FULCRUM environmental consulting

September 18, 2012

Dunollie Enterprises, LLC
Attn: Brad Hill
P.O. Box 1729
Yakima, Washington 98907

RE: Groundwater Sampling Results for Vinyl Chloride Analysis September 2008 through April 2009

In August 2008, Fulcrum Environmental Consulting, Inc. (Fulcrum) began routine sampling of onsite monitoring wells 07 (MW-07), 08 (MW-08), and 09A (MW-09A) at the Dunollie Enterprises, LLC facility located at 805 North 8th Street in Yakima, Washington. Fulcrum has historically provided routine monitoring of select onsite wells in conformance with Washington State Department of Ecology (Ecology) issued permits for the facility. As a portion of site redevelopment planning, Fulcrum completed additional sampling of the three wells for vinyl chloride analysis.

Purpose of this letter is to summarize results of the limited sampling events and results of the vinyl chloride analysis.

Scope of Work

Fulcrum was retained by Dunollie Enterprises, LLC to complete collection of groundwater samples for laboratory analysis of vinyl chloride from three monitoring wells at the Dunollie Enterprises, LLC facility. Sampling of the three wells, MW-07, MW-08, and MW-09A, were completed concurrent with other site groundwater monitoring activities. See Figure 1 in Attachment A for monitoring well locations.

Fulcrum's sampling was limited to five events completed in 2008: August 31, September 17, October 28, November 24, and December 11; and two sampling events completed in 2009: January 7, and April 24.

A description of Fulcrum's onsite field sampling procedures is presented in Attachment B. Fulcrum's field sampling form documentation is presented in Attachment C.

Sample Results

Samples were submitted to TestAmerica Laboratories, Inc. for analysis by Environmental Protection Agency Method 524.2 for vinyl chloride utilizing gas chromatography in Selective Ion Mode (SIM). The SIM method provides a method detection limit (MDL) of 0.02 micrograms per liter (µg/L) or parts per billion (ppb).

Sample results from each of the three wells are presented in the Table 1 below in addition to the corresponding Washington State Model Toxics Control Act (MTCA) cleanup levels value for vinyl chloride. See Attachment D for Laboratory Analytical Reports.

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efulcrum.net

Table 1: Laboratory Results – Vinyl Chloride

Sample Event	Results (µg/L)		
	MW-07	MW-08	MW-09A
August 31, 2008	ND	0.024	ND
September 17, 2008	ND	0.022	ND
October 28, 2008	0.028	ND	ND
November 24, 2008	0.038	ND	ND
December 11, 2008	0.050	ND	ND
January 7, 2009	0.030	ND	ND
April 24, 2009	ND	0.030	ND
MTCA Method A Cleanup Level	0.200		

ND Not detected at the MDL of 0.02 µg/L

No significant data quality anomalies were noted in the laboratory results for the samples. All analytical quality assurance parameters were within acceptable ranges including field duplicate sample results.

Laboratory results for the seven monitoring events suggest that detected concentrations of vinyl chloride were below the MTCA Method A cleanup levels for each of the three monitoring wells.

If you should have any questions concerning the sampling event or this letter, please contact me at 509.574.0839.

Sincerely,

Jeremy M. Lynn, L.H.G.
Geologist

Ryan K. Mathews, CIH, CHMM
Principal

Attachments

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ATTACHMENT A

Figure

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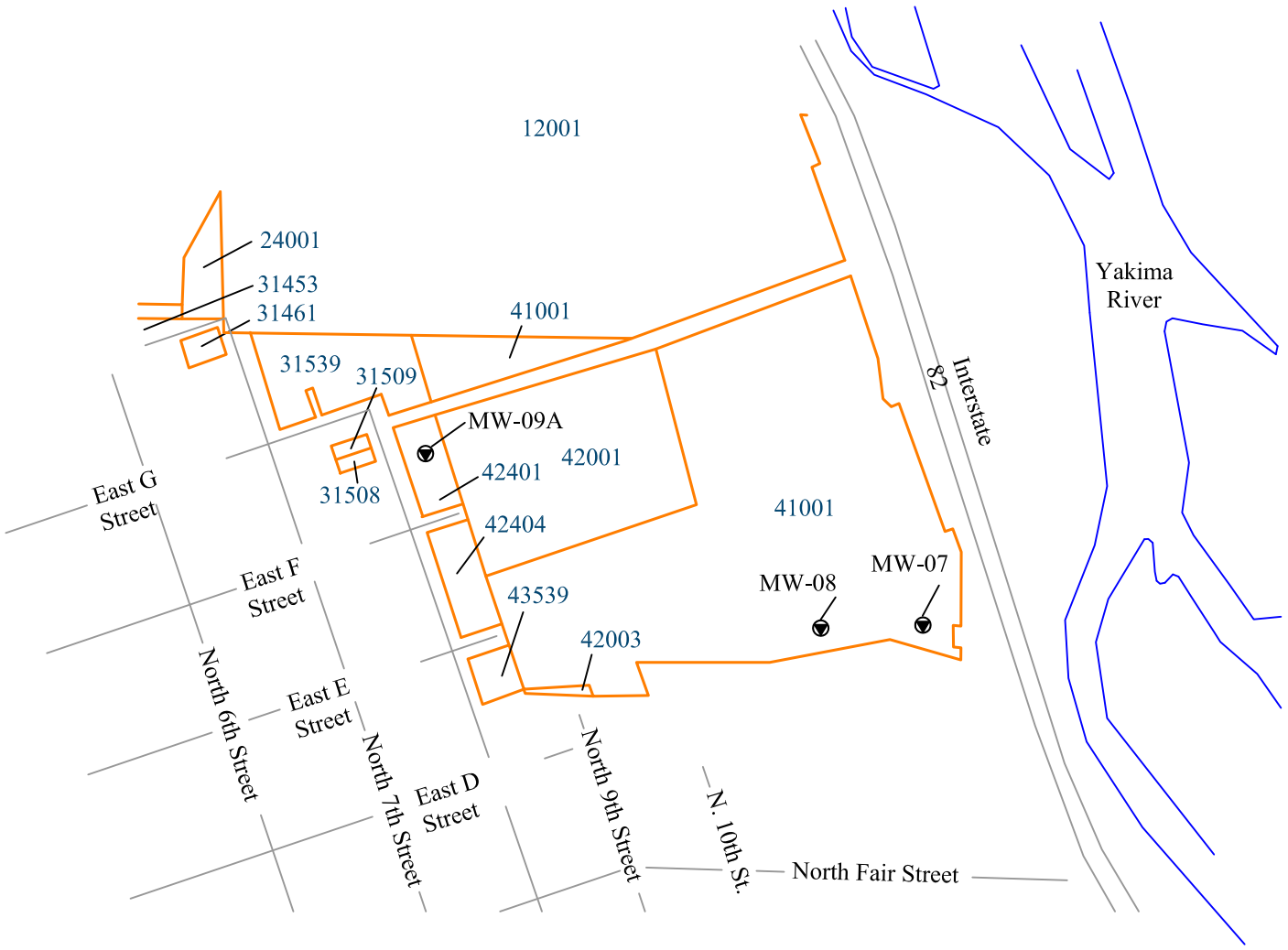

Legend

Parcel Site Number 191318-XXXXX

Approximate Parcel Boundary

Approximate Location of Sampled Monitoring Wells

Not to Scale

N

Fulcrum Environmental Consulting, Inc.
406 North Second Street, Yakima, Washington 98901
p: 509.574.0839 f: 509.575.8453 efulcrum.net
Vinyl Chloride Sampling. 08657. JML. 091812

Yakima Facility
Yakima, Washington

Monitoring Well Location Map

FIGURE
1

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ATTACHMENT B

Field Sampling Procedures

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Field Procedures

All monitoring wells are constructed with a 2-inch diameter PVC well casing. Well monitoring was conducted with a peristaltic pump using dedicated polyethylene tubing present in each well. Decontamination procedures were initiated after each measurement. Purged water was collected in a graduated three-gallon bucket and disposed to the ground. Following is a description of field procedures and analytical results for the monitoring well sampling event.

The following procedure was conducted for each well at the site: Upon arrival at each well, compression caps were removed and the well was opened and allowed to equilibrate for not less than 15-minutes. During the well equilibration, pH and conductivity meters were calibrated. At the end of the equilibration period, the depth to water was measured using a water level probe. The measured water level and construction depth of the well were used to calculate the volume of the well and the total minimum purge volume for the sampling event (three well volumes).

Using polyethylene tubing present in each well, a peristaltic pump was setup and used to purge water from the well. At approximately 1/3-intervals of total purge volume, field parameters of temperature, electric conductivity, and pH were collected. After a minimum of three well volumes were purged from each well, replicate field samples were taken to confirm that groundwater parameters had stabilized.

Field parameter data confirmed stabilization of groundwater conditions prior to sample collection. Once stabilization was confirmed, field testing for ferrous iron (iron phenanthroline) was conducted.

Following well purging, unfiltered samples were collected in two 40-milliliters vials for laboratory analysis. Following sampling and labeling of bottles, the water samples were placed into an ice chest containing ice to preserve water samples by refrigeration. At the end of the sampling event, the ice chest was shipped to the laboratory by common carrier for next day delivery. The samples were submitted, under chain-of-custody, to Test America in Amherst, New York for analysis.

