

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver

4955 Yarrow Street

Arvada, CO 80002

Tel: (303)736-0100

TestAmerica Job ID: 280-114261-1

TestAmerica Sample Delivery Group: DN0467

Client Project/Site: X18-062

For:

CH2M Hill Plateau Remediation Company

PO BOX 1600, MS H8-41

Richland, Washington 99352

Attn: Mr. Scot Fitzgerald



Authorized for release by:

10/9/2018 4:28:59 PM

Darlene Bandy, Project Manager I

(303)736-0188

darlene.bandy@testamericainc.com



LINKS

Review your project results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Receipt Checklists	15
Chain of Custody	16
Definitions	23
Method Summary	24
Sample Summary	25
Client Sample Results	26
QC Sample Results	33
QC Association	38

Case Narrative

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Job ID: 280-114261-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: CH2M Hill Plateau Remediation Company

Project: X18-062

Report Number: 280-114261-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

The laboratory is not able to achieve project specified Highest Allowable Practical Quantitation Limits (HAPQL limits) for several analytes. These include: Boron 6010D, Phosphorus 6010D, Beryllium 6020B, Silver 6020B, Tin 6020B. All analytes met statistical limits, unless otherwise detailed in the individual sections below. As instructed by the client, the data is reported.

The Chain of Custody requests "6020_METALS_ICPMS: GW 01" analysis. Service List "6020_METALS_ICPMS: GW 01" includes Thorium, and while TestAmerica Denver holds Washington State (WDOE) accreditation for method 6020B, Thorium is not on the accreditation certificate at this time. Please note that Thorium is on TestAmerica Denver's primary ORELAP certification, and TestAmerica Denver is pursuing full WDOE accreditation for this element. As instructed by the client, the laboratory proceeded with the requested Thorium analyses by method 6020B.

As instructed by the client, Phosphorus has been added as an analyte for Metals 6010 analysis. Please see attached letter.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 9/13/2018 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

TOTAL METALS (ICP)

Samples B3KPP2 (280-114261-1), B3KPP4 (280-114261-2), B3KPP8 (280-114261-3), B3KPP6 (280-114261-4), B3KPM2 (280-114261-5), B3KPM4 (280-114261-6), B3KR12 (280-114261-7) and B3KR10 (280-114261-8) were analyzed for Total Metals (ICP) in accordance with EPA SW846 6010D. The samples were prepared on 09/26/2018 and analyzed on 09/27/2018, 09/28/2018 and 10/01/2018.

As instructed by the client, Phosphorus has been added as an analyte for Metals 6010 analysis. Please see attached letter.

Samples B3KPM2 (280-114261-5)[10X] and B3KPM4 (280-114261-6)[10X] required dilution prior to analysis for Phosphorus. Associated results have been flagged "D". The reporting limits have been adjusted accordingly.

Boron, Calcium, Vanadium and Sodium were detected in method blank MB 280-430624/1-A at levels that were above the method detection limit but below half the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged. Refer to the QC report for details.

Case Narrative

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Job ID: 280-114261-1 (Continued)**Laboratory: TestAmerica Denver (Continued)**

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: ICP PDS 1 spike was only added at 1/2 the amount listed in the SOP for Prep batch 430624. All of the recoveries were in control.

The continuing calibration verification (CCV) associated with batch 280-431476 recovered above the upper control limit for Sodium. The MB associated with this CCV was less than 1/2 the RL for the affected analyte; the parent sample attached to the serial dilution was associated to the high CCV (CCVH) for Sodium; and the associated MS/MSD recovered within control limits. As such, the data have been qualified and reported.

The instrument blank (CCB) associated with analytical batch 280-431476 contained Sodium at a level greater than half the RL. The samples associated with this CCB were >20x the CCB concentration for the affected element, and the MB was less than half the RL; therefore, the data have been qualified and reported.

The instrument blank (CCB) associated with analysis batch 332027 contained Iron at a level greater than the RL. The samples associated with this CCB were either non-detect or less than the RL for the affected element; therefore, the data have been qualified and reported. The following samples are associated: B3KPP2 (280-114261-1), B3KPP4 (280-114261-2), B3KPP8 (280-114261-3), B3KPP6 (280-114261-4), B3KPM4 (280-114261-6), B3KR12 (280-114261-7) and B3KR10 (280-114261-8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP/MS)

Samples B3KPP2 (280-114261-1), B3KPP4 (280-114261-2), B3KPP8 (280-114261-3), B3KPP6 (280-114261-4), B3KPM2 (280-114261-5), B3KPM4 (280-114261-6), B3KR12 (280-114261-7) and B3KR10 (280-114261-8) were analyzed for Total Metals (ICP/MS) in accordance with SW846 6020B. The samples were prepared on 09/17/2018 and analyzed on 09/18/2018 and 09/19/2018.

The Chain of Custody requests "6020_METALS_ICPMS: GW 01" analysis. Service List "6020_METALS_ICPMS: GW 01" includes Thorium, and while TestAmerica Denver holds Washington State (WDOE) accreditation for method 6020B, Thorium is not on the accreditation certificate at this time. Please note that Thorium is on TestAmerica Denver's primary ORELAP certification, and TestAmerica Denver is pursuing full WDOE accreditation for this element. As instructed by the client, the laboratory proceeded with the requested Thorium analyses by method 6020B.

Beryllium, Molybdenum and Zinc were detected in method blank MB 280-430221/1-A at levels that were above the method detection limit but below half the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged. Refer to the QC report for details.

Manganese was detected in method blank MB 280-430221/1-A at a level that was above the method detection limit (MDL), greater than half the reporting limit (RL) but less than the RL. The value should be considered an estimate, and has been flagged. If the associated samples reported a result above the MDL and/or RL and the method blank concentration was greater than 5% of the sample concentration, the result has been flagged. As instructed by the client, this data has been qualified and reported (SIR19-0063).

The accuracy and precision of Strontium in the MS/MSD performed on sample B3KPP2 (280-114261-1) in prep batch 280-430221 could not be reliably calculated due to the sample concentration reading greater than four times the spike amount. Control limits are not applicable and the MS/MSD results have been flagged "X".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples B3KPP2 (280-114261-1), B3KPP6 (280-114261-4), B3KPM2 (280-114261-5) and B3KR10 (280-114261-8) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 09/21/2018.

The instrument blank for analytical batch 280-430492 contained alkalinity greater than one-half the reporting limit (RL). The samples associated with this CCB were >20x the CCB concentration for the affected analyte; therefore, the data have been qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Job ID: 280-114261-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager or designee and the laboratory's client services representative as verified by their signature on this report.

Reviewed and approved:

Darlene Bandy
Project Manager



1
2
3
4
5
6
7
8
9
10
11

Bandy, Darlene

From: Fitzgerald, Scot L <Scot_L_Fitzgerald@ri.gov>
Sent: Thursday, September 13, 2018 3:20 PM
To: Bandy, Darlene
Cc: Fitzgerald, Scot L; ^CPP Sample Management
Subject: Groundwater samples needing phosphorous

Categories: Follow Up

External Email

Darlene,

The project has determined the need to add Phosphorous to the 6010 analyte list for the following samples. Please use this email in lieu of a SIR as the formal request (and include a copy in each SDG).

