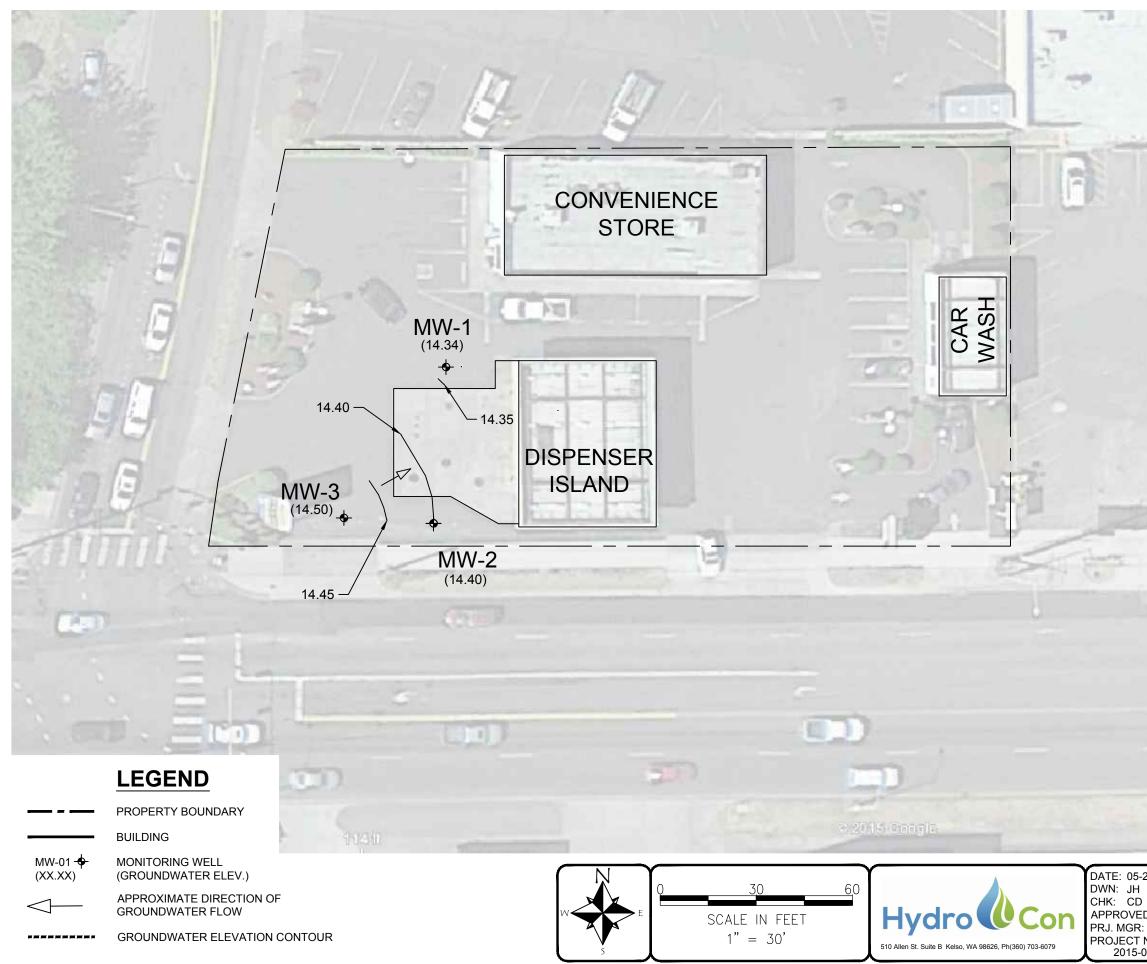


FIGURE 4.0 GROUNDWATER ELEVATION & CONTOUR MAP (MARCH 2017) HANDY MART WILCOX & FLEGEL 1410 OCEAN BEACH HWY LONGVIEW, WA

Table 1 Summary of Historical Groundwater Elevations Handy Mart Longview, Washington HydroCon Project Number 2015-007.1