For demonstration of quality assurance control purposes associated with this portion of site activities, Fulcrum collected one duplicate sample from MW-08 during the October 28, 2008 sampling event and the April 24, 2009 sampling event. Duplicates were labeled as MW11.

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ATTACHMENT C

Field Sampling Forms

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Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 010709-MW-07
Date Collected 01/07/09 Time 12:10
Weather Clear, ~50°F Collectors J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 10.480 Time: 11:50 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 01/07/09 11:51 Casing Volume (gal): 1.19

End Purge: Date/Time: 01/07/09 12:06 Purge Volume (gal): 3.57

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.47 – 10.480 = 6.99, 6.99 x 0.17 = 1.19, 1.19 x 3 = 3.57

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
11:56	1.25	6.27	59.5/15.3	340	See Comments Below
12:01	2.50	6.41	59.5/15.3	310	See Comments Below
12:06	3.75	6.38	59.5/15.3	310	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.39	59.5/15.3	310	
2	6.38	59.5/15.3	310	
3	6.39	59.5/15.3	310	
4	6.39	59.5/15.3	310	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.06 at 14.1 ºC Before Sample Collection

Conductivity meter reads 350 at 13.7 ºC Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was yellow with a mild odor and few suspended brown particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was yellow in color with a mild odor, and suspended brown particulates. Particulate concentrations decreased with subsequent purging.

Signature _____ Date 01/07/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 010709-MW-08
Date Collected 01/07/09 Time 12:35
Weather Clear, ~50°F Collectors J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 10.465 Time: 12:16 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 01/07/09 12:17 Casing Volume (gal): 1.12

End Purge: Date/Time: 01/07/09 12:31 Purge Volume (gal): 3.36

Total Depth of Well (ft. below top of well casing): 17.02

Purge Volume Calculation: 17.02– 10.465 = 6.56, 6.56 x 0.17 = 1.12, 1.12 x 3 = 3.36

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
12:22	1.25	6.40	59.4/15.2	400	See Comments Below
12:26	2.50	6.55	59.2/15.1	390	See Comments Below
12:31	3.75	6.61	59.2/15.1	380	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.60	59.2/15.1	380	
2	6.60	59.2/15.1	380	
3	6.61	59.2/15.1	380	
4	6.60	59.4/15.2	380	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.04 at 15.3 ºC Before Sample Collection

Conductivity meter reads 360 at 14.9 ºC Before Sample Collection

Ferrous Iron Level: 6 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was light yellow with a mild odor and few suspended red particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was light yellow in color with a mild odor, and suspended red particulates. Particulate concentrations decreased with subsequent purging.

Signature _____ Date 01/07/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 010709-MW-09A
Date Collected 01/07/09 Time 13:30
Weather Clear, ~50°F Collectors J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 15.515 Time: 13:05 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 01/07/09 13:07 Casing Volume (gal): 1.65

End Purge: Date/Time: 01/07/09 13:28 Purge Volume (gal): 4.95

Total Depth of Well (ft. below top of well casing): 25.20

Purge Volume Calculation: 25.20 - 15.515 = 9.69, 9.69 x 0.17 = 1.65, 1.65 x 3 = 4.95

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~5.50

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:14	1.75	6.45	58.8/14.9	210	See Comments Below
13:21	3.50	6.52	58.8/14.9	190	See Comments Below
13:28	5.25	6.56	58.8/14.9	190	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.56	58.8/14.9	190	
2	6.56	58.8/14.9	190	
3	6.56	58.8/14.9	190	
4	6.56	58.8/14.9	190	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.06 at 17.1 ºC Before Sample Collection

Conductivity meter reads 370 at 16.6 ºC Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). Sample collected concurrent with MW-09A and labeled MW-11 with a collection time of 14:30

Comments: Purge water was clear with no odor, and very few suspended black particulates. Particulate concentrations decreased with subsequent purging.

Signature _____ Date 01/07/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 042509-MW-07
Date Collected 04/25/09 Time 11:35
Weather Overcast, warm Collectors A. Harris

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 8.825 Time: 11:08 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 04/25/09 11:09 Casing Volume (gal): 1.47

End Purge: Date/Time: 04/25/09 11:32 Purge Volume (gal): 4.41

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.47 – 8.825 =8.65, 8.65 x 0.17 = 1.47, 1.47 x 3 = 4.41

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
11:16	1.50	6.24	59.0/15.0	310	See Comments Below
11:24	3.00	6.35	58.8/14.9	270	See Comments Below
11:32	4.50	6.36	58.8/14.9	270	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.36	58.6/14.8	260	
2	6.36	58.6/14.8	260	
3	6.36	58.6/14.8	260	
4	6.36	58.9/14.9	260	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.02 at 21.3 ºC Before Sample Collection

Conductivity meter reads 410 at 20.0 ºC Before Sample Collection

Ferrous Iron Level: 10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with a very mild odor and few suspended red particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
4	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	❑ Yes (_____) ✓ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Some iron precipitate on water level measuring probe after measurement. Purge water was clear in color with a mild odor, and suspended red particulates. Particulate concentrations and odor decreased with subsequent purging.

Signature  for A. Harris Date 04/25/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 42409-MW-08
Date Collected 04/24/09 Time 12:30
Weather Overcast, warm Collectors A. Harris

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 10.675 Time: 12:05 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 04/25/09 12:05 Casing Volume (gal): 1.09

End Purge: Date/Time: 04/25/09 12:37 Purge Volume (gal): 3.27

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.01-10.675 = 6.345, 6.345x 0.17 = 1.09, 1.09 x 3 = 3.27

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
12:15	1.25	6.60	59.0/15.0	350	See Comments Below
12:24	2.50	6.59	59.0/15.0	330	See Comments Below
12:34	3.75	5.52	59.0/15.0	330	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.52	59.0/15.0	330	
2	6.52	59.0/15.0	330	
3	6.55	58.8/14.9	330	
4	6.52	58.8/14.9	330	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.02 at 21.6 ºC Before Sample Collection

Conductivity meter reads 370 at 16.5 ºC Before Sample Collection

Ferrous Iron Level: Not Collected ppm ❑ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
4	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Some iron precipitate on water level measuring probe. Purge water was clear with no odor and no particulate.

Signature  For A. Harris Date 04/25/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 42409-MW-09A
Date Collected 04/24/09 Time 13:00
Weather Overcast, warm Collectors A. Harris

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 11.021 Time: 13:24 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 04/24/09 13:27 Casing Volume (gal): 1.09

End Purge: Date/Time: 04/24/09 14:50 Purge Volume (gal): 3.27

Total Depth of Well (ft. below top of well casing): 17.44

Purge Volume Calculation: 17.44-11.021 = 6.419, 6.419x 0.17 = 1.09, 1.09 x 3 = 3.27

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:35	1.25	6.63	56.7/13.7	200	See Comments Below
13:42	2.50	6.66	56.5/13.6	170	See Comments Below
13:49	3.75	6.66	56.5/13.6	170	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.67	56.8/13.8	170	
2	6.67	56.8/13.8	170	
3	6.67	56.8/13.8	170	
4	6.67	56.8/13.8	170	

pH Meter: pHep by Hanna Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.04 at 17.3 ºC Before Sample Collection

Conductivity meter reads 380 at 18.4 ºC Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). Sample collected concurrent with MW-09A and labeled MW-11 with a collection time of 11:00

Comments: Purge water was clear with no odor and no particulate.

Signature _____ For A. Harris Date 04/24/09

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 82808-MW07
Date Collected 8/31/08 Time 11:30
Weather Clear, warm Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 8.121 Time: 11:07 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 8/31/08 11:07 Casing Volume (gal): 1.59

End Purge: Date/Time: 8/31/08 11:23 Purge Volume (gal): 4.77

Total Depth of Well (ft. below top of well casing): 17.47 ft

Purge Volume Calculation: 17.47 – 8.121 = 9.35, 9.35 x 0.17 = 1.59, 1.59 x 3 = 4.77

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~5.50

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
11:13	1.75	6.7	68.9/20.5	130	See Comments Below
11:18	3.50	6.4	68.7/20.4	150	See Comments Below
11:23	5.25	6.4	68.4/20.2	160	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash ❑ Tap Rinse ✓ DI Water ✓ Other discharge water ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.4	68.4/20.2	160	
2	6.4	68.4/20.2	150	
3	6.4	68.4/20.2	160	
4	6.4	68.4/20.2	150	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.0 at 19.6 °C Before Sample Collection

Conductivity Meter Reads 400 at 19.5 °C Before Sample Collection

Ferrous Iron Level: 5 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample water had a very light yellow color, a mild odor and very few suspended red/brown particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
1	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
1	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	❑ Yes (_____) ✓No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). Duplicate sample collected concurrent with MW-07 and labeled MW-11 with a collection time of 14:30.

Comments: Purge water had a very light yellow color, a mild odor and suspended red/brown particulate. Particulate concentrations decreased with subsequent purge volumes.

