GROUNDWATER MONITORING REPORT:
5th Quarter - November 2017

Fife RV Center
3410 Pacific Highway East
Fife, Washington 98424

AEROTECH
Environmental Consulting Inc.

November 30, 2017

Anchorage Seattle Portland

Cost-effective environmental solutions
for the western United States and Alaska

www.AerotechEnvironmental.com

AEROTECH
Environmental Consulting Inc.

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(360) 710-5899

512 W. International Airport Road, Suite 201
Anchorage, Alaska 99518
(907) 575-6661

December 18, 2017

Mr. Chris LaVerdiere
Fife RV Center
3410 Pacific Highway East
Fife, Washington 98424

RE: Groundwater Monitoring Report – 5th Quarter – November 2017
Fife RV Center
3410 Pacific Highway East, Fife, Washington
Fife, Washington 98424

Dear Mr. LaVerdiere,

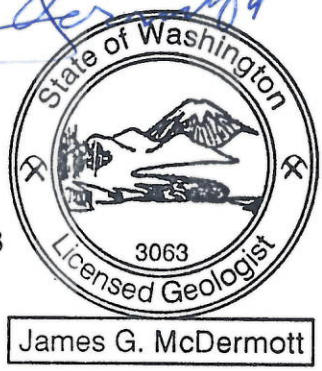
As you are aware, Aerotech Environmental Consulting, Inc. ("Aerotech") has been retained to collect quarterly groundwater samples from nine groundwater monitoring wells previously installed at Fife RV Center in Fife, Washington. Aerotech conducted the last round of groundwater monitoring and sampling activities on November 30, 2017. Enclosed, please find the associated tabulated analytical results, site drawings, laboratory analytical report, and standard operating procedure document.

Petroleum Hydrocarbon and Lead concentrations were below the MTCA Method A Cleanup Levels in samples collected from groundwater monitoring wells MW1, MW5, and MW6. Total Petroleum Hydrocarbons as Gasoline ("TPHg") was present at concentrations above the MTCA Method A Cleanup Levels in samples collected from groundwater monitoring wells MW2, MW3 and MW4. Benzene was present at concentrations above the MTCA Method A Cleanup Levels in samples collected from groundwater monitoring wells MW2 and MW4.

Please feel free to contact the Aerotech Geologist, Mr. James McDermott, at (425) 686-0032, or the Aerotech Field Sampling Coordinator, Mr. Nicholas Gerkin at (206) 482-2287 if you have any questions regarding work completed at this Site.

Sincerely,

James G. McDermott
State of Washington
Licensed Geologist No. 3063



Nick Gerkin
Environmental Professional
Washington State UST Site Assessor
ICC UST Decommissioning Supervisor

APPENDIX

- Analytical Results Table & Figures
- Project Contract Documents
- Laboratory Analytical Results
- Laboratory Chain of Custody
- Low-Flow Groundwater Sampling Standard Operating Procedure
- Field Documentation

ANALYTICAL RESULTS TABLE
&
FIGURES

GROUNDWATER ANALYTICAL RESULTS

Fife RV Center
3410 Pacific Highway East
Fife, Washington

MW1

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.4	11/18/16	1.37	8.37	7.00	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	1.19	8.37	7.18	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	1.72	8.37	6.65	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	2.92	8.37	5.45	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	1.37	8.37	7.00	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160	0.1	15	15

MW2

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.2	11/18/16	2.53	9.40	6.87	18,000	<200	<500	470	18	210	200	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	2.25	9.40	7.15	29,000	<200	<500	720	26	490	700	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	3.02	9.40	6.38	10,000	<200	<500	300	18	93	400	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	4.40	9.40	5.00	25,000	<200	<500	980	62	540	1,300	<0.01	<1.0	<5.0	ND	4.3	<0.1	--	<2.0
	11/30/17	2.43	9.40	6.97	64,000	<200	<500	2,800	94	1,800	3,000	<0.01	<1.0	<5.0	ND	25	<0.1	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW3

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.6	11/18/16	2.19	9.43	7.24	42,000	<200	<500	130	16	2,800	120	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	2.02	9.43	7.41	10,000	<200	<500	28	<1,000	620	92	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	2.65	9.43	6.78	6,700	<200	<500	21	1.4	210	57	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	4.05	9.43	5.38	620	<200	<500	<1.0	<1.0	2.4	1.3	<0.01	<1.0	<5.0	ND	0.60	<0.1	--	<2.0
	11/30/17	2.22	9.43	7.21	830	<200	<500	<1.0	<1.0	3.9	1.7	<0.01	<1.0	<5.0	ND	0.62	<0.1	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW4

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.5	11/18/16	3.31	10.12	6.81	1,900	<200	<500	140	<1.0	13	7.70	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	3.08	10.12	7.04	6,800	<200	<500	220	35	340	22	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	3.88	10.12	6.24	1,600	<200	<500	120	6.0	12	3.8	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	5.61	10.12	4.51	2,100	<200	<500	94	4.4	170	1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	3.15	10.12	6.97	6,400	<200	<500	320	17	370	58	<0.01	<1.0	<5.0	ND	9.90	<0.1	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW5

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
17.5	11/18/16	5.17	11.27	6.10	2,100	<200	<500	250	1.6	5.6	2.1	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	5.16	11.27	6.11	700	<200	<500	52	<1.0	2.2	2.4	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	6.34	11.27	4.93	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	8.31	11.27	2.96	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	5.07	11.27	6.20	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

GROUNDWATER ANALYTICAL RESULTS

Fife RV Center
3410 Pacific Highway East
Fife, Washington

MW6

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
17.5	11/18/16	4.72	11.40	6.68	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	02/20/17	4.69	11.40	6.71	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	05/23/17	5.85	11.40	5.55	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	<2.0	<2.0
	08/01/17	7.32	11.40	4.08	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	6.72	11.40	4.68	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW7

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.2	08/01/17	5.83	10.09	4.26	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	3.12	10.09	6.97	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW8

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.1	08/01/17	5.26	10.26	5.00	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	3.16	10.26	7.10	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160*	0.1	15	15

MW9

Well Depth	Sampling Date	Ground Water Level	Elevation (TOC north)	Water Level Elevation	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	EDB	EDC	MTBE	HVOCs	Naph-thalene	cPAHs*	Dissolved Lead	Total Lead
Feet		Feet Below TOC	Feet Above MSL	Feet Above MSL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
14.3	08/01/17	3.57	8.84	5.27	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	ND	<0.1	<0.1	--	<2.0
	11/30/17	1.58	8.84	7.26	<100	<200	<500	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<5.0	--	--	--	--	<2.0
		MTCA Method A Cleanup Levels			800	500	500	5	1,000	700	1,000	0.01	5	20	Variable	160	0.1	15	15

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)

TOC = Top of Casing MSL = Mean Sea Level

< = not detected at indicated Laboratory Detection Limits -- not analyzed NM = Not Measured

TPHg - Total Petroleum Hydrocarbons - Gasoline by Method NWTPH-Gx

TPHd - Total Petroleum Hydrocarbons - Diesel by Method NWTPH-Dx TPHmo - Total Petroleum Hydrocarbons - Motor Oil by Method NWTPH-Dx extended

Benzene, Toluene, Ethylbenzene and Xylenes by EPA Method 8021B

MTBE = Methyl-tert-butyl-ether EDC = 1,2-Dichloroethane EDB = 1,2-Dibromoethane HVOCs = Halogenated Volatile Organic Compounds; by EPA Method 8260B

