MOSCOW
Urban Renewal Agency

Meeting Agenda: Thursday, May 4, 2023, 7:30 a.m.

City of Moscow Council Chambers • 206 E 3rd Street • Moscow, ID 83843
(A) = Board Action Item

1. **Consent Agenda (A)** - Any item will be removed from the consent agenda at the request of a member of the Board and that item will be considered separately later.
   - **A.** Minutes from April 6, 2023
   - **B.** March 2023 Payables
   - **C.** March 2023 Financials

   ACTION: Approve the consent agenda or take such other action deemed appropriate.

2. **Public Comment**
   Members of the public may speak to the Board regarding matters NOT on the Agenda nor currently pending before the Moscow Urban Renewal Agency. Please state your name and resident city for the record and limit your remarks to three minutes.

3. **University of Idaho Planning Efforts**
   The University of Idaho is in the process of evaluating proposals for development and redevelopment of their properties adjacent to the Legacy Crossing site. Staff from the University will provide an overview and update on this process.

4. **Annual Monitoring Report for the 6th and Jackson Street Site – Cody Riddle**
   Staff will provide an update on the annual groundwater monitoring results for testing that occurred earlier this year on the Agency's property at 6th and Jackson.

5. **General Agency Updates – Cody Riddle**
   - General agency business

NOTICE: It is the policy of the City of Moscow that all City-sponsored public meetings and events are accessible to all people. If you need assistance in participating in this meeting or event due to a disability under the ADA, please contact the City's ADA Coordinator by phone at (208) 883-7600, TDD (208) 883-7019, or by email at adacoordinator@ci.moscow.id.us at least 48 hours prior to the scheduled meeting or event to request an accommodation. The City of Moscow is committed to ensuring that all reasonable accommodation requests are fulfilled.

Urban Renewal Agency

Meeting Minutes: April 6, 2023, 7:30 a.m.

City of Moscow Council Chambers • 206 E 3rd Street • Moscow, ID 83843

Commissioners Present	Commissioners Absent	Staff in Attendance
Steve McGeehan, Chair	Alison Tompkins	Cody Riddle, Executive Director
Mark Beauchamp		Jennifer Fleischman, Clerk
Sandra Kelly		Renee Tack, Treasurer
Maureen Laflin		
Tom Lamar		
Nancy Tribble		

McGeehan called the meeting to order at 7:30 a.m.

1. **Consent Agenda (A)**

   Any item will be removed from the consent agenda at the request of any member of the Board and that item will be considered separately later.

   A. *Minutes from March 16, 2023*

Laflin moved for approval of the consent agenda as presented, seconded by Tribble. Roll Call Vote; Ayes: Unanimous (6). Nays: None. Abstentions: None. Motion carried.

2. **Public Comment**

   Members of the public may speak to the Board regarding matters NOT on the Agenda nor currently pending before the Moscow Urban Renewal Agency. Please state your name and resident city for the record and limit your remarks to three minutes.

None.

3. **Updated Calendar/Summer Schedule (Information Only) – Cody Riddle**

   Staff will present a tentative schedule outlining key dates related to the development of the FY2024 Budget and review of proposals for the Sixth and Jackson property.

Riddle walked the Board through a draft schedule of the upcoming meetings and deadlines. Extending the deadline for the Legacy Crossing Request for Proposals (RFP) has garnered more interest and the Agency can expect to receive two or three proposals. The Board does not need to extend an invite for presentation from each submission, but it would be ideal. The members discussed their individual availability for attending the meetings over the summer, as well as the timeline of the upcoming items.

4. **Legacy Crossing Zoning and Design Standards (Information Only) – Cody Riddle**

   Staff will provide an overview of the zoning and design standards applicable to development of the Sixth and Jackson property.

Riddle reviewed the overlay district for the Legacy Crossing property, as well as the expectations of the design standards for the proposals. The property and designs need to have an emphasis on pedestrian connectivity, with both the University and Downtown. The Board discussed how the Hello Walk might hinder progress in the development of the property.

5. **General Agency Updates – Cody Riddle**

- *General Agency business*

- Staff mentioned the recent legislation pending before the Idaho State Governor regarding policies that could potentially impact the Agency.

- The University of Idaho has an RFP out for their own property, to the southwest of the Legacy Crossing parcel. They are interested in meeting with the Board after that process has been finalized.

- The Board discussed virtual attendance options for Board members.

McGeehan declared the meeting adjourned at 8:27 a.m.

_____ _____

Steve McGeehan, Agency Chair Date

MOSCOW
Urban Renewal Agency

Balance Sheet
March 31, 2023

	Total Funds
ASSETS	
Cash	11,944
Investments - LGIP	2,815,439
Investments-Zions Debt Reserve	44,391
Other Assets	5,260
Land	679,420
Total Assets	$ 3,556,454
LIABILITIES	
Series 2010 Bond - due within one year	35,000
Latah County payback agreement - due within one year	5,000
Series 2010 Bond - due after one year	158,000
Latah County payback agreement - due after one year	79,537
Total Liabilities	277,537
FUND BALANCES	
Net Investment in Capital Assets	486,420
Restricted Fund Balance	44,312
Unrestricted Fund Balance	2,748,185
Total Fund Balance	3,278,917
Total Liabilities and Fund Balance	$ 3,556,454

March-23
Checks by Date

Check Number	Vendor	Description	Check Date	Check Amount
4868	UCITYMOS	City of Moscow	03/02/2023	
	115911-02282023	Feb'23 Utilities 6th & Jackson		328.56
Total for Check Number 4868:				328.56
4869	UAVISTA	Avista Utilities	03/09/2023	
	1563734669-03222023	Feb'23 Electric for Legacy Property		15.45
Total for Check Number 4869:				15.45
4870	UCITYMOS	City of Moscow	03/09/2023	
	2300001442	City Admin Fees Mar'23		4,612.08
Total for Check Number 4870:				4,612.08
4871	UALTASCI	Alta Science & Engineering	03/16/2023	
	A4272	Jan'23 Electric for Legacy Property		787.90
Total for Check Number 4871:				787.90
4872	UMOSPULD	Tribune Publishing Company	03/16/2023	
	172805	URA Annual Report '22 Hearing		48.76
	172924	Amended Legacy RFP Mar 2023		84.88
Total for Check Number 4872:				133.64
Total bills for February 2023:				**$ 5,877.63**