Signature _____ Date 8/31/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 83108-MW08
Date Collected 8/31/08 Time 12:15
Weather Clear, warm Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 6.549 Time: 11:40 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 8/31/08 11:46 Casing Volume (gal): 1.78

End Purge: Date/Time: 8/31/08 12:05 Purge Volume (gal): 5.34

Total Depth of Well (ft. below top of well casing): 17.02 ft

7Purge Volume Calculation: 17.02 – 6.549 = 10.47, 10.47 x 0.17 = 1.78, 1.78 x 3 = 5.34

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~6.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
11:53	2.00	6.3	64.0/17.8	330	See Comments Below
11:59	4.00	6.5	64.0/17.8	280	See Comments Below
12:05	6.00	6.5	64.0/17.8	270	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.5	64.0/17.8	270	
2	6.5	64.0/17.8	270	
3	6.5	64.0/17.8	270	
4	6.5	64.0/17.8	270	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.0 at 21.9 °C Before Sample Collection

Conductivity Meter Reads 400 at 19.6 °C Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with a mild odor and few suspended black particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear with a mild odor and suspended black particulate. Particulate concentrations decreased with subsequent purge volumes.

Signature _____ Date 8/31/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 83108-MW09A
Date Collected 8/31/08 Time 13:15
Weather Clear, warm Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 7.951 Time: 12:43 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 8/31/08 12:45 Casing Volume (gal): 2.93

End Purge: Date/Time: 8/31/08 13:14 Purge Volume (gal): 8.79

Total Depth of Well (ft. below top of well casing): 25.20 ft

7Purge Volume Calculation: 25.20-7.951= 17.25, 17.25 x 0.17 = 2.93, 2.93 x 3 = 8.79

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~9.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
12:55	3.00	6.4	60.6/15.9	240	See Comments Below
13:04	6.00	6.5	60.3/15.7	200	See Comments Below
13:14	9.00	6.5	60.4/15.8	200	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water(3) ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.5	60.4/15.8	200	
2	6.5	60.4/15.8	200	
3	6.5	60.4/15.8	200	
4	6.5	60.4/15.8	200	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.0 at 28.6 °C Before Sample Collection

Conductivity Meter Reads 480 at 28.2 °C Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was clear with no odor and no particulate

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear with no odor or particulate

Signature _____ Date 8/31/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 091708-MW-07
Date Collected 09/17/08 Time 13:23
Weather Clear, warm Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 8.005 Time: 12:56 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 09/17/08 12:56 Casing Volume (gal): 1.61

End Purge: Date/Time: 09/17/08 13:13 Purge Volume (gal): 4.83

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.47–8.005=9.47, 9.47 x 0.17 = 1.61, 1.61 x 3 = 4.83

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 7.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:02	1.75	6.5	68.4/20.2	150	See Comments Below
13:08	3.50	6.4	68.2/20.1	180	See Comments Below
13:13	5.25	6.3	68.0/20.0	240	See Comments Below
13:18	7.00	6.3	68.0/20.0	240	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.4	68.0/20.0	250	
2	6.4	67.8/19.9	240	
3	6.4	67.8/19.9	240	
4	6.4	68.0/20.0	240	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 27.6 ºC Before Sample Collection

Conductivity meter reads 480 at 28.7 ºC Before Sample Collection

Ferrous Iron Level: 3 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	❑ Yes (_____) ✓ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear in color, with no odor, and few suspended red particulates. Purge water cleared with subsequent volumes. Conductivity meter calibration checked after purge of second well volume due to excessive change in readings between measurements.

Signature  Date 09/17/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 091708-MW-08
Date Collected 09/17/08 Time 14:05
Weather Clear, warm Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 6.560 Time: 13:40 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 09/17/08 13:40 Casing Volume (gal): 1.78

End Purge: Date/Time: 09/17/08 14:01 Purge Volume (gal): 5.34

Total Depth of Well (ft. below top of well casing): 17.02

Purge Volume Calculation: 17.02–6.560=10.46, 10.46 x 0.17 = 1.78, 1.78 x 3 = 5.34

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 6.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:47	2.00	6.3	64.4/18.0	380	See Comments Below
13:54	4.00	6.5	64.4/18.0	350	See Comments Below
14:01	6.00	6.5	64.4/18.0	340	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.5	64.4/18.0	340	
2	6.5	64.4/18.0	340	
3	6.5	64.4/18.0	340	
4	6.5	64.4/18.0	340	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 29.1 ºC Before Sample Collection

Conductivity meter reads 480 at 28.6 ºC Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear in color, with no odor, and few suspended brown particulates. Purge water cleared with subsequent volumes.

Signature _____ Date 09/17/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 091708-MW-09A
Date Collected 09/17/08 Time 15:00
Weather Clear, warm Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 8.189 Time: 14:25 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 09/17/08 14:25 Casing Volume (gal): 2.89

End Purge: Date/Time: 09/17/08 14:56 Purge Volume (gal): 8.67

Total Depth of Well (ft. below top of well casing): 25.20

Purge Volume Calculation: 25.20 – 8.189=17.01, 17.01 x 0.17 = 2.89, 2.89 x 3 = 8.67

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 6.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
14:35	3.00	6.6	61.7/16.5	240	See Comments Below
14:46	6.00	6.6	61.5/16.4	210	See Comments Below
14:56	9.00	6.6	61.5/16.4	200	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.6	61.5/16.4	200	
2	6.6	61.5/16.4	200	
3	6.6	61.5/16.4	200	
4	6.6	61.5/16.4	200	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 35.0 ºC Before Sample Collection

Conductivity meter reads 560 at 34.3 ºC Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample was clear with no odor and a few settled black particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear in color, with no odor, and few settled black particulates.

Signature  Date 09/17/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 102808-MW-07
Date Collected 10/28/08 Time 12:40
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 9.449 Time: 12:16 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 10/28/08 12:19 Casing Volume (gal): 1.36

End Purge: Date/Time: 10/28/08 12:33 Purge Volume (gal): 4.08

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.47–9.449=8.02, 8.02 x 0.17 = 1.36, 1.36 x 3 = 4.08

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 4.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
12:24	1.50	6.3	61.2/16.2	240	See Comments Below
12:28	3.00	6.3	61.2/16.2	220	See Comments Below
12:33	4.50	6.4	61.2/16.2	220	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.4	61.2/16.2	220	
2	6.4	61.2/16.2	220	
3	6.4	61.2/16.2	220	
4	6.4	61.2/16.2	220	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 16.3 ºC Before Sample Collection

Conductivity meter reads 370 at 16.4 ºC Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was light yellow with a mild odor and very few suspended black and orange particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was light yellow in color, with a mild odor, and few suspended black and orange particulates. Particulate concentrations were reduced with subsequent purge volumes.

Signature  Date 10/28/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 102808-MW-08
Date Collected 10/28/08 Time 13:10
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 8.251 Time: 12:45 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 10/28/08 12:48 Casing Volume (gal): 1.49

End Purge: Date/Time: 10/28/08 13:03 Purge Volume (gal): 4.47

Total Depth of Well (ft. below top of well casing): 17.02

Purge Volume Calculation: 17.02–8.251=8.77, 8.77 x 0.17 = 1.49, 1.49 x 3 = 4.47

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 4.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
12:53	1.50	6.4	65.7/18.7	280	See Comments Below
12:58	3.00	6.5	65.7/18.7	270	See Comments Below
13:03	4.50	6.5	65.7/18.7	270	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.5	65.7/18.7	270	
2	6.5	65.7/18.7	270	
3	6.5	65.7/18.7	270	
4	6.5	65.7/18.7	270	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 15.5 ºC Before Sample Collection

Conductivity meter reads 370 at 15.7 ºC Before Sample Collection

Ferrous Iron Level: 10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was light yellow with no odor and few suspended black and orange particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). Sample collected concurrent with MW-08 and labeled MW-11 with a collection time of 12:00

Comments: Purge water was light yellow in color, with no odor, and suspended black and orange particulates. Particulate concentrations were reduced with subsequent purge volumes.

Signature _____ Date 10/28/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 102808-MW-09A
Date Collected 10/28/08 Time 14:20
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 11.900 Time: 13:39 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 10/28/08 13:45 Casing Volume (gal): 2.26

End Purge: Date/Time: 10/28/08 14:07 Purge Volume (gal): 6.78

Total Depth of Well (ft. below top of well casing): 25.20

Purge Volume Calculation: 25.20-11.900=13.30, 13.30x 0.17 = 2.26, 2.26 x 3 = 6.78

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 7.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:55	2.50	6.6	60.1/15.6	150	See Comments Below
14:06	5.00	6.5	59.9/15.5	130	See Comments Below
14:07	7.50	6.5	59.9/15.5	130	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.5	59.9/15.5	130	
2	6.5	59.9/15.5	130	
3	6.5	59.9/15.5	130	
4	6.5	59.9/15.5	130	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.0 at 17.4 ºC Before Sample Collection

Conductivity meter reads 380 at 17.1 ºC Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was clear with no odor and no particulates

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear, with no odor, and no particulates

Signature  Date 10/28/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 112408-MW07
Date Collected 11/24/08 Time 12:25
Weather Clear, cold Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07 – Quarterly Sampling

Depth to Water (ft): 9.620 Time: 12:00 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 11/24/08 12:03 Casing Volume (gal): 1.33

End Purge: Date/Time: 11/24/08 12:21 Purge Volume (gal): 3.99

Total Depth of Well (ft. below top of well casing): 17.47 ft

Purge Volume Calculation: 17.47 – 9.620 = 7.85, 7.85 x 0.17 = 1.33, 1.33 x 3 = 3.99

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
12:09	1.50	6.22	59.4/15.2	250	See Comments Below
12:15	3.00	6.32	59.2/15.1	250	See Comments Below
12:21	4.50	6.35	59.2/15.1	250	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.35	59.2/15.1	250	
2	6.34	59.2/15.1	250	
3	6.35	59.2/15.1	250	
4	6.36	59.4/15.2	250	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.04 at 10.0 °C Before Sample Collection

Conductivity Meter Reads 310 at 9.4 °C Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): Sample water had a light yellow color, a mild odor and no particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (__ ___) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water had a light yellow color, a mild odor and suspended orange particulate. Particulate concentrations decreased with subsequent purge volumes.