Monitoring Well ID	Date	TOC Elevation	Depth to Water	Groundwater Elevation
	4/14/16		8.03	13.09
MW-1	8/10/16	21.12	10.45	10.67
10100 - 1	11/17/16	21.12	7.93	13.19
	3/15/17		6.78	14.34
	4/14/16		6.79	13.19
MW-2	8/10/16	19.98	8.41	11.57
	11/17/16	10.00	6.83	13.15
	3/15/17		5.58	14.40
	4/14/16		6.41	13.22
MW-3	8/10/16	19.63	8.02	11.61
	11/17/16]	6.37	13.26
	3/15/17		5.13	14.50

<u>Notes:</u> TOC = Top of well casing

Table 2 Summary of Groundwater Analytical Results Handy Mart, Longview, Washington HydroCon Project Number 2014-007.01

Paramete	r	GRPH [1]	Benzene [2]	Toluene [2]	Ethylbenzene [2]	Total Xylenes [2]
Cleanup Level*		800	5	1,000	700	1,000
Monitoring Well ID	Date Sampled		5	1,000	700	1,000
	9/24/15	<100	6.1	<1	<1	<3
	2/2/16	<100	6.6	<1	<1	<3
MW-1	4/14/16	<100	3.7	<1	<0.5	<1.5
10100-1	8/10/16	<100	2.2	<1	<0.5	<1.5
	11/17/16	<100	0.314	<1	<0.5	<1.5
	3/15/17	<100	<0.2	<1	<0.5	<1.5
	9/24/15	460	<1	4.4	<1	3.5
	2/2/16	<100	2.7	<1	<1	<3
MW-2	4/14/16	<100	1.41	<1	<0.5	<1.5
10100-2	8/10/16	<100	<0.2	<1	<0.5	<1.5
	11/17/16	<100	<0.2	<1	<0.5	<1.5
	3/15/17	<100	<0.2	<1	<0.5	<1.5
	9/24/15	<100	<1	<1	<1	<3
	2/2/16	210	<1	3.7	<1	<3
N414/ 0	4/14/16	310	<0.2	<1	<0.5	<1.5
MW-3	8/10/16	326	<0.2	<1	<0.5	<1.5
	11/17/16	329	<0.2	<1	<0.5	<1.5
	3/15/17	<100	<0.2	<1	<0.5	<1.5

Notes:

* = Washington State Model Toxics Control Act (MTCA) Method A Cleanup Level for Groundwater (rev. October 12, 2007)

[1] = Gasoline Range Petroleum Hydrocarbons (GRPH) by Northwest Method NWTPH-Gx

[2] = Volatile Organic Compounds (VOCs) by EPA Methods 8260B

Indicates compound not detected above the laboratory Method Reporting Limit (MRL) shown.

All values shown are in micrograms per liter (µg/L) (parts per billion). Highlighted cell indicates compound detected above cited MTCA Method A Cleanup Level.