PAHs (including Naphthalene) by EPA Method 8270

Total and Dissolved Lead by EPA Method 7010

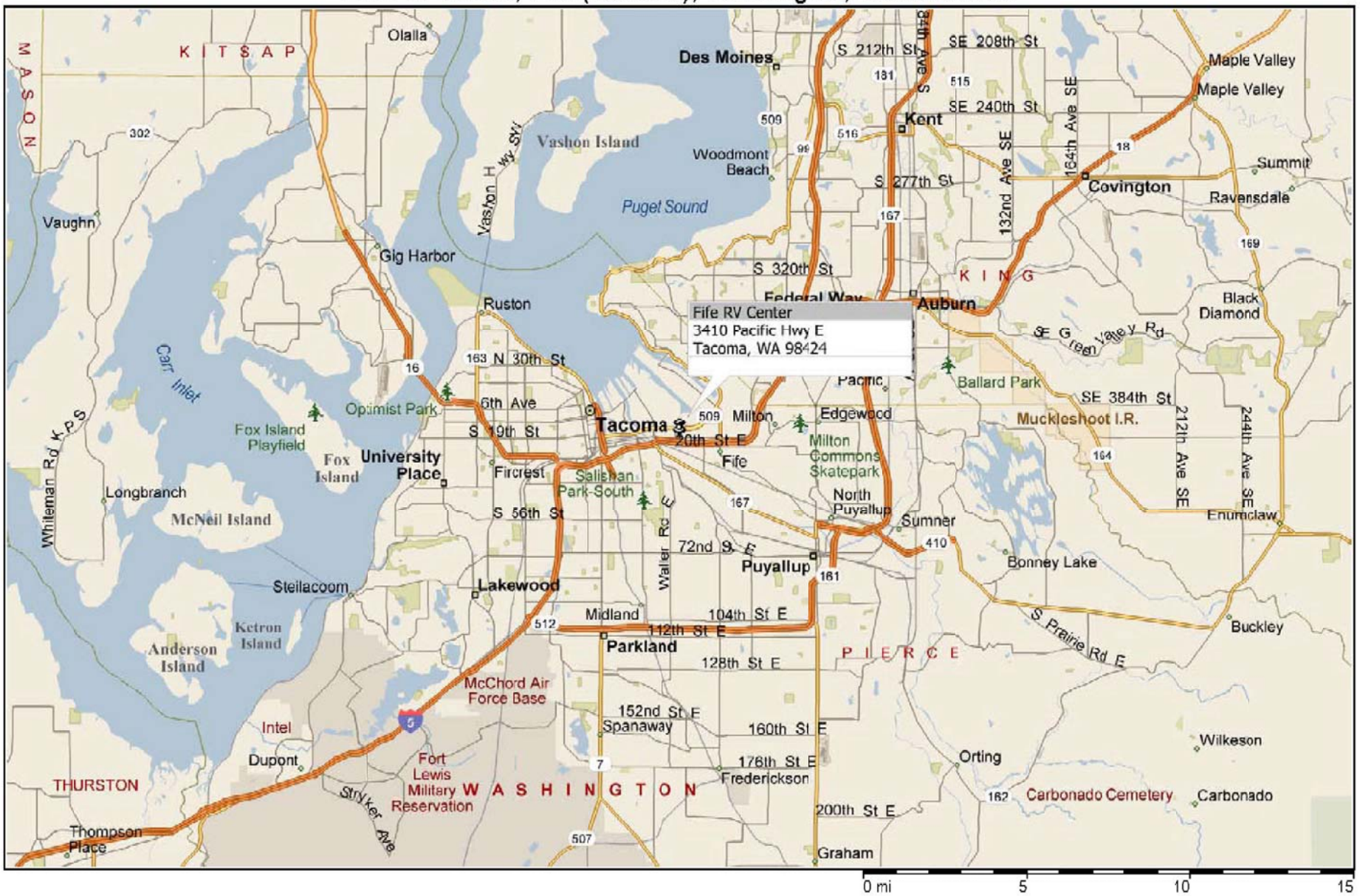
* = Effective concentration using Toxic Equivalency Factor per WAC 173-340-708{e}: SUM(Benzo(a)pyrene (x1), Benzo(a)anthracine (x0.1), Benzo(b)fluoranthene (x0.1), Benzo(k)fluoranthene (x0.1), Chrysene (x0.01), Dibenz(a,h)anthracene (x0.1), Indeno(1,2,3-cd)pyrene (x0.1)

ND = Not Detected above Laboratory Minimum Reporting Limits or applicable cleanup levels (see laboratory report for further detail)

Bolded numbers and red-shaded cells denote concentrations above the MTCA Cleanup Levels for groundwater

N

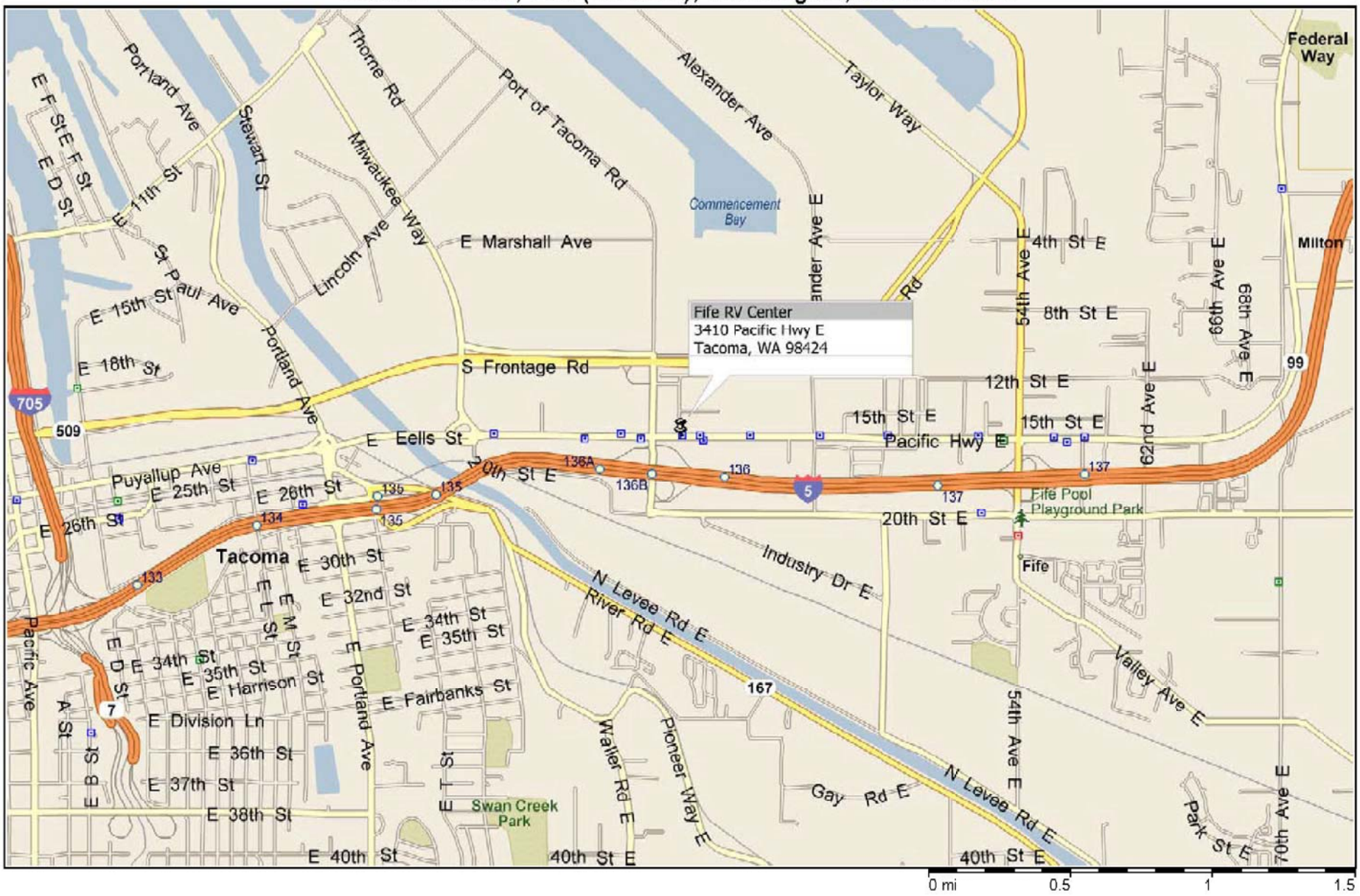
Fife RV Center, Fife (Tacoma), Washington, United States



