

# TECHNICAL MEMORANDUM

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**To:** Nevada Environmental Response Trust

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**Cc:** Nevada Division of Environmental Protection  
United States Environmental Protection Agency

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**From:** Arul Ayyaswami and Dan Pastor

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**Date:** June 8, 2018

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**Subject:** In-Situ Chromium Treatability Study Monthly Progress Report

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At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum that summarizes Tetra Tech's progress made through April 2018 toward successfully implementing the In-Situ Chromium Treatability Study as outlined in the In-Situ Chromium Treatability Study Work Plan (Work Plan).

## Task Progress Update: April 2018

### Task M12 – In-Situ Chromium Treatability Study

- Task Leader – Arul Ayyaswami
- Current Status
  - The In-Situ Chromium Treatability Study Results Report was submitted to NDEP on March 22, 2018 and NDEP comments were received on April 6, 2018. The comments are currently being addressed.
  - An additional performance groundwater monitoring event was performed from March 5 – 7, 2018 as part of the biological reduction study to further evaluate groundwater velocity, carbon substrate longevity, the degree to which reduction of hexavalent chromium and other chemicals of potential concern could occur within the UMCf, and confirm geochemical conditions return to baseline conditions. Groundwater monitoring was performed at 10 of the 14 downgradient monitoring wells. Groundwater monitoring wells CTMW-03S, CTMW-03D, CTMW-05S, and CTMW-05D were excluded as the previous groundwater monitoring results indicated that these wells were located cross-gradient of the injection wells and showed limited effects from the carbon substrate injections.
  - Summary data tables of the well construction details, groundwater gauging results, and groundwater monitoring results are provided in the attached Tables 1, 2, and 3, respectively. As requested by NDEP, the following provides a brief summary of the analytical results obtained from the additional performance groundwater monitoring event conducted in March 2018:

- Hexavalent chromium concentrations in groundwater remained below detectable concentrations (less than 0.25 micrograms per liter [ $\mu\text{g/L}$ ]) at the shallow monitoring wells closest to the injection wells (CTMW-01S and CTMW-02S) and at CTMW-06S. Hexavalent chromium concentrations started to increase at the shallow monitoring well CTMW-04S as the total organic carbon concentration returned to baseline levels. Hexavalent chromium concentrations in groundwater continued to decline at the deep monitoring wells CTMW-01D and CTMW-06D with concentrations declining from 12,000  $\mu\text{g/L}$  to 7,500  $\mu\text{g/L}$  and from 13,000  $\mu\text{g/L}$  to 5,600  $\mu\text{g/L}$ , respectively.
- Perchlorate concentrations in groundwater continued to decline at the shallow monitoring wells closest to the injection wells (CTMW-01S and CTMW-02S), but started to increase at the monitoring wells farther downgradient (CTMW-04S and CTMW-06S) as the total organic carbon concentrations returned to baseline levels. At CTMW-01S and CTMW-02S, perchlorate concentrations in groundwater reduced to below the laboratory method detection limit of 2.5  $\mu\text{g/L}$  and a concentration of 34  $\mu\text{g/L}$ , respectively. Perchlorate concentrations in groundwater continued to decline in the deep monitoring wells CTMW-01D and CTMW-06D with concentrations declining from 1,300,000  $\mu\text{g/L}$  to 910,000  $\mu\text{g/L}$  and from 990,000  $\mu\text{g/L}$  to 610,000  $\mu\text{g/L}$ , respectively.
- Chloroform concentrations in groundwater continued to decline at the shallow monitoring wells CTMW-01S, CTMW-02S, and CTMW-06S with concentrations reduced to 3.2  $\mu\text{g/L}$ , 1.9  $\mu\text{g/L}$ , and 16  $\mu\text{g/L}$ , respectively. Chloroform concentrations in groundwater at CTMW-04S increased from 48  $\mu\text{g/L}$  to 580  $\mu\text{g/L}$ , which is close to the baseline concentration of 720  $\mu\text{g/L}$ . Chloroform concentrations in groundwater declined at the deep monitoring wells CTMW-01D, CTMW-02D, CTMW-04D, and CTMW-06D. At CTMW-01D and CTMW-02D, chloroform concentrations in groundwater declined from 1,300  $\mu\text{g/L}$  to 750  $\mu\text{g/L}$  and from 1,500  $\mu\text{g/L}$  to 990  $\mu\text{g/L}$ , respectively. At CTMW-04D and CTMW-06D, chloroform concentrations in groundwater declined from 1,300  $\mu\text{g/L}$  to 960  $\mu\text{g/L}$  and from 1,200  $\mu\text{g/L}$  to 440  $\mu\text{g/L}$ , respectively.
- Organic acids and intermediate fermentation-based products associated with the presence of high concentrations of carbon substrates in a highly reducing environment, such as acetone and methyl ethyl ketone returned to baseline concentrations in groundwater at the farthest downgradient shallow monitoring wells. At shallow monitoring wells CTMW-04S and CTMW-06S, acetone and methyl ethyl ketone concentrations in groundwater reduced to below the laboratory method detection limit of 100  $\mu\text{g/L}$  and 25  $\mu\text{g/L}$ , respectively.
- Volatile fatty acids, produced during hydrolysis of the long-chain fatty acids of the emulsified oil substrate, also reduced to concentrations in groundwater below the laboratory method detection limit of 3.7 mg/L in the farthest downgradient shallow monitoring wells CTMW-04S and CTMW-06S.
- In general, dissolved metal concentrations for arsenic, iron, and manganese began to decrease in the farthest downgradient shallow monitoring wells CTMW-04S and CTMW-06S. Arsenic concentrations in groundwater collected from CTMW-04S was 66  $\mu\text{g/L}$ , similar to the baseline concentration of 65  $\mu\text{g/L}$ . Arsenic concentrations in groundwater collected from CTMW-06S remained elevated at 430  $\mu\text{g/L}$ , but below the maximum concentration of 660  $\mu\text{g/L}$ . Iron and manganese concentrations in groundwater decreased in samples collected from CTMW-04S and CTMW-06S. These overall decreasing trends in dissolved metal concentrations are expected to continue as

geochemical conditions return to baseline conditions and will continue to be tracked during the next performance groundwater monitoring event.

- Schedule and Progress Updates
  - Per NDEP comments, a revised In-Situ Chromium Treatability Study Results Report and an annotated response-to-comments letter will be submitted to NDEP by June 22, 2018.
  - One additional performance groundwater monitoring event will be performed in June 2018 as part of the biological reduction study. A summary table of the proposed groundwater monitoring parameters for each monitoring well for this event is presented in the attached Table 4. The results of the additional performance groundwater monitoring events will be presented in a report addendum in 3<sup>rd</sup> Quarter 2018.
- Health and Safety
  - There were no health and safety incidents related to Task M12 during April 2018.

## CERTIFICATION

### In-Situ Chromium Treatability Study Monthly Progress Report

**Nevada Environmental Response Trust Site  
(Former Tronox LLC Site)  
Henderson, Nevada**

#### Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the systems(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Signature:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

*not individually, but solely  
as Pres. Trust*

**Name:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Title:** Solely as President and not individually

**Company:** Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Date:** 6/8/18

## CERTIFICATION

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I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

**Description of Services Provided:** Prepared In-Situ Chromium Treatability Study Progress Report, Nevada Environmental Response Trust Site, Henderson, Nevada.



June 8, 2018

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**Kyle Hansen, CEM**

Field Operations Manager/Geologist  
Tetra Tech, Inc.

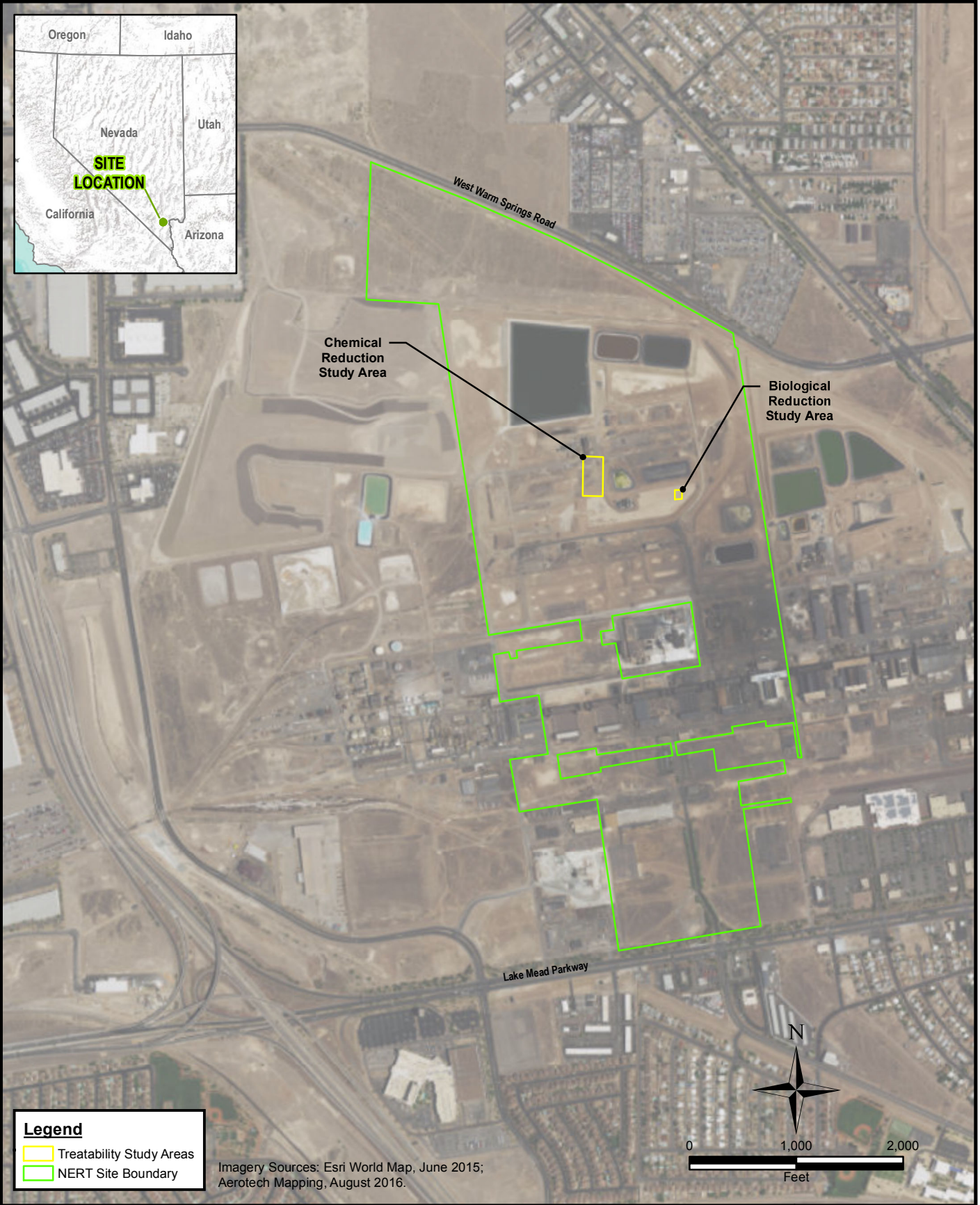
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Date

Nevada CEM Certificate Number: 2167

Nevada CEM Expiration Date: September 18, 2018

# Figures



**Legend**

- Treatability Study Areas
- NERT Site Boundary

Imagery Sources: Esri World Map, June 2015;  
Aerotech Mapping, August 2016.

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**TETRA TECH**

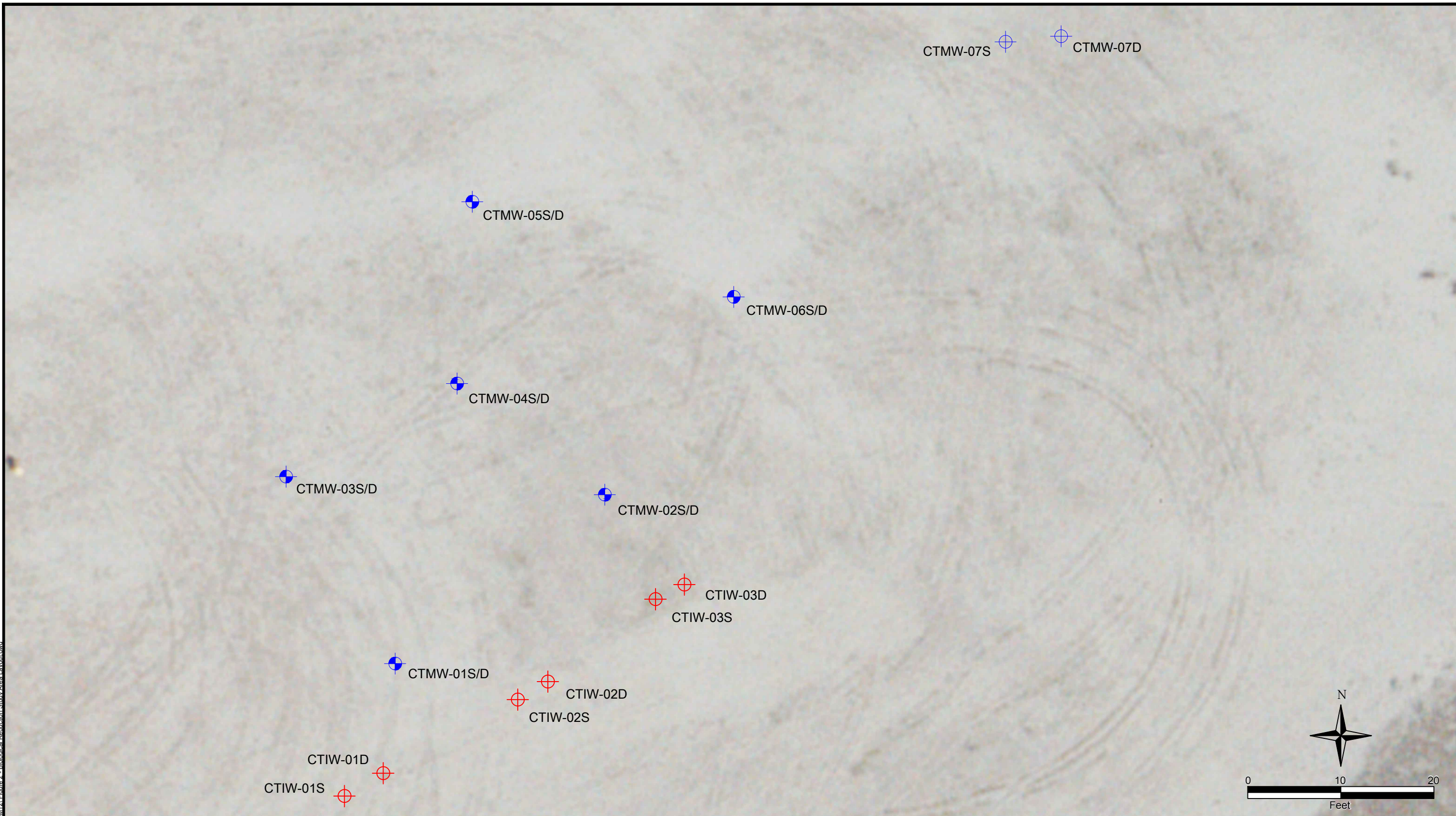
www.tetratech.com

150 S. 4th Street, Unit A  
Henderson, Nevada 89015  
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<b>NEVADA ENVIRONMENTAL RESPONSE TRUST SITE</b>	
IN-SITU CHROMIUM TREATABILITY STUDY	
<b>SITE LOCATION MAP</b>	

Project No.:	87600014
Date:	NOVEMBER 17, 2017
Designed By:	KL
Figure No.	<b>1</b>

\\fs31863\31\local\cas87600014\NERF\_M12\Figure 2 - Biological Reduction Study Area Layout.dwg



**Legend**

CTMW-07S	Monitoring Well (Single Completion)	Qal	Quaternary Alluvium
CTMW-03S/D	Monitoring Well (Dual Completion)	UMCf	Upper Muddy Creek Formation
CTIW-01D	Injection Well (Single Completion)		
S	Shallow Well (Screened in Qal)		
D	Deep Well (Screened in UMCf)		

Note:  
 1. Imagery Source: Aerotech Mapping, August 2016.



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NEVADA ENVIRONMENTAL RESPONSE TRUST SITE

IN-SITU CHROMIUM TREATABILITY STUDY

**BIOLOGICAL REDUCTION STUDY AREA LAYOUT**

Project No: 117-7502018

Date: MAY 22, 2018

Designed By: DVK

Figure No.

**2**



# Tables

**Table 1 - Well Construction Details**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well ID	Northing (feet)	Easting (feet)	Latitude	Longitude	Borehole Size (inches)	Well Diameter (inches)	Well Material (blank casing)	Well Vault	Filter Pack Material	Screen Material	Screen Interval (feet bgs)	Screen Top (feet bgs)	Screen Bottom (feet bgs)	Screen Length (feet)	Total Depth of Borehole (feet bgs)	Total Depth of Well (feet bgs)	TOC Elevation (feet amsl)	Ground Surface Elevation (feet amsl)
CTIW-01S	26719202.713	828135.837	36° 02' 48.27" N	115° 00' 05.74" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	18.5 - 23.5	18.5	23.5	5	26.5	23.5	1,757.41	1,757.20
CTIW-01D	26719205.172	828140.000	36° 02' 48.29" N	115° 00' 05.69" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	33 - 38	33	38	5	61.5	38	1,757.34	1,757.08
CTIW-02S	26719213.064	828154.451	36° 02' 48.37" N	115° 00' 05.51" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	26.5	24	1,757.45	1,757.39
CTIW-02D	26719215.001	828157.687	36° 02' 48.39" N	115° 00' 05.47" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 49	34	49	15	51.5	49	1,757.31	1,757.37
CTIW-03S	26719223.844	828169.245	36° 02' 48.48" N	115° 00' 05.33" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	26.5	24	1,757.32	1,757.31
CTIW-03D	26719225.419	828172.351	36° 02' 48.49" N	115° 00' 05.29" W	8	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 49	34	49	15	51.5	49	1,757.48	1,757.38
CTMW-01S	26719216.935	828141.284	36° 02' 48.41" N	115° 00' 05.67" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	61.5	24	1,757.16	1,757.18
CTMW-01D	26719217.228	828141.249	36° 02' 48.41" N	115° 00' 05.67" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 49	34	49	15		49	1,757.14	1,757.18
CTMW-02S	26719235.068	828163.802	36° 02' 48.59" N	115° 00' 05.40" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	61.5	24	1,757.21	1,757.32
CTMW-02D	26719234.810	828163.939	36° 02' 48.59" N	115° 00' 05.39" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 49	34	49	15		49	1,757.26	1,757.32
CTMW-03S	26719237.005	828129.568	36° 02' 48.61" N	115° 00' 05.81" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	19 - 24	19	24	5	61.5	24	1,757.21	1,757.15
CTMW-03D	26719237.269	828129.763	36° 02' 48.61" N	115° 00' 05.81" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	34 - 39	34	39	5		39	1,757.23	1,757.15
CTMW-04S	26719246.990	828147.930	36° 02' 48.71" N	115° 00' 05.59" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	61.5	24	1,757.00	1,757.17
CTMW-04D	26719246.759	828147.969	36° 02' 48.71" N	115° 00' 05.59" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 49	34	49	15		29	1,757.00	1,757.17
CTMW-05S	26719266.508	828149.570	36° 02' 49.20" N	115° 00' 05.99" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	61.5	24	1,757.24	1,757.15
CTMW-05D	26719266.615	828149.351	36° 02' 49.20" N	115° 00' 05.99" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 54	34	54	20		54	1,757.25	1,757.15
CTMW-06S	26719256.295	828177.643	36° 02' 49.23" N	115° 00' 05.74" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	19 - 24	19	24	5	61.5	24	1,757.43	1,757.17
CTMW-06D	26719256.058	828177.537	36° 02' 49.23" N	115° 00' 05.74" W	12	2	Sch. 40 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.020"	34 - 54	34	54	20		54	1,757.42	1,757.17
CTMW-07S	26719283.848	828206.898	36° 02' 49.60" N	115° 00' 04.84" W	8	2	Sch. 80 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	19 - 24	19	24	5	25	24	1,757.50	1,757.50
CTMW-07D	26719284.263	828212.828	36° 02' 49.60" N	115° 00' 04.77" W	8	2	Sch. 80 PVC	18-in. Diameter Round	#2/16 Sand	2-in PVC 0.010"	100 - 115	100	115	15	131.5	115	1,757.38	1,757.38

**Notes:**  
amsl Above mean sea level  
bgs Below ground surface  
btoc Below top of casing  
GW Groundwater  
in Inches  
PVC Polyvinyl Chloride  
Sch. Schedule  
TOC Top of Casing

**Table 2 - Groundwater Elevations**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well ID	Screen Interval (feet bgs)	TOC Elevation (feet amsl)	Date Gauged	Event	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	GW Elevation (feet amsl)
CTIW-01S	18.5 - 23.5	1,757.41	04/03/17	Baseline	--	22.26	--	1,735.15
			05/02/17	PME1	--	22.15	--	1,735.26
			05/16/17	PME2	--	22.29	--	1,735.12
			05/31/17	PME3	--	22.16	--	1,735.25
			06/19/17	PME4	--	22.03	--	1,735.38
			07/17/17	PME5	--	22.25	--	1,735.16
			08/22/17	PME6	--	22.19	--	1,735.22
			09/19/17	PME7	--	22.33	--	1,735.08
			10/03/17	PME8	22.39	22.80	0.41	1,735.01
03/05/18	PME9	--	21.90	--	1,735.51			
CTIW-01D	33 - 38	1,757.34	04/03/17	Baseline	--	22.21	--	1,735.13
			05/02/17	PME1	--	22.41	--	1,734.93
			05/16/17	PME2	--	22.48	--	1,734.86
			05/31/17	PME3	--	22.36	--	1,734.98
			06/19/17	PME4	--	22.21	--	1,735.13
			07/17/17	PME5	--	22.39	--	1,734.95
			08/22/17	PME6	--	22.95	--	1,734.39
			09/19/17	PME7	--	--	--	--
			10/03/17	PME8	--	22.68	--	1,734.66
03/05/18	PME9	--	22.23	--	1,735.11			
CTIW-02S	19 - 24	1,757.45	04/03/17	Baseline	--	22.49	--	1,734.96
			05/02/17	PME1	--	22.20	--	1,735.25
			05/16/17	PME2	--	22.32	--	1,735.13
			05/31/17	PME3	--	22.37	--	1,735.08
			06/19/17	PME4	--	22.13	--	1,735.32
			07/17/17	PME5	--	22.46	--	1,734.99
			08/22/17	PME6	--	21.40	--	1,736.05
			09/19/17	PME7	--	--	--	--
			10/03/17	PME8	--	22.52	--	1,734.93
03/05/18	PME9	--	22.02	--	1,735.43			
CTIW-02D	34 - 49	1,757.31	04/03/17	Baseline	--	22.52	--	1,734.79
			05/02/17	PME1	--	23.21	--	1,734.10
			05/16/17	PME2	22.71	23.70	0.99	1,734.57
			05/31/17	PME3	--	23.20	--	1,734.11
			06/19/17	PME4	--	22.70	--	1,734.61
			07/17/17	PME5	--	22.88	0.01	1,734.44
			08/22/17	PME6	--	22.76	--	1,734.55
			09/19/17	PME7	--	22.75	--	1,734.56
			10/03/17	PME8	--	22.83	--	1,734.48
03/05/18	PME9	--	22.35	--	1,734.96			
CTIW-03S	19 - 24	1,757.32	04/03/17	Baseline	--	22.53	--	1,734.79
			05/02/17	PME1	--	22.35	--	1,734.97
			05/16/17	PME2	--	22.44	--	1,734.88
			05/31/17	PME3	--	22.51	--	1,734.81
			06/19/17	PME4	--	22.24	--	1,735.08
			07/17/17	PME5	--	22.69	--	1,734.63
			08/22/17	PME6	--	21.75	--	1,735.57
			09/19/17	PME7	--	22.50	--	1,734.82
			10/03/17	PME8	--	22.79	--	1,734.53
03/05/18	PME9	--	22.25	--	1,735.07			

**Table 2 - Groundwater Elevations**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well ID	Screen Interval (feet bgs)	TOC Elevation (feet amsl)	Date Gauged	Event	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	GW Elevation (feet amsl)
CTIW-03D	34 - 49	1,757.48	04/03/17	Baseline	--	22.80	--	1,734.68
			05/02/17	PME1	23.65	23.79	0.14	1,733.83
			05/16/17	PME2	23.59	23.76	0.17	1,733.88
			05/31/17	PME3	--	23.33	--	1,734.15
			06/19/17	PME4	--	23.25	0.20	1,734.42
			07/17/17	PME5	--	23.18	0.02	1,734.30
			08/22/17	PME6	--	24.23	--	1,733.25
			09/19/17	PME7	--	24.11	--	1,733.37
			10/03/17	PME8	--	23.41	--	1,734.07
03/05/18	PME9	--	22.91	--	1,734.57			
CTMW-01S	19 - 24	1,757.16	04/03/17	Baseline	--	22.21	--	1,734.95
			05/02/17	PME1	--	22.25	--	1,734.91
			05/16/17	PME2	--	22.13	--	1,735.03
			05/31/17	PME3	--	22.28	--	1,734.88
			06/19/17	PME4	--	22.24	--	1,734.92
			07/17/17	PME5	--	22.45	--	1,734.71
			08/22/17	PME6	--	22.50	--	1,734.66
			09/19/17	PME7	--	22.85	--	1,734.31
			10/03/17	PME8	--	22.67	--	1,734.49
03/05/18	PME9	--	22.17	--	1,734.99			
CTMW-01D	34 - 49	1,757.14	04/03/17	Baseline	--	22.37	--	1,734.77
			05/02/17	PME1	--	22.43	--	1,734.71
			05/16/17	PME2	--	22.54	--	1,734.60
			05/31/17	PME3	--	22.46	--	1,734.68
			06/19/17	PME4	--	22.48	--	1,734.66
			07/17/17	PME5	--	22.63	--	1,734.51
			08/22/17	PME6	--	22.72	--	1,734.42
			09/19/17	PME7	--	23.77	--	1,733.37
			10/03/17	PME8	--	22.74	--	1,734.40
03/05/18	PME9	--	22.27	--	1,734.87			
CTMW-02S	19 - 24	1,757.21	04/03/17	Baseline	--	22.47	--	1,734.74
			05/02/17	PME1	--	22.79	--	1,734.42
			05/16/17	PME2	--	22.90	--	1,734.31
			05/31/17	PME3	--	22.85	--	1,734.36
			06/19/17	PME4	--	22.75	--	1,734.46
			07/17/17	PME5	--	22.96	--	1,734.25
			08/22/17	PME6	--	Dry	--	--
			09/19/17	PME7	--	23.21	--	1,734.00
			10/03/17	PME8	--	23.26	--	1,733.95
03/05/18	PME9	--	22.65	--	1,734.56			
CTMW-02D	34 - 49	1,757.26	04/03/17	Baseline	--	22.72	--	1,734.54
			05/02/17	PME1	--	22.96	--	1,734.30
			05/16/17	PME2	--	23.07	--	1,734.19
			05/31/17	PME3	--	23.08	--	1,734.18
			06/19/17	PME4	--	23.12	--	1,734.14
			07/17/17	PME5	--	23.22	--	1,734.04
			08/22/17	PME6	--	23.36	--	1,733.90
			09/19/17	PME7	--	23.40	--	1,733.86
			10/03/17	PME8	--	23.36	--	1,733.90
03/05/18	PME9	--	22.90	--	1,734.36			

**Table 2 - Groundwater Elevations**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well ID	Screen Interval (feet bgs)	TOC Elevation (feet amsl)	Date Gauged	Event	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	GW Elevation (feet amsl)
CTMW-03S	19 - 24	1,757.21	04/03/17	Baseline	--	22.36	--	1,734.85
			05/02/17	PME1	--	22.41	--	1,734.80
			05/16/17	PME2	--	22.45	--	1,734.76
			05/31/17	PME3	--	22.47	--	1,734.74
			06/19/17	PME4	--	22.40	--	1,734.81
			07/17/17	PME5	--	22.59	--	1,734.62
			08/22/17	PME6	--	22.64	--	1,734.57
			09/19/17	PME7	--	22.73	--	1,734.48
			10/03/17	PME8	--	22.74	--	1,734.47
03/05/18	PME9	--	22.37	--	1,734.84			
CTMW-03D	34 - 39	1,757.23	04/03/17	Baseline	--	22.43	--	1,734.80
			05/02/17	PME1	--	22.56	--	1,734.67
			05/16/17	PME2	--	22.57	--	1,734.66
			05/31/17	PME3	--	22.58	--	1,734.65
			06/19/17	PME4	--	22.58	--	1,734.65
			07/17/17	PME5	--	22.75	--	1,734.48
			08/22/17	PME6	--	22.80	--	1,734.43
			09/19/17	PME7	--	22.88	--	1,734.35
			10/03/17	PME8	--	22.85	--	1,734.38
03/05/18	PME9	--	22.45	--	1,734.78			
CTMW-04S	19 - 24	1,757.00	04/03/17	Baseline	--	22.37	--	1,734.63
			05/02/17	PME1	--	22.61	--	1,734.39
			05/16/17	PME2	--	22.71	--	1,734.29
			05/31/17	PME3	--	22.69	--	1,734.31
			06/19/17	PME4	--	22.66	--	1,734.34
			07/17/17	PME5	--	22.80	--	1,734.20
			08/22/17	PME6	--	22.89	--	1,734.11
			09/19/17	PME7	--	22.90	--	1,734.10
			10/03/17	PME8	--	22.98	--	1,734.02
03/05/18	PME9	--	22.48	--	1,734.52			
CTMW-04D	34 - 49	1,757.00	04/03/17	Baseline	--	22.62	--	1,734.38
			05/02/17	PME1	--	22.75	--	1,734.25
			05/16/17	PME2	--	22.88	--	1,734.12
			05/31/17	PME3	--	22.86	--	1,734.14
			06/19/17	PME4	--	22.85	--	1,734.15
			07/17/17	PME5	--	23.01	--	1,733.99
			08/22/17	PME6	--	23.07	--	1,733.93
			09/19/17	PME7	--	23.13	--	1,733.87
			10/03/17	PME8	--	23.12	--	1,733.88
03/05/18	PME9	--	22.61	--	1,734.39			
CTMW-05S	19 - 24	1,757.24	04/03/17	Baseline	--		Not Constructed	
			05/02/17	PME1	--		Not Constructed	
			05/16/17	PME2	--		Not Constructed	
			05/31/17	PME3	--		Not Constructed	
			06/19/17	PME4	--	23.18	--	1,734.06
			07/17/17	PME5	--	23.28	--	1,733.96
			08/22/17	PME6	--	23.36	--	1,733.88
			09/19/17	PME7	--	23.38	--	1,733.86
			10/03/17	PME8	--	23.42	--	1,733.82
03/05/18	PME9	--	22.85	--	1,734.39			

**Table 2 - Groundwater Elevations**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well ID	Screen Interval (feet bgs)	TOC Elevation (feet amsl)	Date Gauged	Event	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Product Thickness (feet)	GW Elevation (feet amsl)
CTMW-05D	34 - 54	1,757.25	04/03/17	Baseline	--		Not Constructed	
			05/02/17	PME1	--		Not Constructed	
			05/16/17	PME2	--		Not Constructed	
			05/31/17	PME3	--		Not Constructed	
			06/19/17	PME4	--	23.36	--	1,733.89
			07/17/17	PME5	--	23.48	--	1,733.77
			08/22/17	PME6	--	23.53	--	1,733.72
			09/19/17	PME7	--	23.56	--	1,733.69
			10/03/17	PME8	--	23.54	--	1,733.71
			03/05/18	PME9	--	22.98	--	1,734.27
CTMW-06S	19 - 24	1,757.43	04/03/17	Baseline	--		Not Constructed	
			05/02/17	PME1	--		Not Constructed	
			05/16/17	PME2	--		Not Constructed	
			05/31/17	PME3	--		Not Constructed	
			06/19/17	PME4	--	23.41	--	1,734.02
			07/17/17	PME5	--	23.53	--	1,733.90
			08/22/17	PME6	--	23.59	--	1,733.84
			09/19/17	PME7	--	23.64	--	1,733.79
			10/03/17	PME8	--	23.65	--	1,733.78
			03/05/18	PME9	--	23.18	--	1,734.25
CTMW-06D	34 - 54	1,757.42	04/03/17	Baseline	--		Not Constructed	
			05/02/17	PME1	--		Not Constructed	
			05/16/17	PME2	--		Not Constructed	
			05/31/17	PME3	--		Not Constructed	
			06/19/17	PME4	--	23.74	--	1,733.68
			07/17/17	PME5	--	23.84	--	1,733.58
			08/22/17	PME6	--	23.96	--	1,733.46
			09/19/17	PME7	--	23.95	--	1,733.47
			10/03/17	PME8	--	23.95	--	1,733.47
			03/05/18	PME9	--	23.55	--	1,733.87
CTMW-07S	19 - 24	1,757.50	03/05/18	PME9	--	23.82	--	1,733.68
CTMW-07D	100 - 115	1,757.38	03/05/18	PME9	--	20.52	--	1,736.86

Notes:

- amsl Above mean sea level
- bgs Below ground surface
- btoc Below top of casing
- Product emulsified oil substrate
- PME Performance Monitoring Event
- Not Measured
- 1 Groundwater elevations for wells with product (emulsified oil substrate) are corrected using an average specific gravity of 0.965

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Perchlorate by USEPA Method 314.0 (µg/L)	Hexavalent Chromium by USEPA Method 7199 (µg/L)	Total Metals by USEPA Method 6010B (mg/L)			USEPA Method 300.1B (µg/L)		General Water Quality Parameters							
						Total Chromium	Total Iron	Total Manganese	Chlorate	Chlorite	pH	Temp (°C)	Specific Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Sulfide (mg/L)	Ferrous Iron (mg/L)
CTMW-01S	CTMW-01S-20170404	04/04/17	Baseline	410,000	11,000	11	--	0.030	2,500,000	<1,000	7.4	26	9.1	170	1.7	0.0	0.00	0.02
	CTMW-01S-20170503	05/03/17	PME1	340,000	26	1.7	--	0.55	870,000	<10,000	6.0	29	14	-170	1.9	16	0.00	0.00
	CTMW-01S-20170516	05/16/17	PME2	280,000	<0.25	0.49	--	0.55	730,000	<10,000	6.7	24	11	-300	1.2	59	0.11	0.22
	CTMW-01S-20170531	05/31/17	PME3	140,000	<0.25	0.18	1.4	0.99	650,000	<10,000	6.1	29	11	-160	1.1	9.2	0.05	0.04
	CTMW-01S-20170619	06/19/17	PME4	39,000	<0.25 UJ	1.9	17	3.3	64,000	<20,000	6.2	31	14	-130	0.56	460	0.08	0.30
	CTMW-01S-20170720	07/20/17	PME5	4,000	<0.25	0.49	25	5.5	72,000	<5,000	5.9	29	14	-40	0.77	75	0.25	0.19
	CTMW-01S-20170824	08/24/17	PME6	32,000	2.6	2.2	18	3.3	13,000	<10,000	6.5	30	14	-71	2.1	300	0.62	3.30
	CTMW-01S-20170920	09/20/17	PME7	320	0.37 J	0.086	11	3.6	<1,000	<10,000	6.4	31	12	-72	0.15	35	0.49	--
	CTMW-01S-20171003	10/03/17	PME8	150 J+	<0.25	0.084	21	2.8	610 J	<1,000	7.8	26	12	-82	1.1	30	0.08	10
CTMW-01S-20180305	03/05/18	PME9	<2.5	<0.25	0.061	3.9	0.29	<500	<1,000	7.38	26.20	8.75	-135	1.04	352	0.20	2.30	
CTMW-01D	CTMW-01D-20170403	04/03/17	Baseline	1,400,000	24,000	23	--	0.042	4,900,000	<1,000	7.0	26	15	100	1.6	85	0.030	0.070
	CTMW-01D-20170503	05/03/17	PME1	1,400,000	22,000	24	--	0.20	4,900,000	<10,000	6.5	27	17	79	1.4	81	0.010	0.050
	CTMW-01D-20170516	05/16/17	PME2	1,400,000	21,000	24	--	0.037 J	4,500,000	<10,000	7.5	27	14	-23	1.1	4.8	0.0	0.15
	CTMW-01D-20170531	05/31/17	PME3	1,300,000	22,000	23	0.15 J	0.027 J	4,800,000	<10,000	7.0	27	15	-14	0.83	0.60	0.0	0.050
	CTMW-01D-20170619	06/19/17	PME4	1,400,000	20,000 J-	22	<0.25	<0.075	4,300,000	R	7.0	29	14	-130	0.49	4.2	0.0	0.0
	CTMW-01D-20170720	07/20/17	PME5	1,400,000	16,000	16	<0.10	0.070	4,100,000	R	6.5	27	15	-120	0.36	7.9	0.030	0.030
	CTMW-01D-20170720-FD	07/20/17	PME5	1,300,000	16,000	15	<0.050	0.063	4,100,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-01D-20170824	08/24/17	PME6	1,400,000	13,000	14	0.17 J	0.20	3,700,000	<10,000	6.4	27	16	-160	0.73	27	0.060	0.070
	CTMW-01D-20170920	09/20/17	PME7	1,500,000	12,000	13	0.71	0.21	3,800,000	<10,000	6.5	26	15	-100	0.21	12	0.060	--
	CTMW-01D-20171003	10/03/17	PME8	1,300,000	12,000	11	0.13	0.21	3,500,000	<10,000	7.3	27	14	-19	0.28	0.0	0.090	0.060
	CTMW-01D-20180305	03/05/18	PME9	910,000	7,500	7.4	<0.050	0.66	2,200,000	<10,000	7.10	26.92	9.31	137	1.39	7.0	0.0	0.0
CTMW-01D-20180305-FD	03/05/18	PME9	900,000	7,500	7.3	<0.050	0.65	2,300,000	<10,000	--	--	--	--	--	--	--	--	
CTMW-02S	CTMW-02S-20170405	04/05/17	Baseline	410,000	11,000	11	--	0.03	2,500,000	<10,000	7.45	27.19	9.23	161	1.56	0.00	0.00	0.09
	CTMW-02S-20170504	05/04/17	PME1	460,000	1,300	2.5	--	0.36	860,000	<10,000	5.05	33.65	13.3	190	7.53	62.9	0.00	0.01
	CTMW-02S-20170516	05/16/17	PME2	380,000	110	0.74	--	0.35	550,000	<10,000	6.75	31.31	11.1	-43	1.68	0.0	0.11	0.16
	CTMW-02S-20170601	06/01/17	PME3	440,000	760	0.68	0.11	0.23	750,000	<10,000	6.70	29.55	11.2	150	1.82	6.6	0.06	0.10
	CTMW-02S-20170620	06/20/17	PME4	110,000	<0.25	0.16	2.1	1.3	<500	<500	6.76	27.70	10.5	-145	0.56	239	0.10	0.30
	CTMW-02S-20170719	07/19/17	PME5	26,000	<0.25	0.084	13	2.7	<500	<10,000	6.6	30.00	11.5	-31	0.77	98.1	0.13	0.17
	Not Analyzed	08/24/17	PME6	Well Dry; Unable to sample														
	CTMW-02S-20170920	09/20/17	PME7	13,000	<0.25	0.097	13	1.4	<1,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-02S-20171003	10/03/17	PME8	290	<0.25	0.13	7.9	1.1	<500	<1,000	7.30	26.14	9.15	-107	0.26	45.4	0.07	3.23
	CTMW-02S-20180306	03/06/18	PME9	34	<0.25	0.049	4.2	0.51	<50	<50	7.33	20.71	8.39	-61	1.17	83.2	0.10	4.00
CTMW-02D	CTMW-02D-20170404	04/04/17	Baseline	960,000	20,000	23	--	0.090 J	4,800,000	<1,000	7.6	28	13	120	1.2	29	0.060	0.11
	CTMW-02D-20170404-FD	04/04/17	Baseline	930,000	20,000	21	--	0.076 J	4,600,000	<1,000	--	--	--	--	--	--	--	--
	CTMW-02D-20170503	05/03/17	PME1	1,100,000 J	15,000	19	--	0.10	4,200,000	<10,000	6.0	29	15	130	1.2	5.2	0.030	0.14
	CTMW-02D-20170503-FD	05/03/17	PME1	1,800,000 J	15,000	19	--	0.11	4,200,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-02D-20170517	05/17/17	PME2	1,100,000	19,000	18	--	0.13	40,000,000	<10,000	7.1	23	13	33	3.4	130	0.030	0.0
	CTMW-02D-20170601	06/01/17	PME3	1,300,000	19,000	19	0.11	0.090	3,300,000	<10,000	6.7	27	13	160	0.52	6.6	0.040	0.050
	CTMW-02D-20170601-FD	06/01/17	PME3	1,200,000	18,000	18	0.051 J	0.10	3,400,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-02D-20170619	06/19/17	PME4	1,100,000	16,000	19	<0.25	0.13	2,000,000	<10,000	7.0	27	13	-160	0.41	7.2	0.0	0.0
	CTMW-02D-20170619-FD	06/19/17	PME4	1,200,000	18,000	20	<0.25	0.13	1,900,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-02D-20170719	07/19/17	PME5	950,000	13,000	12	<0.050	0.26	4,400,000	<10,000	6.7	26	13	39	0.68	27	0.030	0.020
	CTMW-02D-20170824	08/24/17	PME6	1,200,000	14,000	16	0.17 J	0.40	3,500,000	R	6.6	26	15	-160	0.75	31	0.040	0.090
	CTMW-02D-20170920	09/20/17	PME7	2,500,000	13,000	13	6.1	0.49	3,700,000	<10,000	6.8	25	13	53	0.12	39	0.020	--
	CTMW-02D-20171003	10/03/17	PME8	1,200,000	15,000	14	0.27	0.28	3,600,000	<10,000	6.7	28	14	-14	0.13	20	0.0	0.0
CTMW-02D-20180305	03/05/18	PME 9	1,100,000	14,000	14	<0.25	0.48	3,900,000	<10,000	6.99	27.32	12.6	152	0.69	1.3	0.00	0.00	

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Perchlorate by USEPA Method 314.0 (µg/L)	Hexavalent Chromium by USEPA Method 7199 (µg/L)	Total Metals by USEPA Method 6010B (mg/L)			USEPA Method 300.1B (µg/L)		General Water Quality Parameters							
						Total Chromium	Total Iron	Total Manganese	Chlorate	Chlorite	pH	Temp (°C)	Specific Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Sulfide (mg/L)	Ferrous Iron (mg/L)
CTMW-03S	CTMW-03S-20170405	04/05/17	Baseline	470,000	13,000	14	--	<0.050	2,900,000	<10,000	7.3	28	9.4	160	1.9	0.0	0.0	0.0
	CTMW-03S-20170505	05/05/17	PME1	460,000	13,000	15	--	0.060	3,200,000	<10,000	6.3	25	9.4	-3.0	1.4	0.50	0.0	0.0
	CTMW-03S-20170517	05/17/17	PME2	490,000	14,000	15	--	0.058	3,200,000	<10,000	7.4	21	10	150	4.8	1.0	0.080	0.0
	CTMW-03S-20170601	06/01/17	PME3	610,000	14,000	13	<0.050	0.060	4,000,000	<10,000	6.9	28	11	170	1.1	0.0	0.0	0.0
	CTMW-03S-20170620	06/20/17	PME4	670,000	4,400	5.7	0.23	0.33	1,600,000	<1,000	6.5	26	11	33	0.26	84	0.0	0.0
	CTMW-03S-20170718	07/18/17	PME5	540,000	14,000	14	0.055 J	0.33	3,100,000	<10,000	6.7	28	11	120	0.87	16	0.0	0.0
	CTMW-03S-20170823	08/23/17	PME6	600,000	4,800	5.7	0.15	0.60	1,600,000	<10,000	6.4	28	12	14	1.5	100	0.16	0.16
	CTMW-03S-20170921	09/21/17	PME7	540,000	14,000	16	<0.050	0.38	3,400,000	<10,000	6.9	25	11	67	0.16	2.1	0.12	--
CTMW-03S-20171003	10/03/17	PME8	560,000	16,000	16	<0.050	0.36	3,400,000	<10,000	7.3	29	8.8	120	0.84	0.0	0.0	0.050	
CTMW-03D	CTMW-03D-20170406	04/06/17	Baseline	530,000	17,000	16	--	0.031	3,700,000	<10,000	7.4	23	11	210	3.4	2.1	0.0	0.0
	CTMW-03D-20170505	05/05/17	PME1	490,000	16,000	16	--	0.027	3,500,000	<10,000	6.5	26	12	180	2.1	0.50	0.0	0.0
	CTMW-03D-20170517	05/17/17	PME2	520,000	16,000	15	--	<0.020	3,400,000	R	8.7	23	11	170	4.3	0.80	0.010	0.0
	CTMW-03D-20170601	06/01/17	PME3	570,000	15,000	15	<0.050	0.019 J	3,500,000	R	7.2	28	11	210	0.58	0.0	0.0	0.0
	CTMW-03D-20170620	06/20/17	PME4	520,000	15,000	18	<0.25	<0.075	3,400,000	<1,000	7.7	27	10	-190	1.2	4.6	0.0	0.0
	CTMW-03D-20170720	07/20/17	PME5	580,000	14,000	14	<0.050	0.018 J	3,400,000	<10,000	7.2	26	11	110	0.78	3.0	0.0	0.0
	CTMW-03D-20170823	08/23/17	PME6	610,000	14,000	15	<0.050	0.022	3,200,000	<10,000	7.3	27	11	-28	0.74	55	0.090	0.13
	CTMW-03D-20170921	09/21/17	PME7	540,000	14,000	16	0.24	0.051	3,400,000	<10,000	7.6	24	9.9	71	0.12	1.0	0.030	--
CTMW-03D-20171003	10/03/17	PME8	540,000	15,000	16	0.095 J	0.030	3,500,000	<10,000	7.98	26.17	9.26	77	1.57	0.0	0.00	0.15	
CTMW-04S	CTMW-04S-20170405	04/05/17	Baseline	420,000	9,900	10	--	0.033	2,500,000	<10,000	7.3	23	9.2	140	1.4	0.0	0.0	0.020
	CTMW-04S-20170504	05/04/17	PME1	420,000	5,400	19	--	0.11	1,800,000	<10,000	5.8	27	12	120	1.4	6.0	0.0	0.020
	CTMW-04S-20170517	05/17/17	PME2	570,000	150	0.82	--	0.30	910,000	<10,000	6.7	26	11	-12	1.2	47	0.17	0.17
	CTMW-04S-20170602	06/02/17	PME3	650,000	470	1.1	0.19	0.33	1,100,000	<10,000	6.5	27	11	190	1.5	39	0.020	0.030
	CTMW-04S-20170620	06/20/17	PME4	560,000	<0.25	0.78	2.9	0.41	290,000	<1,000	6.9	31	10	-70	0.36	79	0.090	0.25
	CTMW-04S-20170718	07/18/17	PME5	180,000	0.34 J	0.51	2.6	1.1	20,000	<5,000	6.7	30	11	-1.0	1.4	60	0.070	0.10
	CTMW-04S-20170823	08/23/17	PME6	140,000	<0.25	0.23	8.7	2.1	16,000	<10,000	6.6	31	12	-240	1.5	70	0.17	2.1
	CTMW-04S-20170921	09/21/17	PME7	510,000	<0.25	0.12	14	2.6	5,100	<10,000	6.7	26	11	-120	0.16	19	0.11	--
CTMW-04S-20171003	10/03/17	PME8	120,000	<0.25	0.083	15	2.0	320,000	<10,000	6.6	30	11	-240	0.18	32	0.0	2.0	
CTMW-04D	CTMW-04D-20170405	04/05/17	Baseline	980,000	19,000	20	--	0.013 J	4,300,000	<10,000	7.2	25	13	140	1.1	4.7	0.010	0.0
	CTMW-04D-20170504	05/04/17	PME1	950,000	16,000	6.2	--	0.16	4,200,000	<10,000	6.2	28	15	200	3.7	12	0.0	0.0
	CTMW-04D-20170517	05/17/17	PME2	870,000	19,000	22	--	<0.020	4,000,000	<10,000	8.7	23	12	190	0.89	14	0.010	0.070
	CTMW-04D-20170517-FD	05/17/17	PME2	890,000	20,000	21	--	<0.020	4,000,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-04D-20170602	06/02/17	PME3	860,000	19,000	19	0.084 J	<0.010	4,700,000	<10,000	7.1	27	12	180	0.34	6.4	0.0	0.0
	CTMW-04D-20170621	06/21/17	PME4	990,000	19,000	21	<0.050	<0.015	3,700,000	<10,000	7.5	25	12	-66	0.50	6.1	0.0	0.0
	CTMW-04D-20170718	07/18/17	PME5	950,000	19,000	19	0.37	0.13	4,600,000	<10,000	7.3	26	13	-36	0.71	19	0.010	0.020
	CTMW-04D-20170823	08/23/17	PME6	780,000	18,000	19	0.82	0.035	4,100,000	<10,000	7.2	25	13	-69	0.78	120	0.21	0.26
	CTMW-04D-20170823-FD	08/23/17	PME6	810,000	18,000	18	1.1	0.038	4,100,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-04D-20170920	09/20/17	PME7	820,000	17,000	19	0.34	<0.015	3,500,000	<10,000	7.4	26	12	-96	0.16	4.7	0.18	--
CTMW-04D-20171003	10/03/17	PME8	740,000	18,000	18	0.13	<0.015	3,900,000	<10,000	7.9	26	10	-130	0.16	0.0	0.0	0.0	
CTMW-04D-20180307	03/07/18	PME9	660,000	15,000	17	<0.25	<0.075	3,700,000	<10,000	7.46	25.32	11.6	157	0.52	8.3	0.00	0.00	
CTMW-05S	CTMW-05S-20170621	06/21/17	PME4	560,000	4,900	5.5	0.088 J	0.21	2,100,000	<10,000	7.0	27	11	110	1.1	19	0.020	0.0
	CTMW-05S-20170717	07/17/17	PME5	570,000	2,500	2.8	<0.050	0.24	1,700,000	<10,000	6.6	32	12	120	0.82	11	0.030	0.040
	CTMW-05S-20170822	08/22/17	PME6	610,000	3,400	3.7	5.6	0.40	2,000,000	<10,000	6.8	28	12	150	0.87	7.6	0.0	0.020
	CTMW-05S-20170919	09/19/17	PME7	570,000	2,300	2.2	<0.050	0.21	1,900,000	<10,000	6.6	29	11	160	0.17	4.9	0.010	--
	CTMW-05S-20171004	10/04/17	PME8	570,000	5,900	5.7	<0.050	0.21	2,700,000	<10,000	6.4	25	10	150	0.66	0.0	0.010	0.080



**Table 3 - Summary of Groundwater Monitoring Data**  
 In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Perchlorate by USEPA Method 314.0 (µg/L)	Hexavalent Chromium by USEPA Method 7199 (µg/L)	Total Metals by USEPA Method 6010B (mg/L)			USEPA Method 300.1B (µg/L)		General Water Quality Parameters							
						Total Chromium	Total Iron	Total Manganese	Chlorate	Chlorite	pH	Temp (°C)	Specific Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Sulfide (mg/L)	Ferrous Iron (mg/L)
CTMW-05D	CTMW-05D-20170621	06/21/17	PME4	660,000	16,000	16	<0.050	<0.015	3,400,000	<10,000	7.6	27	10	140	1.6	8.8	0.0	0.0
	CTMW-05D-20170621-FD	06/21/17	PME4	590,000	16,000	18	<0.050	0.015 J	3,500,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-05D-20170718	07/18/17	PME5	510,000	15,000 J-	15	<0.050	0.10	3,400,000	R	7.2	26	11	140	0.80	3.4	0.0	0.0
	CTMW-05D-20170822	08/22/17	PME6	550,000	15,000	16	0.055 J	<0.015	3,500,000	<10,000	7.5	26	12	88	0.72	9.6	0.030	0.0
	CTMW-05D-20170919	09/19/17	PME7	550,000	15,000	14	0.25	0.016 J	3,300,000	<10,000	7.3	28	11	110	0.22	8.2	0.020	--
	CTMW-05D-20171004	10/04/17	PME8	650,000	14,000	16	0.78 J+	0.028	3,400,000	R	6.9	25	9.9	140	2.5	15	0.010	0.19
CTMW-06S	CTMW-06S-20170621	06/21/17	PME4	460,000	<0.25	0.31	2.5	2.0	20,000	<10,000	6.7	35	10	-130	0.66	250	0.020	0.40
	CTMW-06S-20170717	07/17/17	PME5	18,000 J-	<0.25	0.29	5.2	4.3	19,000	<10,000	6.6	34	12	-120	0.61	160	0.090	0.050
	CTMW-06S-20170822	08/22/17	PME6	13,000	<0.25	0.13	42	5.7	290	<10,000	6.8	33	13	-92	6.5	120	0.33	2.2
	CTMW-06S-20170919	09/19/17	PME7	<10	<0.25	0.061	68	5.7	<500	<10,000	6.6	30	12	-110	0.18	120	0.080	--
	CTMW-06S-20171004	10/04/17	PME8	<25	<0.25	0.062	49	7.1	<1,000	<10,000	6.5	28	12	-100	0.17	16	0.010	2.7
	CTMW-06S-20180306	03/06/18	PME9	130	<0.25	0.028	7.9	1.4	100	<50	7.17	25.89	5.60	-130	0.83	13.2	0.07	2.80
CTMW-06D	CTMW-06D-20170622	06/22/17	PME4	1,000,000	15,000	17	<0.050	0.042	4,000,000	<10,000	7.2	25	11	85	0.15	9.7	0.0	0.0
	CTMW-06D-20170717	07/17/17	PME5	920,000	17,000	18	<0.050	0.035	3,900,000	<10,000	7.0	31	13	87	0.63	7.1	0.0	0.0
	CTMW-06D-20170717-FD	07/17/17	PME5	830,000	17,000	17	0.067 J	0.034	4,200,000	<10,000	--	--	--	--	--	--	--	--
	CMTW-06D-20170822	08/22/17	PME6	950,000	15,000	15	0.63	0.10	3,700,000	<10,000	6.9	26	13	11	0.90	47	0.10	0.0
	CMTW-06D-20170919	09/19/17	PME7	800,000	14,000	13	0.85	0.15	2,700,000	<10,000	6.8	25	13	170	0.49	28	0.10	--
	CTMW-06D-20170919-FD	09/19/17	PME7	810,000	13,000	13	0.79	0.15	2,600,000	<10,000	--	--	--	--	--	--	--	--
	CTMW-06D-20171004	10/04/17	PME8	970,000	12,000	13	0.83	0.19	3,100,000	<10,000	6.6	27	12	180	0.55	91	0.24	0.27
	CTMW-06D-20171004-FD	10/04/17	PME8	990,000	13,000	13	0.71	0.18	3,100,000	<10,000	--	--	--	--	--	--	--	--
CTMW-06D-20180307	03/07/18	PME9	610,000	5,600	6.4	2.0	0.35	2,000,000	<10,000	7.02	24.30	12.2	115	0.61	28.3	0.00	0.00	
CTMW-07S	CTMW-07S-20171009	10/09/17	PME8															
	CMTW-07S-20180306	03/06/18	PME9	510,000 J-	13,000	14	0.41 J	0.092 J	3,200,000	<10,000	7.38	24.97	9.60	163	2.96	8.9	0.00	0.00
CTMW-07D	CTMW-07D-20171009	10/09/17	PME8	14,000	25	0.097	14	0.27	48,000	<100	5.81	23.59	1.26	231	4.82	78.8	0.00	0.00
	CTMW-07D-20180306	03/06/18	PME9	6,100	24	0.026	0.35 J+	0.11	16,000	<100	9.68	23.99	1.44	0.73	-56	8.5	0.00	0.00

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Dissolved Metals by USEPA Method 6020 (µg/L)																		
				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Uranium	Vanadium	Zinc
CTMW-01S	CTMW-01S-20170404	04/04/17	Baseline	<50	<5.0	85	41	<2.5	<2.5	10,000	<5.0	<5.0	<80	<5.0	32	5.5 J	<5.0	<5.0	<5.0	38	<50	<25
	CTMW-01S-20170503	05/03/17	PME1	49	8.8	200	62	<0.25	<0.25	1,100	5.0	10	660	<0.50	510	51	2.5	<0.50	<0.50	200	3.5	9.3 J
	CTMW-01S-20170516	05/16/17	PME2	26	0.53 J	210	58	<0.25	<0.25	360	3.4	4.6	32	0.62 J	480	7.6	2.3	<0.50	<0.50	210	19	10 J
	CTMW-01S-20170531	05/31/17	PME3	<50	<5.0	350	75	<2.5	<2.5	150	<5.0	<5.0	780	<5.0	910	13 J	<5.0	<5.0	<5.0	190	<10	<25
	CTMW-01S-20170619	06/19/17	PME4	<50	<5.0	460	47	<2.5	<2.5	150	5.2 J	13 J	370	<5.0	2,600	61	<5.0	<5.0	<5.0	23	<10	<25
	CTMW-01S-20170720	07/20/17	PME5	48 J	<2.5	380	400	<1.3	<1.3	110	3.7 J	4.2 J	5,200	<2.5	4,500	37	<2.5	<2.5	<2.5	6.6	<5.0	17 J
	CTMW-01S-20170824	08/24/17	PME6	<50	<5.0	910	360	<2.5	<2.5	90	<5.0	<5.0	390	<5.0	2,300	30	<5.0	<5.0	<5.0	80	19 J	<25
	CTMW-01S-20170920	09/20/17	PME7	<25	4.2 J	700	570	<1.3	<1.3	67	2.8 J	3.0 J	220	<2.5	3,200	18	<2.5	<2.5	<2.5	44	8.1 J	<13
	CTMW-01S-20171003	10/03/17	PME8	<25	<2.5	440	610	<1.3	<1.3	59	<2.5	2.8 J	430	<2.5	3,000	15	<2.5	<2.5	<2.5	5.2	<5.0	16 J
CTMW-01S-20180305	03/05/18	PME9	<25	<2.5	590	390	<1.3	<1.3	43	<2.5	7.2 J	250	<2.5	160	2.9 J	<2.5	<2.5	<2.5	16	6.1 J	13 J	
CTMW-01D	CTMW-01D-20170403	04/03/17	Baseline	<500	<50	<50	<50	<25	<25	22,000	<50	<50	<320	<50	<50	<50	<50	<50	<50	<50	<40	<250
	CTMW-01D-20170503	05/03/17	PME1	36	0.96 J	20	47	<0.25	<0.25	28,000	0.77 J	2.5	65	<0.50	44	5.1	3.5	<0.50	<0.50	29	<150	6.7 J
	CTMW-01D-20170516	05/16/17	PME2	12	<0.50	21	43	<0.25	<0.25 UJ	21,000	0.83 J	2.3 J	55	1.2	58 J	6.6 J	2.4 J	<0.50	<0.50	30	R	9.5 J
	CTMW-01D-20170531	05/31/17	PME3	<50	<5.0	24	43	<2.5	<2.5	21,000	<5.0	<5.0	<80	<5.0	36	6.3 J	<5.0	<5.0	<5.0	43	<10	<25
	CTMW-01D-20170619	06/19/17	PME4	<50	<5.0	33	43	<2.5	<2.5	18,000	<5.0	<5.0	<80	<5.0	46	<5.0	<5.0	<5.0	<5.0	67	R	<25
	CTMW-01D-20170720	07/20/17	PME5	<25	<2.5	39	47	<1.3	<1.3	15,000	<2.5	3.5 J	<40	<2.5	85	8.0 J	7.3 J	<2.5	<2.5	140	R	32 J
	CTMW-01D-20170720-FD	07/20/17	PME5	<25	<2.5	43	49	<1.3	<1.3	17,000	<2.5	3.2 J	100	<2.5	88	7.6 J	6.8 J	<2.5	<2.5	140	<5.0 L	<13
	CTMW-01D-20170824	08/24/17	PME6	<50	<5.0	33	50	<2.5	<2.5	11,000	<5.0	<5.0	<80	<5.0	180	8.0 J	6.0 J	<5.0	<5.0	230	<10 L	<25
	CTMW-01D-20170920	09/20/17	PME7	<25	<2.5	32	51	<1.3	<1.3	12,000	<2.5	3.0 J	83 J	<2.5	200	7.4 J	5.3 J	<2.5	<2.5	230	<5.0 L	<13
	CTMW-01D-20171003	10/03/17	PME8	6.2 J	0.54 J	29	53	<0.25	<0.25	13,000	0.50 J	0.58 J	<8.0	<0.50	200	2.7	4.8	<0.50	<0.50	220	7.5	3.7 J
	CTMW-01D-20180305	03/05/18	PME9	<25	<2.5	40	270	<1.3	<1.3	8,600	<2.5	<2.5	<40	<2.5	760	4.7 J	4.7 J	<2.5	<2.5	240	10	45 J
CTMW-01D-20180305-FD	03/05/18	PME9	<25	<2.5	37	270	<1.3	<1.3	8,400	<2.5	2.6 J	<40	<2.5	740	4.6 J	<2.5	<2.5	<2.5	220	9.9 J	50 J	
CTMW-02S	CTMW-02S-20170405	04/05/17	Baseline	<50	<5.0	73	36	<2.5	<2.5	11,000	<5.0	<5.0	<800 F1	<5.0	38	11 J	<5.0	<5.0	<5.0	31	<100	86 J
	CTMW-02S-20170504	05/04/17	PME1	27	1.6 J	85	58	<0.25	<0.25	1,500	2.1	24	79	<0.50	290	11	1.6 J	<0.50	<0.50	200	<150	18 J
	CTMW-02S-20170516	05/16/17	PME2	6.3 J	<0.50	53	53	<0.25	<0.25	240	2.1	5.2	38	<0.50	270	22	2.4	<0.50	<0.50	260	20	13 J
	CTMW-02S-20170601	06/01/17	PME3	8.7 J	<0.50	110	40	<0.25	<0.25	580	1.3	5.1	<8.0	<0.50	180	4.4	2.2	<0.50	<0.50	380	13	5.1 J
	CTMW-02S-20170620	06/20/17	PME4	<50	<5.0	850	58	<2.5	<2.5	130	<5.0	<5.0	2,000	<5.0	1,000	19 J	<5.0	<5.0	<5.0	420	11 J	<25
	CTMW-02S-20170719	07/19/17	PME5	<50	5.0 J	640	350	<2.5	<2.5	42	<5.0	<5.0	6,800	<5.0	2,400	9.0 J	<5.0	<5.0	<5.0	63	<10	<25
	Not Analyzed	08/24/17	PME6	Well Dry; Unable to sample																		
	CTMW-02S-20170920	09/20/17	PME7	<25	3.0 J	530	360	<1.3	<1.3	46	<2.5	24	3,500	<2.5	1,200	11	<2.5	<2.5	<2.5	25	9.8 J	14 J
	CTMW-02S-20171003	10/03/17	PME8	<10	2.5 J	340	430	<0.50	<0.50	37	<1.0	18	340	1.2 J	850	5.9	<1.0	<1.0	<1.0	4.1	6.4	22 J
	CTMW-02S-20180306	03/06/18	PME9	<25	13	1,300	250	<1.3	<1.3	37	<2.5	<2.5	140	<2.5	590	6.8 J	<2.5	<2.5	<2.5	2.5 J	8.2 J	<13
CTMW-02D	CTMW-02D-20170404	04/04/17	Baseline	<5.0	<0.50	28	41	<0.25	<0.25	18,000	0.80 J	1.9 J	<80	<0.50	58	3.7	4.2 J	<0.50	<0.50	39	R	3.6 J
	CTMW-02D-20170404-FD	04/04/17	Baseline	6.4 J	<0.50	28	39	<0.25	<0.25	18,000	0.76 J	1.8 J	<80	<0.50	55	3.9	3.6	<0.50	<0.50	36	<100	4.7 J
	CTMW-02D-20170503	05/03/17	PME1	30	1.0 J	36	44	<0.25	<0.25	20,000	0.81 J	1.8 J	64	<0.50	100	5.0	3.2	<0.50	<0.50	62	<150	9.3 J
	CTMW-02D-20170503-FD	05/03/17	PME1	40	0.91 J	38	47	<0.25	<0.25	22,000	0.84 J	1.9 J	81	<0.50	110	5.0	3.5	<0.50	<0.50	65	<150	9.8 J
	CTMW-02D-20170517	05/17/17	PME2	<25	<2.5	27	47	<1.3	<1.3	19,000	<2.5	<2.5	82 J	<2.5	86	5.6 J	4.9 J	<2.5	<2.5	86	<200	14 J
	CTMW-02D-20170601	06/01/17	PME3	<50	<5.0	39	52	<2.5	<2.5	21,000	<5.0	<5.0	<80	<5.0	120	6.5 J	<5.0	<5.0	<5.0	94	<10	<25
	CTMW-02D-20170601-FD	06/01/17	PME3	<50	<5.0	39	52	<2.5	<2.5	20,000	<5.0	<5.0	<80	<5.0	140	5.5 J	<5.0	<5.0	<5.0	100	<10	<25
	CTMW-02D-20170619	06/19/17	PME4	<50	<5.0	47	42	<2.5	<2.5	15,000	<5.0	<5.0	<80	<5.0	120	<5.0	<5.0	<5.0	<5.0	110	<10	<25
	CTMW-02D-20170619-FD	06/19/17	PME4	<50	<5.0	45	43	<2.5	<2.5	16,000	<5.0	6.6 J	<80	<5.0	120	5.4 J	5.4 J	<5.0	<5.0	110	<10	<25
	CTMW-02D-20170719	07/19/17	PME5	<50	<5.0	88	56	<2.5	<2.5	12,000	<5.0	<5.0	<80 UJ	<5.0	290	5.4 J	<5.0	<5.0	<5.0	150	R	<25
	CTMW-02D-20170824	08/24/17	PME6	<50	<5.0	48	66	<2.5	<2.5	15,000	<5.0	<5.0	<80	<5.0	400	9.2 J	7.8 J	<5.0	<5.0	130	R	33 J
	CTMW-02D-20170920	09/20/17	PME7	<25	<2.5	55	57	<1.3	<1.3	13,000	<2.5	3.0 J	60 J	<2.5	380	6.9 J	4.9 J	<2.5	<2.5	150	R	<13
	CTMW-02D-20171003	10/03/17	PME8	<25	<2.5	47	54	<1.3	<1.3	14,000	<2.5	16	<40	<2.5	320	7.3 J	3.4 J	<2.5	<2.5	140	<5.0 UJ	39 J
CTMW-02D-20180305	03/05/18	PME 9	<25	<2.5	59	110	<1.3	<1.3	15,000	<2.5	<2.5	<40	<2.5	510	2.8 J	4.0 J	<2.5	<2.5	170	15	<13	

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Dissolved Metals by USEPA Method 6020 (µg/L)																		
				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Uranium	Vanadium	Zinc
CTMW-03S	CTMW-03S-20170405	04/05/17	Baseline	<50	<5.0	120	29	<2.5	<2.5	13,000	<5.0	<5.0	<800	<5.0	9.1 J	<5.0	<5.0	<5.0	<5.0	27	<100	<25
	CTMW-03S-20170505	05/05/17	PME1	26 J	<2.5	97	31	<1.3	<1.3	13,000	<2.5	<2.5	<8.0	<2.5	60	3.1 J	4.9 J	<2.5	<2.5	27	<100	<13
	CTMW-03S-20170517	05/17/17	PME2	30 J	<2.5	110	33	<1.3	<1.3	14,000	<2.5	<2.5	100	<2.5	68	3.3 J	3.9 J	<2.5	<2.5	31	<200	22 J
	CTMW-03S-20170601	06/01/17	PME3	<50	<5.0	140	45	<2.5	<2.5	17,000	<5.0	<5.0	<80	<5.0	87	<5.0	<5.0	<5.0	<5.0	43	<10	<25
	CTMW-03S-20170620	06/20/17	PME4	63 J	<5.0	160	51	<2.5	<2.5	4,800	<5.0	<5.0	<80	<5.0	320	10 J	<5.0	<5.0	<5.0	110	<10	<25
	CTMW-03S-20170718	07/18/17	PME5	<25	<2.5	130	43	<1.3	<1.3	16,000	<2.5	<2.5	<40	<2.5	240	4.9 J	<2.5	<2.5	<2.5	47	<5.0	<13
	CTMW-03S-20170823	08/23/17	PME6	9.2 J	0.51 J	180	61	<0.25	<0.25	4,600	3.1	4.0	36	<0.50	520	7.2	3.0	0.56 J	<0.50	98	R	8.1 J
	CTMW-03S-20170921	09/21/17	PME7	<25	<2.5	110	43	<1.3	<1.3	14,000	<2.5	4.9 J	<40	<2.5	330	4.6 J	8.6 J	57 J-	<2.5	44	R	<13
CTMW-03S-20171003	10/03/17	PME8	<25	<2.5	120	42	<1.3	<1.3	13,000	<2.5	29	<40	<2.5	320	6.5 J	3.9 J	<2.5	<2.5	45	41	31 J	
CTMW-03D	CTMW-03D-20170406	04/06/17	Baseline	110 J-	<5.0	100	32	<2.5	<2.5	16,000	<5.0	<5.0	<80	<5.0	36	<5.0	<5.0	<5.0	<5.0	29	R	36 J
	CTMW-03D-20170505	05/05/17	PME1	<25	<2.5	98	30	<1.3	<1.3	14,000	<2.5	4.3 J	9.1 J	<2.5	24	<2.5	5.8 J	12	<2.5	32	R	<13
	CTMW-03D-20170517	05/17/17	PME2	<25	<2.5	110	31	<1.3	<1.3	15,000	<2.5	3.1 J	42 J	<2.5	22	3.9 J	5.3 J	<2.5	<2.5	36	R	44 J
	CTMW-03D-20170601	06/01/17	PME3	<50	<5.0	120 J+	36	<2.5	<2.5	16,000	<5.0	<5.0	<80	<5.0	26	5.7 J	<5.0	<5.0	<5.0	40	R	<25
	CTMW-03D-20170620	06/20/17	PME4	<50	<5.0	100	29	<2.5	<2.5	14,000	<5.0	<5.0	<80	<5.0	22	<5.0	<5.0	<5.0	<5.0	46	<10	<25
	CTMW-03D-20170720	07/20/17	PME5	<50	<5.0	110	31	<2.5	<2.5	15,000	<5.0	<5.0	<80	<5.0	25	<5.0	5.7 J	<5.0	<5.0	52	<10	<25
	CTMW-03D-20170823	08/23/17	PME6	<25	<2.5	110	31	<1.3	<1.3	14,000	<2.5	<2.5	89 J	<2.5	23	3.8 J	5.3 J	<2.5	<2.5	63	<5.0	<13
	CTMW-03D-20170921	09/21/17	PME7	<25	<2.5	100	29	<1.3	<1.3	13,000	<2.5	<2.5	<40	<2.5	25	3.1 J	6.0 J	<2.5	<2.5	49	<5.0	<13
CTMW-03D-20171003	10/03/17	PME8	<25	<2.5	92	27	<1.3	<1.3	13,000	<2.5	18	<40	<2.5	22	3.3 J	3.4 J	<2.5	<2.5	48	<5.0 UJ	29 J	
CTMW-04S	CTMW-04S-20170405	04/05/17	Baseline	<50	<5.0	65	33	<2.5	<2.5	9,900	<5.0	<5.0	<800	<5.0	38	7.2 J	<5.0	<5.0	<5.0	34	<100	<25
	CTMW-04S-20170504	05/04/17	PME1	41	0.89 J	120	35	<0.25	<0.25	6,000	1.2	1.5 J	100	<0.50	150	4.3	3.0	<0.50	<0.50	130	<150	5.5 J
	CTMW-04S-20170517	05/17/17	PME2	20	<0.50	130	44	<0.25	<0.25	550	2.0	2.3	29	<0.50	320	6.3	2.7	<0.50	<0.50	260	17	7.1 J
	CTMW-04S-20170602	06/02/17	PME3	11	<0.50	170	40	<0.25	<0.25	710	1.6	3.1	54	<0.50	290	6.5	2.0	<0.50	<0.50	230	9.6	11 J
	CTMW-04S-20170620	06/20/17	PME4	<50	<5.0	130	43	<2.5	<2.5	180	5.1 J	<5.0	140 J	<5.0	460	130	<5.0	<5.0	<5.0	320	16 J	26 J
	CTMW-04S-20170718	07/18/17	PME5	<25	<2.5	510	57	<1.3	<1.3	200	5.3	<2.5	170	<2.5	1,200	53	<2.5	<2.5	<2.5	480	6.4 J	<13
	CTMW-04S-20170823	08/23/17	PME6	16	2.1	440	99	<0.25	<0.25	120	1.5	1.6 J	460	<0.50	1,800	7.6	1.4 J	<0.50	<0.50	140	4.2	16 J
	CTMW-04S-20170921	09/21/17	PME7	26	1.3 J	370	100	<0.50	<0.50	86	<1.0	1.9 J	530	<1.0	1,400	160	1.3 J	<1.0	<1.0	40	3.8 J	5.0 J
CTMW-04S-20171003	10/03/17	PME8	<25	<2.5	150	200	<1.3	<1.3	70	<2.5	13	62 J	<2.5	2,000	2.5 J	<2.5	<2.5	<2.5	190	<5.0	21 J	
CTMW-04S-20180307	03/07/18	PME9	20 J+	0.93 J	66	130	<0.25	<0.25	2,000	2.9	1.0 J	41	<0.50 UJ	930	6.2 J-	3.9	<0.50	0.99 J	150	42	7.4 J	
CTMW-04D	CTMW-04D-20170405	04/05/17	Baseline	<50	<5.0	72	39	<2.5	<2.5	18,000	<5.0	<5.0	<800	<5.0	16	<5.0	<5.0	<5.0	<5.0	32	<100	<25
	CTMW-04D-20170504	05/04/17	PME1	28	<0.50	78	45	<0.25	<0.25	22,000	0.50 J	1.5 J	52	<0.50	15	3.1	3.3 J-	<0.50	<0.50	33	R	17 J
	CTMW-04D-20170517	05/17/17	PME2	<25	<2.5	92	41	<1.3	<1.3	19,000	<2.5	<2.5	71 J	<2.5	11	3.5 J	<2.5	<2.5	<2.5	33	<250	<13
	CTMW-04D-20170517-FD	05/17/17	PME2	<25	<2.5	95	43	<1.3	<1.3	20,000	<2.5	<2.5	65 J	<2.5	12	3.8 J	4.0 J	<2.5	<2.5	35	<250	<13
	CTMW-04D-20170602	06/02/17	PME3	<50	<5.0	110	49	<2.5	<2.5	22,000	<5.0	<5.0	<80	<5.0	22	5.8 J	<5.0	<5.0	<5.0	50	<10	<25
	CTMW-04D-20170621	06/21/17	PME4	<50	<5.0	80	40	<2.5	<2.5	18,000	<5.0	<5.0	<80	<5.0	11	<5.0	<5.0	<5.0	<5.0	32	<10	<25
	CTMW-04D-20170718	07/18/17	PME5	<25	<2.5	120	51	<1.3	<1.3	23,000	<2.5	<2.5	<40	<2.5	14	4.8 J	3.4 J	<2.5	<2.5	42	<5.0	<13
	CTMW-04D-20170823	08/23/17	PME6	<25	<2.5	93	41	<1.3	<1.3	18,000	<2.5	<2.5	100	<2.5	14 J	4.5 J	5.6 J	<2.5	<2.5	34	<5.0	<13
	CTMW-04D-20170823-FD	08/23/17	PME6	<25	<2.5	90	40	<1.3	<1.3	17,000	<2.5	<2.5	100	<2.5	21 J	4.7 J	5.1 J	<2.5	<2.5	32	<5.0	<13
	CTMW-04D-20170920	09/20/17	PME7	<25	<2.5	110	40	<1.3	<1.3	17,000	<2.5	<2.5	90 J	<2.5	11	4.8 J	5.2 J	<2.5	<2.5	43	<5.0	<13
CTMW-04D-20171003	10/03/17	PME8	55	<2.5	110	40	<1.3	<1.3	17,000	<2.5	8.6 J	<40	<2.5	9.4	4.0 J	3.2 J	<2.5	<2.5	45	<5.0 UJ	19 J	
CTMW-04D-20180307	03/07/18	PME9	30 J	<2.5	96	63	<1.3	<1.3	13,000	<2.5	<2.5	<40	<2.5	27	<2.5	4.3 J	<2.5	<2.5	60	17	<13	
CTMW-05S	CTMW-05S-20170621	06/21/17	PME4	<50	<5.0	88	50	<2.5	<2.5	4,900	<5.0	<5.0	<80	<5.0	190	<5.0	<5.0	<5.0	<5.0	170	<10	<25
	CTMW-05S-20170717	07/17/17	PME5	<25	<2.5	130	54	<1.3	<1.3	3,000	<2.5	<2.5	<40	<2.5	260	5.5 J	<2.5	<2.5	<2.5	250	<5.0	<13
	CTMW-05S-20170822	08/22/17	PME6	120	<0.50	110	56	<0.25	<0.25	3,200	1.2	1.9 J	80	<0.50	210	4.1	4.1	<0.50	<0.50	160	<1.0	5.5 J
	CTMW-05S-20170919	09/19/17	PME7	<10	<1.0	140	53	<0.50	<1.3	2,100	1.3 J	2.8 J	<16	<1.0	230	4.9	4.2	<1.0	<1.0	170	<10	9.3 J
CTMW-05S-20171004	10/04/17	PME8	530	<0.50	110	49	<0.25	<0.25	6,500	0.52 J	85	17 J	8.0	190	2.6	3.3	<0.50	<0.50	110	20	74	

**Table 3 - Summary of Groundwater Monitoring Data**  
**In-Situ Chromium Treatability Study (Biological Reduction Study Area)**

Well Location	Sample ID	Sample Date	Week	Dissolved Metals by USEPA Method 6020 (µg/L)																		
				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Selenium	Silver	Thallium	Uranium	Vanadium	Zinc
CTMW-05D	CTMW-05D-20170621	06/21/17	PME4	<50	<5.0	85	34	<2.5	<2.5	14,000	<5.0	<5.0	<80	<5.0	16	<5.0	<5.0	<5.0	<5.0	40	<10	<25
	CTMW-05D-20170621-FD	06/21/17	PME4	<50	<5.0	94	33	<2.5	<2.5	14,000	<5.0	<5.0	<80	<5.0	19	<5.0	18 J	<5.0	<5.0	37	<10	<25
	CTMW-05D-20170718	07/18/17	PME5	<25	<2.5	130	46	<1.3	<1.3	19,000	<2.5	<2.5	<40	<2.5	21	3.5 J	6.1 J	<2.5	<2.5	57 J+	R	<13
	CTMW-05D-20170822	08/22/17	PME6	92 J	<5.0	110	34	<2.5	<2.5	14,000	<5.0	<5.0	130 J	<5.0	12	5.2 J	6.6 J	<5.0	<5.0	52	<10	<25
	CTMW-05D-20170919	09/19/17	PME7	<25	<2.5	120	36	<1.3	<5.0	14,000	<2.5	<2.5	<40	<2.5	21	3.9 J	5.6 J	<2.5	<2.5	56	<100	<13
CTMW-05D-20171004	10/04/17	PME8	<25	3.6 J	110	34	<1.3	<1.3	13,000	<2.5	16 J-	<40	<2.5	17	<2.5	5.2 J	<2.5	<2.5	60	21	25 J	
CTMW-06S	CTMW-06S-20170621	06/21/17	PME4	56 J	<5.0	190	210	<2.5	<2.5	160	<5.0	<5.0	110 J	<5.0	1,600	15 J	8.3 J	<5.0	<5.0	450	<10	<25
	CTMW-06S-20170717	07/17/17	PME5	<25	4.0 J	660	1,100	<1.3	<1.3	120	3.1 J	<2.5	<40	<2.5	4,300	34	<2.5	<2.5	<2.5	370	11	<13
	CTMW-06S-20170822	08/22/17	PME6	58	1.6 J	120	1,400	<0.25	<0.25	62	3.9	1.7 J	410	<0.50	4,700	11	1.2 J	<0.50	<0.50	19	2.7	5.9 J
	CTMW-06S-20170919	09/19/17	PME7	43	1.9 J	190	1,200	<0.50	<0.50	53	1.3 J	2.9 J	210	<1.0	5,400	8.2	1.1 J	<1.0	<1.0	1.4 J	2.0 J	16 J
	CTMW-06S-20171004	10/04/17	PME8	7.2 J	2.1	210	920	<0.25	<0.25	47	<0.50	<0.50	100	<0.50	5,600	4.1	0.82 J	<0.50	<0.50	1.3	1.4 J	3.3 J
CTMW-06S-20180306	03/06/18	PME9	<25	<2.5	430	510	<1.3	<1.3	27	<2.5	<2.5	89 J	<2.5	1,500	3.3 J	<2.5	<2.5	<2.5	5.6	<5.0	<13	
CTMW-06D	CTMW-06D-20170622	06/22/17	PME4	<10	<1.0	74	37	<0.50	<0.50	18,000	<1.0	1.9 J	96 J	<1.0	50	3.6 J	3.4 J	<1.0	<1.0	74	<10	7.2 J
	CTMW-06D-20170717	07/17/17	PME5	<25	<2.5	110	46	<1.3	<1.3	22,000	<2.5	<2.5	<40	<2.5	61	4.7 J	2.9 J	<2.5	<2.5	110	<5.0	<13
	CTMW-06D-20170717-FD	07/17/17	PME5	<25	<2.5	110	46	<1.3	<1.3	23,000	<2.5	3.8 J	<40	<2.5	55	5.4 J	3.8 J	<2.5	<2.5	110	<5.0	<13
	CTMW-06D-20170822	08/22/17	PME6	<50	<5.0	90	40	<2.5	<2.5	15,000	<5.0	<5.0	<80	<5.0	92	8.0 J	7.4 J	<5.0	<5.0	130	R	<25
	CTMW-06D-20170919	09/19/17	PME7	<25	<2.5	99	46	<1.3	<5.0	13,000	<2.5	<2.5	<40	<2.5	140	5.8 J	11	36 J	<2.5	160	R	<13
	CTMW-06D-20170919-FD	09/19/17	PME7	<25	<2.5	100	46	<1.3	<5.0	13,000	<2.5	<2.5	<40	<2.5	140	5.7 J	5.1 J	<2.5 UJ	<2.5	160	R	<13
	CTMW-06D-20171004	10/04/17	PME8	<25	<2.5	110	64	<1.3	<1.3	12,000	<2.5	<2.5	<40	<2.5	180	2.7 J	4.1 J	<2.5	<2.5	170	19	<13
CTMW-06D-20171004-FD	10/04/17	PME8	35 J	<2.5	120	64	<1.3	<1.3	12,000	<2.5	<2.5	<40	<2.5	180	2.6 J	4.3 J	<2.5	<2.5	180	20	<13	
CTMW-06D-20180307	03/07/18	PME9	23 J+	<0.50	94	310	<0.25	<0.25	4,600	0.55 J	<0.50	33	<0.50	280	3.1	2.3	<0.50	<0.50	160	10	5.0 J	
CTMW-07S	CTMW-07S-20171009	10/09/17	PME8	Well dry																		
	CTMW-07S-20180306	03/06/18	PME9	<25	<2.5	120	30	<1.3	<1.3	14,000	<2.5	3.6 J	<40	<2.5	61	<2.5	5.5 J	38 J-	<2.5	47	44	40 J
CTMW-07D	CTMW-07D-20171009	10/09/17	PME8	30	1.1 J	14	12	<0.25	<0.25	23	<0.50	0.55 J	20 J+	<0.50	5.9	0.68 J	2.1	<0.50	<0.50	5.0	7.1	2.5 J
	CTMW-07D-20180306	03/06/18	PME9	<25	<2.5	<2.5	63	<1.3	<1.3	27	<2.5	5.2 J	<40	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<13

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	General Chemistry (mg/L)											Dissolved Methane (mg/L)	Anions by USEPA Method 300.0 (mg/L)		
				Alkalinity as CaCO <sub>3</sub>	Bicarbonate Alkalinity as CaCO <sub>3</sub>	Chemical Oxygen Demand	Total Organic Carbon	Total Sulfide	Total Kjeldahl Nitrogen	Total Phosphorus	Total Dissolved Solids	Hardness as CaCO <sub>3</sub>	Orthophosphate as P	Orthophosphorus as PO <sub>4</sub>		Chloride	Nitrate as N	Sulfate
CTMW-01S	CTMW-01S-20170404	04/04/17	Baseline	200	200	--	2.4	0.024 J	<0.10	0.026 J	8,200	1,700	0.067 J-	0.21 J-	<0.00025	790	120	1,400
	CTMW-01S-20170503	05/03/17	PME1	2,000	2,000	7,100	2,300	<0.020	<2.5	0.52	12,000	3,700	0.34	1.0	<0.00025	950	210	1,400
	CTMW-01S-20170516	05/16/17	PME2	2,600	2,600	12,000	3,000	<0.020	0.76	0.37	11,000	3,300	0.72	2.2	<0.00025	940	55	1,200
	CTMW-01S-20170531	05/31/17	PME3	2,300	2,300	7,200	2,000	3.9	0.20	0.49 J-	10,000	3,100	1.2 J-	3.7 J-	<0.00025	1,500	2.6	1,100
	CTMW-01S-20170619	06/19/17	PME4	5,300	5,300	22,000	6,600	0.36 J-	190 J-	24 J-	18,000	5,700	18 J-	54 J-	<0.00025	1,300	9.5	740
	CTMW-01S-20170720	07/20/17	PME5	6,300	6,300	26,000	9,000	1.2	47	3.4	20,000	11,000	0.65	2.0	<0.00025	1,500	<0.55	140
	CTMW-01S-20170824	08/24/17	PME6	3,700	3,700	17,000 J-	6,700	<0.027	9,500 J-	5.5	17,000	3,900	5.6 J-	17 J-	0.15	1,300	4.8 J	1,000
	CTMW-01S-20170920	09/20/17	PME7	5,200	5,200	19,000	6,200	0.035 J	240	0.79 J	17,000	4,800	0.76	2.3	0.95	970	<1.1	<130
	CTMW-01S-20171003	10/03/17	PME8	2,700	2,700	17,000	6,300 J-	0.47	210	5.2	16,000	4,300	0.47	1.4	1.8 J-	1,100	<0.55	76
CTMW-01S-20180305	03/05/18	PME9	3,700	3,700	--	1,200 J	0.031 J	140	1.3	7,300	2,700	0.27	0.83	2.9 J-	780	<1.1	<5.0	
CTMW-01D	CTMW-01D-20170403	04/03/17	Baseline	140	140	--	25	0.044 J	<0.10	0.054	14,000	3,400	0.17	0.52	<0.00025	1,900	20	1,900
	CTMW-01D-20170503	05/03/17	PME1	130	130	<20	8.0	0.030 J	<0.10	0.11	14,000	3,600	0.082	0.25	<0.00025	1,900	21	1,800
	CTMW-01D-20170516	05/16/17	PME2	140	140	<20	9.8	<0.020	<0.10	<0.025	15,000	3,500	0.082	0.25	<0.00025	1,700	22	1,700
	CTMW-01D-20170531	05/31/17	PME3	160	160	<50	16	<0.30	<0.10	0.035 J	15,000	3,600	0.051 J-	0.16 J-	<0.00025	1,700	20	1,600
	CTMW-01D-20170619	06/19/17	PME4	290	290	R	11	R	R	0.028 J	14,000	3,400	0.085 J-	0.26 J-	<0.00025	1,700	17	1,700
	CTMW-01D-20170720	07/20/17	PME5	400	400	<50	66	<0.14	<0.10	0.029 J	12,000	3,700	0.080 J-	0.24 J-	0.00040 J	2,000	14	1,700
	CTMW-01D-20170720-FD	07/20/17	PME5	380	380	<50	66	<0.27	<0.10	0.030 J	12,000	3,600	0.10 J-	0.31 J-	<0.00025	2,000	14	1,700
	CTMW-01D-20170824	08/24/17	PME6	740	740	480 J-	350	<0.027	<0.10	0.22	13,000	4,000	0.10 J-	0.31 J-	0.014	2,300	9.9	1,700
	CTMW-01D-20170920	09/20/17	PME7	640	640	410	430	<0.027	<0.10	0.16	14,000	4,000	0.20	0.61	0.29	2,100	12	1,600
	CTMW-01D-20171003	10/03/17	PME8	920	920	630	440 J-	<0.027	<0.50	0.099	13,000	4,000	0.20	0.62	0.038	2,000	11	1,600
	CTMW-01D-20180305	03/05/18	PME9	890	890	--	340	<0.027	<0.10	0.090	10,000	3,100	0.072 J	0.22 J	0.039	1,800	6.0	990
CTMW-01D-20180305-FD	03/05/18	PME9	890	890	--	340	<0.027	<0.10	0.083	10,000	3,100	0.17 J	0.51 J	0.050	1,900	5.0 J	990	
CTMW-02S	CTMW-02S-20170405	04/05/17	Baseline	160	160	--	2.0	<0.020	<0.10	<0.025	8,400	1,500	0.057	0.18	<0.00025	780	160	1,500
	CTMW-02S-20170504	05/04/17	PME1	940	940	58	53	<0.080	<0.10	0.26	10,000	2,500	0.15 J-	0.46 J-	<0.00025	1,300	540	1,500
	CTMW-02S-20170516	05/16/17	PME2	1,200	1,200	37 J	14	<0.020	<0.10	0.39	10,000	2,400	0.19	0.59	<0.00025	1,200	530	1,400
	CTMW-02S-20170601	06/01/17	PME3	1,200	1,200	140	15	<0.14	R	0.26 J-	8,700	1,900	0.27 J-	0.81 J-	<0.00025	1,300	320	1,500
	CTMW-02S-20170620	06/20/17	PME4	3,300	3,300	5,200	1,500	0.090	16	2.1	9,900	2,400	1.2	3.7	0.027	1,500	<1.1	890
	CTMW-02S-20170719	07/19/17	PME5	3,800	3,800	5,400	2,300	0.16	23	2.6	11,000	2,700	0.56 J-	1.7 J-	0.15	1,400	0.63 J	29
	Not Analyzed	08/24/17	PME6	Well Dry; Unable to sample														
	CTMW-02S-20170920	09/20/17	PME7	5,900	5,900	5,400	2,000	<0.027	65	1.8	11,000	2,500	0.39	1.2	1.9	1,600	<0.28	17
	CTMW-02S-20171003	10/03/17	PME8	2,400	2,400	5,700	1,900 J-	0.29	68	1.1	10,000	2,400	0.54	1.7	2.3 J-	1,600	<1.1	6.5 J
	CTMW-02S-20180306	03/06/18	PME9	2,000	2,000	--	35 J	0.078	53	1.9	4,600	850	0.53	1.6	3.9 J-	1,600	<1.1	6.7 J
CTMW-02D	CTMW-02D-20170404	04/04/17	Baseline	190	190	--	18	0.052	<0.10	0.045 J	11,000	2,500	0.074 J-	0.23 J-	<0.00025	1,300	34	1,700
	CTMW-02D-20170404-FD	04/04/17	Baseline	190	190	--	18	0.025 J	<0.10	0.051	12,000	2,400	0.081 J-	0.25 J-	<0.00025	1,200	31	1,600
	CTMW-02D-20170503	05/03/17	PME1	270	270	<20	12	<0.20	<0.10	<0.025	13,000	2,900	0.052	0.16	<0.00025	1,500	30	1,700
	CTMW-02D-20170503-FD	05/03/17	PME1	270	270	<20	12	<0.020	<0.10	0.025 J	12,000	2,900	0.052	0.16	<0.00025	1,600	29	1,700
	CTMW-02D-20170517	05/17/17	PME2	340	340	<20	11	<0.50	R	0.030 J	13,000	3,200	0.064 J-	0.19 J-	<0.00025	1,500	26	1,500
	CTMW-02D-20170601	06/01/17	PME3	290	290	<50	6.2	<0.27	R	0.029 J	13,000	3,200	0.065 J-	0.20 J-	<0.00025	1,500	25	1,600
	CTMW-02D-20170601-FD	06/01/17	PME3	320	320	<50	7.5	<0.38	R	0.029 J	13,000	3,100	0.065 J-	0.20 J-	<0.00025	1,500	25	1,500
	CTMW-02D-20170619	06/19/17	PME4	450	450	R	90	R	R	R	12,000	3,100	0.033 J	0.10 J	0.00041 J	1,500	22	1,600
	CTMW-02D-20170619-FD	06/19/17	PME4	420	420	R	88	R	R	R	12,000	3,100	0.035 J	0.11 J	0.00054 J	1,600	22	1,600
	CTMW-02D-20170719	07/19/17	PME5	890	890	<50	150	<0.054	<0.10	0.027 J	12,000	3,100	0.12 J-	0.35 J-	0.00038 J	1,800	5.8	1,300
	CTMW-02D-20170824	08/24/17	PME6	540	540	R	17	<0.027	R	0.11	13,000	3,300	0.10 J-	0.32 J-	0.079	2,000	18	1,600
	CTMW-02D-20170920	09/20/17	PME7	510	510	<50	8.6	<0.027	<0.10	0.095	12,000	3,300	0.21 J	0.65 J	0.11	2,000	14	1,400
	CTMW-02D-20171003	10/03/17	PME8	590	590	<20	7.8	<0.027	<0.50	<0.025	12,000	3,300	0.11	0.34	0.058	1,900	17	1,500
CTMW-02D-20180305	03/05/18	PME 9	410	410	--	6.5	<0.027	<0.10	<0.025	12,000	3,100	0.081	0.25	0.090	1,800	18	1,600	

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	General Chemistry (mg/L)											Dissolved Methane (mg/L)	Anions by USEPA Method 300.0 (mg/L)		
				Alkalinity as CaCO <sub>3</sub>	Bicarbonate Alkalinity as CaCO <sub>3</sub>	Chemical Oxygen Demand	Total Organic Carbon	Total Sulfide	Total Kjeldahl Nitrogen	Total Phosphorus	Total Dissolved Solids	Hardness as CaCO <sub>3</sub>	Orthophosphate as P	Orthophosphorus as PO <sub>4</sub>		Chloride	Nitrate as N	Sulfate
CTMW-03S	CTMW-03S-20170405	04/05/17	Baseline	140	140	--	1.8	<0.020	<0.10	<0.025	8,700	1,700	0.036 J	0.11 J	<0.00025	940	55	1,500
	CTMW-03S-20170505	05/05/17	PME1	200	200	<20	2.4	<0.020	<0.10	<0.025	9,600	1,900	0.081 J-	0.25 J-	<0.00025	1,000	27	1,600
	CTMW-03S-20170517	05/17/17	PME2	190	190	<20	2.5	<0.50	R	R	9,500	1,900	0.053 J-	0.16 J-	<0.00025	960	31	1,500
	CTMW-03S-20170601	06/01/17	PME3	200	200	<50	2.1	<0.27	R	0.028 J	9,800	1,900	0.059 J-	0.18 J-	<0.00025	1,000	38	1,500
	CTMW-03S-20170620	06/20/17	PME4	1,200	1,200	850	250	<0.14	<0.10	0.88	10,000	2,400	0.44	1.4	<0.00025	1,700	34	1,600
	CTMW-03S-20170718	07/18/17	PME5	320	320	R	5.4	0.077 J-	R	0.046 J	9,400	2,000	0.17 J-	0.51 J-	0.0033	1,100	30	1,600
	CTMW-03S-20170823	08/23/17	PME6	880	880	<20	39	<0.027	<0.10	0.18	9,600	2,200	0.10	0.31	0.025	1,800	17	1,400
	CTMW-03S-20170921	09/21/17	PME7	300	300	<50	2.8	<0.027	<0.10	0.094	10,000	2,000	0.18 J-	0.54 J-	0.014	1,100	26	1,500
CTMW-03S-20171003	10/03/17	PME8	370	370	<20	2.6	<0.027	<0.50	0.049 J	10,000	2,000	0.16	0.48	0.41	1,100	26	1,500	
CTMW-03D	CTMW-03D-20170406	04/06/17	Baseline	130	130	--	2.7	<0.020	<0.10	<0.025	9,600	1,800	0.038 J	0.12 J	<0.00025	1,100	47	1,600
	CTMW-03D-20170505	05/05/17	PME1	150	150	<20	3.0	<0.020	<0.10	<0.025	11,000	1,700	0.044 J	0.14 J	<0.00025	1,100	48	1,600
	CTMW-03D-20170517	05/17/17	PME2	150	150	R	2.5	<0.50	R	R	9,800	1,700	0.033 J	0.10 J	<0.00025	960	41	1,500
	CTMW-03D-20170601	06/01/17	PME3	160	160	<50 UJ	2.0	<0.27	R	<0.025 UJ	9,900	1,700	0.031 J	0.094 J	<0.00025	1,000	34	1,500
	CTMW-03D-20170620	06/20/17	PME4	170	170	<20	2.2	<0.081	<0.10	<0.025	9,700	1,700	0.022 J	0.068 J	<0.00025	1,200	33	1,600
	CTMW-03D-20170720	07/20/17	PME5	180	180	<20	2.0	<0.054	<0.10	<0.025	10,000	1,800	0.064 J-	0.20 J-	<0.00025	1,100	27	1,500
	CTMW-03D-20170823	08/23/17	PME6	170	170	<20	2.0	<0.027	<0.10	0.040 J	9,900	1,700	0.042 J	0.13 J	0.030	1,100	23	1,500
	CTMW-03D-20170921	09/21/17	PME7	150	150	<50	1.9	<0.027	<0.10	<0.025	9,800	1,700	0.055 J-	0.17 J-	0.0084	1,100	23	1,500
CTMW-03D-20171003	10/03/17	PME8	180	180	<20	2.8	<0.027	<0.50	<0.025	9,700	1,700	0.058	0.18	0.0096	1,100	24	1,500	
CTMW-04S	CTMW-04S-20170405	04/05/17	Baseline	180	180	--	2.0	<0.020	<0.10	0.037 J	8,200	1,700	0.078	0.24	<0.00025	780	150	1,500
	CTMW-04S-20170504	05/04/17	PME1	730	730	<20	56	<0.020	<0.10	0.095	8,700	2,000	0.049 J	0.15 J-	<0.00025	1,100	120	1,500
	CTMW-04S-20170517	05/17/17	PME2	1,600	1,600	1,100	250	<0.50	R	0.32 J-	8,800	2,600	0.54 J-	1.6 J-	<0.00025	1,500	93	1,400
	CTMW-04S-20170602	06/02/17	PME3	1,400	1,400	360	58	<0.11	<0.10	0.41 J-	9,600	2,500	0.067 J-	0.21 J-	<0.00025	1,500	51	1,400
	CTMW-04S-20170620	06/20/17	PME4	1,600	1,600	820	170	<0.054	<0.10	0.43	8,300	2,300	0.23	0.69	<0.00025	1,800	18	1,500
	CTMW-04S-20170718	07/18/17	PME5	1,900	1,900	980	320	0.073 J-	R	0.38 J-	7,600	2,400	0.51 J-	1.6 J-	0.0037	1,900	<1.1	1,100
	CTMW-04S-20170823	08/23/17	PME6	2,900	2,900	3,000	1,800	0.41	<0.10	0.97	9,300	2,700	1.0	3.1	0.0052	2,000	<1.1	190
	CTMW-04S-20170921	09/21/17	PME7	1,600	1,600	1,400	820	<0.027	1.8	1.3	8,000	2,400	0.036 J	0.11 J	<0.00025	2,200	<1.1	390 J+
CTMW-04S-20171003	10/03/17	PME8	2,100	2,100	440	140 J-	0.47	<0.50	1.0	8,000	2,300	0.43	1.3	0.094 J-	2,300	5.3 J	920	
CTMW-04D	CTMW-04D-20170405	04/05/17	Baseline	120	120	--	5.7	0.020 J	<0.10	<0.025	12,000	2,500	0.029 J	0.089 J	<0.00025	1,600	26	1,700
	CTMW-04D-20170504	05/04/17	PME1	140	140	<20	2.9	<0.040	<0.10	0.041 J	12,000	2,400	0.037 J	0.11 J	<0.00025	1,400	33	1,700
	CTMW-04D-20170517	05/17/17	PME2	140	140	<20	3.4	<0.50	R	R	12,000	2,400	0.044 J	0.14 J	<0.00025	1,200	32	1,500
	CTMW-04D-20170517-FD	05/17/17	PME2	140	140	<20	3.6	<0.50	R	R	12,000	2,400	0.058 J-	0.18 J-	<0.00025	1,200	33	1,500
	CTMW-04D-20170602	06/02/17	PME3	140	140	<50	3.0	<0.14	<0.10	<0.025	12,000	2,500	0.055	0.17	<0.00025	1,500	31	1,600
	CTMW-04D-20170621	06/21/17	PME4	140	140	<50	2.6	<0.054	<0.10	<0.025	11,000	2,500	0.044 J	0.14 J	<0.00025	1,400	33	1,700
	CTMW-04D-20170718	07/18/17	PME5	140	140	<50	2.4	<0.027 UJ	R	R	12,000	2,400	0.052 J-	0.16 J-	<0.00025	1,900	34	2,200
	CTMW-04D-20170823	08/23/17	PME6	130	130	<20	2.8	<0.027	<0.10	0.032 J	12,000	2,400	0.051	0.16	0.014	1,400	36	1,600
	CTMW-04D-20170823-FD	08/23/17	PME6	120	120	<20	2.6	<0.027	<0.17	<0.025	12,000	2,400	0.061	0.19	0.015	1,400	36	1,600
	CTMW-04D-20170920	09/20/17	PME7	130	130	<50	3.3	<0.027	<0.10	<0.025	11,000	2,100	0.12	0.36	0.032	1,300	36	1,600
CTMW-04D-20171003	10/03/17	PME8	160	160	<20	3.7	<0.027	<0.50	<0.025	11,000	2,100	0.056	0.17	0.029	1,200	38	1,500	
CTMW-04D-20180307	03/07/18	PME9	180	180	--	2.8	<0.027	<0.10	<0.025	10,000	2,000	0.042 J	0.13 J	0.13	1,200	27	1,400	
CTMW-05S	CTMW-05S-20170621	06/21/17	PME4	760	760	<50	8.6	<0.081	<0.10	0.033 J	9,300	2,300	0.099	0.30	<0.00025	1,300	60	1,400
	CTMW-05S-20170717	07/17/17	PME5	1,100	1,100	<50	7.1	0.028 J	<0.10	0.027 J	9,600	2,300	0.13	0.40	<0.00025	1,600	24	1,400
	CTMW-05S-20170822	08/22/17	PME6	820	820	<20	11	<0.027	<0.10	0.19	9,300	2,400	0.039 J	0.12 J	0.0037	1,600	32	1,400
	CTMW-05S-20170919	09/19/17	PME7	750	750	<20	7.1	<0.027	<0.10	0.037 J	9,600	2,300	0.82	2.5	<0.00025	1,700	14	1,300
	CTMW-05S-20171004	10/04/17	PME8	800	800	<20	3.5	<0.027	<0.10	<0.025	10,000	2,200	0.31	0.94	0.11	1,400	28	1,400

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In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	General Chemistry (mg/L)											Dissolved Methane (mg/L)	Anions by USEPA Method 300.0 (mg/L)		
				Alkalinity as CaCO <sub>3</sub>	Bicarbonate Alkalinity as CaCO <sub>3</sub>	Chemical Oxygen Demand	Total Organic Carbon	Total Sulfide	Total Kjeldahl Nitrogen	Total Phosphorus	Total Dissolved Solids	Hardness as CaCO <sub>3</sub>	Orthophosphate as P	Orthophosphorus as PO <sub>4</sub>		Chloride	Nitrate as N	Sulfate
CTMW-05D	CTMW-05D-20170621	06/21/17	PME4	160	160	<50	3.5	<0.054	<0.10	<0.025	9,900	1,900	0.078	0.24	<0.00025	1,000	73	1,400
	CTMW-05D-20170621-FD	06/21/17	PME4	160	160	<50	3.1	<0.054	<0.10	<0.025	9,900	1,900	0.054	0.17	<0.00025	1,100	73	1,500
	CTMW-05D-20170718	07/18/17	PME5	160	160	R	2.3	<0.027 UJ	R	R	9,700	1,900	0.053 J-	0.16 J-	<0.00025	1,100	64 J+	1,500
	CTMW-05D-20170822	08/22/17	PME6	160	160	<20	2.6	<0.027	<0.17	<0.025	10,000	1,800	0.024 J	0.073 J	<0.00025	1,100	52	1,500
	CTMW-05D-20170919	09/19/17	PME7	140	140	<20	2.3	<0.027	<0.10	<0.025	11,000	2,000	0.42	1.3	<0.00025	1,100	52	1,500
	CTMW-05D-20171004	10/04/17	PME8	180	180	R	2.3	<0.027 UJ	R	<0.025 UJ	10,000	1,800	0.077 J-	0.24 J-	0.00044 J	1,100	48	1,500
CTMW-06S	CTMW-06S-20170621	06/21/17	PME4	2,400	2,400	3,300	730	0.58	0.48	0.40	7,300	2,600	0.084	0.26	<0.00025	1,700	<1.1	950
	CTMW-06S-20170717	07/17/17	PME5	3,800	3,800	9,800	3,100	7.3	15	0.93	11,000	3,700	0.67	2.0	0.0084	1,600	1.2 J	230
	CTMW-06S-20170822	08/22/17	PME6	4,400	4,400	6,700	3,200	<0.027	30	2.0	11,000	3,600	0.30	0.93	0.049	1,700	<1.1	14
	CTMW-06S-20170919	09/19/17	PME7	2,300	2,300	7,100	2,700	<0.027	44	1.6	12,000	3,700	2.7	8.2	0.078 J-	1,700	<1.1	<5.0
	CTMW-06S-20171004	10/04/17	PME8	2,600	2,600	10,000	3,000 J-	0.20	54	2.7	12,000	3,700	2.2	6.7	0.27 J-	1,600	<2.8	<13
	CTMW-06S-20180306	03/06/18	PME9	1,800	1,800	--	17	0.15	22	0.86	3,500	910	0.23	0.69	6.0 J-	1,200	<1.1	6.4 J
CTMW-06D	CTMW-06D-20170622	06/22/17	PME4	240	240	<50	3.5	<0.11	<0.10	<0.025	12,000	2,600	0.054	0.17	<0.00025	1,300	97	1,500
	CTMW-06D-20170717	07/17/17	PME5	210	210	<50	4.9	0.030 J	<0.10	<0.025	11,000	2,600	0.064	0.20	<0.00025	1,400	84	1,500
	CTMW-06D-20170717-FD	07/17/17	PME5	210	210	<50	5.8	0.029 J	<0.10	<0.025	12,000	2,700	0.057	0.18	<0.00025	1,500	84	1,500
	CMTW-06D-20170822	08/22/17	PME6	340	340	<50	25	<0.027	<0.10	0.13	12,000	2,700	0.084	0.26	0.00071 J	1,400	52	1,400
	CMTW-06D-20170919	09/19/17	PME7	390	390	<20	85	R	<0.10	0.034 J	11,000	2,600	0.58	1.8 J	0.00034 J	1,700	48	1,500
	CTMW-06D-20170919-FD	09/19/17	PME7	400	400	<20	82	R	<0.10	0.040 J	11,000	2,600	0.44	1.3 J	0.00033 J	1,600	48	1,500
	CTMW-06D-20171004	10/04/17	PME8	590	590	<50	120	<0.027	<0.10	<0.025	11,000	2,800	0.15	0.46	0.0029	1,700	41	1,400
	CTMW-06D-20171004-FD	10/04/17	PME8	590	590	<20	110	<0.027	<0.10	0.029 J	11,000	2,700	0.12	0.36	0.0024	1,700	39	1,400
CTMW-07S	CTMW-06D-20180307	03/07/18	PME9	1,300	1,300	--	52	<0.027	<0.10	0.032 J	10,000	2,500	0.11	0.33	1.3	1,800	18	1,100
	CTMW-07S-20171009	10/09/17	PME8	Well dry														
CTMW-07D	CMTW-07S-20180306	03/06/18	PME9	210	210	--	1.9	R	R	R	9,000	1,600	0.049 J	0.15 J-	1.0	990	66	1,400
	CTMW-07D-20171009	10/09/17	PME8	100	100	55	1.7	<0.027	0.21	0.54	770	380	0.16	0.48	0.00050 J	140	2.0	230
	CTMW-07D-20180306	03/06/18	PME9	170	<4.0	--	2.3	<0.027	0.93	0.045 J	570	36	0.031 J	0.096 J	0.073	85	0.099 J	140

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Detected VOCs by USEPA Method 8260B (µg/L)																				Volatile Fatty Acids (mg/L)							
				Acetone	Benzene	Bromodichloro-methane	Bromoform	2-Butanone (MEK)	Carbon Tetrachloride	Chlorobenzene	Chloroform	1,1-Dichloroethene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Hexachloro-butadiene	2-Hexanone	Methylene Chloride	Methyl-t-Butyl Ether	p-Isopropyltoluene	Tetrachloro-ethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Trichloro-ethene	Acetic Acid	Formic-acid	Lactic Acid	n-Butyric Acid	Propionic Acid	Pyruvic Acid	
CTMW-01S	CTMW-01S-20170404	04/04/17	Baseline	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	850	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<0.29	3.0	<0.31	<0.26	<0.35	<7.4	
	CTMW-01S-20170503	05/03/17	PME1	2,800	<2.5	<2.5	<4.0	360	<2.5	<2.5	420	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	820	400	660	990	200	<7.4	
	CTMW-01S-20170516	05/16/17	PME2	<1,000	<25	<25	<40	1,200	<25	<25	340	<25	<25	<25	<25	<25	<250	<88	<25	<25	<25	<40	<40	<25	540	180	<31	1,600	300	<37	
	CTMW-01S-20170531	05/31/17	PME3	<250	<6.3	<6.3	<10	1,300	<6.3	<6.3	230	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<63	45 J,B	<6.3	<6.3	<6.3	<10	<10	<6.3	880	<13	<16	<13	380	<19
	CTMW-01S-20170619	06/19/17	PME4	300 J	<6.3	<6.3	<10	3,500	<6.3	<6.3	140	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<63	27 J	<6.3	<6.3	<6.3	<10	<10	<6.3	3,000	<26	<31	4,100	2,000	<37
	CTMW-01S-20170720	07/20/17	PME5	<400	<10	<10	<16	2,400	<10	<10	130	<10	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<16	<10	<15	<13	<16	<13	<18	<19	
	CTMW-01S-20170824	08/24/17	PME6	630 J	<13	<13	<20	6,400	<13	<13	86	<13	<13	<13	<13	<13	<130	78 J	<13	<13	<13	<20	<20	<13	3,900	<5.2	<6.2	2,400	1,800	<7.4	
	CTMW-01S-20170920	09/20/17	PME7	750 J	<13	<13	<20	7,200	<13	<13	19 J	<13	<13	<13	<13	<13	<130	<44	<13	<13	<13	<20	<20	<13	4,400	<2.6	<3.1	2,600	2,000	<3.7	
	CTMW-01S-20171003	10/03/17	PME8	R	R	R	R	11,000	R	R	R	35 J	R	R	R	R	R	R	140 J	R	R	R	R	R	R	4,200	<5.2	<6.2	2,500	1,900	<7.4
CTMW-01S-20180305	03/05/18	PME9		600	0.44 J	<0.25	<0.40	6,600	<0.25	<0.25	3.2	<0.25	0.45 J	0.55	0.58	<0.25	4.5 J	1.4 J	0.36 J	0.62	<0.25	1.0	0.49 J	<0.25	560	3.6 J	<3.1	8.5 J	2,000	<3.7	
CTMW-01D	CTMW-01D-20170403	04/03/17	Baseline	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	1,800	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<5.0	<5.0	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-01D-20170503	05/03/17	PME1	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,700	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-01D-20170516	05/16/17	PME2	<400	<10	<10	<16	<100	<10	<10	1,700	<10	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<10	<10	<15	<13	<16	<13	<18	<19	
	CTMW-01D-20170531	05/31/17	PME3	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,800	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	<15	<13	<16	<13	<18	<19	
	CTMW-01D-20170619	06/19/17	PME4	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,600	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	<15 F1	<13	<16	<13	<18	<19	
	CTMW-01D-20170720	07/20/17	PME5	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,700	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	50	<5.2	22	<5.2	<7.0	<7.4 UJ	
	CTMW-01D-20170720-FD	07/20/17	PME5	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,700	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	38	<5.2	18 J	<5.2	<7.0	<7.4	
	CTMW-01D-20170824	08/24/17	PME6	320 J	<5.0	<5.0	<8.0	150	<5.0	<5.0	1,500	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<5.0	<5.0	170	<5.2	80	220	7.0 J	<7.4	
	CTMW-01D-20170920	09/20/17	PME7	440	<5.0	<5.0	<8.0	360	<5.0	<5.0	1,500	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<5.0	<5.0	160	<2.6	54	350	<3.5	<3.7 UJ	
	CTMW-01D-20171003	10/03/17	PME8	560 J	<10	<10	<16	440	<10	<10	1,300	<10	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<10	<10	160	<5.2	36	350	33 J+	<7.4 UJ	
CTMW-01D-20180305	03/05/18	PME9	640	<2.5	<2.5	<4.0	730	<2.5	<2.5	750	<2.5	<2.5	<2.5	<2.5	<2.5	<25	13 J	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5	260	<2.6	<3.1	110	71	<3.7		
CTMW-01D-20180305-FD	03/05/18	PME9	650	<2.5	<2.5	<4.0	650	<2.5	<2.5	720	<2.5	<2.5	<2.5	<2.5	<2.5	<25	12 J	<2.5	<2.5	<2.5	<4.0	<2.5	<2.5	260	<2.6	<3.1	120	66	<3.7		
CTMW-02S	CTMW-02S-20170405	04/05/17	Baseline	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	950	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<6.3	<6.3	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9	
	CTMW-02S-20170504	05/04/17	PME1	420	0.37 J	<2.5	<0.40	38	<0.25	<0.25	620	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<0.88	0.87	<2.5	0.28 J	0.57 J	<0.40	1.2	11	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-02S-20170516	05/16/17	PME2	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	420	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<15	<13	<16	<13	<18	<19	
	CTMW-02S-20170601	06/01/17	PME3	47 J	<0.63	<0.63	<1.0	<6.3	<0.63	<0.63	520	<0.63	<0.63	<0.63	<0.63	<0.63	<6.3	4.3 J,B	<0.63	<0.63	<0.63	<1.0	<1.0	<0.63	<15	<13	<16	<13	<18	<19	
	CTMW-02S-20170620	06/20/17	PME4	260	1.0 J	<0.63	<1.0	2,000	<0.63	<0.63	210	<0.63	<0.63	<0.63	<0.63	<0.63	<6.3	24	<0.63	<0.63	<0.63	3.0	<1.0	<0.63	1,500	<13	<16	490	490	<19	
	CTMW-02S-20170719	07/19/17	PME5	<250	<6.3	<6.3	<10	1,600	<6.3	<6.3	180	<6.3	<6.3	<6.3	<6.3	<6.3	<63	41 J	<6.3	<6.3	<6.3	<10	<10	<6.3	4,000	<5.2	<6.2	430	660	<7.4	
	Not Analyzed	08/24/17	PME6	Well Dry; Unable to sample																											
	CTMW-02S-20170920	09/20/17	PME7	<250	<6.3	<6.3	<10	1,500	<6.3	<6.3	78	<6.3	<6.3	<6.3	<6.3	<6.3	<63	25 J	<6.3	<6.3	<6.3	<10	<10	<6.3	3,300	<2.6	20	480	340	<3.7	
	CTMW-02S-20171003	10/03/17	PME8	<200	<5.0	<5.0	<8.0	1,200	<5.0	<5.0	13	R	<5.0	<5.0	<5.0	<5.0	R	27 J	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	3,200	<5.2	<6.2	560	280	<7.4	
CTMW-02S-20180306	03/06/18	PME9	<10	0.66	<0.25	<0.40	6.9	<0.25	<0.25	1.9	<0.25	0.59	0.28 J	0.36 J	<0.25	<2.5	<0.88	0.30 J	0.60	<0.25	3.8	0.43 J	<0.25	4.6 J	3.6 J	<3.1	<2.6	<3.5	<3.7		
CTMW-02D	CTMW-02D-20170404	04/04/17	Baseline	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,500	<6.3	9.4 J	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-02D-20170404-FD	04/04/17	Baseline	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,500	<6.3	9.4 J	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-02D-20170503	05/03/17	PME1	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,500	<6.3	13	<6.3	6.5 J	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4	
	CTMW-02D-20170503-FD	05/03/17	PME1	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,500	<6.3	14	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<0.29 UJ	<0.26	<0.31 UJ	<0.26 UJ	<0.35 UJ	<7.4	
	CTMW-02D-20170517	05/17/17	PME2	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	1,300	<5.0	17	<5.0	6.7 J	<5.0	<50	29 J	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19	
	CTMW-02D-20170601	06/01/17	PME3	<400	<10	<10	<16	<100	<10	<10	1,900	<10	19 J	<10	<10	<10	<100	38 J	<10	<10	<10	<16	<16	<10	<15	<13	<16	<13	<18	<19	
	CTMW-02D-20170601-FD	06/01/17	PME3	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	1,800	<5.0	15	<5.0	7.2 J	<5.0	<50	22 J	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19	



**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Detected VOCs by USEPA Method 8260B (µg/L)																				Volatile Fatty Acids (mg/L)						
				Acetone	Benzene	Bromodichloro-methane	Bromoform	2-Butanone (MEK)	Carbon Tetrachloride	Chlorobenzene	Chloroform	1,1-Dichloroethene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Hexachloro-butadiene	2-Hexanone	Methylene Chloride	Methyl-t-Butyl Ether	p-Isopropyltoluene	Tetrachloro-ethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Trichloro-ethene	Acetic Acid	Formic-acid	Lactic Acid	n-Butyric Acid	Propionic Acid	Pyruvic Acid
CTMW-03S	CTMW-03S-20170405	04/05/17	Baseline	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>930</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>21 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<1.5	<1.3 UJ	<1.6 UJ	<1.3	<1.8	<1.9 UJ
	CTMW-03S-20170505	05/05/17	PME1	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,100</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>18 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4
	CTMW-03S-20170517	05/17/17	PME2	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	<b>970</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>17 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<15	<13	<16	<13	<18	<19
	CTMW-03S-20170601	06/01/17	PME3	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,200</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>18 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-03S-20170620	06/20/17	PME4	250	<2.5	<2.5	<4.0	690	<2.5	<2.5	<b>920</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>16 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<b>120</b>	<13	<16	140	<b>72</b>	<19
	CTMW-03S-20170718	07/18/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<1.5	<1.3	<1.6	<1.3	<1.8	<19
	CTMW-03S-20170823	08/23/17	PME6	<100	<2.5	<2.5	<4.0	<b>280</b>	<2.5	<2.5	<b>900</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>19 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<b>66</b>	<5.2	<6.2	<5.2	<7.0	<7.4
	CTMW-03S-20170921	09/21/17	PME7	<50	<1.3	<1.3	<2.0	<13	<1.3	<1.3	<b>510</b>	<1.3	<1.3	<1.3	<1.3	<1.3	<13	<4.4	<1.3	<1.3	<1.3	<2.0	<2.0	<1.3	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
CTMW-03S-20171003	10/03/17	PME8	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>700</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<2.9	<2.6	<3.1	<2.6	<3.5	<3.7	
CTMW-03D	CTMW-03D-20170406	04/06/17	Baseline	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	<b>880</b>	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
	CTMW-03D-20170505	05/05/17	PME1	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>19 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4
	CTMW-03D-20170517	05/17/17	PME2	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,100</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>26 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16 UJ	<13	<18	<19
	CTMW-03D-20170601	06/01/17	PME3	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	<b>1,400</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>11 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<b>2.5 J</b>	<15	<13	<16	<13	<18	<19
	CTMW-03D-20170620	06/20/17	PME4	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,200</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>29 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-03D-20170720	07/20/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<1.5	<1.3	<1.6	<1.3	<1.8	<19
	CTMW-03D-20170823	08/23/17	PME6	<50	<1.3	<1.3	<2.0	<13	<1.3	<1.3	<b>1,100</b>	<1.3	<1.3	<1.3	<1.3	<1.3	<13	<4.4	<1.3	<1.3	<1.3	<2.0	<2.0	3.0	<5.8	<5.2	<6.2	<5.2	<7.0	<7.4
	CTMW-03D-20170921	09/21/17	PME7	<10	<0.25	<0.25	<0.40	<2.5	0.58	<0.25	<b>1,100</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<0.88	1.2	<0.25	<b>0.37 J</b>	<0.40	<0.40	2.9	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
CTMW-03D-20171003	10/03/17	PME8	<400	<10	<10	<16	<100	<10	<10	<b>1,000</b>	<10	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<16	<10	<2.9	<2.6	<3.1	<2.6	<3.5	<3.7	
CTMW-04S	CTMW-04S-20170405	04/05/17	Baseline	<10	<0.25	<0.25	<b>0.82 J</b>	<2.5	<b>0.41 J</b>	<0.25	<b>720</b>	<0.25	<0.25	<0.25	<0.25	<b>0.58</b>	<2.5	<0.88	<b>0.86</b>	<0.25	<b>0.26 J</b>	<0.40	<0.40	<b>2.0</b>	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
	CTMW-04S-20170504	05/04/17	PME1	<b>220</b>	<2.5	<2.5	<4.0	<25	<2.5	<2.5	<b>810</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<b>55</b>	<0.26	<0.31	<0.26	<0.35	<7.4
	CTMW-04S-20170517	05/17/17	PME2	<b>1,800</b>	<2.5	<2.5	<4.0	<b>1,000</b>	<2.5	<2.5	<b>640</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<b>70</b>	<13	<16	54	<18	<19
	CTMW-04S-20170602	06/02/17	PME3	<b>860</b>	<2.5	<2.5	<4.0	<b>370</b>	<2.5	<2.5	<b>610</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>9.7 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<29	<26	<31	<26	<35	<37
	CTMW-04S-20170620	06/20/17	PME4	<b>1,900</b>	<b>0.46 J</b>	<0.25	<0.40	<b>670</b>	<0.25	<0.25	<b>590</b>	<0.25	<0.25	<0.25	<0.25	<b>0.36 J</b>	<b>3.3 J</b>	<b>2.6</b>	0.81	<0.25	<0.25	<0.40	<0.40	0.92	<b>85</b>	<13	<16	<b>30 J</b>	83	<19
	CTMW-04S-20170718	07/18/17	PME5	<b>920</b>	<2.5	<2.5	<4.0	<b>650</b>	<2.5	<2.5	<b>620</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>15 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<b>570</b>	<1.3	<1.6	<1.3	<1.8	<1.9
	CTMW-04S-20170823	08/23/17	PME6	<b>1,200</b>	<1.3	<1.3	<2.0	<b>1,300</b>	<1.3	<1.3	<b>520</b>	<1.3	<1.3	<1.3	<1.3	<1.3	<13	24	<1.3	<1.3	<1.3	<2.0	<2.0	<1.3	<b>2,800</b>	<5.2	<6.2	<5.2	<7.0	<7.4
	CTMW-04S-20170921	09/21/17	PME7	<b>770</b>	<0.25	<0.25	<0.40	<b>1,900</b>	<0.25	<0.25	<b>67</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<b>1.7 J</b>	<b>0.49 J</b>	<0.25	<0.25	<0.40	<0.40	<0.25	<b>1,800</b>	<2.6	<3.1	<2.6	<3.5	<3.7
	CTMW-04S-20171003	10/03/17	PME8	<b>89</b>	<0.25	<0.25	<0.40	<b>140</b>	<0.25	<0.25	<b>48</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<b>4.3</b>	0.89	<0.25	<0.25	<0.40	<0.40	<0.25	<b>300</b>	<13	<16	<13	<18	<19
CTMW-04S-20180307	03/07/18	PME9	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	<b>580</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<2.9	<2.6	<3.1	<2.6	<3.5	<3.7	
CTMW-04D	CTMW-04D-20170405	04/05/17	Baseline	<50	<1.3	<1.3	<2.0	<13	<1.3	<1.3	<b>1,600</b>	<1.3	<b>5.1</b>	<1.3	<b>3.7</b>	<1.3	<13	<4.4	<1.3	<1.3	<1.3	<2.0	<2.0	<1.3	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
	CTMW-04D-20170504	05/04/17	PME1	<10	<0.25	<0.25	<b>0.81 J</b>	<2.5	<b>0.46 J</b>	<0.25	<b>1,400</b>	<0.25	<b>2.8</b>	<b>0.34 J</b>	<b>1.9</b>	<0.25	<2.5	<0.88	<b>0.85</b>	<0.25	<b>0.36 J</b>	<0.40	<0.40	<b>1.1</b>	<0.29	<0.26	<0.31	<0.26	<0.35	<7.4
	CTMW-04D-20170517	05/17/17	PME2	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,600</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-04D-20170517-FD	05/17/17	PME2	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,600</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-04D-20170602	06/02/17	PME3	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,600</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>24 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-04D-20170621	06/21/17	PME4	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	<b>1,600</b>	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<b>34 J</b>	<6.3	<6.3	<6.3	<10	<10	<6.3	<15	<13	<16	<13	<18	<19
	CTMW-04D-20170718	07/18/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,700</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<1.5	<1.3	<1.6	<1.3	<1.8	<19
	CTMW-04D-20170823	08/23/17	PME6	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,700</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>24 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<5.8	<5.2	<6.2	<5.2	<7.0	<7.4
	CTMW-04D-20170823-FD	08/23/17																												

**Table 3 - Summary of Groundwater Monitoring Data**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Well Location	Sample ID	Sample Date	Week	Detected VOCs by USEPA Method 8260B (µg/L)																				Volatile Fatty Acids (mg/L)						
				Acetone	Benzene	Bromodichloro-methane	Bromoform	2-Butanone (MEK)	Carbon Tetrachloride	Chlorobenzene	Chloroform	1,1-Dichloroethene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Hexachloro-butadiene	2-Hexanone	Methylene Chloride	Methyl-t-Butyl Ether	p-Isopropyltoluene	Tetrachloro-ethene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Trichloro-ethene	Acetic Acid	Formic-acid	Lactic Acid	n-Butyric Acid	Propionic Acid	Pyruvic Acid
CTMW-05D	CTMW-05D-20170621	06/21/17	PME4	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>30 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-05D-20170621-FD	06/21/17	PME4	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>35 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<15	<13	<16	<13	<18	<19
	CTMW-05D-20170718	07/18/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,300</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<1.5 UJ	<1.3 UJ	<1.6 UJ	<1.3	<1.8 UJ	<19 UJ
	CTMW-05D-20170822	08/22/17	PME6	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	<b>1,200</b>	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<15	<13	<16	<13	<18	<19
	CTMW-05D-20170919	09/19/17	PME7	<100	<2.5	<2.5	<4.0	<25	<2.5	<2.5	<b>630</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<8.8	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	<1.5	<1.3	<1.6	<1.3	<1.8	<1.9
CTMW-05D-20171004	10/04/17	PME8	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	<b>1,000</b>	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<2.9	<2.6	<3.1 UJ	<2.6	<3.5 UJ	<19 UJ	
CTMW-06S	CTMW-06S-20170621	06/21/17	PME4	<b>1,700</b>	<2.5	<2.5	<4.0	730	<2.5	<2.5	<b>670</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<25	<b>18 J</b>	<2.5	<2.5	<2.5	<4.0	<4.0	<2.5	430	<13	<16	240	100	<19
	CTMW-06S-20170717	07/17/17	PME5	<b>1,400</b>	<10	<10	<16	2,800	<10	<10	<b>610</b>	<10	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<16	<10	<b>2,800</b>	<13	<16	710	550	<19
	CTMW-06S-20170822	08/22/17	PME6	<b>1,400</b>	<5.0	<5.0	<8.0	<b>3,200</b>	<5.0	<5.0	<b>320</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<b>30 J</b>	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<b>3,200</b>	<13	<16	690	550	<19
	CTMW-06S-20170919	09/19/17	PME7	<b>780 J-</b>	R	R	R	<b>3,700 J-</b>	R	R	<b>170 J-</b>	R	R	R	R	R	<b>R</b>	<b>41 J-</b>	R	R	R	R	R	R	3,600	<5.2	<6.2	970	440	<7.4
	CTMW-06S-20171004	10/04/17	PME8	<b>620 J-</b>	<b>2.6 J</b>	R	R	<b>4,000 J-</b>	R	R	<b>120 J-</b>	R	R	R	R	R	<b>R</b>	<b>13 J</b>	R	R	R	R	R	R	<b>3,700</b>	<13	<16	1,200	750	<19
CTMW-06S-20180306	03/06/18	PME9	<10	<0.25	<0.25	<0.40	<2.5	<0.25	<0.25	<b>16</b>	<0.25	<b>0.43 J</b>	0.74	<0.25	0.52	<2.5	<b>1.7 J</b>	<b>0.30 J</b>	<0.25	<0.25	<b>0.64 J</b>	<0.40	<0.25	<b>3.1 J</b>	<b>3.5 J</b>	<3.1	<2.6	<3.5	<3.7	
CTMW-06D	CTMW-06D-20170622	06/22/17	PME4	<400	<10	<10	<16	<100	<10	<10	<b>1,500</b>	<10	<10	<10	<10	<100	<35	<10	<10	<10	<16	<16	<10	<5.8	<5.2	<6.2	<5.2	<7.0	<7.4	
	CTMW-06D-20170717	07/17/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,700</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<5.8	<5.2	<6.2	<5.2	<7.0	<7.4
	CTMW-06D-20170717-FD	07/17/17	PME5	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>1,700</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<5.8	<5.2	<6.2	<5.2	<7.0	<7.4
	CMTW-06D-20170822	08/22/17	PME6	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,400	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<29	<26	<31	<26	<35	<37
	CMTW-06D-20170919	09/19/17	PME7	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	1,200	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	96	<1.3	<1.6	26	<1.8	<1.9
	CTMW-06D-20170919-FD	09/19/17	PME7	250	<0.25	<b>0.27 J</b>	<0.40	<b>150</b>	0.54	<0.25	1,000	<0.25	3.6	<b>0.32 J</b>	1.0	<b>0.45 J</b>	<2.5	<b>1.1 J</b>	0.68	<0.25	<b>0.44 J</b>	<b>0.72 J</b>	<0.40	1.0	<b>97</b>	<1.3	<1.6	26	<1.8	<1.9
	CTMW-06D-20171004	10/04/17	PME8	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,200	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<b>140</b>	<2.6	<3.1	16	<3.5 UJ	<19
CTMW-06D-20171004-FD	10/04/17	PME8	<250	<6.3	<6.3	<10	<63	<6.3	<6.3	1,200	<6.3	<6.3	<6.3	<6.3	<6.3	<63	<22	<6.3	<6.3	<6.3	<10	<10	<6.3	<b>130</b>	<2.6	11	<2.6	<b>26 J</b>	<19	
CTMW-06D-20180307	03/07/18	PME9	<b>69 J</b>	<1.3	<1.3	<2.0	<b>140</b>	<1.3	<1.3	<b>440 J</b>	<1.3	<1.3	<1.3	<1.3	<1.3	<13	11	<1.3	<1.3	<1.3	<2.0	<2.0	<1.3	<b>32 J</b>	<13	<16	<13	<18	<19	
CTMW-07S	CTMW-07S-20171009	10/09/17	PME8	Well dry																										
	CMTW-07S-20180306	03/06/18	PME9	<200	<5.0	<5.0	<8.0	<50	<5.0	<5.0	<b>830</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<18	<5.0	<5.0	<5.0	<8.0	<8.0	<5.0	<2.9	<b>3.6 J</b>	<3.1	<2.6	<3.5	<3.7 UJ
CTMW-07D	CTMW-07D-20171009	10/09/17	PME8	<10	<0.25	<0.25	<0.40	<2.5	<0.25	0.64	<b>11</b>	<0.25	0.90	<0.25	<0.25	<0.25	<2.5	<0.88	<0.25	<0.25	<0.25	<0.40	<0.40	<0.25	<2.9	<2.6	<3.1	<2.6	<3.5	<3.7
	CTMW-07D-20180306	03/06/18	PME9	<10	<0.25	<0.25	<0.40	<2.5	<0.25	<0.25	<b>1.5</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<0.88	<0.25	<0.25	<0.25	<0.40	<0.40	<0.25	<2.9	<b>3.8 J</b>	<3.1	<2.6	<3.5	<3.7

- Notes:**
- < Denotes concentration is less than the laboratory method detection limit indicated
  - °C Degress Celsius
  - µg/L Micrograms per liter
  - DO Dissolved Oxygen
  - FD Field duplicate
  - ID Identification
  - mg/L Milligrams per liter
  - mS/cm Millisiemens per centimeter
  - mV Millivolt
  - NTU Nephelometric turbidity units
  - ORP Oxidation reduction potential
  - PME
  - USEPA U.S. Environmental Protection Agency
  - No sample available
  - B Compound was found in the blank and the sample
  - F1 MS and / or MSD Recovery is outside acceptance limits
  - J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
  - J- The result is an estimated quantity, but the result may be biased low.
  - J+ The result is an estimated quantity, but the result may be biased high.
  - L Denotes a negative instrument reading had an absolute value greater than the reporting limit.
  - R The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
  - UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

**Table 4 - Groundwater Monitoring Parameters**  
In-Situ Chromium Treatability Study (Biological Reduction Study Area)

Monitoring Parameters		Monitoring Wells											
Parameter	Analytical Method	CTMW-01S	CTMW-01D	CTMW-02S	CTMW-02D	CTMW-03S	CTMW-03D	CTMW-04S	CTMW-04D	CTMW-06S	CTMW-06D	CTMW-07S	CTMW-07D
<b>Field Parameters</b>													
EC	Field Meter	X	X	X	X			X	X	X	X	X	X
pH	Field Meter	X	X	X	X			X	X	X	X	X	X
DO	Field Meter	X	X	X	X			X	X	X	X	X	X
ORP	Field Meter	X	X	X	X			X	X	X	X	X	X
Temperature	Field Meter	X	X	X	X			X	X	X	X	X	X
Turbidity	Field Meter	X	X	X	X			X	X	X	X	X	X
<b>Laboratory Analyses</b>													
Hexavalent Chromium	7199	X	X	X	X			X	X	X	X	X	X
Total Chromium	6010B or 6020	X	X	X	X			X	X	X	X	X	X
Alkalinity	SM 2320B	X	X	X	X			X	X	X	X	X	X
TOC	SM 5310B	X	X	X	X			X	X	X	X	X	X
Nitrate	300.0	X	X	X	X			X	X	X	X	X	X
Sulfate	300.0	X	X	X	X			X	X	X	X	X	X
Sulfide	SM 4500	X	X	X	X			X	X	X	X	X	X
Total Nitrogen	351.2	X	X	X	X			X	X	X	X	X	X
Total Phosphorus	365.3	X	X	X	X			X	X	X	X	X	X
TDS	SM 2540C	X	X	X	X			X	X	X	X	X	X
Ferrous and Ferric Iron	HACH Method 8008 & 8147	X	X	X	X			X	X	X	X	X	X
Hardness	SM 2340C	X	X	X	X			X	X	X	X	X	X
Manganese	6010B	X	X	X	X			X	X	X	X	X	X
Dissolved Methane	RSK-175	X	X	X	X			X	X	X	X	X	X
Dissolved Metals	6010B or 6020	X	X	X	X			X	X	X	X	X	X
Volatile Fatty Acids	VFA-1C	X	X	X	X			X	X	X	X	X	X
Perchlorate	314.0 LL	X	X	X	X			X	X	X	X	X	X
Chlorate/Chlorite	300.1B	X	X	X	X			X	X	X	X	X	X
Chloride	300.0	X	X	X	X			X	X	X	X	X	X
PLFA	Microbial Insights Bio-Traps®	X	X			X	X						
Perchlorate Reductase	Microbial Insights Bio-Traps®	X	X			X	X						
Sulfate Reducing Bacteria	Microbial Insights Bio-Traps®	X	X			X	X						

**Notes:**

BL: Baseline

EC: Electrical conductivity

DO: Dissolved Oxygen

ORP: Oxidation-reduction potential

TOC: Total organic carbon

TDS: Total dissolved solids

Dissolved metals includes the following: aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, selenium, silver, thallium, uranium, vanadium, and zinc