March-23

Accounts Payable Checks for Approval

Check	Check Date	Fund Name	Vendor	Void	Amount
4868	03/02/2023	Moscow Urban Renewal Agency	City of Moscow		328.56
4869	03/09/2023	Moscow Urban Renewal Agency	Avista Utilities		15.45
4870	03/09/2023	Moscow Urban Renewal Agency	City of Moscow		4,612.08
4871	03/16/2023	Moscow Urban Renewal Agency	Alta Science & Engineering		787.90
4872	03/16/2023	Moscow Urban Renewal Agency	Tribune Publishing Company		133.64
			Report Total:	$ -	5,877.63

Steve McGeehan, Chairperson

Accounts payable expenditures as contained herein were made in compliance with the duly adopted budget for the current fiscal year and according to Idaho law.

Cody Riddle, Executive Director

Renee Tack, Treasurer

General Ledger
Expense vs. Budget

March-23

Sort Level	Description	Amended Budget	Period Amt	End Bal	Variance	% Budget Used
890	Moscow Urban Renewal Agency					
880	URA General Fund					
890-880-642-00	Administrative Services	$ 55,345.00	$ 4,612.08	$ 27,672.48	$ 27,672.52	50.00%
890-880-642-15	Professional Services-Other	$ 5,000.00	$ -	$ 1,250.00	$ 3,750.00	25.00%
890-880-642-20	Professional Services-Auditing	$ 5,356.00	$ -	$ -	$ 5,356.00	0.00%
890-880-642-89	Professional Services	$ 500.00	$ -	$ 19.95	$ 480.05	3.99%
890-880-644-10	Advertising & Publishing	$ 500.00	$ -	$ -	$ 500.00	0.00%
890-880-644-16	Land Sale Expenses	$ 5,000.00	$ 48.76	$ 48.76	$ 4,951.24	0.98%
890-880-668-10	Liability Insurance-General	$ 1,833.00	$ -	$ 1,889.00	$ (56.00)	103.06%
E02	Contractual	$ 73,534.00	$ 4,660.84	$ 30,880.19	$ 42,653.81	41.99%
890-880-631-10	Postage Expense	$ 100.00	$ -	$ -	$ 100.00	0.00%
890-880-631-20	Printing and Binding	$ 400.00	$ -	$ -	$ 400.00	0.00%
890-880-644-15	Alturas Marketing/Maintenance	$ 1,500.00	$ -	$ -	$ 1,500.00	0.00%
890-880-647-10	Travel & Meetings-General	$ 500.00	$ -	$ -	$ 500.00	0.00%
890-880-649-10	Professional Development	$ 500.00	$ -	$ -	$ 500.00	0.00%
890-880-669-10	Misc. Expense-General	$ 500.00	$ -	$ 67.50	$ 432.50	13.50%
890-880-669-11	Dist. of Net Prop. Sale Procee	$ 89,302.00	$ -	$ -	$ 89,302.00	0.00%
E03	Commodities	$ 92,802.00	$ -	$ 67.50	$ 92,734.50	0.07%

General Ledger
Expense vs. Budget

March-23

Sort Level	Description	Amended Budget	Period Amt	End Bal	Variance	% Budget Used
890	Moscow Urban Renewal Agency					
880	URA General Fund	$ 166,336.00	$ 4,660.84	$ 30,947.69	$ 135,388.31	18.61%
895	URA Legacy District					
890-895-642-10	Professional Services-Legacy	$ 5,000.00	$ 787.90	$ 4,746.20	$ 253.80	94.92%
890-895-642-12	Land Sale Expense-Legacy	$ 2,000.00	$ -	$ -	$ 2,000.00	0.00%
890-895-644-10	Ad. & Marketing Expense-Legacy	$ 1,000.00	$ 84.88	$ 688.61	$ 311.39	68.86%
E02	Contractual	$ 8,000.00	$ 872.78	$ 5,434.81	$ 2,565.19	67.94%
890-895-647-10	Travel & Meetings-Legacy	$ 1,000.00	$ -	$ -	$ 1,000.00	0.00%
890-895-652-10	Heat, Lights & Utilities	$ 3,500.00	$ 344.01	$ 1,896.15	$ 1,603.85	54.18%
890-895-658-51	Development Participation	$ 1,025,500.00	$ -	$ 30,239.25	$ 995,260.75	2.95%
890-895-669-10	Misc. Expense-Legacy	$ 500.00	$ -	$ -	$ 500.00	0.00%
890-895-675-00	Fiscal Agent Trustee fees	$ 1,545.00	$ -	$ -	$ 1,545.00	0.00%
890-895-676-15	Latah County Reimb. Agreement	$ 5,000.00	$ -	$ 5,000.00	$ -	100.00%
890-895-676-17	Owner Participation Agreements	$ 62,926.00	$ -	$ 24,095.36	$ 38,830.64	38.29%
E03	Commodities	$ 1,099,971.00	$ 344.01	$ 61,230.76	$ 1,038,740.24	5.57%
890-895-890-00	Transfer To: General Fund	$ 70,984.00	$ -	$ -	$ 70,984.00	0.00%
E10	Transfers To	$ 70,984.00	$ -	$ -	$ 70,984.00	0.00%