LAB_CODE	SAFE_NUM	SAMP_NUM
TADN	X18-055	B3KLL6
TADN	X18-055	B3KLL8
TADN	X18-055	B3KLV3
TADN	X18-055	B3KLV5
TADN	X18-055	B3KLW9
TADN	X18-055	B3KLX1
TADN	X18-056	B3KM17
TADN	X18-056	B3KM19
TADN	X18-056	B3KM40
TADN	X18-056	B3KM42
TADN	X18-056	B3KM54
TADN	X18-056	B3KM55
TADN	X18-056	B3KM58
TADN	X18-056	B3KM59
TADN	X18-056	B3KM61
TADN	X18-056	B3KM63
TADN	X18-056	B3KMC1
TADN	X18-056	B3KMC3
TADN	X18-057	B3KMC8

TADN	X18-057	B3KMD0
TADN	X18-057	B3KMJ5
TADN	X18-057	B3KMJ7
TADN	X18-057	B3KML2
TADN	X18-057	B3KML4
TADN	X18-057	B3KML6
TADN	X18-057	B3KML8
TADN	X18-057	B3KMR6
TADN	X18-057	B3KMR8
TADN	X18-058	B3KN36
TADN	X18-058	B3KN39
TADN	X18-058	B3KN42
TADN	X18-058	B3KN65
TADN	X18-058	B3KN66
TADN	X18-058	B3KN71
TADN	X18-058	B3KN72
TADN	X18-058	B3KN75
TADN	X18-058	B3KN77
TADN	X18-058	B3KN80
TADN	X18-058	B3KN98
TADN	X18-058	B3KN99
TADN	X18-058	B3KNB4
TADN	X18-058	B3KNB5
TADN	X18-059	B3KNC9
TADN	X18-059	B3KND1
TADN	X18-059	B3KND3
TADN	X18-059	B3KND4
TADN	X18-059	B3KND7
TADN	X18-059	B3KND8
TADN	X18-059	B3KNL3
TADN	X18-059	B3KNL5
TADN	X18-059	B3KNM0
TADN	X18-059	B3KNM2
TADN	X18-059	B3KNP0
TADN	X18-059	B3KNP2
TADN	X18-060	B3KNX1
TADN	X18-060	B3KNX3
TADN	X18-060	B3KP06
TADN	X18-060	B3KP08
TADN	X18-060	B3KP26
TADN	X18-060	B3KP28
TADN	X18-060	B3KP43
TADN	X18-060	B3KP44
TADN	X18-060	B3KP47

TADN	X18-060	B3KP48
TADN	X18-060	B3KP50
TADN	X18-060	B3KP52
TADN	X18-061	B3KP85
TADN	X18-061	B3KP87
TADN	X18-061	B3KPB5
TADN	X18-061	B3KPB7
TADN	X18-061	B3KPD3
TADN	X18-061	B3KPD5
TADN	X18-061	B3KPD7
TADN	X18-061	B3KPD9
TADN	X18-061	B3KPL6
TADN	X18-061	B3KPL8
TADN	X18-062	B3KPM2
TADN	X18-062	B3KPM4
TADN	X18-062	B3KPP2
TADN	X18-062	B3KPP4
TADN	X18-062	B3KPP6
TADN	X18-062	B3KPP8
TADN	X18-062	B3KPX4
TADN	X18-062	B3KPX5
TADN	X18-062	B3KPX8
TADN	X18-062	B3KPX9
TADN	X18-062	B3KPY0
TADN	X18-062	B3KPY2
TADN	X18-062	B3KR10
TADN	X18-062	B3KR12
TADN	X18-063	B3KR39
TADN	X18-063	B3KR40
TADN	X18-063	B3KR43
TADN	X18-063	B3KR44
TADN	X18-063	B3KR46
TADN	X18-063	B3KR48
TADN	X18-063	B3KR79
TADN	X18-063	B3KR81
TADN	X18-063	B3KRF2
TADN	X18-063	B3KRF4
TADN	X18-063	B3KRF6
TADN	X18-063	B3KRF8
TADN	X18-063	B3KRF9
TADN	X18-063	B3KRH1
TADN	X18-064	B3KRJ9
TADN	X18-064	B3KRK1
TADN	X18-064	B3KRK3

TADN	X18-064	B3KRK5
TADN	X18-064	B3KRP9
TADN	X18-064	B3KRR0
TADN	X18-064	B3KRR3
TADN	X18-064	B3KRR4
TADN	X18-064	B3KRR7
TADN	X18-064	B3KRR9
TADN	X18-064	B3KRT0
TADN	X18-064	B3KRT2
TADN	X18-064	B3KRW0
TADN	X18-064	B3KRW2
TADN	X18-065	B3KT02
TADN	X18-065	B3KT03
TADN	X18-065	B3KT06
TADN	X18-065	B3KT07
TADN	X18-065	B3KT52
TADN	X18-065	B3KT53
TADN	X18-065	B3KT56
TADN	X18-065	B3KT57
TADN	X18-065	B3KT59
TADN	X18-065	B3KT61
TADN	X18-065	B3KT63
TADN	X18-065	B3KT65
TADN	X18-065	B3KT79
TADN	X18-065	B3KT81
TADN	X18-065	B3KT83
TADN	X18-065	B3KT85
TADN	X18-066	B3KTD0
TADN	X18-066	B3KTD2
TADN	X18-066	B3KTH0
TADN	X18-066	B3KTH2
TADN	X18-066	B3KTJ3
TADN	X18-066	B3KTJ4
TADN	X18-066	B3KTJ7
TADN	X18-066	B3KTJ8
TADN	X18-066	B3KTK0
TADN	X18-066	B3KTK2
TADN	X18-066	B3KTR0
TADN	X18-066	B3KTR2
TADN	X18-066	B3KTR4
TADN	X18-066	B3KTR6
TADN	X18-067	B3KTR9
TADN	X18-067	B3KTT1
TADN	X18-067	B3KTT2

TADN	X18-067	B3KTX4
TADN	X18-067	B3KTX6
TADN	X18-067	B3KTX8
TADN	X18-067	B3KV05
TADN	X18-067	B3KV07
TADN	X18-067	B3KV09
TADN	X18-067	B3KV10
TADN	X18-067	B3KV13
TADN	X18-067	B3KV14
TADN	X18-067	B3KV45
TADN	X18-067	B3KV47
TADN	X18-068	B3KV94
TADN	X18-068	B3KV96
TADN	X18-068	B3KV98
TADN	X18-068	B3KVB0
TADN	X18-068	B3KVC5
TADN	X18-068	B3KVC7
TADN	X18-068	B3KVC9
TADN	X18-068	B3KVD1
TADN	X18-068	B3KVJ3
TADN	X18-068	B3KVJ4
TADN	X18-068	B3KVJ7
TADN	X18-068	B3KVJ8
TADN	X18-068	B3KVL6
TADN	X18-068	B3KVL8
TADN	X18-069	B3KX74
TADN	X18-069	B3KX76
TADN	X18-069	B3KX78
TADN	X18-069	B3KX80
TADN	X18-069	B3KX99
TADN	X18-069	B3KXB1
TADN	X18-069	B3KXC6
TADN	X18-069	B3KXC7
TADN	X18-069	B3KXD0
TADN	X18-069	B3KXD1
TADN	X18-069	B3KXK9
TADN	X18-069	B3KXL1
TADN	X18-069	B3KXL3
TADN	X18-069	B3KXL5
TADN	X18-070	B3KXN1
TADN	X18-070	B3KXN2
TADN	X18-070	B3KXN5
TADN	X18-070	B3KXN6
TADN	X18-070	B3KXR4

TADN	X18-070	B3KXR6
TADN	X18-070	B3KXT9
TADN	X18-070	B3KXV1
TADN	X18-070	B3KXV3
TADN	X18-070	B3KXV5
TADN	X18-070	B3KY14
TADN	X18-070	B3KY16
TADN	X18-070	B3KY18
TADN	X18-070	B3KY20
TADN	X18-071	B3KY21
TADN	X18-071	B3KY40
TADN	X18-071	B3KY42
TADN	X18-071	B3KY60
TADN	X18-071	B3KY62
TADN	X18-071	B3KY78
TADN	X18-071	B3KY80
TADN	X18-071	B3KY82
TADN	X18-071	B3KY84
TADN	X18-071	B3KYF1
TADN	X18-071	B3KYF3
TADN	X18-071	B3KYF5
TADN	X18-072	B3KYF7
TADN	X18-072	B3KYF9
TADN	X18-072	B3KYH0
TADN	X18-072	B3KYJ4
TADN	X18-072	B3KYJ6
TADN	X18-072	B3KYJ8
TADN	X18-072	B3KYK0
TADN	X18-072	B3KYL9
TADN	X18-072	B3KYN8
TADN	X18-072	B3KYP0
TADN	X18-072	B3KYW8
TADN	X18-072	B3KYO0
TADN	X18-073	B3L015
TADN	X18-073	B3L016
TADN	X18-073	B3L055
TADN	X18-073	B3L059
TADN	X18-073	B3L060
TADN	X18-073	B3L062
TADN	X18-073	B3L065
TADN	X18-073	B3L083
TADN	X18-073	B3L084
TADN	X18-073	B3L089
TADN	X18-073	B3L090