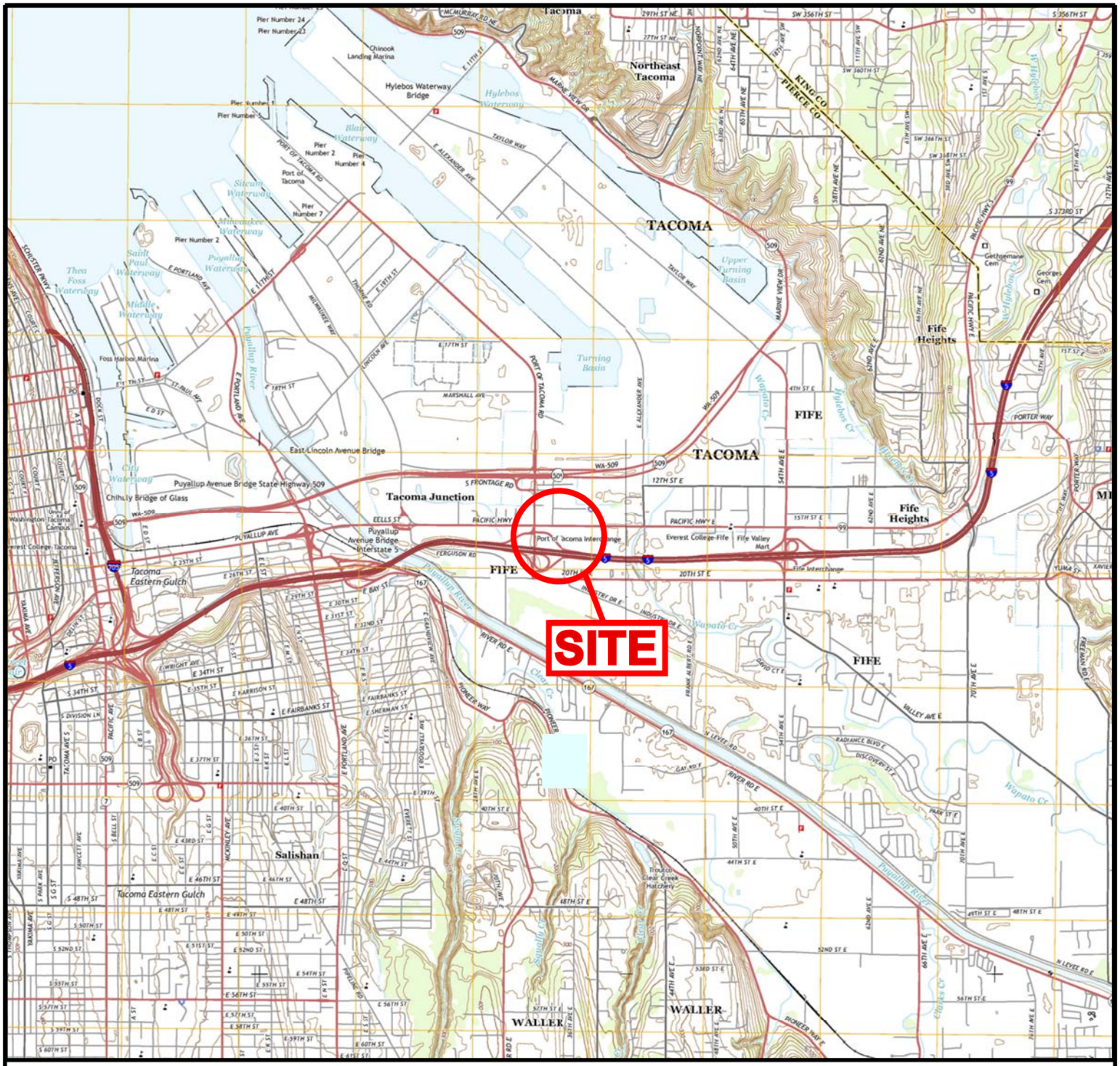
AEROTECH ENVIRONMENTAL CONSULTING	**REGIONAL MAP**	**Fife RV Center** **3410 Pacific Highway East** **Fife, Washington**	**Date:** 12/08/16 **By:** Nick Gerkin **Figure:** 1

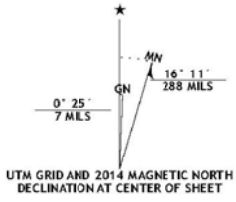
N

Fife RV Center, Fife (Tacoma), Washington, United States

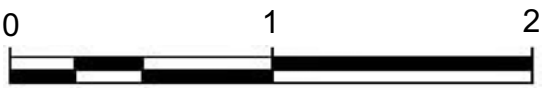


AEROTECH ENVIRONMENTAL CONSULTING	**NEIGHBORHOOD STREET MAP**	**Fife RV Center** **3410 Pacific Highway East** **Fife, Washington**		**Date:** 12/08/16 **By:** Nick Gerkin **Figure:** 2





UTM GRID AND 2014 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



SCALE (mile)

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

AEROTECH
ENVIRONMENTAL CONSULTING

USGS TOPOGRAPHIC MAP

Fife RV Center
3410 Pacific Highway East
Fife, Washington

Date: 10/30/16
By: Nick Gerkin
Figure: 3

EXPLANATION

Extents of Site Remedial Excavation Figures

Property Boundary

AEROTECH ENVIRONMENTAL CONSULTING

SITE VICINITY MAP

Fife RV Center
3410 Pacific Highway East
Fife, Washington

0 150 300

SCALE (feet)

Date: 10/30/16

By: Nick Gerkin

Figure: 4

MW2			
02/20/17	05/23/17	08/01/17	11/30/17
29,000	10,000	25,000	64,000
<200	<200	<200	<200
<500	<500	<500	<500
720	300	980	2,800
26	18	62	94
490	93	540	1,800
700	400	1,300	3,000
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	4.3	25
--	--	<0.1	<0.1

MW4			
02/20/17	05/23/17	08/01/17	11/30/17
6,800	1,600	2,100	6,400
<200	<200	<200	<200
<500	<500	<500	<500
220	120	94	320
35	6.0	4.4	17
340	12	170	370
22	3.8	1.0	58
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	<0.1	9.9
--	--	<0.1	<0.1

MW5			
02/20/17	05/23/17	08/01/17	11/30/17
700	<100	<100	<100
<200	<200	<200	<200
<500	<500	<500	<500
52	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
2.2	<1.0	<1.0	<1.0
2.4	<1.0	<1.0	<1.0
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	<0.1	<0.1
--	--	<0.1	<0.1

MW6			
02/20/17	05/23/17	08/01/17	11/30/17
<100	<100	<100	<100
<200	<200	<200	<200
<500	<500	<500	<500
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	<0.1	--
--	--	<0.1	--

MW7		
08/01/17	11/30/17	
<100	<100	
<200	<200	
<500	<500	
<1.0	<1.0	
<1.0	<1.0	
<1.0	<1.0	
<1.0	<1.0	
ND	ND	
<2.0	<2.0	
<0.1	--	
<0.1	--	

MW1			
02/20/17	05/23/17	08/01/17	11/30/17
<100	<100	<100	<100
<200	<200	<200	<200
<500	<500	<500	<500
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
<1.0	<1.0	<1.0	<1.0
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	<0.1	--
--	--	<0.1	--

MW3			
02/20/17	05/23/17	08/01/17	11/30/17
10,000	6,700	620	830
<200	<200	<200	<200
<500	<500	<500	<500
28	21	<1.0	<1.0
<1.0	1.4	<1.0	<1.0
620	210	2.4	3.9
92	57	1.3	1.7
ND	ND	ND	ND
<2.0	<2.0	<2.0	<2.0
--	--	0.60	0.62
--	--	<0.1	<0.1