Signature  Date 11/24/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 112408-MW08
Date Collected 11/24/08 Time 13:10
Weather Clear, cold Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 9.407 Time: 12:44 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 11/24/08 12:45 Casing Volume (gal): 1.28

End Purge: Date/Time: 11/24/08 13:02 Purge Volume (gal): 3.84

Total Depth of Well (ft. below top of well casing): 17.02 ft

Purge Volume Calculation: 17.02 – 9.487= 7.53, 7.53 x 0.17 = 1.20, 1.20 x 3 = 3.84

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~4.75

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
12:52	1.50	6.26	63.0/17.2	320	See Comments Below
12:57	3.00	6.42	63.0/17.2	320	See Comments Below
13:02	4.50	6.48	63.0/17.2	330	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.49	63.0/17.2	330	
2	6.50	63.0/17.2	330	
3	6.49	63.0/17.2	330	
4	6.49	63.0/17.2	330	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.07 at 9.0 °C Before Sample Collection

Conductivity Meter Reads 310 at 8.8 °C Before Sample Collection

Ferrous Iron Level: 9 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was light yellow with a mild odor and suspended brown particulate.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (__ ___) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water had a light yellow color, a mild odor and suspended brown particulate.

Signature _____ Date 11/24/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 112408-MW09A
Date Collected 11/24/08 Time 14:15
Weather Clear, cold Collectors: J.Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 13.535 Time: 13:32 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 11/24/08 13:42 Casing Volume (gal): 1.98

End Purge: Date/Time: 11/24/08 14:12 Purge Volume (gal): 5.94

Total Depth of Well (ft. below top of well casing): 25.20 ft

Purge Volume Calculation: 25.20 - 13.535 = 11.67, 11.67 x 0.17 = 1.98, 1.98 x 3 = 5.94

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~6.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity(µS)	Comments/Observations
13:52	2.00	6.40	59.2/15.1	180	See Comments Below
14:02	4.00	6.54	59.2/15.1	150	See Comments Below
14:12	6.00	6.55	59.2/15.1	150	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ❑ PVC ❑ Teflon ✓ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash ❑ Tap Rinse ✓ DI Water ✓ Other discharge water ❑ Other _____

Replicate	pH	Temperature (ºF/ºC)	Conductivity (µS)	Other
1	6.55	59.2/15.1	150	
2	6.55	59.2/15.1	150	
3	6.56	59.2/15.1	150	
4	6.56	59.2/15.1	150	

pH Meter: pH Tester by Hannah Cond. Meter: TDS Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH 7 Buffer Reads 7.05 at 10.2 °C Before Sample Collection

Conductivity Meter Reads 310 at 9.7 °C Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was clear with mild odor and no particulate

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (__ ___) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear with a mild odor and few suspended black particulates. Purge water had few to no particulates after first purge volume. Water level was below the tubing depth, replaced tubing.

Signature _____ Date 11/24/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 121108-MW-07
Date Collected 12/11/08 Time 11:56
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-07

Depth to Water (ft): 10.530 Time: 11:37 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 12/11/08 11:41 Casing Volume (gal): 1.18

End Purge: Date/Time: 12/11/08 11:55 Purge Volume (gal): 3.54

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.47–10.530=6.94, 6.94 x 0.17 = 1.18, 1.18 x 3 = 3.54

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
11:45	1.25	6.21	59.4/15.2	310	See Comments Below
11:50	2.50	6.29	59.4/15.2	300	See Comments Below
11:55	3.75	6.32	59.4/15.2	300	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.32	59.4/15.2	300	
2	6.32	59.4/15.2	300	
3	6.32	59.4/15.2	300	
4	6.32	59.4/15.2	300	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.07 at 7.2 ºC Before Sample Collection

Conductivity meter reads 300 at 7.1 ºC Before Sample Collection

Ferrous Iron Level: >10 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was light yellow with no odor and a few suspended red particulates.

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was light yellow in color, with no odor, and few suspended red particulates. No samples collected, field parameters only.

Signature _____ Date 12/11/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 121108-MW-08
Date Collected 12/11/08 Time 12:30
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-08

Depth to Water (ft): 10.093 Time: 12:08 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 12/11/08 12:09 Casing Volume (gal): 1.18

End Purge: Date/Time: 12/11/08 12:25 Purge Volume (gal): 3.54

Total Depth of Well (ft. below top of well casing): 17.47

Purge Volume Calculation: 17.02-10.093=6.93, 6.93 x 0.17 = 1.18, 1.18 x 3 = 3.54

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: π = 3.1416; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~ 4.00

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
12:15	1.25	6.25	61.3/16.3	320	See Comments Below
12:20	2.50	6.41	61.3/16.3	310	See Comments Below
12:25	3.75	6.45	61.3/16.3	310	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.32	61.3/16.3	310	
2	6.32	61.3/16.3	310	
3	6.32	61.3/16.3	310	
4	6.32	61.3/16.3	310	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.07 at 7.6 ºC Before Sample Collection

Conductivity meter reads 330 at 10.9 ºC Before Sample Collection

Ferrous Iron Level: 5 ppm ✓ Present ❑ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was clear with no odor and very few suspended particulates

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). _____

Comments: Purge water was clear, with no odor, and few suspended red particulates. Particulate concentrations decreased with subsequent purge volumes.

Signature  Date 12/11/08

Fulcrum Environmental Consulting, Inc.
406 North Second Street
Yakima, Washington 98901
(509) 574-0839 Fax (509) 575-8453

Project Name/Number: Dunollie Wells/08-657

SAMPLE No. 121108-MW-09A
Date Collected 12/11/08 Time 13:25
Weather Clear, cold Collectors Jeremy Lynn

Groundwater/Surface Water Sample Collection Form

WATER LEVEL/WELL/PURGE DATA

Sample Type: ✓ Groundwater ❑ Surface Water ❑ Other _____

Sample Location: MW-09A

Depth to Water (ft): 14.181 Time: 12:55 Measured from: ❑ Top of protective casing ✓ Top of well casing

Well Casing Type: ✓ PVC ❑ Stainless Steel ❑ Fiberglass Casing Diameter: 2-inches

Well Condition: Secure (✓ Yes / ❑ No) Damaged (❑ Yes / ✓ No) Describe: _____

Begin Purge: Date/Time: 12/11/08 12:56 Casing Volume (gal): 1.87

End Purge: Date/Time: 12/11/08 13:21 Purge Volume (gal): 5.61

Total Depth of Well (ft. below top of well casing): 25.20

Purge Volume Calculation: 25.20-14.181=11.02, 11.02 x 0.17 = 1.87, 1.87 x 3 = 5.61

VOLUME OF SCHEDULE 40 PVC PIPE
Casing Volume (gal) = $\pi r^2 h * 7.48$
Where: $\pi = 3.1416$; r = radius in ft.; h = ft. of water column

Diameter (inch)	O.D. (inch)	I.D. (inch)	Volume (gal/linear ft.)	Wt. Water (lbs/linear ft.)
2	2.375	2.067	0.17	1.45
4	4.500	4.026	0.66	5.51

Purge Water Disposal to: ❑ 55-gal Drum ❑ Storage Tank ✓ Ground ❑ Other _____ Gallons Purged: ~6.25

Time	Vol. Purged (gal)	pH	Temperature (ºF/ºC)	Conductivity (µS)	Comments/Observations
13:04	2.00	6.40	59.2/15.1	200	See Comments Below
13:13	4.00	6.45	59.2/15.1	170	See Comments Below
13:21	6.00	6.46	59.2/15.1	170	See Comments Below

SAMPLE COLLECTION DATA

Sample Collected With: ❑ Bailer ✓ Pump/Pump Type Peristaltic Dedicated Tubing (✓ Yes / ❑ No)

Made of: ❑ Stainless Steel ✓ PVC ❑ Teflon ❑ Polyethylene ❑ Other _____

Decon Procedure: ✓ Alconox Wash (1) ❑ Tap Rinse ✓ DI Water (2) ✓ Discharge water (3) ❑ Other _____

Replicate	Ph	Temperature (ºF/ºC)	Conductivity	Other
1	6.46	59.2/15.1	170	
2	6.46	59.2/15.1	170	
3	6.46	59.2/15.1	170	
4	6.46	59.2/15.1	170	

pH Meter: pH Tester1 Cond. Meter: EC Tester 1 Cond. Range: 0-1990 µS ATC: ❑ On ❑ Off

Meter Calibration Check: pH meter reads 7.05 at 9.9 ºC Before Sample Collection

Conductivity meter reads 330 at 11.4 ºC Before Sample Collection

Ferrous Iron Level: <2 ppm ❑ Present ✓ Absent

Sample Description (color, turbidity, odor, sheen, etc.): sample was clear with no odor and no particulate

QTY	SIZE	TYPE	FIELD FILTERED	PRESERVATIVE	LABORATORY ANALYSIS
2	40 mL	✓ Glass ❑ Plastic	❑ Yes / ✓ No	✓ Yes (HCl) ❑ No	Vinyl Chloride
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	
		❑ Glass ❑ Plastic	❑ Yes / ❑ No	❑ Yes (_____) ❑ No	

Duplicate Sample No(s). Sample collected concurrent with MW-08 and labeled as MW-11 with a collection time of 14:30

Comments: Purge water was clear, with no odor, and few suspended brown particulates. Water became clear after first 2 gallons purged.