TADN	X18-073	B3L094
TADN	X18-073	B3L096
TADN	X18-073	B3L099
TADN	X18-073	B3L0D2
TADN	X18-073	B3L0D5
TADN	X18-074	B3L0F7
TADN	X18-074	B3L0F8
TADN	X18-074	B3L0H1
TADN	X18-074	B3L0H2
TADN	X18-074	B3L0H4
TADN	X18-074	B3L0H6
TADN	X18-074	B3L0N3
TADN	X18-074	B3L0N5
TADN	X18-074	B3L0N7
TADN	X18-074	B3L0N9
TADN	X18-074	B3L0P1
TADN	X18-074	B3L0P3
TADN	X18-074	B3L0R8
TADN	X18-074	B3L0T0
TADN	X18-075	B3L104
TADN	X18-075	B3L106
TADN	X18-075	B3L109
TADN	X18-075	B3L111
TADN	X18-075	B3L126
TADN	X18-075	B3L128
TADN	X18-075	B3L147
TADN	X18-075	B3L157
TADN	X18-075	B3L159
TADN	X18-075	B3L161
TADN	X18-075	B3L162
TADN	X18-075	B3L165
TADN	X18-075	B3L166
TADN	X18-075	B3L184
TADN	X18-076	B3L347
TADN	X18-076	B3L366
TADN	X18-076	B3L368
TADN	X18-076	B3L387
TADN	X18-076	B3L389
TADN	X18-076	B3L3C7
TADN	X18-076	B3L3C9
TADN	X18-076	B3L3D1
TADN	X18-076	B3L3D2
TADN	X18-076	B3L3D5
TADN	X18-076	B3L3D6

TADN	X18-076	B3L3K9
TADN	X18-076	B3L3L1
TADN	X18-076	B3L3L3
TADN	X18-077	B3L3L5
TADN	X18-077	B3L3L7
TADN	X18-077	B3L3N1
TADN	X18-077	B3L3N3
TADN	X18-077	B3L3N5
TADN	X18-077	B3L3N7
TADN	X18-077	B3L3W6
TADN	X18-077	B3L3W8
TADN	X18-077	B3L3X0
TADN	X18-077	B3L3X2
TADN	X18-077	B3L3Y6
TADN	X18-077	B3L3Y7
TADN	X18-077	B3L400
TADN	X18-077	B3L401
TADN	X18-078	B3L434
TADN	X18-078	B3L436
TADN	X18-078	B3L438
TADN	X18-078	B3L440
TADN	X18-078	B3L472
TADN	X18-078	B3L473
TADN	X18-078	B3L476
TADN	X18-078	B3L477
TADN	X18-078	B3L4D5
TADN	X18-078	B3L4D7
TADN	X18-078	B3L4D9
TADN	X18-078	B3L4F1
TADN	X18-078	B3L4F2
TADN	X18-078	B3L4F4

If you have any questions, please let me know.

Thanks

Scot Fitzgerald
 Analytical Support Group
 Soil & Groundwater Remediation Project (S&GRP)
 Phone: (509) 373-7495





SAMPLE ISSUE RESOLUTION (SIR) REPORT	SIR Number: SIR19-0063 Rev. Number: 0 Date Initiated: 10/08/2018
---	---

<u>SAMPLE EVENT INFORMATION</u>	
SAF NUM(S):	X18-062
LABORATORY:	TADN

<u>SAMPLING INFORMATION</u>	
NUMBER OF SAMPLES:	3
SAMPLE NUMBERS:	B3KPM4, B3KPP2, B3KPP6
SAMPLE MATRIX:	WATER
SDG NUM(S):	DN0467

<u>ISSUE BACKGROUND</u>	
CLASS:	Laboratory Issue
TYPE:	Quality Control Failure
DESCRIPTION:	<p>The method blank associated with Metals 6020B prep batch 280-430221 contained Manganese slightly greater than one-half the reporting limit at 0.564 ug/L (RL = 1.0 ug/L). Most samples were either less than the RL or >20x the MB concentration for this analyte; however, the 3 following samples had a concentration greater than the RL but less than 20x the MB concentration.</p> <p>B3KPP2, collected 9/11/2018; SAF X18-062; Mn result = 1.8 ug/L B3KPP6, collected 9/11/2018; SAF X18-062; Mn result = 1.2 ug/L B3KPM4, collected 9/11/2018; SAF X18-062; Mn result = 5.4 ug/L</p>

<u>RESOLUTION</u>	
PROPOSED RESOLUTION:	The laboratory proposes to either re-prep and reanalyze these samples or to report this data with flags and narration.

FINAL RESOLUTION:	Please report results with appropriate "C" flags and narrate.
--------------------------	---

SUBMITTED BY:	
BANDY, DF	10/09/2018
ACCEPTED BY:	
CUTSFORTH, EC	10/09/2018

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 280-114261-1

SDG Number: DN0467

Login Number: 114261

List Number: 1

Creator: Gomez, Alyssa I

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is < /= background as measured by a survey meter.	True	80 CPM
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

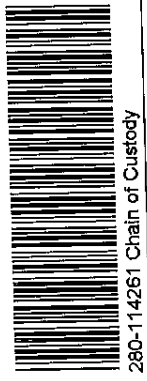
C.O.C.# X18-062-050
Page 1 of 12

Collector: **Kathy Turner /CHPRC** Telephone No.: 509-376-4650
 SAF No.: X18-062 **DN 0167** Purchase Order/Charge Code: 301405
 Project Title: Uranium Sequestration, Part B, Logbook No.: **HNF-N-506-101**
 Shipped To (Lab): **TestAmerica Denver** Method of Shipment: Commercial Carrier
 Protocol: CERCLA Priority: 30 Days Offsite Property No.: **9939**

POSSIBLE SAMPLE HAZARDS/REMARK
 ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
 N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3KPP2	N	W	9/11/18	0846	1x250-mL G/P	2320_ALKALINITY: GW 01	14 Days	Cool <=6C
B3KPP2	N	W	1	1	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2
B3KPP4	Y	W	9/11/18	0846	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2



0.9 + 0.5 Rg Rg AP 9/18/18

Relinquished By: Kathy Turner /CHPRC	Signature	SEP 11 2018	Date/Time	Received By: Janelle Zunker /CHPRC	Signature	SEP 11 2018	Date/Time
Relinquished By: Janelle Zunker /CHPRC	Signature	SEP 11 2018	Date/Time	Received By: SSU-1	Signature	SEP 11 2018	Date/Time
Relinquished By: SSU-1	Signature	SEP 12 2018	Date/Time	Received By: Jeff Lucas /CHPRC	Signature	SEP 12 2018	Date/Time
Relinquished By: Jeff Lucas /CHPRC	Signature	SEP 12 2018	Date/Time	Received By: FEDEX	Signature	SEP 12 2018	Date/Time

Disposal Method (e.g., Return to customer, per lab procedure, used in process):

Disposed By: _____ Date/Time: _____

Matrix *
 S = Soil DS = Drum Solids
 SE = Sediment DL = Drum Liquids
 SO = Solid T = Tissue
 SL = Sludge WI = Wipe
 W = Water L = Liquid
 O = Oil V = Vegetation
 A = Air X = Other



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)			
	C.O.C. No. X18-062-050	Page 2 of 2	Date/Time
Relinquished By	Print FedEx	Sign	Date/Time
Received By	Print Hysa Gomez	Sign <i>[Signature]</i>	Date/Time 9.13.18 0900
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time

A-6003-962 (03/05)



CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# **X18-062-051**
Page 1 of 1

Collector: **Kathy Turner /CHPRC**
Telephone No.: **509-376-4650**

SAF No.: **X18-062 DW0467**
Purchase Order/Charge Code: **301405**

Project Title: **Uranium Sequestration, Part B,**
Logbook No.: **HNF-N-506 - 101**
Ice Chest No.: **645-598**

Shipped To (Lab): **TestAmerica Denver**
Bill of Lading/Air Bill No.: **7731 91070 3458**

Protocol: **CERCLA**
Offsite Property No.: **9939**

Priority: **30 Days**

POSSIBLE SAMPLE HAZARDS/REMARK
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3KPP8	Y	W	9/11/18	1102	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2
B3KPP6	N	W	1	1	1x250-mL G/P	2320_ALKALINITY: GW 01	14 Days	Cool <=6C
B3KPP5	N	W	9/11/18	1102	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2

SEP 11 2018

SEP 11 2018

Relinquished By: Kathy Turner /CHPRC	Received By: SSU-1	Signature	Signature
<i>Kathy Turner</i>	<i>Jeff Lucas</i>	SEP 12 2018 0700	SEP 12 2018 0700
Relinquished By: SSU-1	Received By: FEDEX	Signature	Signature
<i>Jeff Lucas</i>	<i>FEDEX</i>	SEP 12 2018 1400	SEP 12 2018 1400
Relinquished By: FEDEX	Received By: HUSSARBANE Alyse bong	Signature	Signature
<i>FEDEX</i>	<i>HUSSARBANE Alyse bong</i>	SEP 12 2018 0700	SEP 12 2018 0700

Disposal Method (e.g., Return to customer, per lab procedure, used in process):

Disposed By: _____ Date/Time: _____

Matrix *
S = Soil DS = Drum Solids
SE = Sediment DL = Drum Liquids
SO = Solid T = Tissue
SL = Sludge WI = Wipe
W = Water L = Liquid
O = Oil V = Vegetation
A = Air X = Other

FSR ID = FSR65067

Printed On 8/6/2018



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# X18-062-052
Kathy Turner ICHPRC		Telephone No.: 509-376-4650		Page 1 of 1
Collector:	X18-062	Contact/Requester:	Karen Waters-Husted	
SAF No.:	DN0467	Sampling Origin:	Hanford Site	
Project Title:	Uranium Sequestration, Part B,	Logbook No.:	HNF-N-506-101	
Shipped To (Lab):	TestAmerica Denver	Method of Shipment:	Commercial Carrier	
Protocol:	CERCLA	Priority:	30 Days	
POSSIBLE SAMPLE HAZARDS/REMARK		SPECIAL INSTRUCTIONS		
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		N/A		
Sample No.	Filter	Time	No/Type Container	Sample Analysis
B3KPM2	N	9/11/18	1x250-mL G/P	2320_ALKALINITY: GW 01
B3KPM2	N	9/11/18	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01
B3KPM4	Y	9/11/18	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01
				Holding Time
				14 Days
				6 Months
				6 Months
				Preservative
				Cool <=6C
				HNO3 to pH <2
				HNO3 to pH <2

SEP 11 2018		SEP 11 2018	
Relinquished By:	Kathy Turner ICHPRC	Received By:	SSU-1
Print First and Last Name	Signature	Print First and Last Name	Signature
Relinquished By:	SSU-1	Received By:	Jeff Lucas ICHPRC
Print First and Last Name	Signature	Print First and Last Name	Signature
Relinquished By:	Jeff Lucas ICHPRC	Received By:	FEDEX
Print First and Last Name	Signature	Print First and Last Name	Signature
Relinquished By:	FEDEX	Received By:	Russabomez
Print First and Last Name	Signature	Print First and Last Name	Signature

Matrix *
 S = Soil
 SE = Sediment
 SO = Solid
 SL = Sludge
 W = Water
 O = Oil
 A = Air
 DS = Drum Solids
 DL = Drum Liquids
 T = Tissue
 WI = Wipe
 L = Liquid
 V = Vegetation
 X = Other

Disposal Method (e.g., Return to customer, per lab procedure, used in process):
 Disposed By: _____
 Date/Time: _____

Printed On 8/6/2018

FSR ID = FSR65070

A-6004-842 (REV 3)



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
X18-062-049
Page 1 of 12

CH2M Hill Plateau Remediation Company

Collector: **Malcom Chunn** / **CHPRC** Telephone No.: **509-376-4650**
 SAF No.: **X18-062** / **DN 0467** Purchase Order/Charge Code: **301405**
 Project Title: **Uranium Sequestration, Part B,** Logbook No.: **HNF-N-506 104** Ice Chest No.: **GWS-598**
 Shipped To (Lab): **TestAmerica Denver** Method of Shipment: **Commercial Carrier** Bill of Lading/Air Bill No.: **7731916703458**
 Protocol: **CERCLA** Priority: **30 Days** Offsite Property No.: **9939**

POSSIBLE SAMPLE HAZARDS/REMARK
 ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS
 N/A

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3KR12	Y	SEP 11 2018	0836	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2
B3KR10	N	↓	↓	1x250-mL G/P	2320_ALKALINITY: GW 01	14 Days	Cool <=6C
B3KR10	N	↓	↓	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2

Relinquished By: **Malcom Chunn** / **CHPRC** Signature: *MR C* Date/Time: **SEP 11 2018 10:00**
 Received By: **Janette Zunker** / **CHPRC** Signature: *Janette Zunker* Date/Time: **SEP 11 2018 10:20**

Relinquished By: **Janette Zunker** / **CHPRC** Signature: *Janette Zunker* Date/Time: **SEP 11 2018 12:00**
 Received By: **SSU-1** Signature: *SSU-1* Date/Time: **SEP 11 2018 12:00**

Relinquished By: **SSU-1** Signature: *SSU-1* Date/Time: **SEP 12 2018 07:00**
 Received By: **Jeff Lucas** / **CHPRC** Signature: *Jeff Lucas* Date/Time: **SEP 12 2018 07:00**

Relinquished By: **Jeff Lucas** / **CHPRC** Signature: *Jeff Lucas* Date/Time: **SEP 12 2018 14:00**
 Received By: **FEDEX** Signature: *FEDEX* Date/Time: **SEP 12 2018 14:00**

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process):
 Disposed By: _____ Date/Time: _____

Printed On: 8/6/2018 FSR ID = FSR65061 A-6004-842 (REV 3)





[Shipping](#)

[Tracking](#)

[Printing Services](#)

[Locations](#)

[Support](#)

[Sign In](#)

TRACK ANOTHER SHIPMENT

773196703458

Delivered
Thursday 9/13/2018 at 9:05 am

DELIVERED

Signed for by: J.QUINT

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
Richland, WA US

TO
ARVADA, CO US

Travel History

Shipment Facts

9/13/2018 - Thursday

9:05 am

Delivered

ARVADA, CO

[Expand History](#)

9/12/2018 - Wednesday

9:37 am

Shipment information sent to FedEx

OUR COMPANY

[About FedEx](#)

[Our Portfolio](#)

[Investor Relations](#)

[Careers](#)

[FedEx Blog](#)

[Corporate Responsibility](#)

[Newsroom](#)

[Contact Us](#)

MORE FROM FEDEX

[FedEx Compatible](#)

[Developer Resource Center](#)

[FedEx Cross Border](#)

LANGUAGE

[Change Country](#)

English

Ask FedEx

FOLLOW FEDEX



Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Qualifiers

Metals

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
U	Analyzed for but not detected.
C	The analyte was detected in both the sample and the associated QC blank, and the sample concentration was \leq 5% the blank concentration.
X	See case narrative notes for explanation of the 'X' flag
D	The reported value is from a dilution.

General Chemistry

Qualifier	Qualifier Description
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	TAL DEN
6020B	Metals (ICP/MS)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
3010A	Preparation, Total Metals	SW846	TAL DEN
3020A	Preparation, Total Metals	SW846	TAL DEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Sample Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-114261-1	B3KPP2	Water	09/11/18 08:46	09/13/18 09:20
280-114261-2	B3KPP4	Water	09/11/18 08:46	09/13/18 09:20
280-114261-3	B3KPP8	Water	09/11/18 11:02	09/13/18 09:20
280-114261-4	B3KPP6	Water	09/11/18 11:02	09/13/18 09:20
280-114261-5	B3KPM2	Water	09/11/18 11:35	09/13/18 09:20
280-114261-6	B3KPM4	Water	09/11/18 11:35	09/13/18 09:20
280-114261-7	B3KR12	Water	09/11/18 08:36	09/13/18 09:20
280-114261-8	B3KR10	Water	09/11/18 08:36	09/13/18 09:20



Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6010D - Metals (ICP)

Client Sample ID: B3KPP2
Date Collected: 09/11/18 08:46
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	26.8	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:18	1
Calcium	48700		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:18	1
Iron	23.3	B	100	22.0	ug/L		09/26/18 15:30	09/28/18 16:50	1
Magnesium	11700		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:18	1
Phosphorus	88.6	B	3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:18	1
Potassium	5130		3000	237	ug/L		09/26/18 15:30	09/27/18 20:18	1
Sodium	22400		1000	117	ug/L		09/26/18 15:30	09/28/18 16:50	1
Vanadium	8.2	B C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:18	1

Client Sample ID: B3KPP4
Date Collected: 09/11/18 08:46
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.4	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:30	1
Calcium	48200		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:30	1
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:12	1
Magnesium	11700		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:30	1
Phosphorus	89.2	B	3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:30	1
Potassium	5130		3000	237	ug/L		09/26/18 15:30	09/27/18 20:30	1
Sodium	22200		1000	117	ug/L		09/26/18 15:30	09/28/18 17:12	1
Vanadium	7.0	B C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:30	1

Client Sample ID: B3KPP8
Date Collected: 09/11/18 11:02
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	30.3	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:33	1
Calcium	59900		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:33	1
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:15	1
Magnesium	15200		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:33	1
Phosphorus	33700		3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:33	1
Potassium	8810		3000	237	ug/L		09/26/18 15:30	09/27/18 20:33	1
Sodium	41800		1000	117	ug/L		09/26/18 15:30	09/28/18 17:15	1
Vanadium	19.4	C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:33	1

Client Sample ID: B3KPP6
Date Collected: 09/11/18 11:02
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	29.7	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:35	1
Calcium	61000		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:35	1
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:17	1
Magnesium	15500		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:35	1
Phosphorus	34500		3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:35	1
Potassium	8970		3000	237	ug/L		09/26/18 15:30	09/27/18 20:35	1
Sodium	41600		1000	117	ug/L		09/26/18 15:30	09/28/18 17:17	1
Vanadium	20.5	C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:35	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6010D - Metals (ICP)

Client Sample ID: B3KPM2
Date Collected: 09/11/18 11:35
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.7	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:48	1
Calcium	19800		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:48	1
Iron	1690		100	22.0	ug/L		09/26/18 15:30	10/01/18 09:43	1
Magnesium	7800		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:48	1
Phosphorus	272000	D	30000	135	ug/L		09/26/18 15:30	09/28/18 17:22	10
Potassium	97600		3000	237	ug/L		09/26/18 15:30	09/27/18 20:48	1
Sodium	336000		1000	117	ug/L		09/26/18 15:30	09/28/18 17:20	1
Vanadium	41.4		10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:48	1

Client Sample ID: B3KPM4
Date Collected: 09/11/18 11:35
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.4	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:50	1
Calcium	13700		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:50	1
Iron	89.9	B	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:25	1
Magnesium	7600		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:50	1
Phosphorus	291000	D	30000	135	ug/L		09/26/18 15:30	09/28/18 17:27	10
Potassium	107000		3000	237	ug/L		09/26/18 15:30	09/27/18 20:50	1
Sodium	372000		1000	117	ug/L		09/26/18 15:30	09/28/18 17:25	1
Vanadium	40.2		10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:50	1

Client Sample ID: B3KR12
Date Collected: 09/11/18 08:36
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.7	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:53	1
Calcium	48400		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:53	1
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:30	1
Magnesium	12500		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:53	1
Phosphorus	86.6	B	3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:53	1
Potassium	6760		3000	237	ug/L		09/26/18 15:30	09/27/18 20:53	1
Sodium	24100		1000	117	ug/L		09/26/18 15:30	09/28/18 17:30	1
Vanadium	11.6	C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:53	1

Client Sample ID: B3KR10
Date Collected: 09/11/18 08:36
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	24.7	B C	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:55	1
Calcium	45600		200	34.5	ug/L		09/26/18 15:30	09/27/18 20:55	1
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 17:32	1
Magnesium	11900		200	10.7	ug/L		09/26/18 15:30	09/27/18 20:55	1
Phosphorus	78.6	B	3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:55	1
Potassium	6390		3000	237	ug/L		09/26/18 15:30	09/27/18 20:55	1
Sodium	24400		1000	117	ug/L		09/26/18 15:30	09/28/18 17:32	1
Vanadium	11.4	C	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:55	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B3KPP2
Date Collected: 09/11/18 08:46
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14.8	B	50.0	9.2	ug/L		09/17/18 07:30	09/18/18 23:42	1
Antimony	0.63	B	2.0	0.40	ug/L		09/17/18 07:30	09/18/18 23:42	1
Arsenic	2.3	B	5.0	0.33	ug/L		09/17/18 07:30	09/18/18 23:42	1
Barium	76.2		1.0	0.29	ug/L		09/17/18 07:30	09/18/18 23:42	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/18/18 23:42	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/18/18 23:42	1
Chromium	2.9		2.0	0.50	ug/L		09/17/18 07:30	09/18/18 23:42	1
Cobalt	0.055	B	1.0	0.054	ug/L		09/17/18 07:30	09/18/18 23:42	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/18/18 23:42	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/18/18 23:42	1
Manganese	1.8	C	1.0	0.31	ug/L		09/17/18 07:30	09/18/18 23:42	1
Molybdenum	4.3	C	2.0	0.14	ug/L		09/17/18 07:30	09/18/18 23:42	1
Nickel	0.59	B	2.0	0.30	ug/L		09/17/18 07:30	09/18/18 23:42	1
Selenium	2.4	B	5.0	0.70	ug/L		09/17/18 07:30	09/18/18 23:42	1
Silver	0.039	B	5.0	0.033	ug/L		09/17/18 07:30	09/18/18 23:42	1
Strontium	226		10.0	0.90	ug/L		09/17/18 07:30	09/18/18 23:42	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/18/18 23:42	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/18/18 23:42	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/18/18 23:42	1
Uranium	51.6		1.0	0.050	ug/L		09/17/18 07:30	09/18/18 23:42	1
Zinc	96.8		10.0	2.0	ug/L		09/17/18 07:30	09/18/18 23:42	1

Client Sample ID: B3KPP4
Date Collected: 09/11/18 08:46
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:13	1
Antimony	0.40	U	2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:13	1
Arsenic	2.3	B	5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:13	1
Barium	78.6		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:13	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:13	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:13	1
Chromium	3.1		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:13	1
Cobalt	0.081	B	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:13	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:13	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:13	1
Manganese	0.53	B C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:13	1
Molybdenum	4.3	C	2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:13	1
Nickel	0.49	B	2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:13	1
Selenium	2.5	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:13	1
Silver	0.033	U	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:13	1
Strontium	237		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:13	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:13	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:13	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:13	1
Uranium	51.0		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:13	1
Zinc	97.4		10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:13	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B3KPP8
Date Collected: 09/11/18 11:02
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:17	1
Antimony	0.41	B	2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:17	1
Arsenic	33.7		5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:17	1
Barium	77.7		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:17	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:17	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:17	1
Chromium	2.5		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:17	1
Cobalt	0.054	U	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:17	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:17	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:17	1
Manganese	0.39	B C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:17	1
Molybdenum	5.9	C	2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:17	1
Nickel	0.56	B	2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:17	1
Selenium	2.5	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:17	1
Silver	0.033	U	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:17	1
Strontium	292		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:17	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:17	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:17	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:17	1
Uranium	28.8		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:17	1
Zinc	2.0	U	10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:17	1

Client Sample ID: B3KPP6
Date Collected: 09/11/18 11:02
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:20	1
Antimony	0.40	U	2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:20	1
Arsenic	32.7		5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:20	1
Barium	79.1		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:20	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:20	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:20	1
Chromium	3.4		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:20	1
Cobalt	0.054	U	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:20	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:20	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:20	1
Manganese	1.2	C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:20	1
Molybdenum	6.2	C	2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:20	1
Nickel	0.78	B	2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:20	1
Selenium	2.0	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:20	1
Silver	0.049	B	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:20	1
Strontium	293		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:20	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:20	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:20	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:20	1
Uranium	29.1		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:20	1
Zinc	2.4	B C	10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:20	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B3KPM2
Date Collected: 09/11/18 11:35
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	756		50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:24	1
Antimony	3.2		2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:24	1
Arsenic	49.0		5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:24	1
Barium	153		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:24	1
Beryllium	0.42	B C	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:24	1
Cadmium	0.29	B	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:24	1
Chromium	7.5		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:24	1
Cobalt	1.0		1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:24	1
Copper	82.2		2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:24	1
Lead	1.7		1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:24	1
Manganese	59.3		1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:24	1
Molybdenum	8.8		2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:24	1
Nickel	6.6		2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:24	1
Selenium	2.3	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:24	1
Silver	1.7	B	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:24	1
Strontium	130		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:24	1
Thallium	0.071	B	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:24	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:24	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:24	1
Uranium	124		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:24	1
Zinc	74.3		10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:24	1

Client Sample ID: B3KPM4
Date Collected: 09/11/18 11:35
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	183		50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:28	1
Antimony	2.9		2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:28	1
Arsenic	48.5		5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:28	1
Barium	8.6		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:28	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:28	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:28	1
Chromium	4.7		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:28	1
Cobalt	0.19	B	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:28	1
Copper	62.2		2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:28	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:28	1
Manganese	5.4	C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:28	1
Molybdenum	8.7		2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:28	1
Nickel	3.3		2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:28	1
Selenium	2.3	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:28	1
Silver	1.5	B	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:28	1
Strontium	54.0		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:28	1
Thallium	0.061	B	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:28	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:28	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:28	1
Uranium	90.7		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:28	1
Zinc	21.2	C	10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:28	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6020B - Metals (ICP/MS)

Client Sample ID: B3KR12
Date Collected: 09/11/18 08:36
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:32	1
Antimony	0.40	U	2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:32	1
Arsenic	4.0	B	5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:32	1
Barium	53.2		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:32	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:32	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:32	1
Chromium	2.9		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:32	1
Cobalt	0.077	B	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:32	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:32	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:32	1
Manganese	0.57	B C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:32	1
Molybdenum	4.9	C	2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:32	1
Nickel	0.30	U	2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:32	1
Selenium	2.5	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:32	1
Silver	0.033	U	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:32	1
Strontium	229		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:32	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:32	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:32	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:32	1
Uranium	93.9		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:32	1
Zinc	21.0	C	10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:32	1

Client Sample ID: B3KR10
Date Collected: 09/11/18 08:36
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/19/18 02:36	1
Antimony	0.40	U	2.0	0.40	ug/L		09/17/18 07:30	09/19/18 02:36	1
Arsenic	4.1	B	5.0	0.33	ug/L		09/17/18 07:30	09/19/18 02:36	1
Barium	53.2		1.0	0.29	ug/L		09/17/18 07:30	09/19/18 02:36	1
Beryllium	0.080	U	1.0	0.080	ug/L		09/17/18 07:30	09/19/18 02:36	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/19/18 02:36	1
Chromium	3.0		2.0	0.50	ug/L		09/17/18 07:30	09/19/18 02:36	1
Cobalt	0.054	U	1.0	0.054	ug/L		09/17/18 07:30	09/19/18 02:36	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/19/18 02:36	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/19/18 02:36	1
Manganese	0.33	B C	1.0	0.31	ug/L		09/17/18 07:30	09/19/18 02:36	1
Molybdenum	4.8	C	2.0	0.14	ug/L		09/17/18 07:30	09/19/18 02:36	1
Nickel	0.30	U	2.0	0.30	ug/L		09/17/18 07:30	09/19/18 02:36	1
Selenium	2.7	B	5.0	0.70	ug/L		09/17/18 07:30	09/19/18 02:36	1
Silver	0.033	U	5.0	0.033	ug/L		09/17/18 07:30	09/19/18 02:36	1
Strontium	233		10.0	0.90	ug/L		09/17/18 07:30	09/19/18 02:36	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:36	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/19/18 02:36	1
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/19/18 02:36	1
Uranium	95.0		1.0	0.050	ug/L		09/17/18 07:30	09/19/18 02:36	1
Zinc	21.1	C	10.0	2.0	ug/L		09/17/18 07:30	09/19/18 02:36	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

General Chemistry

Client Sample ID: B3KPP2
Date Collected: 09/11/18 08:46
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	121000		5000	1070	ug/L			09/21/18 09:18	1
Bicarbonate Alkalinity as CaCO3	121000		5000	1070	ug/L			09/21/18 09:18	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:18	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:18	1

Client Sample ID: B3KPP6
Date Collected: 09/11/18 11:02
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	170000		5000	1070	ug/L			09/21/18 09:36	1
Bicarbonate Alkalinity as CaCO3	170000		5000	1070	ug/L			09/21/18 09:36	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:36	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:36	1

Client Sample ID: B3KPM2
Date Collected: 09/11/18 11:35
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	410000		5000	1070	ug/L			09/21/18 09:30	1
Bicarbonate Alkalinity as CaCO3	410000		5000	1070	ug/L			09/21/18 09:30	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:30	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:30	1

Client Sample ID: B3KR10
Date Collected: 09/11/18 08:36
Date Received: 09/13/18 09:20

Lab Sample ID: 280-114261-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	129000		5000	1070	ug/L			09/21/18 09:41	1
Bicarbonate Alkalinity as CaCO3	129000		5000	1070	ug/L			09/21/18 09:41	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:41	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 09:41	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 280-430624/1-A
Matrix: Water
Analysis Batch: 431329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.52	B	100	4.4	ug/L		09/26/18 15:30	09/27/18 20:13	1
Calcium	74.86	B	200	34.5	ug/L		09/26/18 15:30	09/27/18 20:13	1
Magnesium	10.7	U	200	10.7	ug/L		09/26/18 15:30	09/27/18 20:13	1
Phosphorus	13.5	U	3000	13.5	ug/L		09/26/18 15:30	09/27/18 20:13	1
Potassium	237	U	3000	237	ug/L		09/26/18 15:30	09/27/18 20:13	1
Vanadium	1.20	B	10.0	1.1	ug/L		09/26/18 15:30	09/27/18 20:13	1

Lab Sample ID: MB 280-430624/1-A
Matrix: Water
Analysis Batch: 431476

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22.0	U	100	22.0	ug/L		09/26/18 15:30	09/28/18 16:45	1
Sodium	333.8	B	1000	117	ug/L		09/26/18 15:30	09/28/18 16:45	1

Lab Sample ID: LCS 280-430624/2-A
Matrix: Water
Analysis Batch: 431329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Boron	1000	1006		ug/L		101	80 - 120
Calcium	50000	49050		ug/L		98	80 - 120
Magnesium	50000	48130		ug/L		96	80 - 120
Phosphorus	10000	10070		ug/L		101	80 - 120
Potassium	50000	54360		ug/L		109	80 - 120
Vanadium	500	494.2		ug/L		99	80 - 120

Lab Sample ID: LCS 280-430624/2-A
Matrix: Water
Analysis Batch: 431476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1000	993.6		ug/L		99	80 - 120
Sodium	50000	52230		ug/L		104	80 - 120