MW9	
08/01/17	11/30/17
<100	<100
<200	<200
<500	<500
<1.0	<1.0
<1.0	<1.0
<1.0	<1.0
<1.0	<1.0
ND	ND
<2.0	<2.0
<0.1	--
<0.1	--

MW8	
08/01/17	11/30/17
<100	<100
<200	<200
<500	<500
<1.0	<1.0
<1.0	<1.0
<1.0	<1.0
<1.0	<1.0
ND	ND
<2.0	<2.0
<0.1	--
<0.1	--

MW2	GW Monitoring Well ID
11/30/17	Date
64,000	TPHg
<200	TPHd
<500	TPHo
2,800	Benzene
94	Toluene
1,800	Ethylbenzene
3,000	Xylenes
ND	VOCs
<2.0	Total Lead
25	Naphthalene
<0.1	cPAHs

All Concentrations Reported in µg/L

Landscaping

JACK IN THE BOX DRIVE-THRU

Landscaping

ACCESS EASEMENT
Pacific Highway East
100 Feet to the North

UST BASIN
(25 Feet to the North)

NDS
North)

Catch Basin Rim
8.0 Feet

MW2

MW1

FORMER PUMP ISLANDS

BIO-SWALE POND

MW4

POSSIBLE FORMER UST BASIN

POSSIBLE FORMER UST BASIN

MW3

MW5

MW9

Fire Hydrant

MW6

MW7

MW8

TAHOMA EXPRESS
(Former Unocal Service Station 7343)
Ecology Cleanup Site ID 5015

N

0 15 30
SCALE (feet)

Blue numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

AEROTECH
ENVIRONMENTAL CONSULTING

EXPLANATION

MW9 — Groundwater Monitoring Well

Property Boundary

Fencing

Cool Guard HRL36 Liner Installed to 10-Foot Depth

All analytes are not represented on this map. Refer to Table 1 and the Laboratory Analytical Report for further detail regarding HVOCs and PAHs.

GROUNDWATER ANALYTICAL RESULTS MAP - 11/30/17

Fife RV Center
3410 Pacific Highway East
Fife, Washington

Date: 12/06/17

By: Nick Gerkin

Figure: 5

N

Landscaping

JACK IN THE BOX
DRIVE-THRU

Landscaping

ACCESS EASEMENT
Pacific Highway East
100 Feet to the North

UST BASIN
(25 Feet to the North)

Catch Basin Rim
8.0 Feet[1]

PREDOMINANT
HISTORICAL FLOW
DIRECTION

TAHOMA
EXPRESS

Water surface presumed to be at or near groundwater table, and hydraulically connected by design to the adjoining Drainage Ditch to the south

BIO-SWALE
POND

MW2
6.97

GEO BARRIER

MW1
7.00

GEO BARRIER

7.0

7.1

6.9

MW4
6.97

6.8

6.7

7.2

6.5

6.3

MW5
6.20

MW3
7.21

MW9
7.26

Storm Sewer
5-Foot Depth

6.4

Fire
Hydrant

6.6

MW6
6.72

MW7
6.97

MW8
7.10

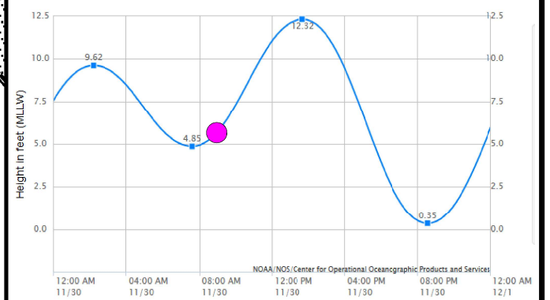
Approximate
Groundwater
Flow Direction
Range[2]

2 - based upon measurements on-site and historical measurements on the adjoining property to the North

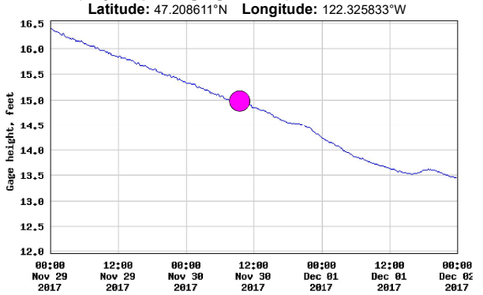
Gradient Range
0.002 - 0.027 ft/ft

1 - Aside from the adjoining Bio-Swale (west) & Drainage Ditch (southwest), a topographic minimum shared by the Site & the adjoining parcel to the north, is situated at the catch basin (north side of study area)

NOAA Commencement Bay Tide Chart for 11/30/17



USGS Puyallup River Hydrograph
(Puyallup Gauging Station) 11/29 - 09/01/17
Latitude: 47.208611°N **Longitude:** 122.325833°W



Time at which water level data was obtained at the subject site

0 15 30
SCALE (feet)

Blue numbers and symbols indicate concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

AEROTECH
ENVIRONMENTAL CONSULTING

EXPLANATION

MW6 — Groundwater Monitoring Well

6.72 — Groundwater Elevation in Feet

Groundwater Elevation Contour Line (Isopotential Line)

Approximate Expected Location of Isopotential Line

Property Boundary

Fencing

Geo Membrane Barrier - Cool Guard HRL36 Liner Installed to 10-Foot Depth

Storm Sewer

Electrical Utility

Gas Utility

Water Utility

POTENTIOMETRIC SURFACE MAP - 11/30/17

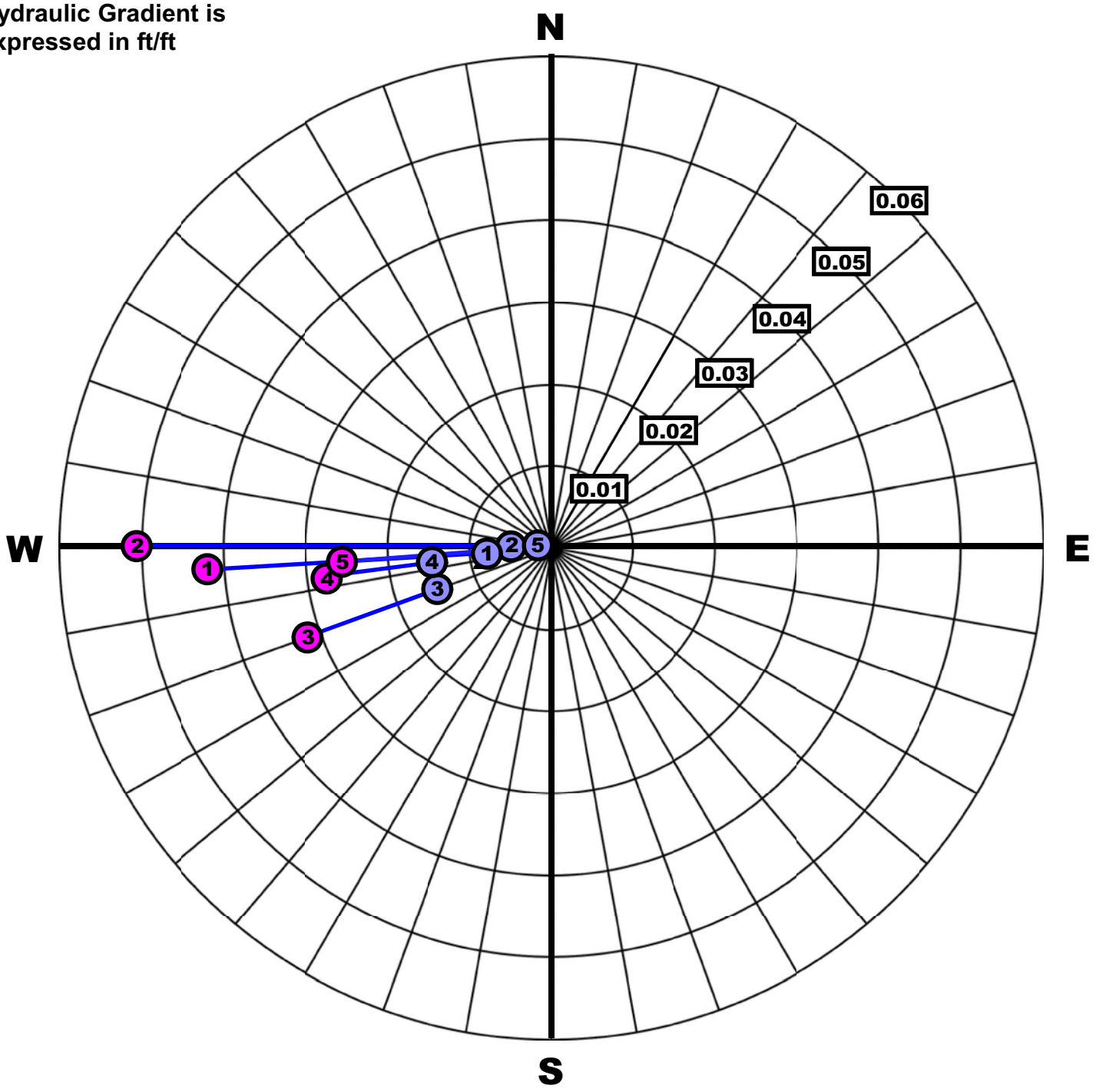
Fife RV Center
3410 Pacific Highway East
Fife, Washington