General Ledger
Expense vs. Budget

March-23

Sort Level	Description	Amended Budget	Period Amt	End Bal	Variance	% Budget Used
890	Moscow Urban Renewal Agency					
890-895-900-11	Contingency - Legacy	$ 15,000.00	$ -	$ -	$ 15,000.00	0.00%
E90	Contingency	$ 15,000.00	$ -	$ -	$ 15,000.00	0.00%
895	URA Legacy District	$ 1,193,955.00	$ 1,216.79	$ 66,665.57	$ 1,127,289.43	5.58%
899	Dept					
890-892-790-01	Bond Principal - Legacy	$ 35,000.00	$ -	$ -	$ 35,000.00	0.00%
890-892-791-01	Bond Interest - Legacy	$ 8,472.00	$ -	$ 1,247.03	$ 7,224.97	14.72%
E05	Debt Service	$ 43,472.00	$ -	$ 1,247.03	$ 42,224.97	2.87%
890-892-900-01	Ending Fund Bal - Assigned	$ 1,096,507.00	$ -	$ -	$ 1,096,507.00	0.00%
890-892-990-05	Ending Fund Bal - Restricted	$ 49,752.00	$ -	$ -	$ 49,752.00	0.00%
890-899-990-00	Ending Fund Bal - Unassigned	$ 80,678.00	$ -	$ -	$ 80,678.00	0.00%
890-899-990-05	Ending Fund Bal - Restricted	$ 11,547.00	$ -	$ -	$ 11,547.00	0.00%
E95	Ending Fund Balance	$ 1,238,484.00	$ -	$ -	$ 1,238,484.00	0.00%
899	Dept	$ 1,281,956.00	$ -	$ 1,247.03	$ 1,280,708.97	0.10%
890	Moscow Urban Renewal Agency	$ 2,642,247.00	$ 5,877.63	$ 98,860.29	$ 2,543,386.71	3.74%

General Ledger

Revenue Analysis

March 2023

Account Number	Description	Budgeted Revenue	Period Revenue	YTD Revenue	Variance	Uncollected Bal	% Avail/Uncollect	% Received
890	**Moscow Urban Renewal Agency**							
890-000-410-01	Property Taxes - Legacy	$ 865,000.00	$ 2,099.31	$ 565,875.13	$ 299,124.87	$ 299,124.87	34.58%	65.42%
890-000-471-00	Investment Earnings	$ 4,500.00	$ 9,307.83	$ 33,141.28	$ (28,641.28)	$ (28,641.28)	-636.47%	736.47%
890-000-478-10	Gain/Loss on Sale of Assets	$ 89,302.00	$ -	$ -	$ 89,302.00	$ 89,302.00	100.00%	0.00%
890-000-498-96	Transfer In: Legacy	$ 70,984.00	$ -	$ -	$ 70,984.00	$ 70,984.00	100.00%	0.00%
890	**Moscow Urban Renewal Agency**	**$ 1,029,786.00**	**$ 11,407.14**	**$ 599,016.41**	**$ 430,769.59**	**$ 430,769.59**	**41.83%**	**58.17%**
Revenue Total		**$ 1,029,786.00**	**$ 11,407.14**	**$ 599,016.41**	**$ 430,769.59**	**$ 430,769.59**	**41.83%**	**58.17%**

Alta Science & Engineering, Inc.

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Moscow, Idaho 83843
Ph: (208) 882-7858; Fax: (208) 883-3785

M E M O R A N D U M

To:	Derek Young, IDEQ, Boise
cc:	Eric Traynor, IDEQ, Boise Bill Belknap, Moscow URA Cody Riddle, Moscow URA
From:	Tom Jenkins
Date:	February 24, 2023
Contract No./Title:	PSA A22-023
Alta Project No.:	22139
Subject:	**Annual Monitoring Report for the W. 6th Street and Jackson Street Site in Moscow, Idaho**

1 Introduction

The purpose of this memorandum is to provide an annual report summarizing groundwater monitoring results for 217 and 317 West 6th Street in Moscow, Idaho. The memorandum includes the following information:

- A brief overview of the history of and work performed at the Site.
- A summary of groundwater monitoring results including sampling dates, water level measurements, water quality parameter data, nitrate and ammonia concentration data, and the QA/QC data validation (see Attachment A, Attachment B, and Attachment C).
- Recommendations for future actions onsite.

2 Site Overview

The 0.84 acre Site is located southwest of the intersection between W. 6th Street and Jackson Street in Moscow, Idaho, between Moscow's historic downtown district and the University of Idaho Campus. The Moscow Urban Renewal Agency (URA) currently owns the Site.

Historically, industrial agricultural businesses and storage of agricultural chemicals supported by the former railroad corridor occupied the Site. Most recently, a retail produce business operated on the northeast corner of the Site from about 2000 through 2010. All Site buildings have been removed and the Site is currently vacant and mostly unpaved, with the exception of a small paved area along the southwestern boundary.

In 2015, the City of Moscow (City), contracted with Alta Science & Engineering, Inc. (Alta) to implement the remedial action strategy presented in the Final Analysis of Brownfields Cleanup Alternatives [ABCA] and Remediation Work Plan [ABCA/Work Plan] for 217 & 317 W. 6th Street Moscow, Idaho (TerraGraphics 2015a) to address nitrate and ammonia concentrations in shallow groundwater and soils.

The ABCA/Work Plan identified remediation standards that ensure current or probable future risk to human health or the environment are eliminated or reduced, based on present and reasonably anticipated future uses of the Site (IDAPA 58.01.18(02)b). This work was completed as part of the Greater Moscow Area Coalition (the Coalition) Assessment Grant BF-00J24101 project and in compliance with the Voluntary Cleanup Program (VCP) agreement between the Idaho Department of Environmental Quality (IDEQ) and the Moscow URA.

In late 2015 and early 2016, Alta implemented remedial actions, including soil excavation, groundwater extraction system installation, and sodium lactate amendment injections (TerraGraphics 2016). The groundwater extraction system, which has been operating since February 2016, consists of three wells (EW-1, EW-2, and EW-3), each equipped with a dedicated 12-volt submersible pump which recovers groundwater from the well and discharges it into the City sanitary sewer. Alta designed the extraction system to remove nitrate- and ammonia-impacted groundwater and prevent it from migrating off the Site.