APPENDIX A

GROUNDWATER SAMPLE COLLECTION FIELD FORMS



GROUNDWATER SAMPLE COLLECTION FORM Well I.D. Number: MWOI

		5/15/17					Personnel:	Chris	Datchel	
N	Monumen Well cap c	FORMATI t condition: condition: reading: eter: sA1	i: ⊠Go ⊠Go	od 🗌		Needs I	replacement		n Monument Water in Well	
	PURGING otal well Depth to pr Depth to wa Casing volu	depth 19 oduct 19 ater 5. ume 13	ATION ・06 イハ 57 ・13	ft Bo ft ft In ft (H ₂ C	take Depth	(BTOC) 닉gal/ft	5' Be	gin Purging W gal. X 3 :	Interval(s): ell: <u></u> el <u></u> g al/ft_6"= 1.47	al.
B	Pump type Bailer type	<u> </u>	taltic [] Centrif	fugal 🔲 D er Disposal:	edicated Bla	adder 🗌 Nor ed 🗌 Remedi	iation System	ladder Other_ ⊠Other_B	ucheted
1	FIELD PA	ARAMETH	ERS					Odor and/	or Sheen:	
	Time	Water Level (BTOC)		e Rate min)	Temp. (°C)	Sp. Cond. (mS/cm) (±3%)	Dissolved Oxygen (±10% or ≤1.00 ±0.2)	pH (SU) (±0.1)	ORP (mV)	Turbidity (NTU) (± 10% or ≤10)
	205	×	.05		13.84	.504	5.34	5.77	31.4	uringe
100	202	_	-		13.21	-578	4,95	5.76	婚17,3	
1	211				13.92	~569 560	4.13	5.76	5.7	olean
	1217				13.84	.549	4.70	5.75	-9.4	Viewe
	1220				13.81	. 538	41.67	5,74	-14-1	
	1223	17		/	13.82	.531	4.66	5.74	-17.5	
_		6013		$(\mathbb{Q}$	and		175	5	_	
-				-	-p	elas i	15	1		
						N	o odo	e or sh	een	
St	tabilization	achieved if t	hree succe	ssive mea	surements fo	r pH. Conducti	vity and Turbidit		xygen are record	ed within their
	erspective s	tabilization	criteria. A	minimum	of six measu	rements shoul	d be recorded.	80	cge write	
	AMPLEI	INFORMA	TION							
P		er Tyne	Bottle Count	Preservat	tive Field	Filtered?		Ana	lysis	
P S	Containe	in rype	count	Mel	(No)0	.45 0.10	Gri	BTEX	/******	
P S			3	HCI		the second se		10 20		
P S	Containe Homi		3	act		.45 0.10				
P S			3	nu	No 0	.45 0.10 .45 0.10 .45 0.10				



Hydro Con GROUNDWATER SAMPLE COLLECTION FORM Well I.D. Number: MW6/2.

Date	>1.5 \.	2019	- 00:4 ~01	_		Field Duplica Personnel:	ite I.D Charts		'ime:
Monumen Well cap o Headspace Well diam	ondition:	: 🛛 Go 🖾 Go 🖾 No 🗌 2-1	ot measured	placed	Needs ro	eplacement D Oo nch X Oo			
Total well Depth to pr Depth to w Casing vol Volume Co PURGING	onversion F	. 50 JM 3 * 3 구 factors:	ft Bottor ft ft Intake ft (H ₂ O) X 3/4"=0.02 g	al/ft 1	BTOC)gal/ft =0.04 gal/ft	Begi = <u>דער פ</u> 2″=0.16 gal/	n Purging Wel gal. X 3 = ft 4"=0.65 ga	nterval(s): <u> : こ</u> ーロ 、マセチga l/ft 6"= 1.47 g	i.
Bailer type			」 Centrifuga Water Di	I De sposal::	dicated Bla	dder 🔲 Non- d 🗌 Remedia	tion System	نم <u>د O</u> ther <u>3.م</u> 0	heted
FIELD PA	ARAMETE	RS				Dissolved	Sheen:		
Time	Water Level (BTOC)			e mp. (°C)	Sp. Cond. (mS/cm) (±3%)	Oxygen (±10% or ≤1.00 ±0.2)	pH (SU) (±0.1)	ORP (mV)	Turbidity (NTU) (± 10% or ≤10)
1243 1246 1249 1252 1255 1258	×	.05	12 12 12	.15 .17 .18 .21 .20 .20	,126 ,120 .115 .111 ,110 ,108	<i>5.08</i> <i>प.१5</i> <i>५.81</i> <i>५.81</i> <i>५.81</i> <i>५.1</i> 9 <i>५.8</i> 1	5.83 5.83 5.81 5.81 5.81 5.81 5.80	-2.6 -17.2 - 20.4 - 23.5 - 27.0 - 31.2	
perspective :	stabilization o	iree succo	essive measure minimum of s	ix measur	ements should	Clear vity and Turbidity	4 No or Dissolved Ox	vgen are recorded	
	INFORMA								
Contain	er Type	Bottle Count	Preservative	Field	Filtered?		Analy	ysis	
40 ml	VOA	3	HU	No 0.	45 0.10 45 0.10 45 0.10 45 0.10	G-x	Brex		