Date: 12/07/17

By: Nick Gerkin

Figure: 6

Hydraulic Gradient is expressed in ft/ft



HYDRAULIC GRADIENT RANGE AND SHALLOW GROUNDWATER FLOW DIRECTION FROM MW3

1	11/18/16	5	11/30/17
2	02/20/17		
3	05/23/17		
4	08/01/17		

2 Maximum Calculated Gradient

2 Minimum Calculated Gradient

AEROTECH ENVIRONMENTAL CONSULTING

ROSE DIAGRAM

Fife RV Center
3410 Pacific Highway East
Fife, Washington

Date: 12/18/17
By: Nick Gerkin
Figure: 7

PROJECT CONTRACT DOCUMENTS

ENVIRONMENTAL CONTRACTOR'S CERTIFICATION

Fife RV Center
3410 Pacific Highway East
Fife, Washington 98424

1. Contractor's Name: Aerotech Environmental Consulting, Inc.

2. Contractor's Address: 13925 Interurban Avenue South, Ste. 210, Seattle, Washington 98168

3. Name and title of person completing this certification: Alan T. Blotch / President

4. Answer the following questions about each employee that contractor will have perform the assessment or prepare the report showing the results of the inspection:

   a. Name and Title of Employee: Alan T. Blotch – Environmental Professional

   b. Length of experience doing environmental assessments: 31 years

   c. Education degrees received: Masters of Business Administration
   Juris Doctor – Environmental Law

   d. Relevant training received: ASTM E50 Environmental Assessment Committee Meetings

5. Identify any certifications and approvals issued to contractor pursuant to an official Federal, State of local program or policy to conduct environmental assessments: Registered Environmental Assessor
   Issued by State of California

6. Describe the generally recognized standards which the contractor will use to perform the assessment. *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* (ASTM E 1903)

7. Disclose the nature of any previous environmental inspections contractor has ever performed for the Owner of the property: Phase I Environmental Site Assessment

8. Disclose the nature of any affiliation or association contractor now has, or ever had, with the above referenced seller of the property, of the above referenced buyer of the property: N/A

9. Describe the liability insurance carried by contractor to cover claims in the event that ir fails to discover adverse environmental conditions during an environmental inspection.
   Professional Errors & Omissions Coverage $1,000,000 / claim and $1,000,000 aggregate liability

THE UNDERSIGNED HEREBY CERTIFIES, UNDER PENALTY OF THE CRIMINAL AND/OR CIVIL PENALTIES IN 18 U.S.C. § 1001 FOR FALSE STATEMENTS TO THE UNITED STATES GOVERNMENT, THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

Signature _____ 12-18-17
Date

LABORATORY ANALYTICAL RESULTS

ADVANCED ANALYTICAL

Environmental Testing Laboratory

December 11, 2017

Nick Gerkin
Aerotech Environmental, Inc.
13925 Interurban Avenue South, Suite 210
Seattle, WA 98168

Dear Mr. Gerkin:

Please find enclosed the analytical data report for the *Fife RV Center* ***(C71204-1)*** Project.

Samples were received on *December 04, 2017.* The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE■ Redmond, WA 98052
425.702-8571
E-mail: aachemlab@yahoo.com

Advanced Analytical Laboratory
(425) 702-8571

AAL Job Number:	C71204-1
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Fife RV Center
Client Project Number:	na
Date received:	12/04/17

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

8260B, µg/L		MTH BLK	LCS	W-MW2	W-MW3	W-MW4	W-MW5
Matrix	Water	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/07/17	12/07/17	12/07/17	12/07/17	12/07/17	12/07/17
MTBE	5.0	nd		nd	nd	nd	nd
Chloromethane	1.0	nd		nd	nd	nd	nd
Vinyl chloride(*)	0.2	nd		nd	nd	nd	nd
Bromomethane	1.0	nd		nd	nd	nd	nd
Chloroethane	1.0	nd		nd	nd	nd	nd
Trichlorofluoromethane	1.0	nd		nd	nd	nd	nd
1,1-Dichloroethene	1.0	nd		nd	nd	nd	nd
Methylene chloride	1.0	nd		nd	nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd
1,1-Dichloroethane	1.0	nd		nd	nd	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd		nd	nd	nd	nd
Chloroform	1.0	nd		nd	nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		nd	nd	nd	nd
Carbontetrachloride	1.0	nd		nd	nd	nd	nd
1,1-Dichloropropene	1.0	nd		nd	nd	nd	nd
1,2-Dichloroethane (EDC)	1.0	nd		nd	nd	nd	nd
Trichloroethene	1.0	nd	93%	nd	nd	nd	nd
1,2-Dichloropropane	1.0	nd		nd	nd	nd	nd
Dibromomethane	1.0	nd		nd	nd	nd	nd
Bromodichloromethane	1.0	nd		nd	nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd
trans-1,3-Dichloropropene	1.0	nd		nd	nd	nd	nd
1,1,2-Trichloroethane	1.0	nd		nd	nd	nd	nd
Tetrachloroethene	1.0	nd		nd	nd	nd	nd
1,3-Dichloropropane	1.0	nd		nd	nd	nd	nd
Dibromochloromethane	1.0	nd		nd	nd	nd	nd
1,2-Dibromoethane (EDB)*	0.01	nd		nd	nd	nd	nd
Chlorobenzene	1.0	nd	89%	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd		nd	nd	nd	nd
Bromoform	1.0	nd		nd	nd	nd	nd
1,2,3-Trichloropropane	1.0	nd		nd	nd	nd	nd
Bromobenzene	1.0	nd		nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd		nd	nd	nd	nd
2-Chlorotoluene	1.0	nd		nd	nd	nd	nd
4-Chlorotoluene	1.0	nd		nd	nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd		nd	nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd		nd	nd	nd	nd
1,3-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
1,4-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
1,2-Dichlorobenzene	1.0	nd		nd	nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd		nd	nd	nd	nd
1,2,4-Trichlorobenzene	1.0	nd		nd	nd	nd	nd
1,2,3-Trichlorobenzene	1.0	nd		nd	nd	nd	nd

*-instrument detection limits

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

8260B, µg/L		MTH BLK	LCS	W-MW2	W-MW3	W-MW4	W-MW5
Matrix	Water	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/07/17	12/07/17	12/07/17	12/07/17	12/07/17	12/07/17
Surrogate recoveries							
Dibromofluoromethane		100%	93%	105%	101%	106%	102%
1,2-Dichloroethane-d4		97%	85%	94%	93%	97%	94%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