3 Compliance Monitoring

Annual compliance monitoring began in 2018 to evaluate if ammonia and nitrates in groundwater met the Site remediation goals of 10 milligrams per liter (mg/L) for nitrate and 3.83 mg/L for ammonia. Prior to 2018, groundwater samples were collected several times a year from two onsite monitoring wells (MW-3 and MW-6) until December 2017 when MW-6 was damaged due to site grading activity. As a result, only MW-3 has been sampled during the subsequent compliance monitoring events until this year. During the summer of 2022, MW-6 was relocated and determined to be repairable. In December of 2022, Alta's field crew rehabilitated the well to a condition in which representative groundwater samples could be collected in accordance with the Site-specific Quality Assurance Project Plan (QAPP) (TerraGraphics 2015b). This year's sampling event is the first time MW-6 has been sampled since 2017. Photos of the well rehabilitation are included in Attachment DD and sampling results are included in Table 1 below and Attachment E. MW-6 serves as a downgradient well (see Attachment F for groundwater gradient directions based on prior groundwater level measurements)

4 Well Rehabilitation

As mentioned above, the well monument and well casing of MW-6 was damaged during Site grading activities in 2017 and buried with onsite fill materials. In 2022, the well was unburied. In particular, the poly-vinyl-chloride (PVC) well casing was damaged and could not be properly sealed or capped. In 2022, Alta's field crew collected a depth to water and depth to bottom measurement of the well and determined the well was repairable and could be restored to collect representative groundwater samples. The following steps were taken to rehabilitate MW-6:

- Once MW-6 was located, the area surrounding the well monument was dug out to expose areas of damage. The casing was cracked inside the concrete monument to an extent that it could not be capped and sealed properly.
- The PVC casing was cut below the concrete monument and a new section of 2-inch inside diameter PVC pipe was coupled and glued to bring the casing above grade.
- A new 12-inch diameter EBCO Wheaton well monument was set flush to grade surrounding the well casing, and prior to monumenting in concrete, the casing was cut below grade to be capped with a 2-inch lockable j-plug inside the monument.
- The monument was set in concrete and covered with a tarp for a 24 hour setting period.

- MW-6 was then re-developed per ASTM Standard Guide for Development of Groundwater Monitoring Wells (ASTM 2013). A combination of bailing and over-pumping methods were utilized until turbidity measurements were below 5 NTUs.

5 Extraction System Wells

The extraction well pumps (EW-1, EW-2, a EW-3) are connected to the City sewer for disposal. The extraction system has operated continuously beginning in February 2016 until it was shut down in December 2018 when groundwater in MW-3 met remediation goals for both ammonia and nitrates. Following a rebound in ammonia and nitrate concentrations in 2019, the extraction system was turned back on from January 2020 through January 2023. During this time period, the pumps ran continuously and a total of 13,809,760 gallons of groundwater (3,384,112 gallons in 2020, 4,540,888 gallons in 2021, and 5,884,760 in 2022) were pumped from the Site to the City sewer for disposal.

During the extraction pump assessment, it appeared that the circuit for EW-2 had tripped. Subsequent checks on this circuit indicate this may be a reoccurring issue and the quantity of water pumped from EW-2 was less in 2022 than the previous year (99,4000 gallons in 2022 and 504,523 gallons in 2021).

6 January 2023 Groundwater Sampling

Three samples (including one duplicate sample from MW-6) were collected on January 11, 2023 from MW-3 and MW-6. The highest results from the original/duplicate pair are shown in Table 1. Concentrations of ammonia and nitrate in MW-3 remain above Site remediation goals (see Table 1).

Based on Alta's data quality review, the laboratory and field data were determined to be of acceptable quality. Alta did not reject data or consider data as unusable for this project; therefore, the calculated completeness for this sampling event is 100% (see Attachment C).

Table 1 provides a summary of all groundwater monitoring data for the project. MW-6 serves as the downgradient onsite compliance well.

Table 1. 6th and Jackson Groundwater Monitoring Results

Sample ID	Sample Date	NH_3-N (mg/L)	NO_3/N (mg/L)
MW-3	12/10/2014	**14.2**	**28.4**
	1/11/2016	**28.1**	**45.6**
	2/26/2016	**66.6**	**81.8**
	3/28/2016	**65.4**	**72.9**
	4/19/2016	**85.2**	**78.7**
	6/16/2016	**90.4**	**75.6**
	9/7/2016	**91.9**	**68.2**
	10/13/2016	**70.8**	**60.3**
	12/21/2016	2.31	5.99
	1/27/2017	**4.50**	**20.9**
	3/9/2017	**12.3**	**36.2**
	4/6/2017	**34.3**	**110**
	12/14/2017	**15.6**	**25.6**
	12/31/2018	0.111	7.35
	3/28/2019	**9.85**	**65.8**
	12/19/2019	**29.5**	**15.9**
	1/14/2021	1.14	**47.2**
	1/25/2022	1.04	**25.5**
	1/11/2023	**53.2**	**114**
MW-6	12/10/2014	**66.9**	**51.6**
	1/12/2016	0.0393 J	8.90
	2/26/2016	<0.0500	8.43
	3/28/2016	<0.0501	6.57
	4/19/2016	**5.59**	**14.6**
	6/16/2016	**29.7**	**43.6**
	9/7/2016	**57.9**	**27.9**
	10/13/2016	**40.2**	**49.9**
	12/21/2016	**28.4**	**28.2**
	1/27/2017	0.115	6.23
	3/9/2017	0.011	4.34
	4/6/2017	<0.05	**14.6**
	1/11/2023	<0.20	2.31
Site Remediation Goals		**3.83**	**10.0 †**

Notes:

† = Maximum Contaminant Level (MCL) - IDAPA 58.01.08. Idaho Rules for Public Drinking Water Systems.
Concentrations in **BOLD** are above the Site Remediation Goals.
For duplicate samples, the highest concentration is reported.
NA = Not Applicable
NS = Not Sampled
mg/L = milligram per liter.

J = result is qualified as an estimate based on internal quality control evaluation.
NH_3 = Ammonia analyzed using SM 4500 NH_3 G (SM 2011).
NO_3 = Nitrate analyzed using USEPA 300.0 (USEPA 1993).