Signature _____ Date 12/11/08

FULCRUM environmental consulting

ATTACHMENT D

Laboratory Analytical Reports

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job#: A08-A717

Project#: NY8A9804
Site Name: ANALYTICAL TESTING
Task: Dunollie VC Groundwater Sampling 08-526.1

Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

TestAmerica Laboratories Inc.

Sally J. Hoffman

Sally J. Hoffman
Project Manager

09/11/2008

RECEIVED SEP 15 2008

10 Hazelwood Drive Amherst, NY 14228 **tel** 716.691.2600 **fax** 716.691.7991 www.testamericainc.com

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 6/15/2007

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	Registration, NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington	CWA,RCRA	C1677
West Virginia	CWA,RCRA	252
Wisconsin	CWA, RCRA	998310390

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8A71701	MW07	WATER	08/31/2008	11:30	09/03/2008	10:00
A8A71702	MW08	WATER	08/31/2008	12:15	09/03/2008	10:00
A8A71703	MW09A	WATER	08/31/2008	13:15	09/03/2008	10:00

METHODS SUMMARY

Job#: A08-A717

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

PARAMETER	ANALYTICAL METHOD
Selective Ion Monitoring - VINYL CHLORIDE	OTHER S.I.M.

References:

OTHER Non-Standard Protocol and Method Defined by State, Client QAPP or Developed by Laboratory

SDG NARRATIVE

Job#: A08-A717

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-A717
Sample Cooler(s) were received at the following temperature(s); 9.0 °C
Samples were received at a temperature of 9.0° C. These samples were analyzed as per instructions from the client. Based on EPA data validation guidelines, there is no impact on data usability.

GC/MS Volatile Data

Task name was amended on 9/11/08 after report issue.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
[1]	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW07
Lab Sample ID: A8A71701
Date Collected: 08/31/2008
Time Collected: 11:30

Date Received: 09/03/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	09/04/2008 13:45	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW08
Lab Sample ID: A8A71702
Date Collected: 08/31/2008
Time Collected: 12:15

Date Received: 09/03/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	0.024		0.020	UG/L	S.I.M.	09/04/2008 14:10	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW09A
Lab Sample ID: A8A71703
Date Collected: 08/31/2008
Time Collected: 13:15

Date Received: 09/03/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	09/04/2008 14:35	TRB

Chronology and QC Summary Package

Date: 09/11/2008
Time: 16:57:06

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling
SELECTIVE ION MONITORING - VINYL CHLORIDE

Rept: AN1247

Client ID		VBLK41							
Job No	Lab ID	A08-A717	A8B2180702						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Vinyl chloride	UG/L	ND	0.020	NA		NA		NA	

11/15

NA = Not Applicable ND = Not Detected

Client Sample ID: VBLK41 LFB41
Lab Sample ID: A8B2180702 A8B2180701

Analyte	Units of Measure	Concentration Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
SELECTIVE ION MONITORING - VINYL CHLORID					
Vinyl chloride	UG/L	0.189	0.200	91	60-140

12/15

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	MW07 A08-A717 A8A71701	MW08 A08-A717 A8A71702	MW09A A08-A717 A8A71703		
Sample Date	08/31/2008 11:30	08/31/2008 12:15	08/31/2008 13:15		
Received Date	09/03/2008 10:00	09/03/2008 10:00	09/03/2008 10:00		
Extraction Date					
Analysis Date	09/04/2008 13:45	09/04/2008 14:10	09/04/2008 14:35		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS		
% Dry					

NA = Not Applicable

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	VBLK41 A08-A717 A8B2180702				
Sample Date					
Received Date					
Extraction Date					
Analysis Date	09/04/2008 10:27				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

NA = Not Applicable

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E 1st Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
20332 Empire Ave, Ste F1, Bend, OR 97701-5712 541-383-9310 FAX 382-7588
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

NCA CLIENT: Fulcrum Environmental Consulting

REPORT TO: Ryan Mathews

ADDRESS: 408 N. 2nd St.
Yakima, WA 98901

PHONE: 509-574-0859 FAX: 575-8453

INVOICE TO: Same

P.O. NUMBER:

PROJECT NAME: Parametrix/Donallie

PROJECT NUMBER: 08-657

SAMPLED BY: J. Lynn

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | 2 | 1 | <1
OTHER Specify: w/in 7-days of collection
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: Vinyl Chloride by SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NCA WO ID
1	83108-MW07	8/31/2008 1130	✓	W	2		
2	-MW08	1215	✓	↓	↓		
3	-MW09A	1315	✓	↓	↓		
4						Samples MW07+MW08 were collected	
5						using 1 preserved VOA and 1 unpreserved VOA.	
6						Sample MW09A was collected using 2 unpreserved	
7						VOAs. Please Analyze w/in the 7-day	
8						hold time	
9							
10							

RELEASED BY: Ann M. Palmer DATE: 9/2/08
PRINT NAME: Ann Palmer FIRM: Fulcrum TIME: 3:15pm

RECEIVED BY: [illegible] DATE: 9/3/08
PRINT NAME: FIRM: TIME: 1000

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: 9.0°C

TEMP:

COC REV 09/04

PAGE OF

15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job#: A08-B429

Project#: NY8A9804
Site Name: ANALYTICAL TESTING
Task: Dunollie VC Groundwater Sampling

Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

TestAmerica Laboratories Inc.

Sally Hoffman
Project Manager

09/23/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 6/15/2007

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	Registration, NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington	CWA,RCRA	C1677
West Virginia	CWA,RCRA	252
Wisconsin	CWA, RCRA	998310390

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8B42901	91708-MW07	WATER	09/17/2008	11:30	09/18/2008	10:00
A8B42902	91708-MW08	WATER	09/17/2008	12:15	09/18/2008	10:00
A8B42903	91708-MW09A	WATER	09/17/2008	13:15	09/18/2008	10:00

METHODS SUMMARY

Job#: A08-B429

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

PARAMETER	ANALYTICAL METHOD
Selective Ion Monitoring - VINYL CHLORIDE	OTHER S.I.M.

References:

OTHER Non-Standard Protocol and Method Defined by State, Client QAPP or Developed by Laboratory

SDG NARRATIVE

Job#: A08-B429

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-B429
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
[1]	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 91708-MW07
Lab Sample ID: A8B42901
Date Collected: 09/17/2008
Time Collected: 11:30

Date Received: 09/18/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	09/19/2008 14:02	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 91708-MW08
Lab Sample ID: A8B42902
Date Collected: 09/17/2008
Time Collected: 12:15

Date Received: 09/18/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	0.022		0.020	UG/L	S.I.M.	09/19/2008 14:22	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 91708-MW09A
Lab Sample ID: A8B42903
Date Collected: 09/17/2008
Time Collected: 13:15

Date Received: 09/18/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	09/19/2008 14:44	TRB

Chronology and QC Summary Package

Client ID		VBLK55							
Job No	Lab ID	A08-B429	A8B2275802						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Vinyl chloride	UG/L	ND	0.020	NA		NA		NA	

NA = Not Applicable ND = Not Detected

Client Sample ID: VBLK55 LFB55
Lab Sample ID: A8B2275802 A8B2275801

Analyte	Units of Measure	Concentration Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
SELECTIVE ION MONITORING - VINYL CHLORID					
Vinyl chloride	UG/L	0.182	0.200	88	60-140

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	91708-MW07 A08-B429 A8B42901	91708-MW08 A08-B429 A8B42902	91708-MW09A A08-B429 A8B42903		
Sample Date	09/17/2008 11:30	09/17/2008 12:15	09/17/2008 13:15		
Received Date	09/18/2008 10:00	09/18/2008 10:00	09/18/2008 10:00		
Extraction Date					
Analysis Date	09/19/2008 14:02	09/19/2008 14:22	09/19/2008 14:44		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS		
% Dry					

NA = Not Applicable

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	VBLK55 A08-B429 A8B2275802				
Sample Date					
Received Date					
Extraction Date					
Analysis Date	09/19/2008 11:00				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

NA = Not Applicable

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: Fulcrum Environmental Consulting, Inc.
REPORT TO: Ryan Mathews
ADDRESS: 406 N. 2nd St. Yakima, WA 98901
PHONE: (509) 574-0834 FAX: (509) 575-8453

INVOICE TO: Same

P.O. NUMBER:

PROJECT NAME: Dunolle VC Groundwater Sampling
PROJECT NUMBER: 08-457
SAMPLED BY: J. Lynn

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER (X) Specify: within 7 days of collection
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: Vinyl Chloride by 8260	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	91708-MW07	9/17/08 11:30		X			All samples unpreserved	
2	91708-MW08	" 12:15		X				
3	91708-MW09A	" 13:15		X				
4								
5								
6								
7								
8								
9								
10								

RELEASED BY: Ann M. Palmer	DATE: 9/17/08	RECEIVED BY:	DATE: 9/18/08
PRINT NAME: Ann M. Palmer FIRM: Fulcrum	TIME: 3:30 pm	PRINT NAME: FIRM: TA	TIME: 1000
RELEASED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS:

TEMP: 2.0

PAGE OF

TAL-1000(0408)

15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Job#: A08-D693

Project#: NY8A9804
Site Name: ANALYTICAL TESTING
Task: Dunollie VC Groundwater Sampling

Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

TestAmerica Laboratories Inc.