8260B, µg/L		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/07/17	12/07/17	12/07/17
MTBE	5.0			
Chloromethane	1.0			
Vinyl chloride(*)	0.2			
Bromomethane	1.0			
Chloroethane	1.0			
Trichlorofluoromethane	1.0			
1,1-Dichloroethene	1.0			
Methylene chloride	1.0			
trans-1,2-Dichloroethene	1.0			
1,1-Dichloroethane	1.0			
2,2-Dichloropropane	1.0			
cis-1,2-Dichloroethene	1.0			
Chloroform	1.0			
1,1,1-Trichloroethane	1.0			
Carbontetrachloride	1.0			
1,1-Dichloropropene	1.0			
1,2-Dichloroethane (EDC)	1.0			
Trichloroethene	1.0	106%	115%	9%
1,2-Dichloropropane	1.0			
Dibromomethane	1.0			
Bromodichloromethane	1.0			
cis-1,3-Dichloropropene	1.0			
trans-1,3-Dichloropropene	1.0			
1,1,2-Trichloroethane	1.0			
Tetrachloroethene	1.0			
1,3-Dichloropropane	1.0			
Dibromochloromethane	1.0			
1,2-Dibromoethane (EDB)*	0.01			
Chlorobenzene	1.0	91%	101%	11%
1,1,1,2-Tetrachloroethane	1.0			
Bromoform	1.0			
1,2,3-Trichloropropane	1.0			
Bromobenzene	1.0			
1,1,2,2-Tetrachloroethane	1.0			
2-Chlorotoluene	1.0			
4-Chlorotoluene	1.0			
1,3,5-Trimethylbenzene	1.0			
1,2,4-Trimethylbenzene	1.0			
1,3-Dichlorobenzene	1.0			
1,4-Dichlorobenzene	1.0			
1,2-Dichlorobenzene	1.0			
1,2-Dibromo-3-Chloropropane	1.0			
1,2,4-Trichlorobenzene	1.0			
1,2,3-Trichlorobenzene	1.0			

*-instrument detection limits

AAL Job Number:	C71204-1
Client:	Aerotech Environmental
Project Manager:	Nick Gerkin
Client Project Name:	Fife RV Center
Client Project Number:	na
Date received:	12/04/17

Analytical Results

8260B, µg/L		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/07/17	12/07/17	12/07/17

Surrogate recoveries		
Dibromofluoromethane	102%	101%
1,2-Dichloroethane-d4	93%	91%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

NWTPH-Gx/BTEX		MTH BLK	LCS	W-MW1	W-MW2	W-MW3	W-MW4
Matrix	Water	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/04/17	12/04/17	12/04/17	12/04/17	12/04/17	12/04/17
NWTPH-Gx, ug/L							
Mineral spirits/Stoddard	100	nd		nd	nd	nd	nd
Gasoline	100	nd		nd	64,000	830	6,400
BTEX 8021B, µg/L							
Benzene	1.0	nd	92%	nd	2,800	nd	320
Toluene	1.0	nd	87%	nd	94	nd	17
Ethylbenzene	1.0	nd		nd	1,800	3.9	370
Xylenes	1.0	nd		nd	3,000	1.7	58
Surrogate recoveries:							
Trifluorotoluene		110%	120%	108%	C	110%	C
Bromofluorobenzene		94%	93%	112%	C	115%	119%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

NWTPH-Gx/BTEX		W-MW5	W-MW6	W-MW7	W-MW8	W-MW9	Dupl W-MW9
Matrix	Water	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/04/17	12/04/17	12/04/17	12/04/17	12/04/17	12/04/17
NWTPH-Gx, ug/L							
Mineral spirits/Stoddard	100	nd	nd	nd	nd	nd	nd
Gasoline	100	nd	nd	nd	nd	nd	nd
BTEX 8021B, µg/L							
Benzene	1.0	nd	nd	nd	nd	nd	nd
Toluene	1.0	nd	nd	nd	nd	nd	nd
Ethylbenzene	1.0	nd	nd	nd	nd	nd	nd
Xylenes	1.0	nd	nd	nd	nd	nd	nd
Surrogate recoveries:							
Trifluorotoluene		110%	98%	118%	112%	127%	121%
Bromofluorobenzene		105%	87%	103%	104%	98%	117%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

NWTPH-Gx/BTEX		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	12/04/17	12/04/17	12/04/17
NWTPH-Gx, ug/L				
Mineral spirits/Stoddard	100			
Gasoline	100			
BTEX 8021B, µg/L				
Benzene	1.0	81%	79%	3%
Toluene	1.0	82%	83%	2%
Ethylbenzene	1.0			
Xylenes	1.0			
Surrogate recoveries:				
Trifluorotoluene		103%	111%	
Bromofluorobenzene		102%	126%	

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

NWTPH-Dx, mg/L		MTH BLK	W-MW1	W-MW2	W-MW3	W-MW4	W-MW5
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	12/05/17	12/05/17	12/05/17	12/05/17	12/05/17	12/05/17
Date analyzed	Limits	12/05/17	12/05/17	12/05/17	12/05/17	12/05/17	12/05/17
Kerosene/Jet fuel	0.20	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	0.20	nd	nd	nd	nd	nd	nd
Heavy oil	0.50	nd	nd	nd	nd	nd	nd
Surrogate recoveries:							
Fluorobiphenyl		129%	113%	125%	121%	118%	120%
o-Terphenyl		112%	97%	111%	115%	99%	103%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

NWTPH-Dx, mg/L		W-MW6	W-MW7	W-MW8	W-MW9
Matrix	Water	Water	Water	Water	Water
Date extracted	Reporting	12/05/17	12/05/17	12/05/17	12/05/17
Date analyzed	Limits	12/05/17	12/05/17	12/05/17	12/05/17
Kerosene/Jet fuel	0.20	nd	nd	nd	nd
Diesel/Fuel oil	0.20	nd	nd	nd	nd
Heavy oil	0.50	nd	nd	nd	nd
Surrogate recoveries:					
Fluorobiphenyl		115%	122%	111%	107%
o-Terphenyl		101%	100%	95%	112%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

PAH(8270), ug/L		MTH BLK	LCS	W-MW2	W-MW3	W-MW4	W-MW5
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Date analyzed	Limits	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Naphthalene	0.1	nd		25	0.62	9.9	nd
1-MethylNaphthalene	0.1	nd		5.2	0.68	3.4	nd
2-MethylNaphthalene	0.1	nd		0.10	nd	nd	nd
Acenaphthylene	0.1	nd		nd	nd	nd	nd
Acenaphthene	0.1	nd	95%	nd	nd	nd	nd
Fluorene	0.1	nd		nd	nd	nd	nd
Phenanthrene	0.1	nd		0.26	nd	nd	nd
Anthracene	0.1	nd		nd	nd	nd	nd
Fluoranthene	0.1	nd		nd	nd	nd	nd
Pyrene	0.1	nd	113%	nd	nd	nd	nd
Benzo(a)anthracene	0.1	nd		nd	nd	nd	nd
Chrysene	0.1	nd		nd	nd	nd	nd
Benzo(b)fluoranthene	0.1	nd		nd	nd	nd	nd
Benzo(k)fluoranthene	0.1	nd		nd	nd	nd	nd
Benzo(a)pyrene	0.1	nd		nd	nd	nd	nd
Indeno(1,2,3-cd)pyrene	0.1	nd		nd	nd	nd	nd
Dibenzo(ah)anthracene	0.1	nd		nd	nd	nd	nd
Benzo(ghi)perylene	0.1	nd		nd	nd	nd	nd

Surrogate recoveries:

Fluorobiphenyl	92%	91%	83%	85%	97%	91%
o-Terphenyl	98%	98%	98%	90%	97%	97%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 50% TO 150%
Acceptable RPD limit: 50%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