				SAMF	GROUNE PLE COLL	ECTION F	Well	I.D. Number:
Project Na Hydrocon Date	Project #:		+ 		Sample I.D. Field Duplic Personnel:	cate I.D	5	_Time:_1330 _Time:
Monumen Well cap o	condition: e reading: eter:	n: 🛛 Good [I Good [I Not meas I 2-inch	Needs rep Replaced sured _ 4-inct	Needs n			n Monument Water in Well	
Depth to pr Depth to w Casing vol	depth roduct ater6 ume12	1.15 ft	Intake Depth z0) X	(BTOC) <u>1</u> 99 gal/ft	51 Beg	gin Purging We gal. X 3 =	1.485 9	al.
Pump type Bailer type	e 🛛 Peris e:	AL METHOD taltic □ Cent Wa	rifugal 🔲 D	edicated Bla : Drumme	dder 🗌 Non d 🗌 Remedi	-Dedicated Bl ation System	adder Other [] Other3	ucketed
FIELD PA	ARAMETI	ERS		· · · · · · · · · · · · · · · · · · ·		Odor and/o	or Sheen:	
Time	Water Level (BTOC)	Purge Rate (L/min)	Тетр. (°С)	Sp. Cond. (mS/cm) (±3%)	Dissolved Oxygen (±10% or ≤1.00 ±0.2)	pH (SU) (±0.1)	ORP (mV)	Turbidity (NTU) (± 10% or ≤10)
1315	X	801	14.31	1751 153 1507 1507	Ч,86 4,80 4,68 Ч.6	5.78 5.76 5.73 5.72	40 56.2 -10.7 -34.1	Clear wilsome red algae
1318 1321 1324 1324			14.73	1508	4.50	572	-65.2.	
1321				.508	니. 50 니.니니	the second se	-15.2.	
1321 1324 1322			14.73 14.76			572		
1321 1324 (322 1320 1330 Stabilization perspectives	stabilization	hree successive m criteria. A minimu	easurements for im of six measu	. 507	133	5.72	- 79.5	ed within their
1321 1324 1322 1320 Stabilization perspective s Purging Cor	stabilization (nments:	criteria. A minimu	easurements for im of six measu	. 507	133	5.72	- 79.5	ed within their
1321 1324 1322 1330 Stabilization perspectives	stabilization nments: INFORMA	ATION	easurements for mof six measu	. 507	133	5.72	xygen are record	ed within their
1321 1324 1324 1325 1320 Stabilization perspective s Purging Cor SAMPLE Containe	stabilization nments: INFORMA	ATION	easurements for mof six measurements for Mo 0 No 0	. 507	7ity and Turbidit be recorded.	572 5.72	xygen are record	ed within their

APPENDIX B

LABORATORY REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Monday, March 20, 2017

Dave Borys HydroCon LLC 510 Allen St. Suite B Kelso, WA 98626

RE: Handy Mart / 2015-007-01

Enclosed are the results of analyses for work order <u>A7C0452</u>, which was received by the laboratory on 3/15/2017 at 3:11:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: <u>Idomenighini@apex-labs.com</u>, or by phone at 503-718-2323.

Apex Laboratories

Assa A Zomenichini

Lisa Domenighini, Client Services Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

HydroCon LLC	Project: Handy Mart	
510 Allen St. Suite B	Project Number: 2015-007-01	Reported:
Kelso, WA 98626	Project Manager: Dave Borys	03/20/17 13:46
	ANALVTICAL DEDODT FOD SAMDLES	

ANALYTICAL REPORT FOR SAMPLES

	SAMPLE INFORMATION											
Sample ID	PDF Ammended	Laboratory ID	Matrix	Date Sampled	Date Received							
MW01	= MW02	A7C0452-01	Water	03/15/17 12:25	03/15/17 15:11							
MW02 MW03	= MW03 = MW01	A7C0452-02 A7C0452-03	Water Water	03/15/17 13:00 03/15/17 13:30	03/15/17 15:11 03/15/17 15:11							

Apex Laboratories

Assa A Zomenighini

Lisa Domenighini, Client Services Manager

HydroCon LLC	Project:	Handy Mart	
510 Allen St. Suite B	Project Number:	2015-007-01	Reported:
Kelso, WA 98626	Project Manager:	Dave Borys	03/20/17 13:46
	ANALYTICAL SA	MPLE RESULTS	
(Gasoline Range Hydrocarbons (Benzen	e through Naphthalene) by NW	TPH-Gx

			Reporting					
Analyte	Result	MDL	Limit	Units	Dilution	Date Analyzed	Method	Notes
MW01 (A7C0452-01)			Matrix: Wa	ter Ba	atch: 70307	16		
Gasoline Range Organics	ND		100	ug/L	1	03/16/17 20:11	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Reco	very: 108 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			107 %	Limits: 50-150 %	"	"	"	
MW02 (A7C0452-02)			Matrix: Wa	ter Ba	atch: 70307 [,]	16		
Gasoline Range Organics	ND		100	ug/L	1	03/16/17 21:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Reco	very: 107 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			106 %	Limits: 50-150 %	"	"	"	
MW03 (A7C0452-03)			Matrix: Wa	ter Ba	atch: 70307 [,]	16		
Gasoline Range Organics	ND		100	ug/L	1	03/16/17 20:38	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Reco	very: 106 %	Limits: 50-150 %	"	"	"	
1,4-Difluorobenzene (Sur)			106 %	Limits: 50-150 %	"	"	"	

Apex Laboratories

Assa A Zomenighini

Lisa Domenighini, Client Services Manager

HydroCon LLC	Project: Handy Mart	
510 Allen St. Suite B	Project Number: 2015-007-01	Reported:
Kelso, WA 98626	Project Manager: Dave Borys	03/20/17 13:46

ANALYTICAL SAMPLE RESULTS

		BT	EX Compo	unds by EPA 82	60B			
			Reporting					
Analyte	Result	MDL	Limit	Units	Dilution	Date Analyzed	Method	Notes
MW01 (A7C0452-01)			Matrix: Wa	iter Ba	atch: 70307	16		
Benzene	ND		0.200	ug/L	1	03/16/17 20:11	EPA 8260B	
Toluene	ND		1.00	"	"	"	"	
Ethylbenzene	ND		0.500	"	"	"	"	
Xylenes, total	ND		1.50	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)		Rec	overy: 109 %	Limits: 80-120 %		"	"	
Toluene-d8 (Surr)			101 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			93 %	Limits: 80-120 %		"	"	
MW02 (A7C0452-02)			Matrix: Wa	iter Ba	atch: 70307	16		
Benzene	ND		0.200	ug/L	1	03/16/17 21:05	EPA 8260B	
Toluene	ND		1.00	"	"	"	"	
Ethylbenzene	ND		0.500	"	"	"	"	
Xylenes, total	ND		1.50	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)		Rec	overy: 107 %	Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)			100 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			91 %	Limits: 80-120 %	"	"	"	
MW03 (A7C0452-03)			Matrix: Wa	iter Ba	atch: 70307	16		
Benzene	ND		0.200	ug/L	1	03/16/17 20:38	EPA 8260B	
Toluene	ND		1.00	"	"	"	"	
Ethylbenzene	ND		0.500	"	"	"	"	
Xylenes, total	ND		1.50	"	"	"	"	
Surrogate: 1,4-Difluorobenzene (Surr)		Rec	overy: 107 %	Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)			99 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			91 %	Limits: 80-120 %	"	"	"	

Apex Laboratories

Assa A Zomenighini

Lisa Domenighini, Client Services Manager

Reported:
03/20/17 13:46
_

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7030716 - EPA 5030I	3						Wat	ter				
Blank (7030716-BLK1)				Р	repared: 03/	/16/17 16:59	Analyzed:	03/16/17 19	9:17			
NWTPH-Gx (MS)												
Gasoline Range Organics	ND		100	ug/L	1							
Surr: 4-Bromofluorobenzene (Sur)		Reco	overy: 104 %	Limits:	50-150 %	Dilu	tion: 1x					
1,4-Difluorobenzene (Sur)			105 %	-	50-150 %		"					
LCS (7030716-BS2)				Р	repared: 03/	/16/17 16:59	Analyzed:	03/16/17 18	3:49			
NWTPH-Gx (MS)												
Gasoline Range Organics	528		100	ug/L	1	500		106	70-130%			
Surr: 4-Bromofluorobenzene (Sur)		Reco	overy: 106 %	Limits:	50-150 %	Dilu	tion: 1x					
1,4-Difluorobenzene (Sur)			100 %	-	50-150 %		"					
Duplicate (7030716-DUP1)				Р	repared: 03/	/16/17 18:13	Analyzed:	03/16/17 21	:32			
QC Source Sample: MW02 (A7C0	452-02)											
NWTPH-Gx (MS)												
Gasoline Range Organics	ND		100	ug/L	1		ND				30%	
Surr: 4-Bromofluorobenzene (Sur)		Reco	overy: 104 %	Limits:	50-150 %	Dilu	tion: 1x					
1,4-Difluorobenzene (Sur)			107 %	5	50-150 %		"					

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Assa A Zomenighini

Lisa Domenighini, Client Services Manager

HydroCon LLC	Project: Handy Mart	
510 Allen St. Suite B	Project Number: 2015-007-01	Reported:
Kelso, WA 98626	Project Manager: Dave Borys	03/20/17 13:46

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260B												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Note
Batch 7030716 - EPA 5030E	3						Wa	ter				
Blank (7030716-BLK1)					Prepared: 03/	16/17 16:59	Analyzed:	03/16/17 19	9:17			
EPA 8260B												
Benzene	ND		0.200	ug/L	1							
Toluene	ND		1.00	"	"							
Ethylbenzene	ND		0.500	"	"							
Xylenes, total	ND		1.50	"	"							
Surr: 1,4-Difluorobenzene (Surr)		Rea	covery: 106 %	Limits:	80-120 %	Dil	ution: 1x					
Toluene-d8 (Surr)			100 %		80-120 %		"					
4-Bromofluorobenzene (Surr)			92 %		80-120 %		"					
LCS (7030716-BS1)					Prepared: 03/	16/17 16:59	Analyzed:	03/16/17 18	3:22			
EPA 8260B												
Benzene	20.4		0.200	ug/L	1	20.0		102	70-130%			
Toluene	18.7		1.00	"	"	"		93	"			
Ethylbenzene	20.4		0.500	"	"	"		102	"			
Xylenes, total	62.4		1.50	"	"	60.0		104	"			
Surr: 1,4-Difluorobenzene (Surr)		Rea	covery: 104 %	Limits:	80-120 %	Dil	ution: 1x					
Toluene-d8 (Surr)			96 %		80-120 %		"					
4-Bromofluorobenzene (Surr)			90 %		80-120 %		"					
Duplicate (7030716-DUP1)					Prepared: 03/	16/17 18:13	Analyzed:	03/16/17 21	:32			
QC Source Sample: MW02 (A7C04	(52-02)											
EPA 8260B												
Benzene	ND		0.200	ug/L	1		ND				30%	
Toluene	ND		1.00	"	"		ND				30%	
Ethylbenzene	ND		0.500	"	"		ND				30%	
Xylenes, total	ND		1.50	"	"		ND				30%	
Surr: 1,4-Difluorobenzene (Surr)		Rea	covery: 108 %	Limits:	80-120 %	Dil	ution: 1x					
Toluene-d8 (Surr)			101 %		80-120 %		"					
4-Bromofluorobenzene (Surr)			91 %		80-120 %		"					

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SAMPLE PREPARATION INFORMATION

	0	Basoline Range Hydr	ocarbons (Benzene	e through Naphthalen	e) by NWTPH-Gx				
Prep: EPA 5030B					Sample	Default	RL Prep		
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor		
Batch: 7030716									
A7C0452-01	Water	NWTPH-Gx (MS)	03/15/17 12:25	03/16/17 18:13	5mL/5mL	5mL/5mL	1.00		
A7C0452-02	Water	NWTPH-Gx (MS)	03/15/17 13:00	03/16/17 18:13	5mL/5mL	5mL/5mL	1.00		
A7C0452-03	Water	NWTPH-Gx (MS)	03/15/17 13:30	03/16/17 18:13	5mL/5mL	5mL/5mL	1.00		
BTEX Compounds by EPA 8260B									
			BTEX Compounds	s by EPA 8260B					
Prep: EPA 5030B			BTEX Compound	s by EPA 8260B	Sample	Default	RL Prep		
Prep: EPA 5030B Lab Number	Matrix	Method	BTEX Compounds	s by EPA 8260B Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor		
	Matrix	Method	•		1		1		
Lab Number	Matrix Water	Method EPA 8260B	•		1		1		
Lab Number Batch: 7030716			Sampled	Prepared	Initial/Final	Initial/Final	Factor		

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HydroCon LLC	Project: Handy Mart	
510 Allen St. Suite B	Project Number: 2015-007-01	Reported:
Kelso, WA 98626	Project Manager: Dave Borys	03/20/17 13:46

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	
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. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
	For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
	Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

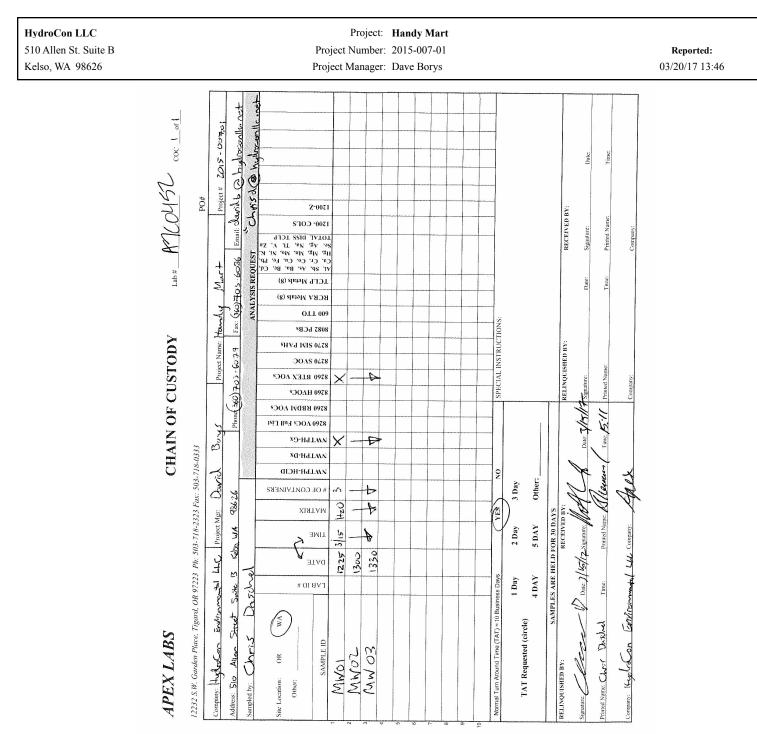
*** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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HydroCon LLC 510 Allen St. Suite B Kelso, WA 98626	Project: Handy Mart Project Number: 2015-007-01 Project Manager: Dave Borys	Reported: 03/20/17 13:46
	APEX LABS COOLER RECEIPT FORM Client:	
	Containers/Volumes Received Appropriate for Analysis? Yes X No Comments:	
	Comments:	

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