Sally Hoffman
Project Manager

11/05/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 6/15/2007

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	Registration, NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington	CWA,RCRA	C1677
West Virginia	CWA,RCRA	252
Wisconsin	CWA, RCRA	998310390

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8D69301	102808-MW07	WATER	10/28/2008	12:40	10/30/2008	10:00
A8D69302	102808-MW08	WATER	10/28/2008	13:10	10/30/2008	10:00
A8D69303	102808-MW09A	WATER	10/28/2008	14:20	10/30/2008	10:00
A8D69304	102808-MW11	WATER	10/28/2008	12:00	10/30/2008	10:00

METHODS SUMMARY

Job#: A08-D693

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

PARAMETER	ANALYTICAL METHOD
Selective Ion Monitoring - VINYL CHLORIDE	OTHER S.I.M.

References:

OTHER Non-Standard Protocol and Method Defined by State, Client QAPP or Developed by Laboratory

SDG NARRATIVE

Job#: A08-D693

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

General Comments

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According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-D693
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

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ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
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B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
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A	This flag indicates that a TIC is a suspected aldol-condensation product.
[1]	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
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H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 102808-MW07
Lab Sample ID: A8D69301
Date Collected: 10/28/2008
Time Collected: 12:40

Date Received: 10/30/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	0.028		0.020	UG/L	S.I.M.	10/31/2008 13:48	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 102808-MW08
Lab Sample ID: A8D69302
Date Collected: 10/28/2008
Time Collected: 13:10

Date Received: 10/30/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	10/31/2008 14:08	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 102808-MW09A
Lab Sample ID: A8D69303
Date Collected: 10/28/2008
Time Collected: 14:20

Date Received: 10/30/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	10/31/2008 14:28	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 102808-MW11
Lab Sample ID: A8D69304
Date Collected: 10/28/2008
Time Collected: 12:00

Date Received: 10/30/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	10/31/2008 14:48	TRB

Chronology and QC Summary Package

Date: 11/05/2008
Time: 09:08:50

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling
SELECTIVE ION MONITORING - VINYL CHLORIDE

Rept: AN1247

Client ID		VBLK04							
Job No	Lab ID	A08-D693	A8B2525302						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Vinyl chloride	UG/L	ND	0.020	NA		NA		NA	

12/16

NA = Not Applicable ND = Not Detected

TestAmerica Lab

Client Sample ID: VBLK04 LFB04
Lab Sample ID: A8B2525302 A8B2525301

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
SELECTIVE ION MONITORING - VINYL CHLORID					
Vinyl chloride	UG/L	0.176	0.200	84	60-140

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	102808-MW07 A08-D693 A8D69301	102808-MW08 A08-D693 A8D69302	102808-MW09A A08-D693 A8D69303	102808-MW11 A08-D693 A8D69304	
Sample Date	10/28/2008 12:40	10/28/2008 13:10	10/28/2008 14:20	10/28/2008 12:00	
Received Date	10/30/2008 10:00	10/30/2008 10:00	10/30/2008 10:00	10/30/2008 10:00	
Extraction Date					
Analysis Date	10/31/2008 13:48	10/31/2008 14:08	10/31/2008 14:28	10/31/2008 14:48	
Extraction HT Met?	-	-	-	-	
Analytical HT Met?	YES	YES	YES	YES	
Sample Matrix	WATER	WATER	WATER	WATER	
Dilution Factor	1.0	1.0	1.0	1.0	
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS	
% Dry					

NA = Not Applicable

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	VBLK04 A08-D693 A8B2525302				
Sample Date					
Received Date					
Extraction Date					
Analysis Date	10/31/2008 13:27				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

15/16

NA = Not Applicable

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Fulcrum Environmental consulting	Kyan Matthews	10/28/2008	112233
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
406 N. 2nd Street	509-574-0839 575-8453		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Yakima / WA / 98901			Vinyl Chloride
Project Name and Location (State)	**Carrier/Waybill Number**		
Dunollie VC Groundwater Sampling			
Contract/Purchase Order/Quote No.			
08-657			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Vinyl Chloride
102808-MW07	10.28.08	1240		X						X			X
-MW08	↓	1310		X						X			X
-MW09A	↓	1420		X						X			X
-MW11		1200		X						X			X

Special Instructions/ Conditions of Receipt

Please analyze by SIM methodology

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10/28/08	16:05	1. Received By	10/30/08	1000
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

207

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

16/16

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Job#: A08-F045

Project#: NY8A9804
Site Name: ANALYTICAL TESTING
Task: Dunollie VC Groundwater Sampling

Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

TestAmerica Laboratories Inc.

Sally Hoffman
Project Manager

12/04/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 11/3/2008

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8F04501	MW-07	WATER	11/24/2008	12:25	11/25/2008	10:30
A8F04502	MW-08	WATER	11/24/2008	13:10	11/25/2008	10:30
A8F04503	MW-09A	WATER	11/24/2008	14:15	11/25/2008	10:30

METHODS SUMMARY

Job#: A08-F045

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

PARAMETER	ANALYTICAL METHOD
Selective Ion Monitoring - VINYL CHLORIDE	OTHER S.I.M.

References:

OTHER Non-Standard Protocol and Method Defined by State, Client QAPP or Developed by Laboratory

SDG NARRATIVE

Job#: A08-F045

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

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According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-F045
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
[1]	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW-07
Lab Sample ID: A8F04501
Date Collected: 11/24/2008
Time Collected: 12:25

Date Received: 11/25/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	0.038		0.020	UG/L	S.I.M.	11/26/2008 17:58	MF

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW-08
Lab Sample ID: A8F04502
Date Collected: 11/24/2008
Time Collected: 13:10

Date Received: 11/25/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	11/26/2008 18:18	MF

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: MW-09A
Lab Sample ID: A8F04503
Date Collected: 11/24/2008
Time Collected: 14:15

Date Received: 11/25/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	11/26/2008 18:39	MF

Chronology and QC Summary Package

Date: 12/04/2008
Time: 09:52:53

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling
SELECTIVE ION MONITORING - VINYL CHLORIDE

Rept: AN1247

Client ID		VBLK48							
Job No	Lab ID	A08-F045	A8B2676502						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Vinyl chloride	UG/L	ND	0.020	NA		NA		NA	

11/15

NA = Not Applicable ND = Not Detected

Date : 12/04/2008 09:53:05 Rept: ANO364

Client Sample ID: VBLK48 LFB48
Lab Sample ID: A8B2676502 A8B2676501

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
SELECTIVE ION MONITORING - VINYL CHLORID					
Vinyl chloride	UG/L	0.172	0.200	82	60-140

12/15

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	MW-07 A08-F045 A8F04501	MW-08 A08-F045 A8F04502	MW-09A A08-F045 A8F04503		
Sample Date	11/24/2008 12:25	11/24/2008 13:10	11/24/2008 14:15		
Received Date	11/25/2008 10:30	11/25/2008 10:30	11/25/2008 10:30		
Extraction Date					
Analysis Date	11/26/2008 17:58	11/26/2008 18:18	11/26/2008 18:39		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS		
% Dry					

NA = Not Applicable

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	VBLK48 A08-F045 A8B2676502				
Sample Date					
Received Date					
Extraction Date					
Analysis Date	11/26/2008 10:46				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

NA = Not Applicable

TestAmerica
ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: Fulcrum Environmental Consulting
INVOICE TO: Same

REPORT TO: Ryan Mathews
ADDRESS: 406 N. 2nd St
Yakima, WA
PHONE: 509.574.0839 FAX: 509.575.8453

P.O. NUMBER:

PROJECT NAME: Donnelly VC Groundwater Sampling
PROJECT NUMBER: 08-657
SAMPLED BY: J. Lynn

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* *Turnaround Requests less than standard* **may incur Rush Charges.**

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: HCl	REQUESTED ANALYSES: Vinyl Chloride	REQUESTED ANALYSES: Lead by	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
1	112408-MW07	11/24/08 1225	Y			W	2		
2	-MW08	↓ 1310	Y						
3	-MW09A	1415	Y						
4									
5									
6									
7									
8									
9									
10									

RELEASED BY: [signature] DATE: 11/24/08
PRINT NAME: Jeremy Lynn FIRM: Fulcrum TIME: 16:05

RECEIVED BY: [signature] DATE: 11/24/08
PRINT NAME: Michael Rath FIRM: BV TIME: 1630

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 2.0

COC REV 05/2006 PAGE OF

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and for any additional analyses performed on this project.
Payment for services is due within 30 days from the date of invoice unless otherwise contracted. Sample(s) will be disposed of after 30 days unless otherwise contracted.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Job#: A08-F823

Project#: NY8A9804
Site Name: ANALYTICAL TESTING
Task: Dunollie VC Groundwater Sampling

Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

TestAmerica Laboratories Inc.