PAH(8270), ug/L		MS	MSD	RPD
Matrix	Water	Water	Water	Water
Date extracted	Reporting	12/06/17	12/06/17	12/06/17
Date analyzed	Limits	12/06/17	12/06/17	12/06/17
Naphthalene	0.1			
1-MethylNaphthalene	0.1			
2-MethylNaphthalene	0.1			
Acenaphthylene	0.1			
Acenaphthene	0.1	96%	97%	1%
Fluorene	0.1			
Phenanthrene	0.1			
Anthracene	0.1			
Fluoranthene	0.1			
Pyrene	0.1	115%	110%	5%
Benzo(a)anthracene	0.1			
Chrysene	0.1			
Benzo(b)fluoranthene	0.1			
Benzo(k)fluoranthene	0.1			
Benzo(a)pyrene	0.1			
Indeno(1,2,3-cd)pyrene	0.1			
Dibenzo(ah)anthracene	0.1			
Benzo(ghi)perylene	0.1			

Surrogate recoveries:

Fluorobiphenyl	90%	89%	
o-Terphenyl	95%	96%	

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 50% TO 150%
Acceptable RPD limit: 50%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

Metals Total (7010), mg/L		MTH BLK	LCS	W-MW1	W-MW2	W-MW3	W-MW4	W-MW5
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Date analyzed	Limits	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Lead Total (Pb)	0.002	nd	90%	nd	nd	nd	nd	nd

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 30%

AAL Job Number: C71204-1
Client: Aerotech Environmental
Project Manager: Nick Gerkin
Client Project Name: Fife RV Center
Client Project Number: na
Date received: 12/04/17

Analytical Results

Metals Total (7010), mg/L		W-MW6	W-MW7	W-MW8	W-MW9	MS	MSD	RPD
Matrix	Water	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Date analyzed	Limits	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17	12/06/17
Lead Total (Pb)	0.002	nd	nd	nd	nd	68%	78%	13%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 30%

LABORATORY CHAIN OF CUSTODY

ADVANCED ANALYTICAL

Chain of Custody Record

Page 1 of 1

Laboratory Job #: C71204-1

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Aerotech

Project Name: Fife RV Center

Project Manager: Nick Gerkin

Project Number: —

Address: 13925 Interurban Ave S Tukwila, WA

Collector: Nick Gerkin

Phone: 206 482 2287 Fax:

Date of collection: 11/30/17

	Sample ID	Time	Matrix	Container type	8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead	MTCA5 Metals	Notes, comments	# of containers
1	W-MW1	1210	W	2 VOA 1 Poly 1 Amb				X		X							X			4
2	W-MW2	1340		2 VOA 1 Poly 3 Amb		X		X		X			X				X			6
3	W-MW3	1235				X		X		X			X				X			6
4	W-MW4	1300				X		X		X			X				X			6
5	W-MW5	1040				X		X		X			X				X			6
6	W-MW6	1020		2 VOA 1 Poly 1 Amb				X		X							X			4
7	W-MW7	1355						X		X							X			4
8	W-MW8	1110						X		X							X			4
9	W-MW9	1145						X		X							X			4
10																				
11																				
12																				

Relinquished by:	Date/Time	Received by:	Date/Time
	12/4/17 0800		12/4/17 0800
Relinquished by:	Date/Time	Received by:	Date/Time
	12/4/17 1415		12/04/17 14:11

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day O

24 hr O

48 hr O

Standard X

* All Black-Capped Ambers are preserved w/ HCl, others are not *

LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE

AEROTECH
Environmental Consulting Inc.
13925 Interurban Avenue South, Suite No.210
Seattle, Washington 98168
(360)710-5899

2916 NW Bucklin Hill Road, Suite No.126
Silverdale, Washington 98383
(866) 800-4030

512 W. International Airport Road, Suite 201
Anchorage, Alaska 99518
(907) 575-6661

5319 SW Westgate Dr., Suite No.24
Portland, Oregon 97221
(503) 360-4701

LOW-FLOW GROUNDWATER SAMPLING STANDARD OPERATING PROCEDURE

The following protocol and sampling procedures were designed to meet or exceed standards for groundwater monitoring well sampling, as specified by the State of Washington Department of Ecology *"Standard Operating Procedures for Purging and Sampling Monitoring Wells, Version 1.0,"* dated and approved on October 4, 2011. These procedures are strictly adhered to by Aerotech field staff:

Cross-Contamination Mitigation Protocol

A sampling table is set up adjacent to the well head in order to protect field equipment from contact with the ground, to prevent or minimize the possible introduction of foreign materials into the wells, and in general in order to mitigate the possibility of cross-contamination. Where previous laboratory data is available, or where visual of olfactory indicators provide initial evidence, well sampling order is arranged to proceed with the least contaminated well, often the upgradient groundwater monitoring wells, and sampling order proceeds by sampling wells associated with successively higher contamination levels. Thus, the wells exhibiting the highest contamination levels are sampled last, in order to minimize the possibility of cross contamination.

A fresh pair of disposable Nitrile gloves is worn at each well. Equipment neither disposable nor dedicated to wells, is washed in a dedicated container prepared with non-phosphate Alconox detergent and triple rinsed in a second container prepared with distilled and/or deionized water. Surfaces that cannot be readily submerged for the purpose of decontamination, are sprayed with wash water followed by rinse water, and wiped with a fresh disposable paper towel. For shallow wells that require a peristaltic pump, dedicated tubing is left in each well after sampling, however, for deeper wells that require a submersible pump, dedicated tubing is recovered from wells after each use, and deployed to a designated dedicated clean plastic bag, bearing a label indicating well identification information.

Water Level Measurement

Prior to the well purge process and the collection of groundwater samples, groundwater levels are measured at the north side of the ("TOC") with a piezometer/water level indicator, by slowly lowering the sensor into wells prior to purging, in order to minimize disturbances. The water levels are measured twice, with tape a marked in 0.01 foot increments, in order to reduce possible reading error. Where appropriate, free product thickness is measured with gas level indicator paste or an interface indicator. Upon arrival, each well is visual inspected and the condition of the well and well head are noted.

Groundwater Monitoring Well Purge and Sampling Methodologies

Prior to groundwater sample collection, A dedicated length of high density polyethylene tubing is lowered into each well to a level near the middle of the screened interval. A dedicated length of clean silicone tubing is utilized within the pump mechanism. The wells are purged by means of low flow techniques, during which time groundwater is monitored for physical parameters, including temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), by means of a multi-parameter device mounted upon a flow cell, until such time as values recorded have stabilized and equilibrium conditions are verified according to State guidelines. This protocol ensures that collected groundwater samples are representative of in-situ groundwater conditions. Readings are recorded once every 2 to 5 minutes, including water level measurement. The pumping rate shall remain below 1 L/min during monitoring and sampling procedures. This is verified by periodically filling a one-Liter graduated cylinder and recording the rate, adjusting the pump as necessary. The water column within the well should remain within 5% of the static height during the purge and sample process, if this cannot be achieved, the pump rate will be reduced until the water level stabilizes. The following conditions must be met in three consecutive readings prior to sampling:

• pH	+/- 0.1 standard units
• Specific Conductivity	+/- 10.0 mS/cm for values < 1,000 mS/cm +/- 20.0 mS/cm for values > 1,000 mS/cm
• DO	+/- 0.05 mg/L for values < 1 mg/L +/- 0.2 mg/L for values > 1 mg/L
• Temperature	+/- 0.1 degrees Celcius
• ORP	+/- 10 mV

Groundwater samples are collected in containers specified by the laboratory for the analyses established at the Site, and in accordance with State of Washington regulations or guidelines. Sample containers are labeled with site name, well identification, and date of collection information. Each sample is documented on a *Chain of Custody* (“”COC”) form, and immediately placed in an iced cooler (maintained at 4 degrees Celcius or less) for transport to a certified laboratory for analysis. Please note that any purge water suspected or confirmed to contain concentrations above the MTCA Cleanup Levels is drummed and left on Site

Please feel free to contact the Aerotech Geologist/Hydrogeologist, Mr. James McDermott, at (425) 686-0032, or the Aerotech Environmental Scientist/Field Sampling Coordinator, Mr. Nicholas Gerkin, at (206) 482-2287, if you have questions regarding work completed at this Site.