7 Conclusions

Although the ammonia and nitrate concentrations in MW-3 met remediation goals in 2018, the well exceeded the nitrate concentrations in three of the past five years and ammonia target concentrations in all subsequent sampling events. MW-3 is a 1-inch pre-pack well.

Ammonia and nitrate concentrations in groundwater samples collected from the rehabilitated well, MW-6, were both below site remediation goals. MW-6 is a 2-inch well. Both wells are screened within the same depth interval.

The differences in concentrations between the two wells may suggest a small source area near MW-3. With MW-6 being a 2-inch well, MW-6 may be a better representation of the site groundwater conditions. MW-6 data suggests that exceeding concentrations of ammonia and nitrate are limited to within the Site boundaries and are not migrating offsite in the presence of the operating extraction wells. Data from MW-6 suggests that continued operation of the groundwater extraction pumps is aiding in the prevention of offsite migration. Additionally, if EW-2 is restored to full function throughout the year, MW-3 may experience more influence from the extraction system.

8 Recommendations

Based upon the available information and data collected during the assessment, Alta recommends the City of Moscow:

- Continue to pump groundwater from existing extraction wells (EW-1, EW-2, and EW-3).
- Perform maintenance and system check on extraction well EW-2 to determine the cause of tripped circuit and provide repairs to ensure proper operation.
- Conduct annual monitoring of ammonia and nitrate concentrations in MW-3 and MW-6.
- Evaluate the continued use of MW-3 for future monitoring events.

9 Attachments

Attachment A: Groundwater Sampling Sheet & Field Notes

Attachment B: Sample Chain of Custody Record

Attachment C: QA/QC Memorandum

Attachment D: Photograph Log

Attachment E: Laboratory Results

Attachment F: Groundwater Gradient Directions

10 References

ASTM, 2013. D5521 / D5521M-13, Standard Guide for Development of Groundwater Monitoring Wells in Granular Aquifers, ASTM International, West Conshohocken, PA, 2005,www.astm.org

TerraGraphics Environmental Engineering, Inc. (TerraGraphics), 2015a. Final Analysis for Brownfields Cleanup Alternatives and Remediation Work Plan for 217 & 317 W. 6th Street Moscow, Idaho. Prepared for the City of Moscow and Moscow Urban Renewal Agency. September 24, 2015.

TerraGraphics, 2015b. Final Quality Assurance Project Plan (QAPP) for 217 & 317 West 6th Street Moscow, Idaho, Environmental Remediation. Prepared for Moscow Urban Renewal Agency. October 16, Revision #3.

TerraGraphics, 2016. Construction and Remediation Report for 217 & 317 W. 6th Street Moscow, Idaho, Revision 0. Prepared for the City of Moscow and Moscow Urban Renewal Agency. August 10, 2016.

Attachment A
Groundwater Sampling Sheet and Field Notes

Alta Science & Engineering, Inc.

GROUNDWATER SAMPLING RECORD

NOTE: Information must be filled in for all gray highlighted cells. All other cells are optional info.

Project: 6TH & JACKSON	Well Number: MW-3
Project Number: 22139	Sample Number: MW-3
Location: MOSCOW, ID	Weather: CLOUDY, 35°F
Date: 1/11/23	Sampler(s): TJ, KM
Depth to Bottom (ft): TJ 1/11/23	Purge Time: 15 MINS
Depth to Water (ft): ~~9.98~~ 9.03	Purge Method: LOW FLOW / PERISTALTIC
DTB-DTW (ft):	Purge Flow Rate (ml/min): 400 ML/MIN
Drawdown once stabilized (feet): 9.57	Total Purge Volume: 2.5 GAL

Conversion Factors (height x factor= vol in Gal)	¾" diameter 0.023	1" diameter 0.041	1 ½" diameter 0.092	2" diameter 0.163	4" diameter 0.652	8" diameter 2.611
Conversion Factors (height x factor= vol in L)	¾" diameter 0.087	1" diameter 0.155	1 ½" diameter 0.348	2" diameter 0.617	4" diameter 2.468	8" diameter 9.884

GROUNDWATER DATA

Purged Volume (Specify L or Gal)	Time	pH	Cond (µS/cm)	Temp (°C)	DO mg/L	Turbidity (NTU)	ORP (mV)	
	0:00	5.77	1626	12.1	0.69	4.00	234.7	DRAW DOWN
	0:05	5.75	1666	12.4	0.44	1.84	228.3	
	0:10	5.76	1681	12.4	0.36	1.73	224.4	
2.5 GAL	0:15	5.78	1670	12.4	0.36	1.72	226.2	
	0:20							9.57

Sampling Date: 1/11/23 | Sampling Method: LOW FLOW | Time Sampled: 10:10

Stabilization Criteria (MUST MEET CRITERIA BETWEEN FINAL 3 CONSECUTIVE MEASUREMENTS COLLECTED 5 MINUTES APART)

Temperature ± 0.2°C	**pH = ± 0.1°**	**DO = ± 10% or 0.2 mg/L**
Turbidity = ± 10%	**SEC = ± 3%**	**ORP = ± 10.0 mV**

Drawdown Criteria = <0.3 feet

Duplicate Sample Number:

Alta
Science & Engineering, Inc.

Container (circle one)	Volume (ml) (circle one)	Preservative (circle one)	# Containers	Other
(Poly), Glass	40, 100, (125), 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, (none)	1	
(Poly), Glass	40, 100, (125), 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none	H2SO4 (1)	
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		

Notes: EXTRACTION PUMP READINGS:

#1: 7,655,200
#2: 1,298,200
#3: 6,461,700

- LET WELL PURGE FOR ~10 MINS PRIOR TO COLLECTING PARAMETERS

Alta
Science & Engineering, Inc.

GROUNDWATER SAMPLING RECORD

NOTE: Information must be filled in for all gray highlighted cells. All other cells are optional info.