Sally Hoffman
Project Manager

12/24/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 11/3/2008

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8F82301	121108-MW07	WATER	12/11/2008	12:00	12/12/2008	10:30
A8F82302	121108-MW08	WATER	12/11/2008	12:30	12/12/2008	10:30
A8F82303	121108-MW09A	WATER	12/11/2008	13:25	12/12/2008	10:30

METHODS SUMMARY

Job#: A08-F823

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

PARAMETER	ANALYTICAL METHOD
Selective Ion Monitoring - VINYL CHLORIDE	OTHER S.I.M.

References:

OTHER Non-Standard Protocol and Method Defined by State, Client QAPP or Developed by Laboratory

SDG NARRATIVE

Job#: A08-F823

Project#: NY8A9804
Site Name: ANALYTICAL TESTING

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-F823
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
[1]	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 121108-MW07
Lab Sample ID: A8F82301
Date Collected: 12/11/2008
Time Collected: 12:00

Date Received: 12/12/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	0.050		0.020	UG/L	S.I.M.	12/16/2008 11:10	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 121108-MW08
Lab Sample ID: A8F82302
Date Collected: 12/11/2008
Time Collected: 12:30

Date Received: 12/12/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	12/16/2008 11:29	TRB

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling

Sample ID: 121108-MW09A
Lab Sample ID: A8F82303
Date Collected: 12/11/2008
Time Collected: 13:25

Date Received: 12/12/2008
Project No: NY8A9804
Client No: 357434
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
VINYL CHLORIDE BY SIM							
Vinyl chloride	ND		0.020	UG/L	S.I.M.	12/16/2008 11:48	TRB

Chronology and QC Summary Package

Date: 12/24/2008
Time: 07:17:09

ANALYTICAL TESTING
Dunollie VC Groundwater Sampling
SELECTIVE ION MONITORING - VINYL CHLORIDE

Rept: AN1247

Client ID		VBLK74							
Job No	Lab ID	A08-F823	A8B2773902						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Vinyl chloride	UG/L	ND	0.020	NA		NA		NA	

11/15

NA = Not Applicable ND = Not Detected

TestAmerica Lab

Client Sample ID: VBLK74 LFB74
Lab Sample ID: A8B2773902 A8B2773901

Analyte	Units of Measure	Concentration Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
SELECTIVE ION MONITORING - VINYL CHLORID					
Vinyl chloride	UG/L	0.181	0.200	84	60-140

12/15

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	121108-MW07 A08-F823 A8F82301	121108-MW08 A08-F823 A8F82302	121108-MW09A A08-F823 A8F82303		
Sample Date	12/11/2008 12:00	12/11/2008 12:30	12/11/2008 13:25		
Received Date	12/12/2008 10:30	12/12/2008 10:30	12/12/2008 10:30		
Extraction Date					
Analysis Date	12/16/2008 11:10	12/16/2008 11:29	12/16/2008 11:48		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS		
% Dry					

NA = Not Applicable

SELECTIVE ION MONITORING - VINYL CHLORIDE

Client Sample ID Job No & Lab Sample ID	VBLK74 A08-F823 A8B2773902				
Sample Date					
Received Date					
Extraction Date					
Analysis Date	12/16/2008 10:45				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

NA = Not Applicable

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E 1st Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
20332 Empire Ave, Ste F1, Bend, OR 97701-5712 541-383-9310 FAX 382-7588
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

NCA CLIENT: Fulcrum Environmental Consulting
REPORT TO: Ryan Mathews
ADDRESS: 406 N. 2nd St. Yakima, WA 98901
PHONE: 509-574-0839 FAX: 509-575-8453

INVOICE TO: Same
P.O. NUMBER:

PROJECT NAME: Dunnville VC Groundwater Sampling
PROJECT NUMBER: 08-657
SAMPLED BY: J. Lynn

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: Vinyl chloride by SIM methods	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NCA WO ID
1	121108-MW07	12/11/08 1200			W	2	Please Analyze	
2	MW08	1230			↓	↓	by SIM.	
3	MW09A	1325			↓	↓	Sample Containers Preserved w/HCl	
4								
5								
6								
7								
8								
9								
10								

RELEASED BY: [signature] DATE: 12/11/08
PRINT NAME: J. Lynn FIRM: Fulcrum TIME: 14:05

RECEIVED BY: [signature] DATE: 12/12/08
PRINT NAME: FIRM: TIME: 1080

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 20

COC REV 09/04

PAGE OF

15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

Work Order: RSA0233

SDG Number:

Work Order Description: Dunollie VC Groundwater Sampling

For:

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Sally J Hoffman

Sally Hoffman
Project Manager
Sally.Hoffman@testamericainc.com

Thursday, January 22, 2009

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received:	01/08/09
406 N. 2nd Street			Reported:	01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041		
Project Manager	Project Number:	FULCRUM		

Case Narrative

The Chain of Custody, 1 page, is included and is an integral part of this report.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received:	01/08/09
406 N. 2nd Street			Reported:	01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041		
Project Manager	Project Number:	FULCRUM		

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	Rpt Limit	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSA0233-01 (010709-MW07 - Water)					**Sampled: 01/07/09 12:10**			**Recvd: 01/08/09 16:05**	
Selective Ion Monitoring Volatile Organic Compounds									
Vinyl chloride	**0.030**		0.020	ug/L	1.00	01/15/09 01:47	MF	9A14061	8260B SIM

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received:	01/08/09
406 N. 2nd Street			Reported:	01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041		
Project Manager	Project Number:	FULCRUM		

Sample Summary

SAMPLE IDENTIFICATION	LAB NUMBER	Client Matrix	Date/Time Sampled	Date/Time Received
010709-MW07	RSA0233-01	Water	01/07/09 12:10	01/08/09 16:05
010709-MW08	RSA0233-02	Water	01/07/09 12:35	01/08/09 16:05
010709-MW09A	RSA0233-03	Water	01/07/09 13:30	01/08/09 16:05

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901
Project Manager

Work Order: RSA0233
Project: Dunollie VC Groundwater Sampling - NY8A98041
Project Number: FULCRUM

Received: 01/08/09
Reported: 01/22/09 15:47

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSA0233-01 (010709-MW07 - Water)					**Sampled: 01/07/09 12:10**		**Recvd: 01/08/09 16:05**		
Selective Ion Monitoring Volatile Organic Compounds									
Vinyl chloride	**0.030**		0.020	ug/L	1.00	01/15/09 01:47	MF	9A14061	8260B SIM
Sample ID: RSA0233-02 (010709-MW08 - Water)					**Sampled: 01/07/09 12:35**		**Recvd: 01/08/09 16:05**		
Selective Ion Monitoring Volatile Organic Compounds									
Vinyl chloride	ND		0.020	ug/L	1.00	01/15/09 02:06	MF	9A14061	8260B SIM
Sample ID: RSA0233-03 (010709-MW09A - Water)					**Sampled: 01/07/09 13:30**		**Recvd: 01/08/09 16:05**		
Selective Ion Monitoring Volatile Organic Compounds									
Vinyl chloride	ND		0.020	ug/L	1.00	01/15/09 02:24	MF	9A14061	8260B SIM

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received: 01/08/09
406 N. 2nd Street			Reported: 01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041	
Project Manager	Project Number:	FULCRUM	

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Volume	Date	Analyst	Extraction Method
Selective Ion Monitoring Volatile Organic Compounds							
8260B SIM	9A14061	RSA0233-01	25	25	01/14/09 20:21	MAF	5030B MS
8260B SIM	9A14061	RSA0233-02	25	25	01/14/09 20:21	MAF	5030B MS
8260B SIM	9A14061	RSA0233-03	25	25	01/14/09 20:21	MAF	5030B MS

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901
Project Manager

Work Order: RSA0233
Project: Dunollie VC Groundwater Sampling - NY8A98041
Project Number: FULCRUM

Received: 01/08/09
Reported: 01/22/09 15:47

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Spike Level	MRL	MDL	Units	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Selective Ion Monitoring Volatile Organic Compounds													
Vinyl chloride	9A14061		0.020	N/A	ug/L	<0.020							

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received: 01/08/09
406 N. 2nd Street			Reported: 01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041	
Project Manager	Project Number:	FULCRUM	

Analyte	Seq/ Batch	Source Result	Spike Level	MRL	MDL	Units	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Selective Ion Monitoring Volatile Organic Compounds														
Vinyl chloride	RA91411		0.200	N/A	N/A	ug/L	0.210		105		0-200			

Fulcrum Environmental Consulting	Work Order:	RSA0233	Received: 01/08/09
406 N. 2nd Street			Reported: 01/22/09 15:47
Yakima, WA 98901	Project:	Dunollie VC Groundwater Sampling - NY8A98041	
Project Manager	Project Number:	FULCRUM	

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Spike Level	MRL	MDL	Units	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Selective Ion Monitoring Volatile Organic Compounds													
Vinyl chloride	9A14061	0.200	N/A	N/A	ug/L	0.170		85		60-140		30	

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E 1st Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
20332 Empire Ave, Ste F1, Bend, OR 97701-5712 541-383-9310 FAX 382-7588
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

NCA CLIENT: Fulcrum Environmental Consulting

REPORT TO: Ryan Mathews

ADDRESS: 406 N. 2nd St
Yakima, WA 98901

PHONE: 5095740839 FAX: 575-5455

INVOICE TO: Same

P.O. NUMBER:

PROJECT NAME: Dunolli VCGW sampling

PROJECT NUMBER: 08-657

SAMPLED BY: J. Lynn

TURNAROUND REQUEST
In Business Days *
Organic & Inorganic Analyses
10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses
5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: Vinyl chloride	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NCA WO ID
1	01-0709-MW07	01/07/09 1210				Please Analyze	
2	-MW08	1235				by SIM	
3	-MW09A	1330				Methodology.	
4						Sample containers	
5						unpreserved.	
6						Analyze w/in	
7						7-days of	
8						collection	
9							
10							

REQUESTED ANALYSES

RELEASED BY:	DATE: 1/7/09	RECEIVED BY:	DATE: 1/09/09
PRINT NAME: J. Lynn FIRM: Fulcrum	TIME: 1605	PRINT NAME: KENNETH P. KENNEDY FIRM: BUREAU	TIME: 1530
RELEASED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS:

TEMP: 2.0°C

COC REV 09/04

PAGE OF

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

Work Order: RSD1102

Project Description
Dunollie VC Groundwater Sampling

For:

Ryan Mathews
Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Sally J Hoffman

Sally Hoffman
Project Manager
Sally.Hoffman@testamericainc.com

Friday, May 1, 2009

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Case Narrative

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

DATA QUALIFIERS AND DEFINITIONS

B Analyte was detected in the associated Method Blank.