FIELD DOCUMENTATION

AEROTECH
ENVIRONMENTAL CONSULTING

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GROUNDWATER MONITORING WELL GAUGING RECORD

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

Well ID	Time	Wellhead Elevation	Depth to Water	Groundwater Elevation	Depth of Well	Well Diameter	Comments
--	hh:mm	Feet Above MSL	Feet Below TOC	Feet Above MSL	Feet Below TOC	Inches	--
MW1	9:12	8.37	1.37	7.00	14.4	2	Well vaults, seals, bolts and plugs are in great condition.
MW2	9:24	9.40	2.43	6.97	14.2	2	Well vaults, seals, bolts and plugs are in great condition.
MW3	9:21	9.43	2.22	7.21	14.6	2	Well vaults, seals, bolts and plugs are in great condition.
MW4	9:23	10.12	3.15	6.97	14.5	2	Well vaults, seals, bolts and plugs are in great condition.
MW5	9:14	11.27	5.07	6.20	17.5	2	Well vaults, seals, bolts and plugs are in great condition.
MW6	9:15	11.40	4.68	6.72	17.5	2	Well vaults, seals, bolts and plugs are in great condition.
MW7	9:16	10.09	3.12	6.97	14.2	1	Well vaults, seals, bolts and plugs are in great condition.
MW8	9:18	10.26	3.16	7.10	14.1	1	Well vaults, seals, bolts and plugs are in great condition.
MW9	9:20	8.84	1.58	7.26	14.3	1	Well vaults, seals, bolts and plugs are in great condition.

EXPLANATION
MSL = Mean Sea Level
TOC - Top of Casing

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GROUNDWATER MONITORING WELL
LOW FLOW SAMPLING FIELD LOG

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

MW1

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:12	1.37	--	--	--	--	--	--
12:00	1.82	220	14.1	627.1	1.60	6.99	-92.3
12:02	1.86	220	14.1	622.2	1.21	6.99	-100.0
12:04	1.90	220	14.2	619.3	1.10	6.98	-104.4
12:06	1.94	220	14.2	618.8	1.18	6.98	-108.2
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
12:10	**SAMPLE**	--	--	--	--	--	--

Comments:

MW2

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:24	2.43	--	--	--	--	--	--
13:26	2.88	225	13.0	589.6	1.62	6.96	-89.3
13:28	3.00	225	13.1	592.3	1.12	6.95	-105.0
13:30	3.07	225	13.0	595.2	0.96	6.95	-114.0
13:32	3.12	225	12.9	595.9	0.83	6.95	-119.6
13:34	3.15	225	13.0	596.3	0.80	6.94	-123.7
13:36	3.18	225	12.9	597.0	0.78	6.94	-126.6
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
13:40	**SAMPLE**	--	--	--	--	--	--

Comments:

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GROUNDWATER MONITORING WELL
LOW FLOW SAMPLING FIELD LOG

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

MW3

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:21	2.22	--	--	--	--	--	--
12:22	2.67	250	13.3	536.6	1.00	7.04	-77.2
12:24	2.73	250	13.5	536.3	0.80	7.03	-80.3
12:26	2.76	250	13.5	536.8	0.69	7.03	-83.6
12:28	2.77	250	13.6	538.5	0.55	7.03	-85.5
12:30	2.78	250	13.7	539.8	0.52	7.03	-87.2
12:32	2.80	250	13.7	540.2	0.50	7.03	-88.7
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
12:35	**SAMPLE**	--	--	--	--	--	--

Comments:

MW4

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:23	3.15	--	--	--	--	--	--
12:50	3.89	225	13.2	657	1.48	6.93	-65.4
12:52	4.04	225	13.2	661	1.18	6.93	-74.5
12:54	4.19	225	13.2	664	1.12	6.93	-82.2
12:56	4.26	225	13.2	664	1.08	6.93	-85.4
12:58	4.32	225	13.2	665	1.07	6.93	-89.0
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
13:00:00 PM	**SAMPLE**	--	--	--	--	--	--

Comments:

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GROUNDWATER MONITORING WELL LOW FLOW SAMPLING FIELD LOG

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

MW5

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:14	5.07	--	--	--	--	--	--
10:32	5.57	200	12.5	481.6	0.98	7.19	-70.9
10:34	5.60	200	12.6	484.0	0.79	7.13	-67.5
10:36	5.63	200	12.6	490.3	0.76	7.12	-68.9
10:38	5.65	200	12.6	490.0	0.74	7.12	-70.8
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
10:40	**SAMPLE**	--	--	--	--	--	--

Comments:

MW6

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:15	4.68	--	--	--	--	--	--
10:11	5.23	180	12.2	412.6	1.04	7.16	-86.0
10:13	5.33	180	12.2	412.3	0.82	7.16	-87.2
10:15	5.40	180	12.3	412.0	0.72	7.15	-87.9
10:17	5.46	180	12.3	411.8	0.70	7.15	-88.8
10:19	5.51	180	12.4	411.3	0.69	7.15	-89.5
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
10:20	**SAMPLE**	--	--	--	--	--	--

Comments:

AEROTECH ENVIRONMENTAL CONSULTING

www. AerotechEnvironmental.com

GROUNDWATER MONITORING WELL LOW FLOW SAMPLING FIELD LOG

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

MW7

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:16	3.12	--	--	--	--	--	--
9:51	5.27	250	13.1	546.0	2.82	7.05	-46.1
9:53	6.30	250	12.9	562.3	1.69	7.06	-72.3
9:55	7.55	250	13.0	606.9	1.34	7.07	-90.1
9:57	8.83	250	13.3	619.8	1.12	7.09	-101.6
9:59	10.81	250	13.5	628.8	1.18	7.10	-109.2
10:01	12.64	250	13.6	610.9	0.96	7.10	-113.8
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
13:55	**SAMPLE**	--	--	--	--	--	--

Comments: Well pumped Dry at 10:01, DTW = 12.66, Sampled at 13:55, DTW= 3.34

MW8

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:18	3.16	--	--	--	--	--	--
11:00	4.52	150	13.2	712	1.57	7.14	-89.9
11:02	4.93	150	13.3	723	1.37	7.14	-101.9
11:04	5.32	150	13.4	746	1.34	7.13	-110.4
11:06	5.62	150	13.4	751	1.31	7.13	-115.4
11:08	5.80	150	13.4	755	1.27	7.13	-118.8
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
11:10	**SAMPLE**	--	--	--	--	--	--

Comments:

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GROUNDWATER MONITORING WELL
LOW FLOW SAMPLING FIELD LOG

FIELD CREW: NAG	**PROJECT NAME:** Fife RV Center
DATE: 11/30/17	**PROJECT ADDRESS:** 3410 Pacific Highway East, Fife, WA

MW9

Time	DTW	Purge Rate	Temperature	Specific Conductivity	DO	pH	ORP
hr:min	feet	mL/min	°C	mS/cm	mg/L	unit	mV
9:20	1.58	--	--	--	--	--	--
11:36	1.63	210	13.6	720	2.21	7.03	-87.2
11:38	1.63	210	13.4	725	2.52	7.06	-101.3
11:40	1.63	210	13.5	720	2.53	7.05	-107.4
11:42	1.63	210	13.5	716	2.60	7.05	-111.7
11:44	1.63	210	13.5	717	2.70	7.05	-114.4
Ecology Parameter Limits (3 Consecutive Readings)			**+/- 0.1**	**+/- 10**	**+/- 0.05**	**+/- 0.1**	**+/- 10**
12:10	**SAMPLE**	--	--	--	--	--	--

Comments: