

Location Sample Date Depths (ft)						WS-001 4/19/2013 0 WS-001(SURFA CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						3650	9540
Metals								
Barium	ug/l					53.2	16.8	71.5
Cadmium	ug/l	2	0.25			< 5.0 U	0.72	0.72
Calcium	ug/l					3800	2820	3630
Chromium	ug/l	570	74			4.6 J	1.3	8.8
Lead	ug/l	65	2.5			< 15.0 U	8.7	8.7
Magnesium	ug/l					2040	1340	2270
Nickel	ug/l	470	52	4600		4.6 J	1.2	7
Vanadium	ug/l					4.8 J	1.3	12.8
Other								
Hardness (as CaCO3)	ug/l					17900	12600	18300
SVOC SIM								
Naphthalene	ug/l					< 0.052 U	0.035	0.067
Pyrene	ug/l			4000		< 0.052 U	0.016	0.016
TPH								
VOCs								
1,3,5-Trimethylbenzene	ug/l					< 0.5 U	0.1	0.1
Benzene	ug/l			51		< 0.5 U	5.8	7
Toluene	ug/l			15000		< 0.5 U	5.2	6.5
Total Xylenes	ug/l					< 0.5 U	0.2	0.4

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-001 4/19/2013 0.5-1		
Sample ID						WS-001(0.5-1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						3650	9540
Metals								
Barium	ug/l					56.9	16.8	173
Cadmium	ug/l	2	0.25			< 5.0 U	0.49	0.55
Calcium	ug/l					3620	2840	7010
Chromium	ug/l	570	74			5.2 J	1.1	21.3
Lead	ug/l	65	2.5			< 15.0 U	8.3	18.1
Magnesium	ug/l					1980	1350	3930
Nickel	ug/l	470	52	4600		5.3 J	1.2	16.6
Vanadium	ug/l					6.5	1.7	32.2
Other								
Hardness (as CaCO3)	ug/l					17200	12700	33700
SVOC SIM								
2-Methylnaphthalene	ug/l					< 0.051 U	0.012	0.012
Benzo(b)fluoranthene	ug/l			0.018		< 0.051 U	0.011	0.015
Chrysene	ug/l			0.018		< 0.051 U	0.012	0.012
Fluoranthene	ug/l			140		< 0.051 U	0.019	0.019
Naphthalene	ug/l					< 0.051 U	0.031	0.036
Pyrene	ug/l			4000		< 0.051 U	0.016	0.017
TPH								
VOCs								
1,3,5-Trimethylbenzene	ug/l					< 0.5 U	0.1	0.1
Toluene	ug/l			15000		< 0.5 U	0.8	0.8
Total Xylenes	ug/l					< 0.5 U	0.2	0.4

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-002 4/19/2013 0 WS-002(SURFACE) 041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						4400	10290
Metals								
Barium	ug/l					19.2	14.6	20.4
Cadmium	ug/l	2	0.25			< 5.0 U	0.37	0.5
Calcium	ug/l					3260	2550	3220
Chromium	ug/l	570	74			< 15.0 U	1.1	1.8
Magnesium	ug/l					1610	1330	1610
Nickel	ug/l	470	52	4600		1.1 J	1.1	2.4
Other								
Hardness (as CaCO3)	ug/l					14800	12000	14700
SVOC SIM								
1-Methylnaphthalene	ug/l					< 0.051 U	0.023	0.023
2-Methylnaphthalene	ug/l					< 0.051 U	0.02	0.02
Acenaphthene	ug/l			990	20	< 0.051 U	0.033	0.033
Acenaphthylene	ug/l					< 0.051 U	0.032	0.032
Anthracene	ug/l			40000		< 0.051 U	0.042	0.042
Benzo(a)Anthracene	ug/l			0.018		< 0.051 U	0.048	0.048
Benzo(a)Pyrene	ug/l			0.018		< 0.051 U	0.045	0.045
Benzo(b)fluoranthene	ug/l			0.018		< 0.051 U	0.043	0.043
Benzo(g,h,i)Perylene	ug/l					< 0.051 U	0.037	0.037
Benzo(k)Fluoranthene	ug/l			0.018		< 0.051 U	0.044	0.044
Chrysene	ug/l			0.018		< 0.051 U	0.043	0.043
Dibenzo(a,h)Anthracene	ug/l			0.018		< 0.051 U	0.039	0.039
Fluoranthene	ug/l			140		< 0.051 U	0.046	0.046
Fluorene	ug/l			5300		< 0.051 U	0.037	0.037
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.051 U	0.038	0.038
Naphthalene	ug/l					< 0.051 U	0.031	0.06
Phenanthrene	ug/l					< 0.051 U	0.042	0.042
Pyrene	ug/l			4000		< 0.051 U	0.045	0.045
TPH								
Oil & Grease	ug/l						1500	1500
VOCs								
Toluene	ug/l			15000		< 0.5 U	0.1	0.1
Total Xylenes	ug/l					< 0.5 U	0.2	0.2

Notes

1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.

2 CMC - Acute = Criteria Maximum Concentration

3 CCC - Chronic = Criteria Continuous Concentration

4 mg/l = milligrams per liter (parts per million)

5 ug/l = micrograms per liter (parts per billion)

						Location	WS-002		
						Sample Date	4/19/2013		
						Depths (ft)	0		
							WS-		
							002(SURFA		
						Sample ID	CE)041913		
Chemical	Units	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organoleptic Effects			Min Detection (ignore if ND)	Max Detection (ignore if ND)

- 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
- 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
- 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-003 4/19/2013 0 WS-003(SURFACE) 041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organoleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						5020	11480
Metals								
Barium	ug/l					19.7	15.4	26.3
Cadmium	ug/l	2	0.25			< 5.0 U	0.4	0.43
Calcium	ug/l					3100	2930	3360
Chromium	ug/l	570	74			< 15.0 U	1.2	1.5
Magnesium	ug/l					1550	1400	1710
Nickel	ug/l	470	52	4600		< 10.0 U	1.1	2.7
Silver	ug/l	3.2				< 5.0 U	1.3	1.3
Vanadium	ug/l					1.5 J	1.4	2.5
Other								
Hardness (as CaCO3)	ug/l					14100	13100	15400
SVOC SIM								
Fluoranthene	ug/l			140		< 0.051 U	0.012	0.012
Naphthalene	ug/l					< 0.051 U	0.04	0.076
TPH								
VOCs								
1,2,4-Trimethylbenzene	ug/l					< 0.5 U	0.1	0.1
Benzene	ug/l			51		< 0.5 U	0.1	0.1
Ethylbenzene	ug/l			2100		< 0.5 U	0.1	0.1
Toluene	ug/l			15000		< 0.5 U	0.2	0.4
Total Xylenes	ug/l					< 0.5 U	0.3	0.8

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-004 4/19/2013 0 WS- 004(SURFA CE)041913		
Sample ID								
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						700	7320
Metals								
Barium	ug/l					294	17.8	106
Cadmium	ug/l	2	0.25			0.52 J	0.71	0.94
Calcium	ug/l					7170	3160	4680
Chromium	ug/l	570	74			32.5	1.5	13.5
Lead	ug/l	65	2.5			36.9	5.3	11.6
Magnesium	ug/l					5160	1460	2690
Nickel	ug/l	470	52	4600		29.3	1.5	10
Vanadium	ug/l					46.1	2	18.4
Other								
Hardness (as CaCO3)	ug/l					39100	14000	22800
SVOC SIM								
1-Methylnaphthalene	ug/l					< 0.052 U	0.013	0.39
2-Methylnaphthalene	ug/l					< 0.052 U	0.017	0.27
Acenaphthene	ug/l			990	20	< 0.052 U	0.014	0.023
Benzo(a)Anthracene	ug/l			0.018		< 0.052 U	0.011	0.011
Benzo(a)Pyrene	ug/l			0.018		< 0.052 U	0.011	0.034
Benzo(b)fluoranthene	ug/l			0.018		< 0.052 U	0.012	0.019
Benzo(g,h,i)Perylene	ug/l					< 0.052 U	0.015	0.015
Chrysene	ug/l			0.018		< 0.052 U	0.013	0.013
Fluoranthene	ug/l			140		< 0.052 U	0.013	0.013
Fluorene	ug/l			5300		< 0.052 U	0.014	0.057
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.052 U	0.017	0.017
Naphthalene	ug/l					< 0.052 U	0.034	0.93
Phenanthrene	ug/l					< 0.052 U	0.039	0.042
Pyrene	ug/l			4000		0.013 J	0.011	0.017
TPH								
VOCs								
1,2,4-Trimethylbenzene	ug/l					0.8	1.2	5.9
1,3,5-Trimethylbenzene	ug/l					0.8	0.3	4.2
Acetone	ug/l					3.4 J	3.1	18.5
Benzene	ug/l			51		0.3 J	0.1	102
Ethylbenzene	ug/l			2100		0.3 J	2.3	6
Gasoline Range Organics	ug/l						610	610
Isopropylbenzene	ug/l					0.1 J	0.1	1.1
N-Propylbenzene	ug/l					0.1 J	0.3	0.3
Toluene	ug/l			15000		1.8	1.1	77.7
Total Xylenes	ug/l					3.4	0.2	59.2

Notes

						Location	WS-004		
						Sample Date	4/19/2013		
						Depths (ft)	0		
							WS-		
							004(SURFA		
						Sample ID	CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects			Min Detection (ignore if ND)	Max Detection (ignore if ND)

- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
- 2 CMC - Acute = Criteria Maximum Concentration
- 3 CCC - Chronic = Criteria Continuous Concentration
- 4 mg/l = milligrams per liter (parts per million)
- 5 ug/l = micrograms per liter (parts per billion)
- 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
- 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
- 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-004 4/19/2013 0.5-1		
Sample ID						WS-004(0.5-1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						700	7320
Metals								
Arsenic	ug/l	340	150	0.14		14.7 J	8.9	8.9
Barium	ug/l					293	21.8	180
Cadmium	ug/l	2	0.25			< 5.0 U	0.69	1.1
Calcium	ug/l					7500	3250	7270
Chromium	ug/l	570	74			34.3	1.2	24.3
Lead	ug/l	65	2.5			38.2	5.7	19.2
Magnesium	ug/l					5560	1430	4180
Nickel	ug/l	470	52	4600		30.7	2.4	17.8
Silver	ug/l	3.2				< 5.0 U	1.4	1.4
Vanadium	ug/l					46.3	2	35.6
Other								
Hardness (as CaCO3)	ug/l					41600	14000	35400
SVOC SIM								
1-Methylnaphthalene	ug/l					0.012 J	0.017	0.36
2-Methylnaphthalene	ug/l					0.017 J	0.011	0.23
Acenaphthene	ug/l			990	20	< 0.055 U	0.014	0.024
Benzo(a)Anthracene	ug/l			0.018		< 0.055 U	0.013	0.014
Benzo(a)Pyrene	ug/l			0.018		< 0.055 U	0.021	0.021
Benzo(b)fluoranthene	ug/l			0.018		< 0.055 U	0.012	0.028
Benzo(g,h,i)Perylene	ug/l					< 0.055 U	0.019	0.019
Benzo(k)Fluoranthene	ug/l			0.018		< 0.055 U	0.022	0.022
Chrysene	ug/l			0.018		0.012 J	0.011	0.027
Dibenzo(a,h)Anthracene	ug/l			0.018		< 0.055 U	0.021	0.021
Fluoranthene	ug/l			140		< 0.055 U	0.011	0.02
Fluorene	ug/l			5300		< 0.055 U	0.014	0.057
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.055 U	0.023	0.023
Naphthalene	ug/l					0.049 J	0.033	0.22
Phenanthrene	ug/l					< 0.055 U	0.038	0.038
Pyrene	ug/l			4000		0.015 J	0.011	0.02
TPH								
VOCs								
1,2,4-Trimethylbenzene	ug/l					0.8	2.6	2.6
1,3,5-Trimethylbenzene	ug/l					0.9	0.1	2
Acetone	ug/l					< 5.0 U	4.4	4.4
Benzene	ug/l			51		0.3 J	0.1	3.4
Ethylbenzene	ug/l			2100		0.3 J	2.8	2.8
Isopropylbenzene	ug/l					0.1 J	0.1	0.1
N-Propylbenzene	ug/l					0.1 J	0.3	0.3
Toluene	ug/l			15000		1.8	0.8	5.1

						Location	WS-004		
						Sample Date	4/19/2013		
						Depths (ft)	0.5-1		
							WS-004(0.5-		
						Sample ID	1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)	
Total Xylenes	ug/l					3.4	0.2	20	

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-005 4/19/2013 0 WS- 005(SURFA CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						5050	10250
Metals								
Barium	ug/l					17.4	14.6	58.6
Cadmium	ug/l	2	0.25			< 5.0 U	0.45	0.53
Calcium	ug/l					3230	3050	4860
Chromium	ug/l	570	74			< 15.0 U	1.3	3.1
Magnesium	ug/l					1580	1470	2080
Nickel	ug/l	470	52	4600		1.5 J	1.2	3.1
Silver	ug/l	3.2				< 5.0 U	1.4	1.4
Vanadium	ug/l					< 5.0 U	1.7	2.3
Other								
Hardness (as CaCO3)	ug/l					14600	13700	20700
SVOC SIM								
TPH								
Oil & Grease	ug/l						1500	2600
VOCs								
Total Xylenes	ug/l					< 0.5 U	0.1	0.2

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

					Location Sample Date Depths (ft)	WS-006 4/19/2013 0 WS- 006(SURFA CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						4330	10010
Metals								
Barium	ug/l					52.5	14.4	37.7
Cadmium	ug/l	2	0.25			< 5.0 U	0.43	0.64
Calcium	ug/l					4000	3020	3950
Chromium	ug/l	570	74			4.7 J	1.2	3.2
Magnesium	ug/l					2140	1540	1850
Mercury	ug/l	1.4	0.77			< 0.20 U	0.11	0.11
Nickel	ug/l	470	52	4600		4.3 J	1.2	3.3
Vanadium	ug/l					5.8	1.4	5
Other								
Hardness (as CaCO3)	ug/l					18800	14100	17400
SVOC SIM								
Naphthalene	ug/l					< 0.051 U	0.034	0.11
TPH								
Oil & Grease	ug/l						1500	1500
VOCs								
Cymene	ug/l					< 0.5 U	0.1	0.1
Toluene	ug/l			15000		< 0.5 U	0.1	0.1

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-006 4/19/2013 0.5-1		
Sample ID						WS-006(0.5-1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						4330	10010
Metals								
Arsenic	ug/l	340	150	0.14		< 20.0 U	7.5	7.5
Barium	ug/l					51.1	16.3	40.5
Cadmium	ug/l	2	0.25			< 5.0 U	0.53	0.65
Calcium	ug/l					4110	3010	4050
Chromium	ug/l	570	74			4.5 J	1.1	4.2
Magnesium	ug/l					2170	1450	1910
Mercury	ug/l	1.4	0.77			< 0.20 U	0.083	0.083
Nickel	ug/l	470	52	4600		4.9 J	1.2	3.4
Silver	ug/l	3.2				< 5.0 U	1.4	1.4
Vanadium	ug/l					5.4	1.4	4.9
Other								
Hardness (as CaCO3)	ug/l					19200	13600	17800
SVOC SIM								
Naphthalene	ug/l					< 0.052 U	0.053	0.053
TPH								
VOCs								
Cymene	ug/l					< 0.5 U	0.2	0.2
Toluene	ug/l			15000		< 0.5 U	0.1	0.1

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-007 4/19/2013 0 WS- 007(SURFA CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						2140	6880
Metals								
Arsenic	ug/l	340	150	0.14		< 20.0 U	9.3	9.3
Barium	ug/l					172	23.1	131
Cadmium	ug/l	2	0.25			< 5.0 U	0.65	0.91
Calcium	ug/l					6390	3130	6170
Chromium	ug/l	570	74			12.2 J	1.7	18.1
Lead	ug/l	65	2.5			16.1	6.5	16.1
Magnesium	ug/l					3260	1500	3350
Mercury	ug/l	1.4	0.77			< 0.20 U	0.074	0.085
Nickel	ug/l	470	52	4600		12.9	2.1	15.5
Vanadium	ug/l					17.5	1.6	26.4
Other								
Hardness (as CaCO3)	ug/l					29400	14000	26000
SVOC SIM								
1-Methylnaphthalene	ug/l					< 0.052 U	0.068	0.39
2-Methylnaphthalene	ug/l					< 0.052 U	0.011	0.27
Acenaphthene	ug/l			990	20	< 0.052 U	0.014	0.041
Acenaphthylene	ug/l					< 0.052 U	0.014	0.036
Anthracene	ug/l			40000		< 0.052 U	0.027	0.13
Benzo(a)Anthracene	ug/l			0.018		0.015 J	0.011	0.29
Benzo(a)Pyrene	ug/l			0.018		< 0.052 U	0.085	0.085
Benzo(b)fluoranthene	ug/l			0.018		0.033 J	0.011	0.43
Benzo(g,h,i)Perylene	ug/l					< 0.052 U	0.012	0.081
Benzo(k)Fluoranthene	ug/l			0.018		< 0.052 U	0.011	0.16
Chrysene	ug/l			0.018		0.037 J	0.011	0.77
Dibenzo(a,h)Anthracene	ug/l			0.018		< 0.052 U	0.019	0.019
Fluoranthene	ug/l			140		0.088	0.011	3
Fluorene	ug/l			5300		< 0.052 U	0.027	0.065
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.052 U	0.011	0.11
Naphthalene	ug/l					0.036 J	0.034	0.16
Phenanthrene	ug/l					< 0.052 U	0.034	0.64
Pyrene	ug/l			4000		0.080	0.013	2
TPH								
VOCs								
1,3,5-Trimethylbenzene	ug/l					0.2 J	0.1	1.6
2-Butanone	ug/l					< 5.0 U	1	1
Acetone	ug/l					< 5.0 U	3.4	24
Benzene	ug/l			51		< 0.5 U	0.1	2
Toluene	ug/l			15000		< 0.5 U	0.1	0.1
Total Xylenes	ug/l					0.8	0.1	6.4

						Location	WS-007		
						Sample Date	4/19/2013		
						Depths (ft)	0		
							WS-		
							007(SURFA		
						Sample ID	CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects			Min Detection (ignore if ND)	Max Detection (ignore if ND)

Notes

- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
- 2 CMC - Acute = Criteria Maximum Concentration
- 3 CCC - Chronic = Criteria Continuous Concentration
- 4 mg/l = milligrams per liter (parts per million)
- 5 ug/l = micrograms per liter (parts per billion)
- 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
- 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
- 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-007 4/19/2013 0.5-1		
Sample ID						WS-007(0.5-1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
FIELD								
Dissolved Oxygen	ug/l						2140	6880
Metals								
Arsenic	ug/l	340	150	0.14		7.3 J	7.8	9.6
Barium	ug/l					201	23.7	160
Cadmium	ug/l	2	0.25			< 5.0 U	0.43	0.77
Calcium	ug/l					6630	3330	5410
Chromium	ug/l	570	74			18.2	1.8	20.3
Lead	ug/l	65	2.5			21.3	5.3	38.8
Magnesium	ug/l					3910	1560	3720
Nickel	ug/l	470	52	4600		17.3	1.7	17.4
Vanadium	ug/l					24.6	2.4	30.8
Other								
Hardness (as CaCO3)	ug/l					32600	14700	28900
SVOC SIM								
1-Methylnaphthalene	ug/l					0.038 J	0.012	0.5
2-Methylnaphthalene	ug/l					0.051 J	0.013	0.33
Acenaphthene	ug/l			990	20	0.022 J	0.012	0.038
Acenaphthylene	ug/l					< 0.053 U	0.016	0.04
Anthracene	ug/l			40000		0.024 J	0.012	0.15
Benzo(a)Anthracene	ug/l			0.018		0.022 J	0.018	0.22
Benzo(a)Pyrene	ug/l			0.018		< 0.053 U	0.012	0.07
Benzo(b)fluoranthene	ug/l			0.018		0.025 J	0.012	0.42
Benzo(g,h,i)Perylene	ug/l					< 0.053 U	0.011	0.075
Benzo(k)Fluoranthene	ug/l			0.018		< 0.053 U	0.015	0.13
Chrysene	ug/l			0.018		0.042 J	0.012	0.61
Dibenzo(a,h)Anthracene	ug/l			0.018		< 0.053 U	0.012	0.017
Fluoranthene	ug/l			140		0.11	0.013	2.5
Fluorene	ug/l			5300		0.043 J	0.012	0.07
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.053 U	0.014	0.099
Naphthalene	ug/l					0.064	0.042	0.19
Phenanthrene	ug/l					0.18	0.035	0.71
Pyrene	ug/l			4000		0.098	0.012	1.7
TPH								
VOCs								
1,3,5-Trimethylbenzene	ug/l					0.2 J	0.2	1.9
Acetone	ug/l					3.1 J	3.4	5.1
Benzene	ug/l			51		< 0.5 U	0.2	1.9
Toluene	ug/l			15000		< 0.5 U	0.1	0.3
Total Xylenes	ug/l					0.8	0.2	6.8

Notes

						Location	WS-007		
						Sample Date	4/19/2013		
						Depths (ft)	0.5-1		
							WS-007(0.5-		
						Sample ID	1.0)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects			Min Detection (ignore if ND)	Max Detection (ignore if ND)

- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
- 2 CMC - Acute = Criteria Maximum Concentration
- 3 CCC - Chronic = Criteria Continuous Concentration
- 4 mg/l = milligrams per liter (parts per million)
- 5 ug/l = micrograms per liter (parts per billion)
- 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
- 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
- 8 Results have not been validated. Preliminary data is presented for discussion purposes only.