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSD1102-02 (42409-MW08 - Water)					**Sampled: 04/24/09 12:36**			**Recvd: 04/28/09 10:00**		
Selective Ion Monitoring Volatile Organic Compounds										
Vinyl chloride	**0.030**		0.020	NR	ug/L	1.00	04/30/09 15:44	TRB	9D29076	8260B SIM

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Sample Summary

SAMPLE IDENTIFICATION	LAB NUMBER	Client Matrix	Date/Time Sampled	Date/Time Received
42409-MW07	RSD1102-01	Water	04/24/09 11:35	04/28/09 10:00
42409-MW08	RSD1102-02	Water	04/24/09 12:36	04/28/09 10:00
42409-MW09A	RSD1102-03	Water	04/24/09 17:00	04/28/09 10:00
42409-MW11	RSD1102-04	Water	04/24/09 11:00	04/28/09 10:00

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSD1102-01 (42409-MW07 - Water)						**Sampled: 04/24/09 11:35**		**Recvd: 04/28/09 10:00**		
Selective Ion Monitoring Volatile Organic Compounds										
Vinyl chloride	ND		0.020	NR	ug/L	1.00	04/30/09 15:25	TRB	9D29076	8260B SIM

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSD1102-02 (42409-MW08 - Water)						**Sampled: 04/24/09 12:36**		**Recvd: 04/28/09 10:00**		
Selective Ion Monitoring Volatile Organic Compounds										
Vinyl chloride	**0.030**		0.020	NR	ug/L	1.00	04/30/09 15:44	TRB	9D29076	8260B SIM

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSD1102-03 (42409-MW09A - Water)						**Sampled: 04/24/09 17:00**		**Recvd: 04/28/09 10:00**		
Selective Ion Monitoring Volatile Organic Compounds										
Vinyl chloride	ND		0.020	NR	ug/L	1.00	04/30/09 16:02	TRB	9D29076	8260B SIM

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

Analytical Report

Analyte	Sample Result	Data Qualifiers	Rpt Limit	MDL	Units	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: RSD1102-04 (42409-MW11 - Water)						**Sampled: 04/24/09 11:00**		**Recvd: 04/28/09 10:00**		
Selective Ion Monitoring Volatile Organic Compounds										
Vinyl chloride	ND		0.020	NR	ug/L	1.00	04/30/09 16:21	TRB	9D29076	8260B SIM

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Units	Extract Volume	Units	Date	Analyst	Extraction Method
Selective Ion Monitoring Volatile Organic Compounds									
8260B SIM	9D29076	RSD1102-01	25.00	mL	25.00	mL	04/29/09 18:38	TRB	5030B MS
8260B SIM	9D29076	RSD1102-02	25.00	mL	25.00	mL	04/29/09 18:38	TRB	5030B MS
8260B SIM	9D29076	RSD1102-03	25.00	mL	25.00	mL	04/29/09 18:38	TRB	5030B MS
8260B SIM	9D29076	RSD1102-04	25.00	mL	25.00	mL	04/29/09 18:38	TRB	5030B MS

Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Work Order: RSD1102

Project: Dunollie VC Groundwater Sampling
Project Number: FULCRUM

Received: 04/28/09
Reported: 05/01/09 11:23

LABORATORY QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	MRL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Qualifier
Selective Ion Monitoring Volatile Organic Compounds												
Blank Analyzed: 04/30/09 (9D29076-BLK1)												
Vinyl chloride	9D29076			0.020	NA	ug/L	ND					B
LCS Analyzed: 04/30/09 (9D29076-BS1)												
Vinyl chloride	9D29076		0.20	N/A	NA	ug/L	0.160	80	60-140			

TestAmerica

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: Fulcrum Environmental Consulting

INVOICE TO: Same

REPORT TO: Ryan Mathews
ADDRESS: 406 N. 2nd Street
Yakima, WA 98901
PHONE: 509 5740839 FAX: 5758453

P.O. NUMBER:

PROJECT NAME: Pinnacle VC GW Sampling

PROJECT NUMBER: 08-657

SAMPLED BY: J. Lynn

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: [X] STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: HCl

REQUESTED ANALYSES: VOA Chlorides | SIM

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	VOA	Chlorides	SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	42409-MW07	4/24/09 11:35	X			W	2	Please analyze	
2	MW08	12:36	X					w/in std.	
3	MW09A	17:00	X					hold time	
4	MW11	11:00	X						
5									
6									
7									
8									
9									
10									

RELEASED BY: [signature] DATE: 4/27
PRINT NAME: FIRM: Fulcrum TIME:

RECEIVED BY: [signature] DATE: 4-27-09
PRINT NAME: ROBERT. MERCER FIRM: TA Bothell TIME: 1000

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP:

PAGE OF

TAL-1000(0408)

2.0°C

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11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 — 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 — 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 — 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 — 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: Fulcrum Environmental Consulting

REPORT TO: Ryan Mathews
ADDRESS: 406 N. 2nd Street
Yakima, WA 98901

PHONE: 509 5740839 FAX: 5758453

INVOICE TO: Same

P.O. NUMBER:

PROJECT NAME: Dunollie VC GW Sampling

PROJECT NUMBER: 08-657

SAMPLED BY: J. Lynn

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses: [X] STD. 7 5 4 3 2 1 <1

Petroleum Hydrocarbon Analyses: 5 STD. 4 3 2 1 <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: HCl

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME		Vinyl Chloride	SIM											MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	42409-MW07	4/24/09	11:35	X												W	2	Please analyze	
2	MW08	↓	12:36	X												↓	↓	w/in std.	
3	MW09A	↓	17:00	X												↓	↓	hold time	
4	MW11	↓	11:00	X												↓	↓		
5																			
6																			
7																			
8																			
9																			
10																			

RELEASED BY: [signature] PRINT NAME: FIRM: Fulcrum DATE: 4/27 TIME:

RECEIVED BY: [signature] PRINT NAME: Robert Mence FIRM: TA Bott DATE: 4-28-09 TIME: 1800

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:

TEMP:

PAGE OF

2.0°

TAL-1000(0408)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

10 Hazelwood Drive Amherst, NY 14228 716-691-2600 Fax:716-691-7991

INVOICE

Invoice To: 1357434

Fulcrum Environmental Consulting
Accounts Payable
406 N. 2nd Street
Yakima, WA 98901

Invoice Number: 48902452

Remit Payment To:
TestAmerica Laboratories, Inc.
Dept 2314
P.O. Box 122314
Dallas, TX 75312-2314

TestAmerica EIN: 23-2919996

For Billing Inquiries please contact: 716-691-2600

Invoice Date: 05/01/09

Client: Fulcrum Environmental Consulting
Client Contact: Ryan Mathews
Lab Contact: Sally Hoffman / Sally.Hoffman@testamericainc.com

Terms
See Below

Sample Qty	Sample Name / Analysis	Project / Matrix	PO Number / Price	Surcharge	Extended
Workorder: RSD1102	**Sampled: 4/24/2009**	**Received: 04/28/09**	**Reported: 05/01/09**		
RSD1102-01	**42409-MW07**	**Dunollie VC Groundwater Sampling - NY8A98041 FULCRUM**			
1	8260_SIM	Water	$110.00	None	$110.00
				Sample Total:	$110.00
RSD1102-02	**42409-MW08**	**Dunollie VC Groundwater Sampling - NY8A98041 FULCRUM**			
1	8260_SIM	Water	$110.00	None	$110.00
				Sample Total:	$110.00
RSD1102-03	**42409-MW09A**	**Dunollie VC Groundwater Sampling - NY8A98041 FULCRUM**			
1	8260_SIM	Water	$110.00	None	$110.00
				Sample Total:	$110.00
RSD1102-04	**42409-MW11**	**Dunollie VC Groundwater Sampling - NY8A98041 FULCRUM**			
1	8260_SIM	Water	$110.00	None	$110.00
				Sample Total:	$110.00
				Work Order Total:	$440.00

Additional Items

1	Environmental Management Fee	$22.00

Invoice Total: **$462.00**

Any applicable rush charges are based on the actual turn-around-time met.

ANALYTICAL TESTING