Project: 6TH & JACKSON	Well Number: MW-6
Project Number: 22139	Sample Number: MW-6
Location: MOSCOW, ID	Weather: CLOUDY, 36°F
Date: 1/11/23	Sampler(s): TJ/KM
Depth to Bottom (ft): 13.96'	Purge Time: 25 MINS
Depth to Water (ft): 8.56'	Purge Method: PERISTALTIC / LOW FLOW
DTB-DTW (ft): 5.40'	Purge Flow Rate (ml/min): 400ML/MIN
Drawdown once stabilized (feet): 8.00	Total Purge Volume: ~~[illegible]~~ - TJ 1/11/23

Conversion Factors (height x factor= vol in Gal)	¾" diameter 0.023	1" diameter 0.041	1 ½" diameter 0.092	2" diameter 0.163	4" diameter 0.652	8" diameter 2.611
Conversion Factors (height x factor= vol in L)	¾" diameter 0.087	1" diameter 0.155	1 ½" diameter 0.348	2" diameter 0.617	4" diameter 2.468	8" diameter 9.884

GROUNDWATER DATA

Purged Volume (Specify L or Gal)	Time	pH	Cond (µS/cm)	Temp (°C)	DO mg/L	Turbidity (NTU)	ORP (mV)	DTW
	0:00	6.16	1165	12.8	0.95	5.28	145.2	
	0:05	6.15	1316	12.6	0.32	4.46	146.1	8.15
	0:10	6.15	1356	12.5	0.31	2.79	146.0	8.41
	0:15	6.15	1377	12.4	0.30	2.3	124.0	8.47
	0:20	6.15	1386	12.4	0.29	2.15	128.8	8.53
	0:25	6.14	1391	12.4	0.28	1.89	131.2	8.54
3.5 GAL	0:30							

Sampling Date: 1/11/23	Sampling Method: LOW FLOW	Time Sampled: 10:50

Stabilization Criteria (MUST MEET CRITERIA BETWEEN FINAL 3 CONSECUTIVE MEASUREMENTS COLLECTED 5 MINUTES APART)

Temperature ± 0.2°C	**pH = ± 0.1°**	**DO = ± 10% or 0.2 mg/L**
Turbidity = ± 10%	**SEC = ± 3%**	**ORP = ± 10.0 mV**

Drawdown Criteria = <0.3 feet

Duplicate Sample Number: MW-6-FD

Alta
Science & Engineering, Inc.

Container (circle one)	Volume (ml) (circle one)	Preservative (circle one)	# Containers	Other
(Poly), Glass	40, 100, (125), 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, (none)	2	
(Poly), Glass	40, 100, (125), 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none	H2SO4(2)	
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		
Poly, Glass	40, 100, 125, 250, 500, 1,000	Hcl, nitric, NaThio, MeoH, none		

Notes: LET WELL PURGE FOR ~10MINS PRIOR TO COLLECTING GW PARAMETERS

Attachment B
Sample Chain of Custody Record

ANATEK LABS

Chain of Custody Record

Anatek
1282 Alturas Drive, Mc
504 E Sprague Ste D, Sp

MDA0258

Due: 01/25/23

Tu

Please

Company Name: ALTA-SE	Project Manager: TOM JENKINS
Address: 220 EAST 5TH ST. STE. 325	Project Name & #: 6TH & JACKSON - 22139
City: MOSCOW State: ID Zip: 83843	Purchase Order #: 22139
Phone: 208-882-7858	Sampler Name & Phone: TOM JENKINS 208-669-0488
Email Address(es): THOMAS.JENKINS@ALTA-SE.COM	

✓ Normal
__ Next Day*
__ 2nd Day*
__ Other*_____

__ Phone
__ Email

*All rush order requests must have prior approval

List Analyses Requested

Preservative: H_2SO_4 / NA

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Ammonia/N	Nitrate-N
	MW-3	1/11/23 10:10	WW	2	250mL	/	/
	MW-6	1/11/23 10:50	WW	2	250mL	/	/
	MW-6-FD	1/11/23 10:50	WW	2	250mL	/	/

Note Special Instructions/Comments

48 HR HOLD FOR NITRATES

Inspection Checklist

Received Intact?	(Y)	N
Labels & Chains Agree?	(Y)	N
Containers Sealed?	(Y)	N
No VOC Head Space?	Y	~~N~~
Cooler?	(Y)	N
Ice/Ice Packs Present?	Y	~~N~~

Temperature (°C): 13.1
Number of Containers: 6
Shipped Via: _____
Preservative: H2SO4

Date & Time: 11:05 1/11/23
Inspected By: [signature]

	Printed Name	Signature	Company	Date	Time
Relinquished by	TOM JENKINS	[signature]	ALTA-SE	1/11/23	11:01
Received by	Cheyenne Garrett	[signature]	Anatek	1/11/23	11:05
Relinquished by					
Received by					
Relinquished by					
Received by					

Samples submitted to Anatek Labs may be subcontacted to other accredited labs if necessary. This message serves as notice of this possibility. Subcontracted analyses will be clearly noted on the analytical report.

Attachment C
QA/QC Memorandum

Alta Science & Engineering, Inc.

alta-se.com

988 South Longmont Avenue, Suite 200
Boise, Idaho 83706
Ph: (208) 336-7080; Fax: (208) 908-4980

INTERNAL MEMORANDUM

To: Thomas Jenkins, Moscow

From: Rachel Gibeault, Boise

Date: February 9, 2023

Contract Title: City of Moscow – 6th & Jackson Well Sampling 2023

Alta Project No.: 22139

Subject: **QA/QC Review for the 2023 Annual Monitoring of the W. 6th Street and Jackson Street Site in Moscow, Idaho**

1 Introduction

This memorandum provides a summary of the data validation and data quality assessment performed on the groundwater sample results for the groundwater monitoring activities that occurred on January 11, 2023, at the 6th and Jackson site located at 217 and 317 West 6th Street, Moscow, Idaho.

Sampling procedures and the quality assurance/quality control (QA/QC) review followed guidelines set forth in the following documents:

- *Scope of Work [SOW] for 6th and Jackson Well Sampling* (Alta 2022)
- *Final Quality Assurance Project Plan (QAPP) for 217 & 317 W 6th Street Moscow, Idaho* (TerraGraphics 2015)
- *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA 2020)
- *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (USEPA 2009)
- *USEPA Guidance on Environmental Data Verification and Data Validation* (USEPA 2002)

This memorandum discusses the data quality assessment and data validation performed for the batch number listed in Table 1. Data qualifiers used in this review are defined by the U.S. Environmental Protection Agency (USEPA) (2020).