Lab Sample ID: 280-114261-1 MS
Matrix: Water
Analysis Batch: 431329

Client Sample ID: B3KPP2
Prep Type: Total/NA
Prep Batch: 430624

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	26.8	B C	1000	1026		ug/L		100	75 - 125
Calcium	48700		50000	96900		ug/L		96	75 - 125
Magnesium	11700		50000	59880		ug/L		96	75 - 125
Phosphorus	88.6	B	10000	10200		ug/L		101	75 - 125
Potassium	5130		50000	59010		ug/L		108	75 - 125
Vanadium	8.2	B C	500	510.0		ug/L		100	75 - 125

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 280-114261-1 MS

Matrix: Water

Analysis Batch: 431476

Client Sample ID: B3KPP2

Prep Type: Total/NA

Prep Batch: 430624

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	23.3	B	1000	1023		ug/L		100	75 - 125
Sodium	22400		50000	73170		ug/L		102	75 - 125

Lab Sample ID: 280-114261-1 MSD

Matrix: Water

Analysis Batch: 431329

Client Sample ID: B3KPP2

Prep Type: Total/NA

Prep Batch: 430624

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	26.8	B C	1000	1009		ug/L		98	75 - 125	2	20
Calcium	48700		50000	95030		ug/L		93	75 - 125	2	20
Magnesium	11700		50000	58800		ug/L		94	75 - 125	2	20
Phosphorus	88.6	B	10000	10000		ug/L		99	75 - 125	2	20
Potassium	5130		50000	57760		ug/L		105	75 - 125	2	20
Vanadium	8.2	B C	500	497.9		ug/L		98	75 - 125	2	20

Lab Sample ID: 280-114261-1 MSD

Matrix: Water

Analysis Batch: 431476

Client Sample ID: B3KPP2

Prep Type: Total/NA

Prep Batch: 430624

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	23.3	B	1000	1017		ug/L		99	75 - 125	1	20
Sodium	22400		50000	72030		ug/L		99	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 280-430221/1-A

Matrix: Water

Analysis Batch: 430178

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 430221

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9.2	U	50.0	9.2	ug/L		09/17/18 07:30	09/18/18 23:34	1
Antimony	0.40	U	2.0	0.40	ug/L		09/17/18 07:30	09/18/18 23:34	1
Arsenic	0.33	U	5.0	0.33	ug/L		09/17/18 07:30	09/18/18 23:34	1
Barium	0.29	U	1.0	0.29	ug/L		09/17/18 07:30	09/18/18 23:34	1
Beryllium	0.216	B	1.0	0.080	ug/L		09/17/18 07:30	09/18/18 23:34	1
Cadmium	0.27	U	1.0	0.27	ug/L		09/17/18 07:30	09/18/18 23:34	1
Chromium	0.50	U	2.0	0.50	ug/L		09/17/18 07:30	09/18/18 23:34	1
Cobalt	0.054	U	1.0	0.054	ug/L		09/17/18 07:30	09/18/18 23:34	1
Copper	0.56	U	2.0	0.56	ug/L		09/17/18 07:30	09/18/18 23:34	1
Lead	0.18	U	1.0	0.18	ug/L		09/17/18 07:30	09/18/18 23:34	1
Manganese	0.564	B	1.0	0.31	ug/L		09/17/18 07:30	09/18/18 23:34	1
Molybdenum	0.314	B	2.0	0.14	ug/L		09/17/18 07:30	09/18/18 23:34	1
Nickel	0.30	U	2.0	0.30	ug/L		09/17/18 07:30	09/18/18 23:34	1
Selenium	0.70	U	5.0	0.70	ug/L		09/17/18 07:30	09/18/18 23:34	1
Silver	0.033	U	5.0	0.033	ug/L		09/17/18 07:30	09/18/18 23:34	1
Strontium	0.90	U	10.0	0.90	ug/L		09/17/18 07:30	09/18/18 23:34	1
Thallium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/18/18 23:34	1
Thorium	1.2	U	5.0	1.2	ug/L		09/17/18 07:30	09/18/18 23:34	1

TestAmerica Denver

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
SDG: DN0467

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 280-430221/1-A
Matrix: Water
Analysis Batch: 430178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430221

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tin	0.77	U	10.0	0.77	ug/L		09/17/18 07:30	09/18/18 23:34	1
Uranium	0.050	U	1.0	0.050	ug/L		09/17/18 07:30	09/18/18 23:34	1
Zinc	2.05	B	10.0	2.0	ug/L		09/17/18 07:30	09/18/18 23:34	1

Lab Sample ID: LCS 280-430221/2-A
Matrix: Water
Analysis Batch: 430178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430221

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	400	385.9		ug/L		96	80 - 120
Antimony	40.0	36.93		ug/L		92	80 - 120
Arsenic	40.0	35.81		ug/L		90	80 - 120
Barium	40.0	38.35		ug/L		96	80 - 120
Beryllium	40.0	38.30		ug/L		96	80 - 120
Cadmium	40.0	40.70		ug/L		102	80 - 120
Chromium	40.0	39.46		ug/L		99	80 - 120
Cobalt	40.0	39.27		ug/L		98	80 - 120
Copper	40.0	39.72		ug/L		99	80 - 120
Lead	40.0	42.41		ug/L		106	80 - 120
Manganese	40.0	40.31		ug/L		101	80 - 120
Molybdenum	40.0	37.06		ug/L		93	80 - 120
Nickel	40.0	39.68		ug/L		99	80 - 120
Selenium	40.0	36.07		ug/L		90	80 - 120
Silver	40.0	40.42		ug/L		101	80 - 120
Strontium	40.0	38.26		ug/L		96	80 - 120
Thallium	40.0	39.68		ug/L		99	80 - 120
Thorium	40.0	39.14		ug/L		98	80 - 120
Tin	40.0	38.91		ug/L		97	80 - 120
Uranium	40.0	39.03		ug/L		98	80 - 120
Zinc	40.0	39.87		ug/L		100	80 - 120

Lab Sample ID: 280-114261-1 MS
Matrix: Water
Analysis Batch: 430178

Client Sample ID: B3KPP2
Prep Type: Total/NA
Prep Batch: 430221

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aluminum	14.8	B	400	392.2		ug/L		94	75 - 125
Antimony	0.63	B	40.0	38.00		ug/L		93	75 - 125
Arsenic	2.3	B	40.0	38.16		ug/L		90	75 - 125
Barium	76.2		40.0	114.1		ug/L		95	75 - 125
Beryllium	0.080	U	40.0	39.97		ug/L		100	75 - 125
Cadmium	0.27	U	40.0	37.97		ug/L		95	75 - 125
Chromium	2.9		40.0	42.52		ug/L		99	75 - 125
Cobalt	0.055	B	40.0	38.91		ug/L		97	75 - 125
Copper	0.56	U	40.0	39.11		ug/L		98	75 - 125
Lead	0.18	U	40.0	39.19		ug/L		98	75 - 125
Manganese	1.8	C	40.0	41.24		ug/L		99	75 - 125
Molybdenum	4.3	C	40.0	40.84		ug/L		91	75 - 125
Nickel	0.59	B	40.0	40.30		ug/L		99	75 - 125

TestAmerica Denver

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 280-114261-1 MS
 Matrix: Water
 Analysis Batch: 430178

Client Sample ID: B3KPP2
 Prep Type: Total/NA
 Prep Batch: 430221
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Selenium	2.4	B	40.0	38.63		ug/L		91	75 - 125
Silver	0.039	B	40.0	39.73		ug/L		99	75 - 125
Strontium	226		40.0	256.9	X	ug/L		77	75 - 125
Thallium	0.050	U	40.0	39.41		ug/L		99	75 - 125
Thorium	1.2	U	40.0	39.23		ug/L		98	75 - 125
Tin	0.77	U	40.0	39.55		ug/L		99	75 - 125
Uranium	51.6		40.0	89.09		ug/L		94	75 - 125
Zinc	96.8		40.0	132.3		ug/L		89	75 - 125