Location Sample Date Depths (ft)						WS-008 4/19/2013 0 WS- 008(SURFA CE)041913		
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
Metals								
Arsenic	ug/l	340	150	0.14		< 20.0 U	9.4	11.6
Barium	ug/l					83.1	28.8	182
Cadmium	ug/l	2	0.25			< 5.0 U	0.37	1
Calcium	ug/l					4790	2930	7490
Chromium	ug/l	570	74			9.5 J	1.9	30.8
Lead	ug/l	65	2.5			8.0 J	14.2	30.2
Magnesium	ug/l					3310	2100	5310
Mercury	ug/l	1.4	0.77			< 0.20 U	0.076	0.082
Nickel	ug/l	470	52	4600		8.8 J	2.6	26.5
Vanadium	ug/l					12.3	2.9	32.7
Other								
Hardness (as CaCO3)	ug/l					25600	16000	35700
SVOC SIM								
1-Methylnaphthalene	ug/l					0.048 J	0.022	5.5
2-Methylnaphthalene	ug/l					0.046 J	0.02	7.2
Acenaphthene	ug/l			990	20	< 0.052 U	0.013	0.3
Acenaphthylene	ug/l					< 0.052 U	0.011	0.22
Anthracene	ug/l			40000		< 0.052 U	0.018	0.24
Benzo(a)Anthracene	ug/l			0.018		< 0.052 U	0.014	0.31
Benzo(a)Pyrene	ug/l			0.018		< 0.052 U	0.011	0.23
Benzo(b)fluoranthene	ug/l			0.018		0.018 J	0.011	0.52
Benzo(g,h,i)Perylene	ug/l					0.014 J	0.011	0.31
Benzo(k)Fluoranthene	ug/l			0.018		< 0.052 U	0.024	0.075
Chrysene	ug/l			0.018		0.023 J	0.015	0.78
Dibenzo(a,h)Anthracene	ug/l			0.018		< 0.052 U	0.031	0.06
Fluoranthene	ug/l			140		0.013 J	0.013	0.21
Fluorene	ug/l			5300		0.028 J	0.021	0.93
Indeno(1,2,3-cd)Pyrene	ug/l			0.018		< 0.052 U	0.014	0.11
Naphthalene	ug/l					0.045 J	0.032	2.5
Phenanthrene	ug/l					< 0.052 U	0.059	1.8
Pyrene	ug/l			4000		0.029 J	0.016	0.82
TPH								
Oil & Grease	ug/l						1700	5400
VOCs								
1,2,4-Trimethylbenzene	ug/l					0.5 J	0.2	29
1,3,5-Trimethylbenzene	ug/l					0.3 J	0.1	13
2-Phenylbutane	ug/l					< 0.5 U	0.1	1.5
Acetone	ug/l					< 5.0 U	3.5	8.9
Benzene	ug/l			51		2.6	0.5	30
Bromodichloromethane	ug/l			17		0.2 J	0.1	0.8
Chloroform	ug/l			470		0.9	0.6	2.9

Location Sample Date Depths (ft)						WS-008 4/19/2013 0 WS-008(SURFACE) 041913		
Sample ID								
Chemical	Unit s	Aquatic Live Freshwater CMC - Acute	Aquatic Live Freshwater CCC - Chronic	Human Health Consumption for Organism Only	Organ oleptic Effects		Min Detection (ignore if ND)	Max Detection (ignore if ND)
Chloromethane	ug/l					< 0.5 U	1.6	1.6
Cymene	ug/l					< 0.5 U	0.2	1.8
Ethylbenzene	ug/l			2100		0.3 J	0.2	18
Isopropylbenzene	ug/l					< 0.5 U	0.1	3.7
N-Butylbenzene	ug/l					< 0.5 U	0.2	1.6
N-Propylbenzene	ug/l					< 0.5 U	0.1	5.3
Toluene	ug/l			15000		3.5	0.7	93
Total Xylenes	ug/l					3.8	0.9	130

- Notes
- 1 All surface water criteria are from current USEPA National Recommended Surface Waste Quality Criteria.
 - 2 CMC - Acute = Criteria Maximum Concentration
 - 3 CCC - Chronic = Criteria Continuous Concentration
 - 4 mg/l = milligrams per liter (parts per million)
 - 5 ug/l = micrograms per liter (parts per billion)
 - 6 Where hardness results are available, freshwater aquatic life criteria for Cadmium, Chromium, Lead, Nickel, Silver, and Zinc are adjusted on a sample-specific basis for comparison with sampling results using the conversion factors presented in Appendix B to the National Recommended Surface Water Quality Criteria. Where hardness results are not available, comparison criteria are based on a conservative hardness value of ppm.
 - 7 Freshwater CMC - Acute criteria for Selenium is calculated on a sample-specific basis based on the fractions of Selenite (SeO3) and Selenate (SeO4) in the sample. Samples were analyzed for total Selenium only. Criteria in table conservatively assumes that all of the measured Selenium is Selenate (SeO4) which would result in the lowest comparison criteria concentration.
 - 8 Results have not been validated. Preliminary data is presented for discussion purposes only.