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MEMORANDUM

700 SW Higgins Ste. 15
Missoula MT 59803

T: 406.549.8270
F: 406.549.8277

To: Sara Sparks
Remedial Project Manager

From: David Tooke PhD.
Project Coordinator

Project No: 350.0065.001

Subject: Metal and Common Ion Results for 5-23-18 Water Samples Collected at The former Smurfit-Stone / Frenchtown Mill Site

Date: June 6, 2018

Sara,

Please see the brief summary of metals and common ion results below for water samples collected on 5/23/18 during high river flows in the Clark Fork River (CFR) at the former Smurfit-Stone / Frenchtown Mill (Site).

In summary, aluminum, copper, iron and lead were detected in the background samples upriver from the mill at concentrations above relevant water quality standards. A sample of "tea-colored" water was collected from floodwaters adjacent to pond HP-13A. This "tea colored" water was first observed in the CFR after the PRP's placed additional fill material along the inner berm in this area to minimize "boils" observed in the immediate vicinity. Samples of "tea water" collected adjacent to the Site, and pond water, and groundwater collected on the Site contained concentrations of arsenic above relevant water quality standards and background concentrations. These samples also contained manganese above background concentrations. As with previous risk assessment screening at the site, a constituent of potential concern (COPC) is defined as a contaminant that exceeds a risk-based screening level (i.e.: water quality standard) and significantly exceeds the background concentration. Sample (CFR-2) collected in the CFR immediately downgradient of the 'tea-water' sample did not contain any COPCs.

Sampling and Analysis

As part of the ongoing work concerning potential impacts to the CFR during high flows, the Potential Responsible Parties (PRPs) collected surface water and groundwater samples as directed by the EPA and in accordance with a work plan approved by EPA on 5/23/18. Two (2) water samples were collected from pond 13A and pond 2 on the Site adjacent to the river. Two (2) background surface water samples were collected in the river upstream (CFR-HB-1) and along the southern part of the Site (CFR-1). A sample of 'tea-colored' water (CFR-HP-13A) was collected from floodwaters on the river side of the southern berm of HP-13A. CFR-2 was collected about 200 yards downstream of the 'tea-water' location in CFR floodwaters where the tea-water appeared to be mixing with turbid upstream CFR water. Sample locations are shown on **Figure 1** (attached). Results of metals and common ion analysis are provided in the attached **Table 1** and **Table 2** respectively.

Screening

Metal concentrations were compared to applicable Federal and State water quality standards and background concentrations to identify COPCs. In accordance with previous risk assessment screening done by EPA at this Site, a chemical is identified as a COPC if the maximum detected concentration exceeds an available water quality standard, and Site concentrations for that chemical are significantly higher than background concentrations.

Water Quality Standards - Surface water results were compared to Montana DEQ Circular-7 human health and aquatic life standards (MDEQ, 2017). The aquatic life standards for some metals were adjusted to water hardness in the samples (**Table 3**). Groundwater was compared to EPA Maximum Contaminant Levels (MCLs) (EPA, 2018) and the Montana DEQ Circular-7 groundwater standards (MDEQ, 2017).

Background Samples - Four wells within the boundary of the Smurfit-Stone/Frenchtown Mill Site (County MW, SMW1, SMW5, SMW6) have been identified as background groundwater locations for shallow groundwater at the Site (EPA 2017). These wells were identified as being upgradient from any potential Site contamination. Up to five groundwater samples have been collected from each of these wells between April 2014 and December 2017 as part of ongoing RI activities (NewFields 2018).

Two background surface water samples were collected on May 23, 2018. These include CFR-HB-1 collected on the east side of the river at Harpers Bridge, and CFR-1 collected on the east side of the river adjacent to the production well field at the southern end of the site near the CFR1 staff gage (**Figure 1**). The highest observed concentrations from the background samples were used as upper threshold values for comparison to downgradient samples.

Results

The results presented in **Table 1** and **Table 2** show the following:

- The 'tea-water', pond water, and groundwater samples contained arsenic at concentrations higher than relevant water quality standards and background levels.
- Copper was detected above water quality standards in all surface water samples collected, including the background river samples.
- Background (upriver) samples contained aluminum, copper, iron and lead concentrations above relevant water quality standards.
- The surface water sample collected at CFR-2 downgradient to the 'tea-water' sample in the river did not contain any COPCs. This sample was collected adjacent to the CFR berm.
- Concentrations of analytes observed in the groundwater sample (SMW11) are consistent with previous groundwater sample results.
- Aluminum, iron and manganese were detected in the groundwater sample (SMW11) above secondary MCLs and background concentrations.
- The water quality profile of the pond water and groundwater samples (sodium sulfate signature) are similar and distinct from the water quality profile of the CFR water (calcium carbonate signature). The 'tea-water' sample has a calcium carbonate profile similar to the CFR samples but is higher in TDS and has slightly higher sodium and sulfate than the CFR water.

Exceedances of water quality standards are highlighted with a yellow background in **Table 1**. Exceedances of background levels are shown with **bold font** and, groundwater concentrations and relevant groundwater standards are shown with blue font in **Table 1**.

A field duplicate and a field blank were collected to help measure the precision and accuracy of the sample results. The field blank consisted of deionized (Millipore) water and preservative respective of analytical methods. Original laboratory results are also attached for your review.

References

EPA, 2017. Draft Human Health Risk Assessment for the Smurfit-Stone/Frenchtown Mill Operable Unit 3 Site Located in Missoula County, Montana. December.

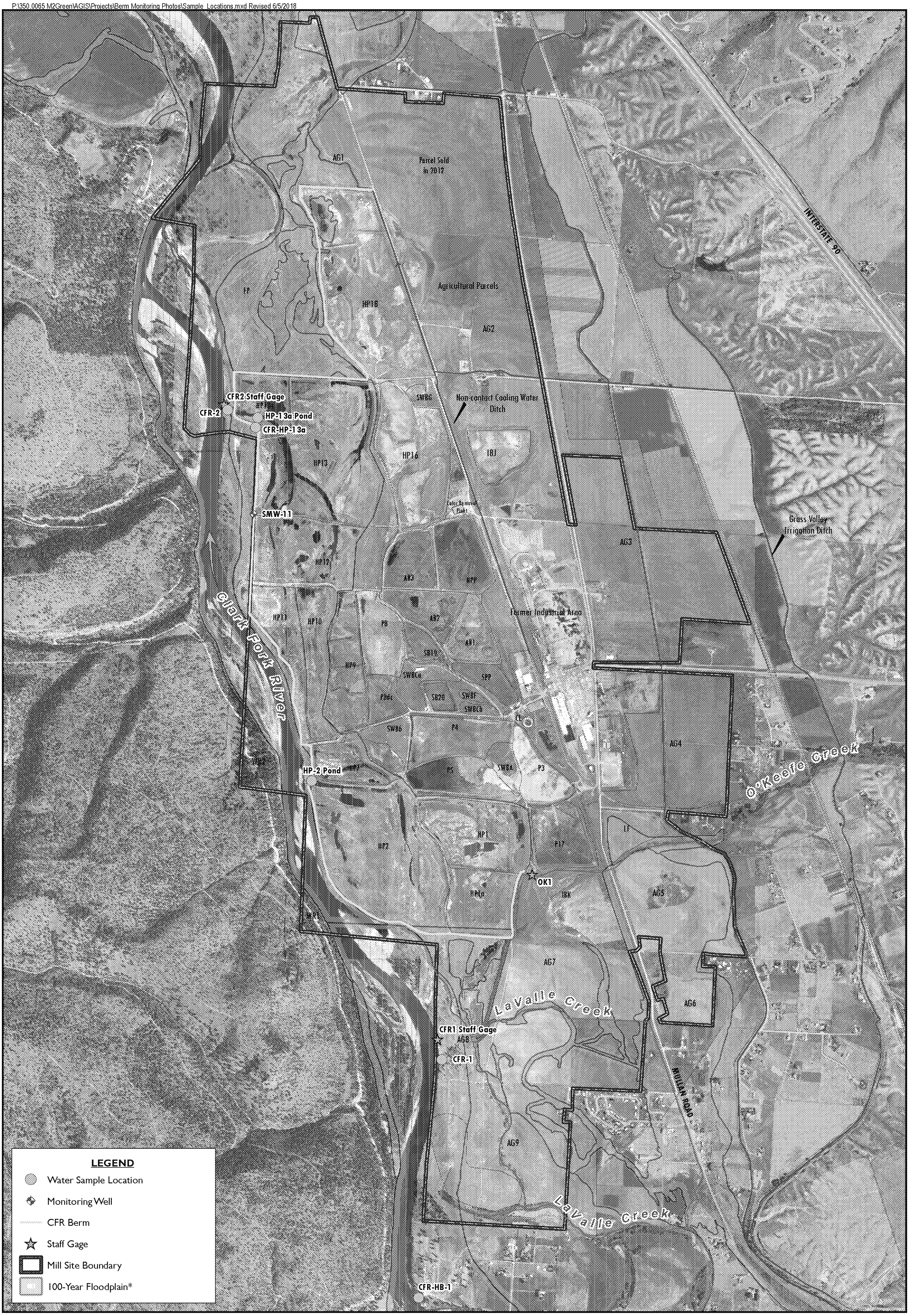
EPA, 2018. Regional Screening Levels for Chemical Contaminants at Superfund Sites, May. on-line. https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables. Office of Superfund Remediation and Technology Innovation.

MTDEQ, 2017. Water Quality Circulars by Program, DEQ7. http://deq.mt.gov/wqinfo/circulars.mcpx, Accessed May 2018. Montana Department of Environmental Quality.

NewFields, 2018. December 2017 Groundwater Data Summary Report. Smurfit Stone / Frenchtown Mill Site, Missoula County Montana. April. 2873p.

Attachment A
Figure 1

P:\350.0065 M2Green\AGIS\Projects\Berm Monitoring Photos\Sample_Locations.mxd Revised 6/5/2018



0 Feet 1,300

NewFields

Aerial Photo Source: NAIP 2011 and Newfields 2016 (Within Site Boundary)

*Floodplain Source:
As defined by the Federal Emergency Management Agency (FEMA) 2013 Digital Flood Insurance Rate Map (DFIRM). (NFIP 2013)

Notes

AG - Agricultural Land
AB - Aeration Stabilization Basin
CFR - Clark Fork River
CL - Clarifier
FP - Floodplain
HP - Holding or Storage Pond
IB - Rapid Infiltration Basin
NPP - North Polishing Pond
P - Settling Pond
SB - Spoils Basin
SPP - South Polishing Pond
SWB - Solid Waste Basin
WR - West of River

May 23, 2018 Sample Locations
Former Frenchtown Mill Site
Missoula County, Montana
FIGURE 1

Attachment B
Tables

TABLE 1 - Total and Dissolved Metals (ug/L) in Surface Water and Groundwater Samples Collected on 5/23/18
Former Smurfit-Stone / Frenchtown Mill Site
Missoula County, Montana

Total Metals	Sample Date	Description	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Sample Results																				
SMW-11	5/23/2018	Groundwater	**175** J	**0.87**	**37.5**	161	**0.11** J	0.028 U	4.3	**0.51**	0.58 J	**1530**	**0.27**	**6830**	**5.6**	**0.69**	0.17 U	0.028 U	**22.1**	1.6 J
CFR-HB-1	5/23/2018	Background SW	1260	0.3 J	4.6	85.6	0.089 J	0.1	1.2	0.54	15.4	1170	2.4	71.4	1.1	0.17 U	0.17 U	0.028 U	2	23.6
CFR-1	5/23/2018	Background SW	1220	0.26 J	4.6	85.2	0.091 J	0.088	1.1	0.54	15	1180	2.5	72.9	1.1	0.17 U	0.17 U	0.028 U	2	24.1
HP-2 Pond	5/23/2018	Upgradient Pondwater	218 J	**1.3**	**5.4**	**105**	0.079 J	**0.3**	**1.6**	**1.6**	13.8	480	0.63	**428**	**4.3**	**0.24** J	0.17 U	0.028 U	**5.3**	22
HP-13A Pond	5/23/2018	Upgradient Pondwater	138 J	**1.4**	**16.2**	**90.3**	0.064 U	**0.43**	**1.5**	**0.75**	**19.6**	615	1	**953**	**3.4**	**0.36** J	0.17 U	0.028 U	**6.9**	**43**
CFR-HP-13A	5/23/2018	'tea-water'	81.8 J	**0.57**	**21.5**	**123**	0.064 U	**0.27**	0.41 UJ	0.31 J	**24.5**	159	0.62	**277**	0.86	0.17 U	**0.19** J	0.028 U	1.3	13.9
CFR-2	5/23/2018	Downgradient to tea-water	747	0.29 J	**7.3**	81.8	0.064 U	0.086	0.75	0.4 J	13.1	721	1.6	**163**	0.91	0.17 U	0.17 U	0.028 U	1.9	15.3
Quality Control Samples																				
SW-DUP	5/23/2018	'tea-water'	87.3 J	**0.56**	**22.2**	**127**	0.064 U	**0.24**	0.41 UJ	0.32 J	**25.4**	163	0.62	**287**	0.88	0.17 U	**0.2** J	0.028 U	1.3	13.3
Field Blank	5/23/2018	Blank	48.6	0.12 U	0.21 U	0.8	0.064 U	0.028 U	0.41 J	0.15 U	0.22 J	37.5 J	0.072 J	1.7	0.28 J	0.17 U	0.17 U	0.028 U	0.27 U	1.4 J
Water Quality Standards[a] and Background Concentrations																				
Background Groundwater (Total)			34.6	0.25	5.1	359	0	0.08	4.6	0.5	2.4	50	0.1	2.2	0.8	0.5	0.5	0.1	1.6	5
EPA MCL				6	10	2000	4	5	100		1300		15			50		2		5000
EPA secondary MCL			50								1000	300		50			100			
MDEQ-7 Human Health Standard for Groundwater					10	1000		5	100		1300		15		100	50	100	2		2000
MDEQ-7 Human Health Standard for Surface Water					10	1000		5	100		1300		15		100	50	100	0.24		7400
MDEQ-7 Acute Aquatic Life Standard			750		340			1.04			7.36		37.4		279.3	20	1.41			71.3
MDEQ-7 Chronic Aquatic Life Standard			87		150			0.48			5.53	1000	1.46		31.1	5				71.3

Dissolved Metals	Sample Date	Description	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Sample Results																				
SMW-11	5/23/2018	Groundwater	**152**	**0.87**	**36.6**	163	**0.098** J	0.028 U	**4**	0.48 J	0.58 J	**1440**	**0.31**	**7300**	**4.9**	**0.6**	0.17 U	0.028 U	**21.3**	2.5 J
CFR-HB-1	5/23/2018	Background SW	61.2	0.23 J	3.1	60.8	0.064 U	0.028 U	0.34 J	0.37 J	4	53.4	0.13	18.9	0.29 J	0.17 U	0.17 U	0.028 U	0.59 J	4.1 J
CFR-1	5/23/2018	Background SW	69.4	0.24 J	2.8	55.8	0.064 U	0.029 J	0.27 J	0.15 U	3.8	54.5	0.13	17.7	0.4 J	0.17 U	0.17 U	0.028 U	0.53 J	4.4 J
HP-2 Pond	5/23/2018	Upgradient Pondwater	**76.6**	**1.2**	**5.1**	**100**	0.064 U	**0.24**	**1.2**	**1.9**	**11.2**	**266**	**0.39**	**360**	**3.7**	**0.3** J	0.17 U	0.028 U	**4.8**	**14.6**
HP-13A Pond	5/23/2018	Upgradient Pondwater	48.6	**1.6**	**14.4**	**84.3**	0.064 U	**0.28**	**1.1**	**0.74**	**14.8**	**398**	**0.73**	**897**	**2.9**	**0.38** J	0.17 U	0.028 U	**6.5**	**26**
CFR-HP-13A	5/23/2018	'tea-water'	32.1	**0.92**	**21.5**	**120**	0.064 U	**0.19**	**0.5** J	**0.43** J	**18.8**	**91.6**	**0.36**	**247**	**0.97**	0.17 U	0.17 U	0.028 U	**1.4**	**10**
CFR-2	5/23/2018	Downgradient to tea-water	**70.9**	**0.5** J	**6.2**	**67.4**	0.064 U	**0.048** J	0.25 UJ	0.22 J	**6.1**	**73.5**	**0.25**	**118**	**0.46** J	0.17 U	0.17 U	0.028 U	**0.95** J	**7.3**
Quality Control Samples																				
SW-DUP	5/23/2018	'tea-water'	36.6	**0.74**	**21.8**	**120**	0.064 U	**0.2**	0.34 J	0.34 J	**19.2**	**95.2**	**0.38**	**247**	**0.85**	0.17 U	0.17 U	0.028 U	**1.3**	**9.5**
Field Blank	5/23/2018	blank	2.9 J	0.12 U	0.21 U	0.14 U	0.064 U	0.028 U	0.25 J	0.15 U	0.2 U	6.8 U	0.028 U	0.26 J	0.12 U	0.17 U	0.17 U	0.028 U	0.27 U	1.4 J
Background Concentrations																				
Background Groundwater (Dissolved)			11.3	0.84	5.6	363	0	0.08	1.1	0.5	3.4	50	0.18	68.5	1	0.5	0.5	0.1	1.8	5.6

Notes:

CFR - Clark Fork River
J - Concentration is considered estimated.
U - Concentration is below the reporting limit. Reporting limit shown
DUP - duplicate sample (associated natural sample)
ug/L - All units in micrograms per liter (ug/L)
- exceeds the lowest applicable water quality standard
BOLD - exceeds background sample concentration
BLUE - Groundwater concentrations and standards

[a] Some aquatic-life water quality standards have been adjusted to account for changes in sample hardness. Adjusted values are shown with green font. Calculations are shown in Table 3. Calculations were completed in accordance with MDEQ Circular-7 guidance.

TABLE 2 - Common Ions in Surface Water and Groundwater Samples Collected on 5/23/18
Former Smurfit-Stone / Frenchtown Mill Site
Missoula County, Montana

Sample Identification	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Nitrogen, NO2 plus NO3 (mg/L)	Phosphorus (mg/L)	Sulfate (mg/L)	Alkalinity, Bicarbonate (CaCO3) (mg/L)	Alkalinity, Carbonate (CaCO3) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Specific Conductance (uS/cm)	pH (s.u.)	Calcium (ug/L)	Magnesium (ug/L)	Potassium (ug/L)	Sodium (ug/L)	Calcium, Dissolved (ug/L)	Magnesium, Dissolved (ug/L)	Potassium, Dissolved (ug/L)	Sodium, Dissolved (ug/L)
Sample Results																				
CFR-HB-1	5/23/2018	1.2 J	0.089 J	0.024 J	0.11	5.8 J	56.3	1 U	99	5	124	7.8 J	18100	5550	1470	3200	15800 J	4380	1010	2640 J
CFR-1	5/23/2018	1.2 J	0.086 J	0.053 J	0.097 J	5.5 J	56.5	1 U	100	4.9	160	7 J	17400	5240	1430	2900	14900 J	4120	978	2530 J
HP-2 Pond	5/23/2018	37.3 J	0.22 J	0.016 J	0.24	1220 J	341	1 U	2120	37.5	2970	8.1 J	99300	57700	46800	611000	97100 J	55500	46400	590000 J
SMW-11	5/23/2018	54.3 J	0.22 J	0.011 U	0.77	947 J	846	1 U	2450	41.4	3210	7.5 J	108000	32500	29700	773000	112000 J	33500	29900	773000 J
HP-13A Pond	5/23/2018	78.5 J	0.27 J	0.023 J	0.28	1540 J	545	43.4	2980	50.5	4240	8.2 J	91300	45500	44400	957000	85600 J	41900	41200	885000 J
CFR-HP-13A	5/23/2018	10 J	0.12 J	0.011 U	0.27	45.7 J	172	1 U	296	17.2	419	6.8 J	30900	8800	7490	54900	28600 J	8430	7220	55500 J
CFR-2	5/23/2018	3.8 J	0.096 J	0.038 J	0.1	17 J	79.8	1 U	123	5.7	199	7 J	19000	5640	2050	22500	17500 J	4970	1720	20400 J
Quality Control Samples																				
CFR HP13A (Dup)	5/23/2018	9.8 J	0.12 J	0.019 J	0.3	44.5 J	165	1 U	293	17.7	423	7.6 J	31400 J	9380	7840	57600 J	40000 J	8400	7100	78200 J
Filtered DI Water	5/23/2018	0.37 J	0.015 UJ	0.011 U	0.043 U	0.53 J	1 U	1 U	50 U	0.42 J	1.7	4.6 J	176	75.1	19.8 J	21.7 J	31.3 J	5.5 J	12.5 U	153 J

Notes:

CFR - Clark Fork River
J - Concentration is considered estimated.
U - Concentration is below the reporting limit. Reporting limit shown
DUP (NM) - duplicate sample (associated natural sample)
NM - natural sample
mg/L - milligrams per liter
µg/L - micrograms per liter
s.u. - standard units
µS/cm - micro Siemens per centimeter

TABLE 3 - MDEQ-7 Aquatic Life Standards Adjusted for Hardness Concentrations

Former Smurfit-Stone / Frenchtown Mill Site

Missoula County, Montana

Sample Results					Freshwater Aquatic Life Standards (ug/L)												
					Acute							Chronic					
Sample	Calcium Dissolved (ug/L)	Magnesium Dissolved (ug/L)	Hardness (mg/L)	Hardness, limits (mg/L)[1]	Cadmium	Copper	Chromium (III)	Lead	Nickel	Silver	Zinc	Cadmium	Copper	Chromium (III)	Lead	Nickel	Silver	Zinc
CFR-HB-1	15800	4380	57.5	57.5	1.11	8.31	1146	40.4	294	1.57	75.0	0.508	5.81	54.8	1.57	32.7	--	75.0
CFR-1	14900	4120	54.2	54.2	1.04	7.86	1091	37.4	279	1.41	71.3	0.485	5.53	52.2	1.46	31.1	--	71.3
HP-2 Pond	97100	55500	471	400	7.38	51.7	5612	476.8	1516	44.0	387.8	2.39	30.5	268.2	18.6	168.5	--	387.8
HP-13A Pond	85600	41900	386	386	7.13	50.0	5454	456.1	1472	41.5	376.5	2.32	29.6	260.7	17.8	163.6	--	376.5
CFR-HP-13A	28600	8430	106	106	2.01	14.8	1893	88.1	493	4.50	126.0	0.829	9.82	90.5	3.43	54.9	--	126.0
CFR-2	17500	4970	64.2	64.2	1.23	9.22	1254	46.4	322	1.89	82.3	0.555	6.39	59.9	1.81	35.8	--	82.3
SW-DUP	40000	8400	134	134	2.54	18.5	2298	119.0	603	6.76	154.0	1.00	12.0	109.8	4.64	67.0	--	154.0
Lowest Adjusted Standard					1.04	7.86	1091	37.4	279	1.41	71.3	0.48	5.53	52.2	1.46	31.1	--	71.3

Notes:

1 If hardness is <25 mg/L as CaCO3, 25 must be used in calculation
If hardness is ≥400 mg/L as CaCO3, 400 must be used in calculation

Attachment C
Laboratory Report

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

June 04, 2018

David Tooke
Newfields
700 SW Higgins Ave.
Suite 15
Missoula, MT 59803

RE: Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Dear David Tooke:
Enclosed are the analytical results for sample(s) received by the laboratory on May 25, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kang Khang
kang.khang@pacelabs.com
(406)254-7226
Project Manager

Enclosures

cc: Accounts Payable (Donna McCammon), Newfields Companies LLC
Chris Cerquone, Newfields
Adam Johnson, NewFields
Katie Sitler, Newfields
Sydney Stewart, Newfields

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

CERTIFICATIONS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #:MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792
California Certification #2973
Montana Certificate #CERT0103
California Certification #2973
Alaska Certification UST-107
Alaska Certification UST-107
Alaska Certification #MN01084
Arizona Department of Health Certification #AZ0785
Minnesota Dept of Health Certification #: 027-137-445
North Dakota Certification: # R-203
Wisconsin DNR Certification # : 998027470
WA Department of Ecology Lab ID# C1007
Nevada DNR #MN010842018-1
Oklahoma Department of Environmental Quality
California Certification #2973

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

SAMPLE SUMMARY

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10432836001	**CFR-1**	Water	05/23/18 19:10	05/25/18 10:00
10432836002	**CFR-2**	Water	05/23/18 17:40	05/25/18 10:00
10432836003	**SMW-11**	Water	05/23/18 15:40	05/25/18 10:00
10432836004	**HP-13A Pond**	Water	05/23/18 16:15	05/25/18 10:00
10432836005	**HP-2 Pond**	Water	05/23/18 18:40	05/25/18 10:00
10432836006	**CFR-HB-1**	Water	05/23/18 19:50	05/25/18 10:00
10432836007	**SW-DUP**	Water	05/23/18 00:00	05/25/18 10:00
10432836008	**ERB**	Water	05/23/18 20:55	05/25/18 10:00
10432831001	**CFR-HP-13A**	Water	05/23/18 16:40	05/25/18 10:00

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

SAMPLE ANALYTE COUNT

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10432836001	**CFR-1**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836002	**CFR-2**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836003	**SMW-11**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836004	**HP-13A Pond**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

SAMPLE ANALYTE COUNT

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836005	**HP-2 Pond**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836006	**CFR-HB-1**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836007	**SW-DUP**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432836008	**ERB**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
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SAMPLE ANALYTE COUNT

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M
10432831001	**CFR-HP-13A**	EPA 6020A	TT3	22	PASI-M
		EPA 6020A	TT3	22	PASI-M
		SM 2320B	AR3	2	PASI-M
		SM 2540C	NAS	1	PASI-M
		SM 4500-H+B	AR3	1	PASI-M
		SM 2510	AR3	1	PASI-M
		EPA 300.0	KEO	3	PASI-M
		EPA 353.2	JFP	1	PASI-M
		SM 5310C	JK1	1	PASI-V
		SM 4500-P E	KEO	1	PASI-M

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **EPA 6020A**
Description: 6020A MET ICPMS
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for EPA 6020A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **EPA 6020A**
Description: 6020A MET ICPMS, Dissolved
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for EPA 6020A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 541156

B: Analyte was detected in the associated method blank.
- BLANK for HBN 541156 [MPRP/824 (Lab ID: 2943635)
  - Manganese, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541156

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10432836001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 2943637)
  - Calcium, Dissolved
- MSD (Lab ID: 2943638)
  - Calcium, Dissolved

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 2540C**
Description: 2540C Total Dissolved Solids
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA required holding time.
- CFR-1 (Lab ID: 10432836001)
- CFR-2 (Lab ID: 10432836002)
- CFR-HB-1 (Lab ID: 10432836006)
- CFR-HP-13A (Lab ID: 10432831001)
- ERB (Lab ID: 10432836008)
- HP-13A Pond (Lab ID: 10432836004)
- HP-2 Pond (Lab ID: 10432836005)
- SMW-11 (Lab ID: 10432836003)
- SW-DUP (Lab ID: 10432836007)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 2510**
Description: SM2510 Specific Conductance
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 2510. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541303

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10431928006,10432489006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2944285)
  - Fluoride
- MS (Lab ID: 2944309)
  - Chloride
  - Sulfate
- MSD (Lab ID: 2944286)
  - Fluoride
- MSD (Lab ID: 2944310)
  - Chloride
  - Sulfate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **EPA 353.2**
Description: 353.2 Nitrate + Nitrite
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 5310C**
Description: 5310C TOC
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Newfields
Date: June 04, 2018

General Information:
9 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM 4500-P B with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 541342

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10432366001,10432717001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 2944466)
  - Phosphorus
- MSD (Lab ID: 2944467)
  - Phosphorus

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-1 **Lab ID: 10432836001** Collected: 05/23/18 19:10 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**1220**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:12	7429-90-5	
Antimony	**0.26J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-36-0	
Arsenic	**4.6**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-38-2	
Barium	**85.2**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:12	7440-39-3	
Beryllium	**0.091J**	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:12	7440-41-7	
Cadmium	**0.088**	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:12	7440-43-9	
Calcium	**17400**	ug/L	40.0	1	05/30/18 08:53	06/01/18 10:12	7440-70-2	
Chromium	**1.1**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-47-3	
Cobalt	**0.54**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-48-4	
Copper	**15.0**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:12	7440-50-8	
Iron	**1180**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:12	7439-89-6	
Lead	**2.5**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:12	7439-92-1	
Magnesium	**5240**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:12	7439-95-4	
Manganese	**72.9**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7439-96-5	
Nickel	**1.1**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-02-0	
Potassium	**1430**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:12	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:12	7440-22-4	
Sodium	**2900**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:12	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:12	7440-28-0	
Vanadium	**2.0**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:12	7440-62-2	
Zinc	**24.1**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:12	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**69.4**	ug/L	10.0	1	05/30/18 09:28	06/01/18 20:45	7429-90-5	
Antimony, Dissolved	**0.24J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-36-0	
Arsenic, Dissolved	**2.8**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-38-2	
Barium, Dissolved	**55.8**	ug/L	0.30	1	05/30/18 09:28	06/01/18 20:45	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 20:45	7440-41-7	
Cadmium, Dissolved	**0.029J**	ug/L	0.080	1	05/30/18 09:28	06/01/18 20:45	7440-43-9	
Calcium, Dissolved	**14900**	ug/L	40.0	1	05/30/18 09:28	06/01/18 20:45	7440-70-2	M1
Chromium, Dissolved	**0.27J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-47-3	
Cobalt, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-48-4	
Copper, Dissolved	**3.8**	ug/L	1.0	1	05/30/18 09:28	06/01/18 20:45	7440-50-8	
Iron, Dissolved	**54.5**	ug/L	50.0	1	05/30/18 09:28	06/01/18 20:45	7439-89-6	
Lead, Dissolved	**0.13**	ug/L	0.10	1	05/30/18 09:28	06/01/18 20:45	7439-92-1	
Magnesium, Dissolved	**4120**	ug/L	10.0	1	05/30/18 09:28	06/01/18 20:45	7439-95-4	
Manganese, Dissolved	**17.7**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7439-96-5	
Nickel, Dissolved	**0.40J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-02-0	
Potassium, Dissolved	**978**	ug/L	50.0	1	05/30/18 09:28	06/01/18 20:45	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:45	7440-22-4	
Sodium, Dissolved	**2530**	ug/L	50.0	1	05/30/18 09:28	06/01/18 20:45	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/01/18 20:45	7440-28-0	
Vanadium, Dissolved	**0.53J**	ug/L	1.0	1	05/30/18 09:28	06/01/18 20:45	7440-62-2	
Zinc, Dissolved	**4.4J**	ug/L	5.0	1	05/30/18 09:28	06/01/18 20:45	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-1 **Lab ID: 10432836001** Collected: 05/23/18 19:10 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**56.5**	mg/L	5.0	1		05/29/18 16:24		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/29/18 16:24		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**100**	mg/L	10.0	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.0**	Std. Units	0.10	1		05/29/18 17:51		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**160**	umhos/cm	1.0	1		05/29/18 16:44		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**1.2**	mg/L	1.2	1		05/30/18 04:04	16887-00-6	
Fluoride	**0.086**	mg/L	0.050	1		05/30/18 04:04	16984-48-8	
Sulfate	**5.5**	mg/L	1.2	1		05/30/18 04:04	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.053J**	mg/L	0.10	1		05/31/18 09:35		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**4.9**	mg/L	1.0	1		05/29/18 14:08	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.097J**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:53	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-2 **Lab ID: 10432836002** Collected: 05/23/18 17:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**747**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:09	7429-90-5	
Antimony	**0.29J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-36-0	
Arsenic	**7.3**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-38-2	
Barium	**81.8**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:09	7440-39-3	
Beryllium	ND	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:09	7440-41-7	
Cadmium	**0.086**	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:09	7440-43-9	
Calcium	**19000**	ug/L	40.0	1	05/30/18 08:53	06/01/18 10:09	7440-70-2	
Chromium	**0.75**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-47-3	
Cobalt	**0.40J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-48-4	
Copper	**13.1**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:09	7440-50-8	
Iron	**721**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:09	7439-89-6	
Lead	**1.6**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:09	7439-92-1	
Magnesium	**5640**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:09	7439-95-4	
Manganese	**163**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7439-96-5	
Nickel	**0.91**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-02-0	
Potassium	**2050**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:09	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:09	7440-22-4	
Sodium	**22500**	ug/L	250	5	05/30/18 08:53	06/01/18 10:33	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:09	7440-28-0	
Vanadium	**1.9**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:09	7440-62-2	
Zinc	**15.3**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:09	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**70.9**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:34	7429-90-5	
Antimony, Dissolved	**0.50J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-36-0	
Arsenic, Dissolved	**6.2**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-38-2	
Barium, Dissolved	**67.4**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:34	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 21:27	7440-41-7	
Cadmium, Dissolved	**0.048J**	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:34	7440-43-9	
Calcium, Dissolved	**17500**	ug/L	40.0	1	05/30/18 09:28	06/04/18 08:34	7440-70-2	
Chromium, Dissolved	**0.24J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-47-3	
Cobalt, Dissolved	**0.22J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-48-4	
Copper, Dissolved	**6.1**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:34	7440-50-8	
Iron, Dissolved	**73.5**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:34	7439-89-6	
Lead, Dissolved	**0.25**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:34	7439-92-1	
Magnesium, Dissolved	**4970**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:34	7439-95-4	
Manganese, Dissolved	**118**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7439-96-5	
Nickel, Dissolved	**0.46J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-02-0	
Potassium, Dissolved	**1720**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:34	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 21:27	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:34	7440-22-4	
Sodium, Dissolved	**20400**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:34	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:34	7440-28-0	
Vanadium, Dissolved	**0.95J**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:34	7440-62-2	
Zinc, Dissolved	**7.3**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:34	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-2 **Lab ID: 10432836002** Collected: 05/23/18 17:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**79.8**	mg/L	5.0	1		05/29/18 16:28		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/29/18 16:28		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**123**	mg/L	10.0	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.0**	Std. Units	0.10	1		05/29/18 17:52		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**199**	umhos/cm	1.0	1		05/29/18 16:46		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**3.8**	mg/L	1.2	1		05/30/18 04:19	16887-00-6	
Fluoride	**0.096**	mg/L	0.050	1		05/30/18 04:19	16984-48-8	
Sulfate	**17.0**	mg/L	1.2	1		05/30/18 04:19	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.038J**	mg/L	0.10	1		05/31/18 09:36		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**5.7**	mg/L	1.0	1		05/29/18 14:21	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.10**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:54	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
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ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: SMW-11 **Lab ID: 10432836003** Collected: 05/23/18 15:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**175**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:36	7429-90-5	
Antimony	**0.87**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-36-0	
Arsenic	**37.5**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-38-2	
Barium	**161**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:36	7440-39-3	
Beryllium	**0.11J**	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:36	7440-41-7	
Cadmium	ND	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:36	7440-43-9	
Calcium	**108000**	ug/L	2000	50	05/30/18 08:53	06/01/18 10:43	7440-70-2	
Chromium	**4.3**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-47-3	
Cobalt	**0.51**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-48-4	
Copper	**0.58J**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:36	7440-50-8	
Iron	**1530**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:36	7439-89-6	
Lead	**0.27**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:36	7439-92-1	
Magnesium	**32500**	ug/L	500	50	05/30/18 08:53	06/01/18 10:43	7439-95-4	
Manganese	**6830**	ug/L	25.0	50	05/30/18 08:53	06/01/18 10:43	7439-96-5	
Nickel	**5.6**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-02-0	
Potassium	**29700**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:43	7440-09-7	
Selenium	**0.69**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:36	7440-22-4	
Sodium	**773000**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:43	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:36	7440-28-0	
Vanadium	**22.1**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:36	7440-62-2	
Zinc	**1.6J**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:36	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**152**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:21	7429-90-5	
Antimony, Dissolved	**0.87**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-36-0	
Arsenic, Dissolved	**36.6**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-38-2	
Barium, Dissolved	**163**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:21	7440-39-3	
Beryllium, Dissolved	**0.098J**	ug/L	0.20	1	05/30/18 09:28	06/01/18 21:10	7440-41-7	
Cadmium, Dissolved	ND	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:21	7440-43-9	
Calcium, Dissolved	**112000**	ug/L	2000	50	05/30/18 09:28	06/04/18 08:23	7440-70-2	
Chromium, Dissolved	**4.0**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-47-3	
Cobalt, Dissolved	**0.48J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-48-4	
Copper, Dissolved	**0.58J**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:21	7440-50-8	
Iron, Dissolved	**1440**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:21	7439-89-6	
Lead, Dissolved	**0.31**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:21	7439-92-1	
Magnesium, Dissolved	**33500**	ug/L	500	50	05/30/18 09:28	06/04/18 08:23	7439-95-4	
Manganese, Dissolved	**7300**	ug/L	25.0	50	05/30/18 09:28	06/04/18 08:23	7439-96-5	
Nickel, Dissolved	**4.9**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-02-0	
Potassium, Dissolved	**29900**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:23	7440-09-7	
Selenium, Dissolved	**0.60**	ug/L	0.50	1	05/30/18 09:28	06/01/18 21:10	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:21	7440-22-4	
Sodium, Dissolved	**773000**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:23	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:21	7440-28-0	
Vanadium, Dissolved	**21.3**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:21	7440-62-2	
Zinc, Dissolved	**2.5J**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:21	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: SMW-11 **Lab ID: 10432836003** Collected: 05/23/18 15:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**846**	mg/L	5.0	1		05/29/18 16:32		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/29/18 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**2450**	mg/L	100	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.5**	Std. Units	0.10	1		05/29/18 17:54		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**3210**	umhos/cm	1.0	1		05/29/18 16:48		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**54.3**	mg/L	1.2	1		05/30/18 04:34	16887-00-6	
Fluoride	**0.22**	mg/L	0.050	1		05/30/18 04:34	16984-48-8	
Sulfate	**947**	mg/L	24.0	20		05/30/18 10:11	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		05/31/18 09:37		FS
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**41.4**	mg/L	1.0	1		05/29/18 15:01	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.77**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:54	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
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ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: HP-13A Pond **Lab ID: 10432836004** Collected: 05/23/18 16:15 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**138**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:38	7429-90-5	
Antimony	**1.4**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-36-0	
Arsenic	**16.2**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-38-2	
Barium	**90.3**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:38	7440-39-3	
Beryllium	ND	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:38	7440-41-7	
Cadmium	**0.43**	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:38	7440-43-9	
Calcium	**91300**	ug/L	2000	50	05/30/18 08:53	06/01/18 10:48	7440-70-2	
Chromium	**1.5**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-47-3	
Cobalt	**0.75**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-48-4	
Copper	**19.6**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:38	7440-50-8	
Iron	**615**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:38	7439-89-6	
Lead	**1.0**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:38	7439-92-1	
Magnesium	**45500**	ug/L	500	50	05/30/18 08:53	06/01/18 10:48	7439-95-4	
Manganese	**953**	ug/L	25.0	50	05/30/18 08:53	06/01/18 10:48	7439-96-5	
Nickel	**3.4**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-02-0	
Potassium	**44400**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:48	7440-09-7	
Selenium	**0.36J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:38	7440-22-4	
Sodium	**957000**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:48	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:38	7440-28-0	
Vanadium	**6.9**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:38	7440-62-2	
Zinc	**43.0**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:38	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**48.6**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:25	7429-90-5	
Antimony, Dissolved	**1.6**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-36-0	
Arsenic, Dissolved	**14.4**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-38-2	
Barium, Dissolved	**84.3**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:25	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 21:15	7440-41-7	
Cadmium, Dissolved	**0.28**	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:25	7440-43-9	
Calcium, Dissolved	**85600**	ug/L	2000	50	05/30/18 09:28	06/04/18 08:27	7440-70-2	
Chromium, Dissolved	**1.1**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-47-3	
Cobalt, Dissolved	**0.74**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-48-4	
Copper, Dissolved	**14.8**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:25	7440-50-8	
Iron, Dissolved	**398**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:25	7439-89-6	
Lead, Dissolved	**0.73**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:25	7439-92-1	
Magnesium, Dissolved	**41900**	ug/L	500	50	05/30/18 09:28	06/04/18 08:27	7439-95-4	
Manganese, Dissolved	**897**	ug/L	25.0	50	05/30/18 09:28	06/04/18 08:27	7439-96-5	
Nickel, Dissolved	**2.9**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-02-0	
Potassium, Dissolved	**41200**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:27	7440-09-7	
Selenium, Dissolved	**0.38J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 21:15	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:25	7440-22-4	
Sodium, Dissolved	**885000**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:27	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:25	7440-28-0	
Vanadium, Dissolved	**6.5**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:25	7440-62-2	
Zinc, Dissolved	**26.0**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:25	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: HP-13A Pond **Lab ID: 10432836004** Collected: 05/23/18 16:15 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**545**	mg/L	5.0	1		05/30/18 13:13		
Alkalinity,Carbonate (CaCO3)	**43.4**	mg/L	5.0	1		05/30/18 13:13		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**2980**	mg/L	200	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**8.2**	Std. Units	0.10	1		05/29/18 17:55		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**4240**	umhos/cm	1.0	1		05/29/18 16:49		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**78.5**	mg/L	1.2	1		05/30/18 05:19	16887-00-6	
Fluoride	**0.27**	mg/L	0.050	1		05/30/18 05:19	16984-48-8	
Sulfate	**1540**	mg/L	24.0	20		05/30/18 10:28	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.023J**	mg/L	0.10	1		05/31/18 09:38		FS
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**50.5**	mg/L	2.0	2		05/30/18 08:00	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.28**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:55	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
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ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: HP-2 Pond **Lab ID: 10432836005** Collected: 05/23/18 18:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**218**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:41	7429-90-5	
Antimony	**1.3**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-36-0	
Arsenic	**5.4**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-38-2	
Barium	**105**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:41	7440-39-3	
Beryllium	**0.079J**	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:41	7440-41-7	
Cadmium	**0.30**	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:41	7440-43-9	
Calcium	**99300**	ug/L	2000	50	05/30/18 08:53	06/01/18 10:51	7440-70-2	
Chromium	**1.6**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-47-3	
Cobalt	**1.6**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-48-4	
Copper	**13.8**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:41	7440-50-8	
Iron	**480**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:41	7439-89-6	
Lead	**0.63**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:41	7439-92-1	
Magnesium	**57700**	ug/L	500	50	05/30/18 08:53	06/01/18 10:51	7439-95-4	
Manganese	**428**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7439-96-5	
Nickel	**4.3**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-02-0	
Potassium	**46800**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:51	7440-09-7	
Selenium	**0.24J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:41	7440-22-4	
Sodium	**611000**	ug/L	2500	50	05/30/18 08:53	06/01/18 10:51	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:41	7440-28-0	
Vanadium	**5.3**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:41	7440-62-2	
Zinc	**22.0**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:41	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**76.6**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:30	7429-90-5	
Antimony, Dissolved	**1.2**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-36-0	
Arsenic, Dissolved	**5.1**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-38-2	
Barium, Dissolved	**100**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:30	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 21:21	7440-41-7	
Cadmium, Dissolved	**0.24**	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:30	7440-43-9	
Calcium, Dissolved	**97100**	ug/L	2000	50	05/30/18 09:28	06/04/18 08:32	7440-70-2	
Chromium, Dissolved	**1.2**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-47-3	
Cobalt, Dissolved	**1.9**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-48-4	
Copper, Dissolved	**11.2**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:30	7440-50-8	
Iron, Dissolved	**266**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:30	7439-89-6	
Lead, Dissolved	**0.39**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:30	7439-92-1	
Magnesium, Dissolved	**55500**	ug/L	500	50	05/30/18 09:28	06/04/18 08:32	7439-95-4	
Manganese, Dissolved	**360**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7439-96-5	
Nickel, Dissolved	**3.7**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-02-0	
Potassium, Dissolved	**46400**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:32	7440-09-7	
Selenium, Dissolved	**0.30J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 21:21	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:30	7440-22-4	
Sodium, Dissolved	**590000**	ug/L	2500	50	05/30/18 09:28	06/04/18 08:32	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:30	7440-28-0	
Vanadium, Dissolved	**4.8**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:30	7440-62-2	
Zinc, Dissolved	**14.6**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:30	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: HP-2 Pond **Lab ID: 10432836005** Collected: 05/23/18 18:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**341**	mg/L	5.0	1		05/30/18 13:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/30/18 13:46		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**2120**	mg/L	100	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**8.1**	Std. Units	0.10	1		05/29/18 17:57		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**2970**	umhos/cm	1.0	1		05/29/18 16:50		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**37.3**	mg/L	1.2	1		05/30/18 05:34	16887-00-6	
Fluoride	**0.22**	mg/L	0.050	1		05/30/18 05:34	16984-48-8	
Sulfate	**1220**	mg/L	24.0	20		05/30/18 10:45	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.016J**	mg/L	0.10	1		05/31/18 09:39		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**37.5**	mg/L	1.0	1		05/29/18 15:54	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.24**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:56	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
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ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-HB-1 **Lab ID: 10432836006** Collected: 05/23/18 19:50 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**1260**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:46	7429-90-5	
Antimony	**0.30J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-36-0	
Arsenic	**4.6**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-38-2	
Barium	**85.6**	ug/L	0.30	1	05/30/18 08:53	06/01/18 10:46	7440-39-3	
Beryllium	**0.089J**	ug/L	0.20	1	05/30/18 08:53	06/01/18 10:46	7440-41-7	
Cadmium	**0.10**	ug/L	0.080	1	05/30/18 08:53	06/01/18 10:46	7440-43-9	
Calcium	**18100**	ug/L	40.0	1	05/30/18 08:53	06/01/18 10:46	7440-70-2	
Chromium	**1.2**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-47-3	
Cobalt	**0.54**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-48-4	
Copper	**15.4**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:46	7440-50-8	
Iron	**1170**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:46	7439-89-6	
Lead	**2.4**	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:46	7439-92-1	
Magnesium	**5550**	ug/L	10.0	1	05/30/18 08:53	06/01/18 10:46	7439-95-4	
Manganese	**71.4**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7439-96-5	
Nickel	**1.1**	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-02-0	
Potassium	**1470**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:46	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 10:46	7440-22-4	
Sodium	**3200**	ug/L	50.0	1	05/30/18 08:53	06/01/18 10:46	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 10:46	7440-28-0	
Vanadium	**2.0**	ug/L	1.0	1	05/30/18 08:53	06/01/18 10:46	7440-62-2	
Zinc	**23.6**	ug/L	5.0	1	05/30/18 08:53	06/01/18 10:46	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**61.2**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:48	7429-90-5	
Antimony, Dissolved	**0.23J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-36-0	
Arsenic, Dissolved	**3.1**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-38-2	
Barium, Dissolved	**60.8**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:48	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 22:09	7440-41-7	
Cadmium, Dissolved	ND	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:48	7440-43-9	
Calcium, Dissolved	**15800**	ug/L	40.0	1	05/30/18 09:28	06/04/18 08:48	7440-70-2	
Chromium, Dissolved	**0.34J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-47-3	
Cobalt, Dissolved	**0.37J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-48-4	
Copper, Dissolved	**4.0**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:48	7440-50-8	
Iron, Dissolved	**53.4**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:48	7439-89-6	
Lead, Dissolved	**0.13**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:48	7439-92-1	
Magnesium, Dissolved	**4380**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:48	7439-95-4	
Manganese, Dissolved	**18.9**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7439-96-5	
Nickel, Dissolved	**0.29J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-02-0	
Potassium, Dissolved	**1010**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:48	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 22:09	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:48	7440-22-4	
Sodium, Dissolved	**2640**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:48	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:48	7440-28-0	
Vanadium, Dissolved	**0.59J**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:48	7440-62-2	
Zinc, Dissolved	**4.1J**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:48	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-HB-1 **Lab ID: 10432836006** Collected: 05/23/18 19:50 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**56.3**	mg/L	5.0	1		05/30/18 13:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/30/18 13:50		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**99.0**	mg/L	10.0	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.8**	Std. Units	0.10	1		05/29/18 17:59		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**124**	umhos/cm	1.0	1		05/29/18 16:51		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**1.2**	mg/L	1.2	1		05/30/18 05:49	16887-00-6	
Fluoride	**0.089**	mg/L	0.050	1		05/30/18 05:49	16984-48-8	
Sulfate	**5.8**	mg/L	1.2	1		05/30/18 05:49	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.024J**	mg/L	0.10	1		05/31/18 09:43		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**5.0**	mg/L	1.0	1		05/29/18 16:07	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.11**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:57	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
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ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: SW-DUP **Lab ID: 10432836007** Collected: 05/23/18 00:00 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**87.3**	ug/L	10.0	1	05/30/18 08:53	06/01/18 11:05	7429-90-5	
Antimony	**0.56**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-36-0	
Arsenic	**22.2**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-38-2	
Barium	**127**	ug/L	0.30	1	05/30/18 08:53	06/01/18 11:05	7440-39-3	
Beryllium	ND	ug/L	0.20	1	05/30/18 08:53	06/01/18 11:05	7440-41-7	
Cadmium	**0.24**	ug/L	0.080	1	05/30/18 08:53	06/01/18 11:05	7440-43-9	
Calcium	**31400**	ug/L	200	5	05/30/18 08:53	06/01/18 11:09	7440-70-2	
Chromium	**0.37J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-47-3	
Cobalt	**0.32J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-48-4	
Copper	**25.4**	ug/L	1.0	1	05/30/18 08:53	06/01/18 11:05	7440-50-8	
Iron	**163**	ug/L	50.0	1	05/30/18 08:53	06/01/18 11:05	7439-89-6	
Lead	**0.62**	ug/L	0.10	1	05/30/18 08:53	06/01/18 11:05	7439-92-1	
Magnesium	**9380**	ug/L	10.0	1	05/30/18 08:53	06/01/18 11:05	7439-95-4	
Manganese	**287**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7439-96-5	
Nickel	**0.88**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-02-0	
Potassium	**7840**	ug/L	50.0	1	05/30/18 08:53	06/01/18 11:05	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7782-49-2	
Silver	**0.20J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:05	7440-22-4	
Sodium	**57600**	ug/L	250	5	05/30/18 08:53	06/01/18 11:09	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 11:05	7440-28-0	
Vanadium	**1.3**	ug/L	1.0	1	05/30/18 08:53	06/01/18 11:05	7440-62-2	
Zinc	**13.3**	ug/L	5.0	1	05/30/18 08:53	06/01/18 11:05	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**36.6**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:38	7429-90-5	
Antimony, Dissolved	**0.74**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-36-0	
Arsenic, Dissolved	**21.8**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-38-2	
Barium, Dissolved	**120**	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:38	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 21:32	7440-41-7	
Cadmium, Dissolved	**0.20**	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:38	7440-43-9	
Calcium, Dissolved	**40000**	ug/L	200	5	05/30/18 09:28	06/04/18 08:40	7440-70-2	
Chromium, Dissolved	**0.34J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-47-3	
Cobalt, Dissolved	**0.34J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-48-4	
Copper, Dissolved	**19.2**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:38	7440-50-8	
Iron, Dissolved	**95.2**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:38	7439-89-6	
Lead, Dissolved	**0.38**	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:38	7439-92-1	
Magnesium, Dissolved	**8400**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:38	7439-95-4	
Manganese, Dissolved	**247**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7439-96-5	
Nickel, Dissolved	**0.85**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-02-0	
Potassium, Dissolved	**7100**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:38	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 21:32	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:38	7440-22-4	
Sodium, Dissolved	**78200**	ug/L	250	5	05/30/18 09:28	06/04/18 08:40	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:38	7440-28-0	
Vanadium, Dissolved	**1.3**	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:38	7440-62-2	
Zinc, Dissolved	**9.5**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:38	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: SW-DUP **Lab ID: 10432836007** Collected: 05/23/18 00:00 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**165**	mg/L	5.0	1		05/30/18 13:57		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/30/18 13:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**293**	mg/L	10.0	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.6**	Std. Units	0.10	1		05/29/18 17:59		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**423**	umhos/cm	1.0	1		05/29/18 16:52		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**9.8**	mg/L	1.2	1		05/30/18 06:05	16887-00-6	
Fluoride	**0.12**	mg/L	0.050	1		05/30/18 06:05	16984-48-8	
Sulfate	**44.5**	mg/L	1.2	1		05/30/18 06:05	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	**0.019J**	mg/L	0.10	1		05/31/18 09:44		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**17.7**	mg/L	1.0	1		05/29/18 16:20	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.30**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:58	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: ERB **Lab ID: 10432836008** Collected: 05/23/18 20:55 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**48.6**	ug/L	10.0	1	05/30/18 08:53	06/01/18 11:12	7429-90-5	
Antimony	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-36-0	
Arsenic	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-38-2	
Barium	**0.80**	ug/L	0.30	1	05/30/18 08:53	06/01/18 11:12	7440-39-3	
Beryllium	ND	ug/L	0.20	1	05/30/18 08:53	06/01/18 11:12	7440-41-7	
Cadmium	ND	ug/L	0.080	1	05/30/18 08:53	06/01/18 11:12	7440-43-9	
Calcium	**176**	ug/L	40.0	1	05/30/18 08:53	06/01/18 11:12	7440-70-2	
Chromium	**0.41J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-47-3	
Cobalt	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-48-4	
Copper	**0.22J**	ug/L	1.0	1	05/30/18 08:53	06/01/18 11:12	7440-50-8	
Iron	**37.5J**	ug/L	50.0	1	05/30/18 08:53	06/01/18 11:12	7439-89-6	
Lead	**0.072J**	ug/L	0.10	1	05/30/18 08:53	06/01/18 11:12	7439-92-1	
Magnesium	**75.1**	ug/L	10.0	1	05/30/18 08:53	06/01/18 11:12	7439-95-4	
Manganese	**1.7**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7439-96-5	
Nickel	**0.28J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-02-0	
Potassium	**19.8J**	ug/L	50.0	1	05/30/18 08:53	06/01/18 11:12	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7782-49-2	
Silver	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 11:12	7440-22-4	
Sodium	**21.7J**	ug/L	50.0	1	05/30/18 08:53	06/01/18 11:12	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 11:12	7440-28-0	
Vanadium	ND	ug/L	1.0	1	05/30/18 08:53	06/01/18 11:12	7440-62-2	
Zinc	**1.4J**	ug/L	5.0	1	05/30/18 08:53	06/01/18 11:12	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**2.9J**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:50	7429-90-5	
Antimony, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-36-0	
Arsenic, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-38-2	
Barium, Dissolved	ND	ug/L	0.30	1	05/30/18 09:28	06/04/18 08:50	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 22:06	7440-41-7	
Cadmium, Dissolved	ND	ug/L	0.080	1	05/30/18 09:28	06/04/18 08:50	7440-43-9	
Calcium, Dissolved	**31.3J**	ug/L	40.0	1	05/30/18 09:28	06/04/18 08:50	7440-70-2	
Chromium, Dissolved	**0.25J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-47-3	
Cobalt, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-48-4	
Copper, Dissolved	ND	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:50	7440-50-8	
Iron, Dissolved	ND	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:50	7439-89-6	
Lead, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:50	7439-92-1	
Magnesium, Dissolved	**5.5J**	ug/L	10.0	1	05/30/18 09:28	06/04/18 08:50	7439-95-4	B
Manganese, Dissolved	**0.26J**	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7439-96-5	B
Nickel, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-02-0	
Potassium, Dissolved	ND	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:50	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 22:06	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/04/18 08:50	7440-22-4	
Sodium, Dissolved	**153**	ug/L	50.0	1	05/30/18 09:28	06/04/18 08:50	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/04/18 08:50	7440-28-0	
Vanadium, Dissolved	ND	ug/L	1.0	1	05/30/18 09:28	06/04/18 08:50	7440-62-2	
Zinc, Dissolved	**1.4J**	ug/L	5.0	1	05/30/18 09:28	06/04/18 08:50	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: ERB **Lab ID: 10432836008** Collected: 05/23/18 20:55 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	1		05/30/18 14:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/30/18 14:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	100	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**4.6**	Std. Units	0.10	1		05/29/18 18:06		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**1.7**	umhos/cm	1.0	1		05/29/18 16:53		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**0.37J**	mg/L	1.2	1		05/30/18 06:20	16887-00-6	
Fluoride	ND	mg/L	0.050	1		05/30/18 06:20	16984-48-8	
Sulfate	**0.53J**	mg/L	1.2	1		05/30/18 06:20	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		05/31/18 09:45		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**0.42J**	mg/L	1.0	1		05/29/18 16:32	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	ND	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:59	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-HP-13A **Lab ID: 10432831001** Collected: 05/23/18 16:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6020A MET ICPMS	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum	**81.8**	ug/L	10.0	1	05/30/18 08:53	06/01/18 09:40	7429-90-5	
Antimony	**0.57**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-36-0	
Arsenic	**21.5**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-38-2	
Barium	**123**	ug/L	0.30	1	05/30/18 08:53	06/01/18 09:40	7440-39-3	
Beryllium	ND	ug/L	0.20	1	05/30/18 08:53	06/01/18 09:40	7440-41-7	
Cadmium	**0.27**	ug/L	0.080	1	05/30/18 08:53	06/01/18 09:40	7440-43-9	
Calcium	**30900**	ug/L	200	5	05/30/18 08:53	06/01/18 09:44	7440-70-2	
Chromium	**0.38J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-47-3	
Cobalt	**0.31J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-48-4	
Copper	**24.5**	ug/L	1.0	1	05/30/18 08:53	06/01/18 09:40	7440-50-8	
Iron	**159**	ug/L	50.0	1	05/30/18 08:53	06/01/18 09:40	7439-89-6	
Lead	**0.62**	ug/L	0.10	1	05/30/18 08:53	06/01/18 09:40	7439-92-1	
Magnesium	**8800**	ug/L	10.0	1	05/30/18 08:53	06/01/18 09:40	7439-95-4	
Manganese	**277**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7439-96-5	
Nickel	**0.86**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-02-0	
Potassium	**7490**	ug/L	50.0	1	05/30/18 08:53	06/01/18 09:40	7440-09-7	
Selenium	ND	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7782-49-2	
Silver	**0.19J**	ug/L	0.50	1	05/30/18 08:53	06/01/18 09:40	7440-22-4	
Sodium	**54900**	ug/L	250	5	05/30/18 08:53	06/01/18 09:44	7440-23-5	
Thallium	ND	ug/L	0.10	1	05/30/18 08:53	06/01/18 09:40	7440-28-0	
Vanadium	**1.3**	ug/L	1.0	1	05/30/18 08:53	06/01/18 09:40	7440-62-2	
Zinc	**13.9**	ug/L	5.0	1	05/30/18 08:53	06/01/18 09:40	7440-66-6	
6020A MET ICPMS, Dissolved	Analytical Method: EPA 6020A Preparation Method: EPA 3020							
Aluminum, Dissolved	**32.1**	ug/L	10.0	1	05/30/18 09:28	06/01/18 20:42	7429-90-5	
Antimony, Dissolved	**0.92**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-36-0	
Arsenic, Dissolved	**21.5**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-38-2	
Barium, Dissolved	**120**	ug/L	0.30	1	05/30/18 09:28	06/01/18 20:42	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	05/30/18 09:28	06/01/18 20:42	7440-41-7	
Cadmium, Dissolved	**0.19**	ug/L	0.080	1	05/30/18 09:28	06/01/18 20:42	7440-43-9	
Calcium, Dissolved	**28600**	ug/L	200	5	05/30/18 09:28	06/01/18 20:59	7440-70-2	
Chromium, Dissolved	**0.50J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-47-3	
Cobalt, Dissolved	**0.43J**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-48-4	
Copper, Dissolved	**18.8**	ug/L	1.0	1	05/30/18 09:28	06/01/18 20:42	7440-50-8	
Iron, Dissolved	**91.6**	ug/L	50.0	1	05/30/18 09:28	06/01/18 20:42	7439-89-6	
Lead, Dissolved	**0.36**	ug/L	0.10	1	05/30/18 09:28	06/01/18 20:42	7439-92-1	
Magnesium, Dissolved	**8430**	ug/L	10.0	1	05/30/18 09:28	06/01/18 20:42	7439-95-4	
Manganese, Dissolved	**247**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7439-96-5	
Nickel, Dissolved	**0.97**	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-02-0	
Potassium, Dissolved	**7220**	ug/L	50.0	1	05/30/18 09:28	06/01/18 20:42	7440-09-7	
Selenium, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	05/30/18 09:28	06/01/18 20:42	7440-22-4	
Sodium, Dissolved	**55500**	ug/L	250	5	05/30/18 09:28	06/01/18 20:59	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	05/30/18 09:28	06/01/18 20:42	7440-28-0	
Vanadium, Dissolved	**1.4**	ug/L	1.0	1	05/30/18 09:28	06/01/18 20:42	7440-62-2	
Zinc, Dissolved	**10**	ug/L	5.0	1	05/30/18 09:28	06/01/18 20:42	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

ANALYTICAL RESULTS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Sample: CFR-HP-13A **Lab ID: 10432831001** Collected: 05/23/18 16:40 Received: 05/25/18 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	**172**	mg/L	5.0	1		05/29/18 16:19		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	1		05/29/18 16:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**296**	mg/L	10.0	1		05/30/18 20:26		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**6.8**	Std. Units	0.10	1		05/29/18 17:50		H6
SM2510 Specific Conductance	Analytical Method: SM 2510							
Specific Conductance	**419**	umhos/cm	1.0	1		05/29/18 16:37		
300.0 IC Anions	Analytical Method: EPA 300.0							
Chloride	**10.0**	mg/L	1.2	1		05/30/18 03:49	16887-00-6	
Fluoride	**0.12**	mg/L	0.050	1		05/30/18 03:49	16984-48-8	
Sulfate	**45.7**	mg/L	1.2	1		05/30/18 03:49	14808-79-8	
353.2 Nitrate + Nitrite	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		05/31/18 09:31		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**17.2**	mg/L	1.0	1		05/29/18 13:28	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM 4500-P B							
Phosphorus	**0.27**	mg/L	0.10	1	05/30/18 09:39	05/30/18 12:53	7723-14-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541158 Analysis Method: EPA 6020A
QC Batch Method: EPA 3020 Analysis Description: 6020A Water UPD4
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2943643 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	3.4J	10.0	06/01/18 09:22	
Antimony	ug/L	ND	0.50	06/01/18 09:22	
Arsenic	ug/L	ND	0.50	06/01/18 09:22	
Barium	ug/L	ND	0.30	06/01/18 09:22	
Beryllium	ug/L	ND	0.20	06/01/18 09:22	
Cadmium	ug/L	ND	0.080	06/01/18 09:22	
Calcium	ug/L	ND	40.0	06/01/18 09:22	
Chromium	ug/L	ND	0.50	06/01/18 09:22	
Cobalt	ug/L	ND	0.50	06/01/18 09:22	
Copper	ug/L	ND	1.0	06/01/18 09:22	
Iron	ug/L	ND	50.0	06/01/18 09:22	
Lead	ug/L	ND	0.10	06/01/18 09:22	
Magnesium	ug/L	5.6J	10.0	06/01/18 09:22	
Manganese	ug/L	ND	0.50	06/01/18 09:22	
Nickel	ug/L	ND	0.50	06/01/18 09:22	
Potassium	ug/L	ND	50.0	06/01/18 09:22	
Selenium	ug/L	ND	0.50	06/01/18 09:22	
Silver	ug/L	ND	0.50	06/01/18 09:22	
Sodium	ug/L	ND	50.0	06/01/18 09:22	
Thallium	ug/L	ND	0.10	06/01/18 09:22	
Vanadium	ug/L	ND	1.0	06/01/18 09:22	
Zinc	ug/L	ND	5.0	06/01/18 09:22	

LABORATORY CONTROL SAMPLE: 2943644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	2000	2170	109	80-120	
Antimony	ug/L	100	105	105	80-120	
Arsenic	ug/L	100	104	104	80-120	
Barium	ug/L	100	104	104	80-120	
Beryllium	ug/L	100	116	116	80-120	
Cadmium	ug/L	100	107	107	80-120	
Calcium	ug/L	2000	2240	112	80-120	
Chromium	ug/L	100	111	111	80-120	
Cobalt	ug/L	100	109	109	80-120	
Copper	ug/L	100	111	111	80-120	
Iron	ug/L	2000	2260	113	80-120	
Lead	ug/L	100	106	106	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

LABORATORY CONTROL SAMPLE: 2943644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	2000	2250	112	80-120	
Manganese	ug/L	100	108	108	80-120	
Nickel	ug/L	100	111	111	80-120	
Potassium	ug/L	2000	2190	110	80-120	
Selenium	ug/L	100	114	114	80-120	
Silver	ug/L	50	49.9	100	80-120	
Sodium	ug/L	2000	2230	112	80-120	
Thallium	ug/L	100	105	105	80-120	
Vanadium	ug/L	100	108	108	80-120	
Zinc	ug/L	100	109	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2943645 2943646

Parameter	Units	10432836001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	1220	2000	2000	3530	3590	115	118	75-125	2	20	
Antimony	ug/L	0.26J	100	100	104	105	103	105	75-125	1	20	
Arsenic	ug/L	4.6	100	100	109	112	104	107	75-125	2	20	
Barium	ug/L	85.2	100	100	192	193	107	108	75-125	0	20	
Beryllium	ug/L	0.091J	100	100	113	109	112	109	75-125	3	20	
Cadmium	ug/L	0.088	100	100	108	110	107	110	75-125	3	20	
Calcium	ug/L	17400	2000	2000	19500	19500	104	108	75-125	0	20	
Chromium	ug/L	1.1	100	100	114	114	113	113	75-125	1	20	
Cobalt	ug/L	0.54	100	100	110	112	109	111	75-125	2	20	
Copper	ug/L	15.0	100	100	126	128	111	113	75-125	2	20	
Iron	ug/L	1180	2000	2000	3470	3480	114	115	75-125	0	20	
Lead	ug/L	2.5	100	100	108	111	106	109	75-125	3	20	
Magnesium	ug/L	5240	2000	2000	7460	7460	111	111	75-125	0	20	
Manganese	ug/L	72.9	100	100	181	184	108	111	75-125	2	20	
Nickel	ug/L	1.1	100	100	110	112	109	111	75-125	2	20	
Potassium	ug/L	1430	2000	2000	3600	3650	108	111	75-125	2	20	
Selenium	ug/L	ND	100	100	111	108	111	108	75-125	3	20	
Silver	ug/L	ND	50	50	50.5	51.2	101	102	75-125	1	20	
Sodium	ug/L	2900	2000	2000	5140	5080	112	109	75-125	1	20	
Thallium	ug/L	ND	100	100	105	108	105	108	75-125	3	20	
Vanadium	ug/L	2.0	100	100	112	113	110	111	75-125	1	20	
Zinc	ug/L	24.1	100	100	132	134	108	110	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(406)254-7226

QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541156 Analysis Method: EPA 6020A
QC Batch Method: EPA 3020 Analysis Description: 6020A Water Dissolved UPD4
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2943635 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	10.0	06/01/18 20:39	
Antimony, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Arsenic, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Barium, Dissolved	ug/L	ND	0.30	06/01/18 20:39	
Beryllium, Dissolved	ug/L	ND	0.20	06/01/18 20:39	
Cadmium, Dissolved	ug/L	ND	0.080	06/01/18 20:39	
Calcium, Dissolved	ug/L	ND	40.0	06/01/18 20:39	
Chromium, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Cobalt, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Copper, Dissolved	ug/L	ND	1.0	06/01/18 20:39	
Iron, Dissolved	ug/L	ND	50.0	06/01/18 20:39	
Lead, Dissolved	ug/L	ND	0.10	06/01/18 20:39	
Magnesium, Dissolved	ug/L	ND	10.0	06/01/18 20:39	
Manganese, Dissolved	ug/L	0.20J	0.50	06/01/18 20:39	
Nickel, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Potassium, Dissolved	ug/L	ND	50.0	06/01/18 20:39	
Selenium, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Silver, Dissolved	ug/L	ND	0.50	06/01/18 20:39	
Sodium, Dissolved	ug/L	ND	50.0	06/01/18 20:39	
Thallium, Dissolved	ug/L	ND	0.10	06/01/18 20:39	
Vanadium, Dissolved	ug/L	ND	1.0	06/01/18 20:39	
Zinc, Dissolved	ug/L	ND	5.0	06/01/18 20:39	

LABORATORY CONTROL SAMPLE: 2943636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	2000	2170	108	80-120	
Antimony, Dissolved	ug/L	100	107	107	80-120	
Arsenic, Dissolved	ug/L	100	106	106	80-120	
Barium, Dissolved	ug/L	100	108	108	80-120	
Beryllium, Dissolved	ug/L	100	106	106	80-120	
Cadmium, Dissolved	ug/L	100	108	108	80-120	
Calcium, Dissolved	ug/L	2000	2310	115	80-120	
Chromium, Dissolved	ug/L	100	112	112	80-120	
Cobalt, Dissolved	ug/L	100	107	107	80-120	
Copper, Dissolved	ug/L	100	108	108	80-120	
Iron, Dissolved	ug/L	2000	2250	112	80-120	
Lead, Dissolved	ug/L	100	111	111	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

LABORATORY CONTROL SAMPLE: 2943636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium, Dissolved	ug/L	2000	2240	112	80-120	
Manganese, Dissolved	ug/L	100	110	110	80-120	
Nickel, Dissolved	ug/L	100	109	109	80-120	
Potassium, Dissolved	ug/L	2000	2170	109	80-120	
Selenium, Dissolved	ug/L	100	104	104	80-120	
Silver, Dissolved	ug/L	50	56.1	112	80-120	
Sodium, Dissolved	ug/L	2000	2240	112	80-120	
Thallium, Dissolved	ug/L	100	109	109	80-120	
Vanadium, Dissolved	ug/L	100	108	108	80-120	
Zinc, Dissolved	ug/L	100	110	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2943637 2943638

Parameter	Units	10432836001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	ug/L	69.4	2000	2000	2230	2220	108	108	75-125	0	20	
Antimony, Dissolved	ug/L	0.24J	100	100	107	108	107	108	75-125	1	20	
Arsenic, Dissolved	ug/L	2.8	100	100	109	110	107	107	75-125	1	20	
Barium, Dissolved	ug/L	55.8	100	100	168	168	112	112	75-125	0	20	
Beryllium, Dissolved	ug/L	ND	100	100	111	111	111	111	75-125	0	20	
Cadmium, Dissolved	ug/L	0.029J	100	100	106	108	106	108	75-125	2	20	
Calcium, Dissolved	ug/L	14900	2000	2000	18600	18200	184	167	75-125	2	20	M1
Chromium, Dissolved	ug/L	0.27J	100	100	111	110	110	110	75-125	0	20	
Cobalt, Dissolved	ug/L	ND	100	100	105	105	105	105	75-125	0	20	
Copper, Dissolved	ug/L	3.8	100	100	108	109	105	105	75-125	0	20	
Iron, Dissolved	ug/L	54.5	2000	2000	2280	2290	111	112	75-125	0	20	
Lead, Dissolved	ug/L	0.13	100	100	109	108	108	108	75-125	0	20	
Magnesium, Dissolved	ug/L	4120	2000	2000	6610	6540	124	121	75-125	1	20	
Manganese, Dissolved	ug/L	17.7	100	100	125	126	108	108	75-125	0	20	
Nickel, Dissolved	ug/L	0.40J	100	100	106	106	106	106	75-125	0	20	
Potassium, Dissolved	ug/L	978	2000	2000	3230	3190	113	111	75-125	1	20	
Selenium, Dissolved	ug/L	ND	100	100	107	109	107	109	75-125	1	20	
Silver, Dissolved	ug/L	ND	50	50	54.9	55.6	110	111	75-125	1	20	
Sodium, Dissolved	ug/L	2530	2000	2000	4900	4840	119	116	75-125	1	20	
Thallium, Dissolved	ug/L	ND	100	100	108	108	108	108	75-125	0	20	
Vanadium, Dissolved	ug/L	0.53J	100	100	110	110	109	109	75-125	0	20	
Zinc, Dissolved	ug/L	4.4J	100	100	112	112	108	108	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541240 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003

METHOD BLANK: 2944027 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	05/29/18 14:07	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	05/29/18 14:07	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541421 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2944820 Matrix: Water
Associated Lab Samples: 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	05/30/18 12:27	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	05/30/18 12:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541393 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2944685 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	05/30/18 20:26	

LABORATORY CONTROL SAMPLE: 2944686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	954	95	80-120	

SAMPLE DUPLICATE: 2944687

Parameter	Units	10432831001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	296	288	3	10	

SAMPLE DUPLICATE: 2944688

Parameter	Units	10432836001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	97.9	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541214 Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

LABORATORY CONTROL SAMPLE: 2943914

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.0	100	98-102	H6

SAMPLE DUPLICATE: 2943915

Parameter	Units	10432836004 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.2	8.2	0	3	H6

SAMPLE DUPLICATE: 2943945

Parameter	Units	10431815003 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.5	7.5	0	3	H6

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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541212 Analysis Method: SM 2510
QC Batch Method: SM 2510 Analysis Description: SM2510 Specific Conductance
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2943904 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	1.0	05/29/18 16:35	

LABORATORY CONTROL SAMPLE: 2943905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	976	98	90-110	

SAMPLE DUPLICATE: 2943906

Parameter	Units	10432831001 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	419	425	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541303 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2944283 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.2	05/30/18 01:52	
Fluoride	mg/L	ND	0.050	05/30/18 01:52	
Sulfate	mg/L	ND	1.2	05/30/18 01:52	

LABORATORY CONTROL SAMPLE: 2944284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	12.5	12.4	99	90-110	
Fluoride	mg/L	1	1.0	102	90-110	
Sulfate	mg/L	12.5	12.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944285 2944286

Parameter	Units	10431928006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	12.5	12.5	17.3	17.3	95	95	90-110	0	20	
Fluoride	mg/L	ND	1	1	0.71	0.72	71	72	90-110	1	20	M1
Sulfate	mg/L	10	12.5	12.5	22.5	22.6	100	101	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944309 2944310

Parameter	Units	10432489006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	14.1	12.5	12.5	24.9	25.1	87	88	90-110	1	20	M1
Fluoride	mg/L	0.66	1	1	1.6	1.6	96	97	90-110	1	20	
Sulfate	mg/L	43.3	12.5	12.5	51.5	51.9	66	69	90-110	1	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541432 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2944878 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	05/31/18 10:03	FS

LABORATORY CONTROL SAMPLE: 2944879

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	1	0.98	98	90-110	FS

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944880 2944881

Parameter	Units	10432831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	ND	1	1	0.96	1.0	96	103	90-110	7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944882 2944883

Parameter	Units	10432698005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	8.4	10	10	18.0	18.3	96	98	90-110	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 143886 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C TOC
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 568093 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	05/29/18 13:01	

LABORATORY CONTROL SAMPLE: 568094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	25.8	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 568095 568096

Parameter	Units	10432831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	17.2	25	25	43.7	43.1	106	104	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 568097 568098

Parameter	Units	10432836002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	5.7	25	25	32.2	31.8	106	104	80-120	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

QC Batch: 541342 Analysis Method: SM 4500-P E
QC Batch Method: SM 4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

METHOD BLANK: 2944464 Matrix: Water
Associated Lab Samples: 10432831001, 10432836001, 10432836002, 10432836003, 10432836004, 10432836005, 10432836006, 10432836007, 10432836008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphorus	mg/L	ND	0.10	05/30/18 12:44	

LABORATORY CONTROL SAMPLE: 2944465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus	mg/L	1	1.0	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944466 2944467

Parameter	Units	10432366001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus	mg/L	180	1	1	173	175	-705	-520	80-120	1	30	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2944468 2944469

Parameter	Units	10432717001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphorus	mg/L	ND	1	1	0.99	1.0	96	101	80-120	4	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALIFIERS

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis
PASI-V	Pace Analytical Services - Virginia

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
FS	The sample was filtered in the laboratory prior to analysis.
H6	Analysis initiated outside of the 15 minute EPA required holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10432831001	CFR-HP-13A	EPA 3020	541158	EPA 6020A	541946
10432836001	CFR-1	EPA 3020	541158	EPA 6020A	541946
10432836002	CFR-2	EPA 3020	541158	EPA 6020A	541946
10432836003	SMW-11	EPA 3020	541158	EPA 6020A	541946
10432836004	HP-13A Pond	EPA 3020	541158	EPA 6020A	541946
10432836005	HP-2 Pond	EPA 3020	541158	EPA 6020A	541946
10432836006	CFR-HB-1	EPA 3020	541158	EPA 6020A	541946
10432836007	SW-DUP	EPA 3020	541158	EPA 6020A	541946
10432836008	ERB	EPA 3020	541158	EPA 6020A	541946
10432831001	CFR-HP-13A	EPA 3020	541156	EPA 6020A	542050
10432836001	CFR-1	EPA 3020	541156	EPA 6020A	542050
10432836002	CFR-2	EPA 3020	541156	EPA 6020A	542050
10432836003	SMW-11	EPA 3020	541156	EPA 6020A	542050
10432836004	HP-13A Pond	EPA 3020	541156	EPA 6020A	542050
10432836005	HP-2 Pond	EPA 3020	541156	EPA 6020A	542050
10432836006	CFR-HB-1	EPA 3020	541156	EPA 6020A	542050
10432836007	SW-DUP	EPA 3020	541156	EPA 6020A	542050
10432836008	ERB	EPA 3020	541156	EPA 6020A	542050
10432831001	CFR-HP-13A	SM 2320B	541240		
10432836001	CFR-1	SM 2320B	541240		
10432836002	CFR-2	SM 2320B	541240		
10432836003	SMW-11	SM 2320B	541240		
10432836004	HP-13A Pond	SM 2320B	541421		
10432836005	HP-2 Pond	SM 2320B	541421		
10432836006	CFR-HB-1	SM 2320B	541421		
10432836007	SW-DUP	SM 2320B	541421		
10432836008	ERB	SM 2320B	541421		
10432831001	CFR-HP-13A	SM 2540C	541393		
10432836001	CFR-1	SM 2540C	541393		
10432836002	CFR-2	SM 2540C	541393		
10432836003	SMW-11	SM 2540C	541393		
10432836004	HP-13A Pond	SM 2540C	541393		
10432836005	HP-2 Pond	SM 2540C	541393		
10432836006	CFR-HB-1	SM 2540C	541393		
10432836007	SW-DUP	SM 2540C	541393		
10432836008	ERB	SM 2540C	541393		
10432831001	CFR-HP-13A	SM 4500-H+B	541214		
10432836001	CFR-1	SM 4500-H+B	541214		
10432836002	CFR-2	SM 4500-H+B	541214		
10432836003	SMW-11	SM 4500-H+B	541214		
10432836004	HP-13A Pond	SM 4500-H+B	541214		
10432836005	HP-2 Pond	SM 4500-H+B	541214		
10432836006	CFR-HB-1	SM 4500-H+B	541214		
10432836007	SW-DUP	SM 4500-H+B	541214		
10432836008	ERB	SM 4500-H+B	541214		
10432831001	CFR-HP-13A	SM 2510	541212		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
150 N Ninth Street
Billings, MT 59101
(406)254-7226

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 350.0065.001 Ph15 Frenchtown
Pace Project No.: 10432836

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10432836001	CFR-1	SM 2510	541212		
10432836002	CFR-2	SM 2510	541212		
10432836003	SMW-11	SM 2510	541212		
10432836004	HP-13A Pond	SM 2510	541212		
10432836005	HP-2 Pond	SM 2510	541212		
10432836006	CFR-HB-1	SM 2510	541212		
10432836007	SW-DUP	SM 2510	541212		
10432836008	ERB	SM 2510	541212		
10432831001	CFR-HP-13A	EPA 300.0	541303		
10432836001	CFR-1	EPA 300.0	541303		
10432836002	CFR-2	EPA 300.0	541303		
10432836003	SMW-11	EPA 300.0	541303		
10432836004	HP-13A Pond	EPA 300.0	541303		
10432836005	HP-2 Pond	EPA 300.0	541303		
10432836006	CFR-HB-1	EPA 300.0	541303		
10432836007	SW-DUP	EPA 300.0	541303		
10432836008	ERB	EPA 300.0	541303		
10432831001	CFR-HP-13A	EPA 353.2	541432		
10432836001	CFR-1	EPA 353.2	541432		
10432836002	CFR-2	EPA 353.2	541432		
10432836003	SMW-11	EPA 353.2	541432		
10432836004	HP-13A Pond	EPA 353.2	541432		
10432836005	HP-2 Pond	EPA 353.2	541432		
10432836006	CFR-HB-1	EPA 353.2	541432		
10432836007	SW-DUP	EPA 353.2	541432		
10432836008	ERB	EPA 353.2	541432		
10432831001	CFR-HP-13A	SM 5310C	143886		
10432836001	CFR-1	SM 5310C	143886		
10432836002	CFR-2	SM 5310C	143886		
10432836003	SMW-11	SM 5310C	143886		
10432836004	HP-13A Pond	SM 5310C	143886		
10432836005	HP-2 Pond	SM 5310C	143886		
10432836006	CFR-HB-1	SM 5310C	143886		
10432836007	SW-DUP	SM 5310C	143886		
10432836008	ERB	SM 5310C	143886		
10432831001	CFR-HP-13A	SM 4500-P B	541342	SM 4500-P E	541437
10432836001	CFR-1	SM 4500-P B	541342	SM 4500-P E	541437
10432836002	CFR-2	SM 4500-P B	541342	SM 4500-P E	541437
10432836003	SMW-11	SM 4500-P B	541342	SM 4500-P E	541437
10432836004	HP-13A Pond	SM 4500-P B	541342	SM 4500-P E	541437
10432836005	HP-2 Pond	SM 4500-P B	541342	SM 4500-P E	541437
10432836006	CFR-HB-1	SM 4500-P B	541342	SM 4500-P E	541437
10432836007	SW-DUP	SM 4500-P B	541342	SM 4500-P E	541437
10432836008	ERB	SM 4500-P B	541342	SM 4500-P E	541437

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CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed a

WO# : 10432836

10432836

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	NewFields	Report To:	dtooke@newfields.com	Attention:	Donna McCammon
Address:	700 SW Higgins, Suite 15	Copy To:	ajohnson@newfields.com; ksitler@newfields.com	Company Name:	NewFields
	Missoula, MT 59803			Address:	Same
Email To:	David Tooke	Purchase Order No.:		Pace Quote Reference:	
Phone:	406-549-8270 Fax:	Project Name:	Frenchtown Mill	Pace Project Manager:	Kang Khang
Requested Due Date/TAT:	Standard (except where noted)	Project Number:	350.0065.001 Phase 15	Pace Profile #:	32634

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MT

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Total Metals (6010/6020)*	Diss. Metals (6010/6020)*	353.2 N+N	SM4500 PE Total Phos	TOC	2540C TDS	300.0 IC Anions	Alk, pH	SM2510 Spec. Cond			Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	CFR-1	WT	G			05/23/18	19:10		4	X	X	X						x	x	x	x	x	x	x	x				001
2	CFR-2	WT	G			05/23/18	17:40		5	X	X	X						x	x	x	x	x	x	x	x				002
3	SMW-11	WT	G			05/23/18	15:40		4	X	X	X						x	x	x	x	x	x	x	x				003
4	HP-13A Pond	WT	G			05/23/18	16:15		5	X	X	X						x	x	x	x	x	x	x	x				004
5	CFR-HP-13A (48-hr TAT)	WT	G			05/23/18	16:40		4	X	X	X						x	x	x	x	x	x	x	x				
6	HP-2 Pond	WT	G			05/23/18	18:40		4	X	X	X						x	x	x	x	x	x	x	x				005
7	CFR-HB-1	WT	G			05/23/18	19:50		4	X	X	X						x	x	x	x	x	x	x	x				006
8	SW-DUP	WT	G			05/23/18	—		4	X	X	X						x	x	x	x	x	x	x	x				007
9	ERB	Wt	G			05/23/18	20:55		6	X	X	X						x	x	x	x	x	x	x	x				008
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* 6010:Ca, Mg, Na, K	Heather Grotbo/NewFields	5/24/18	1520	Matt Pace	5/25/18	1000	3.0	4	Y	Y
*6020:Al, V, Cr, Fe, Mn, Co, Zn, As, Se, Ag, Cd, Sb, Ba, Tl, Pb							3.9			
Please See attached project table for reference.										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: HEATHER GROTBO

SIGNATURE of SAMPLER: Heather Grotbo DATE Signed (MM/DD/YY): 5/24/18

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 02May2018 Page 1 of 2
	Document No.: F-MN-L-213-rev.23	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: New Fields

Project #: **WO#: 10432836**

PM: KSK1 **Due Date: 06/04/18**

CLIENT: 11 Newfields

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Commercial ☐Pace ☐SpeeDee ☐Other:

Tracking Number: 7475 9638 9857 6752 4211 4258

Custody Seal on Cooler/Box Present? ☒Yes ☐No **Seals Intact?** ☒Yes ☐No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒Bubble Wrap ☐Bubble Bags ☐None ☐Other: **Temp Blank?** ☒Yes ☐No

Thermometer Used: ☐G87A9170600254 ☒G87A9155100842 **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Cooler Temp Read (°C): 3.9,3.0 **Cooler Temp Corrected (°C):** 3.9,3.0 **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C **Correction Factor:** true **Date and Initials of Person Examining Contents:** MD 5/25/18

USDA Regulated Soil (☒N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☒Yes	☐No		1.
Chain of Custody Filled Out?	☒Yes	☐No		2.
Chain of Custody Relinquished?	☒Yes	☐No		3.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time?	☒Yes	☐No		5.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		6.
Rush Turn Around Time Requested?	☐Yes	☒No		7.
Sufficient Volume?	☒Yes	☐No		8.
Correct Containers Used?	☒Yes	☐No		9. unpres, and sulfuric containers poured off into sub-out containers.
-Pace Containers Used?	☒Yes	☐No		
Containers Intact?	☒Yes	☐No		10.
Filtered Volume Received for Dissolved Tests?	☒Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? Matrix: WT	☒Yes	☐No		12.
All containers needing acid/base preservation have been checked?	☒Yes	☐No	☐N/A	13. ☒HNO_3 ☒H_2SO_4 ☐NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	~~☒Yes~~ AA 5-25-18	☒No	☐N/A	Sample # 1-8: 2/2 1,3,5-7: 1/1 2,4,8: 2/2
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐Yes	☐No	☒N/A	Initial when completed: MD Lot # of added preservative: 3117051
Headspace in VOA Vials (>6mm)?	☐Yes	☐No	☒N/A	14.
Trip Blank Present?	☐Yes	☐No	☒N/A	15.
Trip Blank Custody Seals Present?	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: KKG **Date:** 5/25/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

SCUR Exceptions: **Workorder #:**

Issue	Sample ID	Container Type/#

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH Upon Receipt	Date Preservation Adjusted	Time Preservation Adjusted	Amount of Additional Preservative Added	Lot # of Preservative Added	pH After Adjustment	Initials
SMW-11	H_2SO_4	>6	5/25/18	1055	2.0mL	311705I	1.0	MD
HP-2 Pond	"	5	"	"	1.0mL	"	1.0	MD
CFR-HB-1	"	4	"	"	1.0mL	"	1.0	MD

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Doc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed ac

WO# : 10432831

10432831

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	NewFields	Report To:	dtooke@newfields.com	Attention:	Donna McCammon
Address:	700 SW Higgins, Suite 15	Copy To:	ajohnson@newfields.com; ksitler@newfields.com	Company Name:	NewFields
	Missoula, MT 59803			Address:	Same
Email To:	David Tooke	Purchase Order No.:		Pace Quote Reference:	
Phone:	406-549-8270 Fax:	Project Name:	Frenchtown Mill	Pace Project Manager:	Kang Khang
Requested Due Date/TAT:	Standard (except where noted)	Project Number:	350.0065.001 Phase 15	Pace Profile #:	32634

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MT

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: Total Metals (6010/6020)*	Diss. Metals (6010/6020)*	353.2 N+N	SM4500 PE Total Phos	TOC	2540C TDS	300.0 IC Anions	Alk, pH	SM2510 Spec. Cond				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	CFR-1		WT	G			05/23/18	19:10		4	X	X	X							X	X	X	X	X	X	X	X				
2	CFR-2		WT	G			05/23/18	17:40		5	X	X	X							X	X	X	X	X	X	X	X				
3	SMW-11		WT	G			05/23/18	15:40		4	X	X	X							X	X	X	X	X	X	X	X				
4	HP-13A Pond		WT	G			05/23/18	16:15		5	X	X	X							X	X	X	X	X	X	X	X				
5	CFR-HP-13A (48-hr TAT)		WT	G			05/23/18	16:40		4	X	X	X							X	X	X	X	X	X	X	X				001
6	HP-2 Pond		WT	G			05/23/18	18:40		4	X	X	X							X	X	X	X	X	X	X	X				
7	CFR-HB-1		WT	G			05/23/18	19:50		4	X	X	X							X	X	X	X	X	X	X	X				
8	SW-DUP		WT	G			05/23/18	—		4	X	X	X							X	X	X	X	X	X	X	X				
9	ERB		Wt	G			05/23/18	20:55		6	X	X	X							X	X	X	X	X	X	X	X				
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* 6010:Ca, Mg, Na, K	Heather Grotbo/NewFields	5/24/18	1530	Matt Pace	5/25/18	1000	3.9	Y	Y	Y
*6020:Al, V, Cr, Fe, Mn, Co, Zn, As, Se, Ag, Cd, Sb, Ba, Tl, Pb							3.0			
Please See attached project table for reference.										

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	HEATHER GROTBO		
SIGNATURE of SAMPLER:	Heather Grotbo	DATE Signed (MM/DD/YY):	5/24/18

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Client Name: New Fields

Project #: **WO#: 10432831**

PM: KSK1 **Due Date: 05/30/18**

CLIENT: 11 Newfields

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Commercial ☐Pace ☐SpeeDee ☐Other:

Tracking Number: 7475 9638 9857 6752 4211 4256

Custody Seal on Cooler/Box Present? ☒Yes ☐No Seals Intact? ☒Yes ☐No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒Bubble Wrap ☐Bubble Bags ☐None ☐Other: Temp Blank? ☒Yes ☐No

Thermometer Used: ☐G87A9170600254 ☒G87A9155100842 Type of Ice: ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Cooler Temp Read (°C): 3.9, 3.0 Cooler Temp Corrected (°C): 3.9, 3.0 Biological Tissue Frozen? ☐Yes ☐No ☒N/A

Temp should be above freezing to 6°C Correction Factor: true Date and Initials of Person Examining Contents: MD 5/25/18

USDA Regulated Soil (☒N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☒Yes	☐No		1.
Chain of Custody Filled Out?	☒Yes	☐No		2.
Chain of Custody Relinquished?	☒Yes	☐No		3.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time?	☒Yes	☐No		5.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		6.
Rush Turn Around Time Requested?	☒Yes	☐No		7.
Sufficient Volume?	☒Yes	☐No		8.
Correct Containers Used?	☒Yes	☐No		9. unpres. & sulfuric volumes split for subouts
-Pace Containers Used?	☒Yes	☐No		
Containers Intact?	☒Yes	☐No		10.
Filtered Volume Received for Dissolved Tests?	☒Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? Matrix: WT	☒Yes	☐No		12.
All containers needing acid/base preservation have been checked?	☒Yes	☐No	☐N/A	13. ☒HNO_3 ☒H_2SO_4 ☐NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☒Yes	☐No	☐N/A	Sample #: 2/2 1/1
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☐Yes	☐No	☒N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐Yes	☐No	☒N/A	14.
Trip Blank Present?	☐Yes	☐No	☒N/A	15.
Trip Blank Custody Seals Present?	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐Yes ☐No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: KSK Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Table 11
Groundwater Sample Methods, Containers and Preservatives
2018 and 2019 Groundwater Monitoring Plan
Frenchtown Mill Site, Missoula County, Montana

Parameter Group	Analytical Method & Parameters	Number of Containers	Container Type	Preservative / Additive	Hold Time
Field Parameters	**Flow Cell / In Field;** pH, conductivity, DO, ORP, temperature, turbidity	0	---	---	---
Dioxins / Furans	**8290;** congeners PCDD/F (Cl4-Cl8) 2005 WHO	2	1-liter amber glass bottle	Cool to 6°C, sodium thiosulfate	Store at <6°C, or lower, in the dark. Extract within 30 days and analyze within 45 days of extraction. Analyze withing 1 year if sample extracts stored in the dark at < -10oC.
Total and Dissolved Metals	**6020;** Ag, Al, As, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, Sb, Se, Tl, V, **7471B;** Hg **6010;**Ca, Mg, Na, K	1	250-mL HDPE bottle (Dissolved, Field-Filtered)	Cool to 6°C; nitric acid to pH <2; water to be sampled for dissolved metals must be field-filtered.	6 months with the exception of mercury (28 days).
Volatile Organic Compounds (VOCs)	**8260;** See FSP Table D-5	3	40 mL VOA vial	Cool to 6°C; hydrochloric acid to pH<2; Sodium Thiosulfate ($Na_2S_2O_3$) if Cl present	14 days.
Semi-Volatile Organic Compounds (SVOCs)	**8270;** See FSP Table D-5	2	1-liter amber glass bottle	Cool to 6°C	Extract within 7 days after sample collection. Analyze within 40 days of extraction.
Polychlorinated Biphenyls (PCBs)	**8082;** PCBs (Aroclors)	2	1-liter amber glass bottle	Cool to 6°C but above freezing	Extract within 1 year of sample collection. Analyze within 40 days of extraction.
Nutrients	**353.2;** Nitrate+Nitrite **SM 4500-P-E;** Phosphate **SM 5310C;** TOC	1	250-mL HDPE bottle	Cool to 6°C, sulfuric acid to pH <2	28 days
Ions	**300.0;** SO_4, Cl, F **SM2320B;** Alkalinity **SM 2540-C;** TDS **Electrode;** Conductivity, pH	1	500-mL HDPE bottle	Cool to 6°C	All analytes 28 days except TDS (7 days).

Notes:

--- - not applicable
Ag - silver
Al - aluminum
As - arsenic
Ba - barium
Ca - calcium
Cd - cadmium
Cl - chloride
Co - cobalt
Cr - chromium
Cu - copper
°C - degrees celsius
DO - dissolved oxygen
Fe - iron
HDPE - high density polyethylene
Hg - mercury
K - potassium
Mg - magnesium
mL - milliliter
mn - manganese
Na - sodium
Ni - nickel
ORP - oxidation reduction potential
Pb - lead
Se - selenium
SO_4 - sulfate
TDS - total dissolved solids
Tl - thallium
TOC - total organic carbon
V - vanadium
Zn - zinc

FSP - NewFields 2015, Field Sampling Plan, Appendix D of the Remedial Investigation Work Plan, November 2015

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: MT

Workorder: 10432836 Workorder Name:350.0065.001 Ph15 Frenchtown Owner Received Date: 5/25/2018 Results Requested By: 5/31/2018

Report To	Subcontract To
Kang Khang Pace Analytical Billings MT 150 N Ninth Street Billings, MT 59101 Phone (406)254-7226	Pace Analytical Virginia MN 315 Chestnut Street Virginia, MN 55792 Phone (218)742-1042

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	TOC 5310C	Requested Analysis	LAB USE ONLY
1	CFR-HP-13A	PS	5/23/2018 16:40	10432831001	Water	1	X		
2	CFR-1	PS	5/23/2018 19:10	10432836001	Water	1	X		
3	CFR-2	PS	5/23/2018 17:40	10432836002	Water	1	X		
4	SMW-11	PS	5/23/2018 15:40	10432836003	Water	1	X		
5	HP-13A Pond	PS	5/23/2018 16:15	10432836004	Water	1	X		
6	HP-2 Pond	PS	5/23/2018 18:40	10432836005	Water	1	X		
7	CFR-HB-1	PS	5/23/2018 19:50	10432836006	Water	1	X		
8	SW-DUP	PS	5/23/2018 00:00	10432836007	Water	1	X		
9	ERB	PS	5/23/2018 20:55	10432836008	Water	1	X		

Transfers	Released By	Date/Time	Received By	Date/Time
1	PACE	5/25/18 0850	5-25-18	1900
2	5.26.18	01:15		5/29/18 0810
3				

Comments: QC4 Needed - DUE 6/7

Cooler Temperature on Receipt 2.8 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 15Mar2016 Page 1 of 1
	Document No: F-VM-C-001-Rev.10	Issuing Authority: Pace Virginia, Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Pace MN

Project #: WO#: 12109173

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other:

Tracking Number:

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No Seals Intact? ☐ Yes ☐ No Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other: Temp Blank? ☐ Yes ☐ No

Thermometer Used: ☑ 140792808 Type of Ice: ☐ Wet ☐ Blue ☐ None ☑ Samples on ice, cooling process has begun

Cooler Temp Read °C: 2.9 Cooler Temp Corrected °C: 2.8 Biological Tissue Frozen? ☐ Yes ☐ No ☑ NA

Temp should be above freezing to 6°C Correction Factor -0.1 Date and Initials of Person Examining Contents: 5-28-18 DC

				Comments:
Chain of Custody Present?	☐ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☐ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☐ Yes	☐ No	☐ N/A	3.
Sampler Name and Signature on COC?	☐ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☐ Yes	☐ No	☐ N/A	5. If Fecal: ☐ <8 hours ☐ >8, <24 hours ☐ >24 hours
Short Hold Time Analysis (<72 hr)?	☐ Yes	☐ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☐ No	☐ N/A	7.
Sufficient Volume?	☐ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☐ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☐ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☐ N/A	11. Note if sediment is visible in the dissolved containers.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	12.
-Includes Date/Time/ID/Analysis Matrix				
All containers needing acid/base preservation will be checked and documented in the pH logbook.	☐ Yes	☐ No	☐ N/A	See pH log for results and additional preservation documentation
Headspace in Methyl Mercury Container	☐ Yes	☐ No	☐ N/A	13.
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☐ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

FECAL WAIVER ON FILE Y N TEMPERATURE WAIVER ON FILE Y N

Project Manager Review: Date: 5/29/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)