Lab Sample ID: 280-114261-1 MSD
 Matrix: Water
 Analysis Batch: 430178

Client Sample ID: B3KPP2
 Prep Type: Total/NA
 Prep Batch: 430221
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	14.8	B	400	402.9		ug/L		97	75 - 125	3	20
Antimony	0.63	B	40.0	38.86		ug/L		96	75 - 125	2	20
Arsenic	2.3	B	40.0	37.87		ug/L		89	75 - 125	1	20
Barium	76.2		40.0	114.3		ug/L		95	75 - 125	0	20
Beryllium	0.080	U	40.0	41.01		ug/L		103	75 - 125	3	20
Cadmium	0.27	U	40.0	39.14		ug/L		98	75 - 125	3	20
Chromium	2.9		40.0	42.05		ug/L		98	75 - 125	1	20
Cobalt	0.055	B	40.0	38.62		ug/L		96	75 - 125	1	20
Copper	0.56	U	40.0	38.27		ug/L		96	75 - 125	2	20
Lead	0.18	U	40.0	39.04		ug/L		98	75 - 125	0	20
Manganese	1.8	C	40.0	39.82		ug/L		95	75 - 125	4	20
Molybdenum	4.3	C	40.0	40.28		ug/L		90	75 - 125	1	20
Nickel	0.59	B	40.0	39.38		ug/L		97	75 - 125	2	20
Selenium	2.4	B	40.0	38.14		ug/L		89	75 - 125	1	20
Silver	0.039	B	40.0	39.34		ug/L		98	75 - 125	1	20
Strontium	226		40.0	254.7	X	ug/L		72	75 - 125	1	20
Thallium	0.050	U	40.0	39.08		ug/L		98	75 - 125	1	20
Thorium	1.2	U	40.0	38.87		ug/L		97	75 - 125	1	20
Tin	0.77	U	40.0	37.87		ug/L		95	75 - 125	4	20
Uranium	51.6		40.0	90.03		ug/L		96	75 - 125	1	20
Zinc	96.8		40.0	140.3		ug/L		109	75 - 125	6	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-430492/104
 Matrix: Water
 Analysis Batch: 430492

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 07:11	1
Bicarbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 07:11	1
Carbonate Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 07:11	1
Hydroxide Alkalinity as CaCO3	1070	U	5000	1070	ug/L			09/21/18 07:11	1

TestAmerica Denver

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-430492/103
 Matrix: Water
 Analysis Batch: 430492

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	200000	199600		ug/L		100	80 - 120

Lab Sample ID: 280-114261-1 DU
 Matrix: Water
 Analysis Batch: 430492

Client Sample ID: B3KPP2
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	121000		120500		ug/L		0.4	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Metals

Analysis Batch: 430178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	6020B	430221
280-114261-2	B3KPP4	Total/NA	Water	6020B	430221
280-114261-3	B3KPP8	Total/NA	Water	6020B	430221
280-114261-4	B3KPP6	Total/NA	Water	6020B	430221
280-114261-5	B3KPM2	Total/NA	Water	6020B	430221
280-114261-6	B3KPM4	Total/NA	Water	6020B	430221
280-114261-7	B3KR12	Total/NA	Water	6020B	430221
280-114261-8	B3KR10	Total/NA	Water	6020B	430221
MB 280-430221/1-A	Method Blank	Total/NA	Water	6020B	430221
LCS 280-430221/2-A	Lab Control Sample	Total/NA	Water	6020B	430221
280-114261-1 MS	B3KPP2	Total/NA	Water	6020B	430221
280-114261-1 MSD	B3KPP2	Total/NA	Water	6020B	430221

Prep Batch: 430221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	3020A	
280-114261-2	B3KPP4	Total/NA	Water	3020A	
280-114261-3	B3KPP8	Total/NA	Water	3020A	
280-114261-4	B3KPP6	Total/NA	Water	3020A	
280-114261-5	B3KPM2	Total/NA	Water	3020A	
280-114261-6	B3KPM4	Total/NA	Water	3020A	
280-114261-7	B3KR12	Total/NA	Water	3020A	
280-114261-8	B3KR10	Total/NA	Water	3020A	
MB 280-430221/1-A	Method Blank	Total/NA	Water	3020A	
LCS 280-430221/2-A	Lab Control Sample	Total/NA	Water	3020A	
280-114261-1 MS	B3KPP2	Total/NA	Water	3020A	
280-114261-1 MSD	B3KPP2	Total/NA	Water	3020A	

Prep Batch: 430624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	3010A	
280-114261-2	B3KPP4	Total/NA	Water	3010A	
280-114261-3	B3KPP8	Total/NA	Water	3010A	
280-114261-4	B3KPP6	Total/NA	Water	3010A	
280-114261-5	B3KPM2	Total/NA	Water	3010A	
280-114261-6	B3KPM4	Total/NA	Water	3010A	
280-114261-7	B3KR12	Total/NA	Water	3010A	
280-114261-8	B3KR10	Total/NA	Water	3010A	
MB 280-430624/1-A	Method Blank	Total/NA	Water	3010A	
LCS 280-430624/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-114261-1 MS	B3KPP2	Total/NA	Water	3010A	
280-114261-1 MSD	B3KPP2	Total/NA	Water	3010A	

Analysis Batch: 431329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	6010D	430624
280-114261-2	B3KPP4	Total/NA	Water	6010D	430624
280-114261-3	B3KPP8	Total/NA	Water	6010D	430624
280-114261-4	B3KPP6	Total/NA	Water	6010D	430624
280-114261-5	B3KPM2	Total/NA	Water	6010D	430624
280-114261-6	B3KPM4	Total/NA	Water	6010D	430624

TestAmerica Denver

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: X18-062

TestAmerica Job ID: 280-114261-1
 SDG: DN0467

Metals (Continued)

Analysis Batch: 431329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-7	B3KR12	Total/NA	Water	6010D	430624
280-114261-8	B3KR10	Total/NA	Water	6010D	430624
MB 280-430624/1-A	Method Blank	Total/NA	Water	6010D	430624
LCS 280-430624/2-A	Lab Control Sample	Total/NA	Water	6010D	430624
280-114261-1 MS	B3KPP2	Total/NA	Water	6010D	430624
280-114261-1 MSD	B3KPP2	Total/NA	Water	6010D	430624

Analysis Batch: 431476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	6010D	430624
280-114261-2	B3KPP4	Total/NA	Water	6010D	430624
280-114261-3	B3KPP8	Total/NA	Water	6010D	430624
280-114261-4	B3KPP6	Total/NA	Water	6010D	430624
280-114261-5	B3KPM2	Total/NA	Water	6010D	430624
280-114261-5	B3KPM2	Total/NA	Water	6010D	430624
280-114261-6	B3KPM4	Total/NA	Water	6010D	430624
280-114261-6	B3KPM4	Total/NA	Water	6010D	430624
280-114261-7	B3KR12	Total/NA	Water	6010D	430624
280-114261-8	B3KR10	Total/NA	Water	6010D	430624
MB 280-430624/1-A	Method Blank	Total/NA	Water	6010D	430624
LCS 280-430624/2-A	Lab Control Sample	Total/NA	Water	6010D	430624
280-114261-1 MS	B3KPP2	Total/NA	Water	6010D	430624
280-114261-1 MSD	B3KPP2	Total/NA	Water	6010D	430624

Analysis Batch: 431610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-5	B3KPM2	Total/NA	Water	6010D	430624

General Chemistry

Analysis Batch: 430492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-114261-1	B3KPP2	Total/NA	Water	SM 2320B	
280-114261-4	B3KPP6	Total/NA	Water	SM 2320B	
280-114261-5	B3KPM2	Total/NA	Water	SM 2320B	
280-114261-8	B3KR10	Total/NA	Water	SM 2320B	
MB 280-430492/104	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-430492/103	Lab Control Sample	Total/NA	Water	SM 2320B	
280-114261-1 DU	B3KPP2	Total/NA	Water	SM 2320B	