Table 1. Work Order Data Validation

Laboratory	Work Order	Analysis	Matrix	Data Validation Level (USEPA 2009)	Review Conducted by
Anatek Labs, Inc.	MDA0258	NH3-N [a] NO3/N [b]	water	Stage 2A	Alta data validator

[a] ammonia as nitrogen analyzed using Standard Method (SM) 4500 NH_3-G (SM 2011).

[b] nitrate as nitrogen analyzed using USEPA Method 300.0 (USEPA 1993).

2 Data Validation and Quality Assessment Summary of Groundwater Results

Alta's Stage 2A validation of the analytical data and review of the field data are summarized in Table 2. Procedures/checks that require further discussion are explained below the table, as necessary.

Table 2. Data Quality Review Summary for Groundwater

Data Validation Procedure or Check	Acceptable Frequency [a]	Acceptable Performance [b]	Data Qualified?	Discussion Item Number
Completed tailgate safety meeting	Y	Y	--	
Field parameters stabilized	Y	Y	--	
Sample condition upon receipt at laboratory and COC	Y	Y	--	
Preservation	N	Y	N	1
Holding times	Y	Y	N	
Laboratory followed specified analytical methods	Y	Y	N	
Methods and analyses dates are present	Y	Y	N	
Laboratory reported requested target analytes, qualifiers, units, and practical quantitation limits	Y	N	--	2
Method blanks	Y	Y	N	
Laboratory Control Samples	Y	Y	N	
Matrix Spikes	Y	Y	N	
Matrix Spike Duplicates	Y	Y	N	
Field Duplicates	Y	Y	N	3

[a] Frequencies as defined in the QAPP (TerraGraphics 2015).

[b] As defined in the QAPP (TerraGraphics 2015), the SOW (Alta 2022), or based on professional judgment of the data validator.

-- = not applicable

Discussion Items

1. Preservation

   The samples were received at the laboratory with a cooler temperature of 13.1°C, which is above the preservation requirement of 4°C±2°C as specified in the QAPP (TerraGraphics 2015) and SOW (Alta 2022). However, the samples were delivered to the laboratory less than 1 hour after sampling took place. Therefore, although samples did not reach the lower temperature, cooling had already begun. Additionally, the Alta Quality Assurance Officer (QAO) contacted the laboratory regarding the higher cooler temperature and the laboratory responded that it should have no adverse effects on the data. Therefore, no data are qualified based on preservation requirements.

2. Laboratory reported requested practical quantitation limits:

   The practical quantitation limits (PQLs) did not meet QAPP (TerraGraphics 2015) requirements for sample MW-3. However, the PQL for this sample was elevated due to a dilution. Therefore, no data are qualified based on sensitivity issues.

3. Field Duplicate:

   One field duplicate was collected from MW-6, which meets the required frequency. The Alta QAO calculated the relative percent difference (RPD) between the original and duplicate samples as shown below in Table 3. No data are qualified based on the field duplicate analysis as the RPDs for ammonia and nitrate were below the data quality indicator for precision of 30% (TerraGraphics 2015).

Table 3. Field Duplicate Sample Analysis

Sample ID	Sample Date	Analyte	Original Concentration (mg/L)	Duplicate Concentration (mg/L)	RPD
MW-6 / MW-6 FD	1/11/2023	ammonia/N	<0.200	<0.200	NA
		Nitrate-N	2.30	2.31	0%

Relative Percent Difference (RPD) = |X1-X2|/((X1+X2)/2)*100

Where: X1 = Original Concentration and X2 = Duplicate Concentration

mg/L = milligrams per liter

NA = RPD cannot be calculated due to one or more concentrations reported below the practical quantitation limit.

3 Overall Assessment

3.1 Data Accuracy and Precision

Based on this data quality review, Alta determines the laboratory and field data to be of acceptable quality. Accuracy and precision are acceptable based on the laboratory control sample, the matrix spike and matrix spike duplicate, and the field duplicate. Alta's QAO has not qualified any data.

3.2 Data Usability

Alta did not reject data or consider data as unusable for this project; therefore, the calculated completeness for this sampling event is 100%.

4 Resources and References Used

Alta Science & Engineering, Inc. (Alta), 2022. Memorandum of "Scope of Work for 6th and Jackson Well Sampling" addressed to B. Belknap (City of Moscow) from T. Jenkins. October 22.

SM. 2011. Method 4500-NH3: Standard Methods for the Examination of Water and Wastewater. Section D. Ammonia-Selective Electrode Method.

TerraGraphics Environmental Engineering, Inc. (TerraGraphics), 2015. Final Quality Assurance Project Plan (QAPP) for 217 & 317 West 6th Street Moscow, Idaho, Environmental Remediation. Prepared for Moscow Urban Renewal Agency. October 16, Revision #3.

US Environmental Protection Agency (USEPA), 1993. Method 300.0. Determination of Inorganic Anions by Ion Chromatography. Revision2.1. August.

USEPA, 2002. USEPA Guidance on Environmental Data Verification and Data Validation. USEPA QA/G-8; November.

USEPA, 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. OSWER No. 9200.1-85, EPA 540-R-08-005 prepared by the Office of Solid Waste and Emergency Response; January.

USEPA, 2020. National Functional Guidelines for Inorganic Superfund Methods Data Review, (SFAM01.1), Office of Superfund Remediation and Technology Innovation (OSRTI). OLEM 9240.0-66, USEPA-542-R-20-006; November.

Attachment D
Photograph Log

Photo 1

EW-1 gauge

Photo 2

EW-2 gauge

Photo 3

EW-3 gauge

Photo 4

MW-6 casing cut below damaged monument facing north

Alta Science & Engineering, Inc.	PRINT DATE: February 2, 2023	PROJECT MANAGER: Tom Jenkins	PROJECT NAME: Moscow URA – 6th and Jackson	ATTACHMENT D, PHOTO LOG 6th and Jackson – Groundwater Sampling
	PROJECT NUMBER: 22139	CREATED BY: Tom Jenkins		

Photo 5

MW-6 casing cut below monument for repair

Photo 6

MW-6 PVC casing attached to original well casing.

Photo 7

MW-6 PVC cut below grade to fit inside well monument

Photo 8

MW-6 monumented in concrete

Alta Science & Engineering, Inc.	PRINT DATE: February 2, 2023	PROJECT MANAGER: Tom Jenkins	PROJECT NAME: Moscow URA – 6th and Jackson	ATTACHMENT D, PHOTO LOG 6th and Jackson – Groundwater Sampling
	PROJECT NUMBER: 22139	CREATED BY: Tom Jenkins		

Attachment E
Laboratory Results

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client:	Alta Science & Engineering	Work Order:	MDA0258
Address:	220 East 5th St Suite 325	Project:	6th & Jackson - 22139
	Moscow, ID 83843	Reported:	2/2/2023 08:14
Attn:	Tom Jenkins		

Analytical Results Report

Sample Location:	MW - 3		
Lab/Sample Number:	MDA0258-01	Collect Date:	01/11/23 10:10
Date Received:	01/11/23 11:05	Collected By:	Tom Jenkins
Matrix:	Wastewater		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Ammonia/N	53.2	mg/L	20.0	2/1/23 8:51	MMC	SM 4500-NH3 G	
Nitrate/N	114	mg/L	2.00	1/12/23 14:40	BKP	EPA 300.0	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Analytical Results Report

(Continued)

Sample Location:	MW - 6		
Lab/Sample Number:	MDA0258-02	Collect Date:	01/11/23 10:50
Date Received:	01/11/23 11:05	Collected By:	Tom Jenkins
Matrix:	Wastewater		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Ammonia/N	ND	mg/L	0.200	2/1/23 8:51	MMC	SM 4500-NH3 G	
Nitrate/N	2.30	mg/L	0.100	1/12/23 15:01	BKP	EPA 300.0	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Analytical Results Report

(Continued)

Sample Location:	MW - 6 - FD		
Lab/Sample Number:	MDA0258-03	Collect Date:	01/11/23 10:50
Date Received:	01/11/23 11:05	Collected By:	Tom Jenkins
Matrix:	Wastewater		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
Ammonia/N	ND	mg/L	0.200	2/1/23 8:51	MMC	SM 4500-NH3 G	
Nitrate/N	2.31	mg/L	0.100	1/12/23 15:23	BKP	EPA 300.0	

Authorized Signature,

Justin Doty For Todd Taruscio, Laboratory Manager

E1	Concentration estimated. Analyte exceeded calibration range.
PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was spiked or duplicated.

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Quality Control Data

Inorganics

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDA0334 - Anions										
Blank (BDA0334-BLK1)					Prepared & Analyzed: 1/12/2023					
Nitrate-N	ND		0.100	mg/L						
LCS (BDA0334-BS1)					Prepared & Analyzed: 1/12/2023					
Nitrate-N	4.19		0.100	mg/L	4.00		105	90-110		
Matrix Spike (BDA0334-MS1)		**Source: MDA0258-01RE1**			Prepared & Analyzed: 1/12/2023					
Nitrate-N	146	E1	1.00	mg/L	40.0	110	91.4	90-110		
Matrix Spike (BDA0334-MS2)		**Source: MDA0320-01RE1**			Prepared & Analyzed: 1/12/2023					
Nitrate-N	43.2		1.00	mg/L	40.0	0.810	106	90-110		
Matrix Spike Dup (BDA0334-MSD1)		**Source: MDA0258-01RE1**			Prepared & Analyzed: 1/12/2023					
Nitrate-N	147	E1	1.00	mg/L	40.0	110	94.1	90-110	0.743	20
Matrix Spike Dup (BDA0334-MSD2)		**Source: MDA0320-01RE1**			Prepared & Analyzed: 1/12/2023					
Nitrate-N	42.8		1.00	mg/L	40.0	0.810	105	90-110	0.977	20
Batch: BDA0951 - FIA										
Blank (BDA0951-BLK1)					Prepared: 1/31/2023 Analyzed: 2/1/2023					
Ammonia/N	ND		0.200	mg/L						
LCS (BDA0951-BS1)					Prepared: 1/31/2023 Analyzed: 2/1/2023					
Ammonia/N	0.909		0.200	mg/L	1.00		90.9	90-110		
Matrix Spike (BDA0951-MS1)		**Source: MDA0258-01**			Prepared: 1/31/2023 Analyzed: 2/1/2023					
Ammonia/N	143		20.0	mg/L	100	53.2	89.8	80-120		

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Quality Control Data
(Continued)

Inorganics (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDA0951 - FIA (Continued)										
Matrix Spike Dup (BDA0951-MSD1)		**Source: MDA0258-01**			Prepared: 1/31/2023 Analyzed: 2/1/2023					
Ammonia/N	141		20.0	mg/L	100	53.2	87.8	80-120	1.41	20

ANATEK LABS

Chain of Custody Record

Anatek
1282 Alturas Drive, Mc
504 E Sprague Ste D, Sp

MDA0258

Due: 01/25/23

Tu

Please

Company Name: ALTA-SE	Project Manager: TOM JENKINS
Address: 220 EAST 5TH ST. STE. 325	Project Name & #: 6TH & JACKSON - 22139
City: MOSCOW State: ID Zip: 83843	Purchase Order #: 22139
Phone: 208-882-7858	Sampler Name & Phone: TOM JENKINS 208-669-0488
Email Address(es): THOMAS.JENKINS@ALTA-SE.COM	

✓ Normal
__ Next Day*
__ 2nd Day*
__ Other*_____

__ Phone
__ Email

*All rush order requests must have prior approval

List Analyses Requested

Preservative: H_2SO_4 NA

Lab ID	Sample Identification	Sampling Date/Time	Matrix	# of Containers	Sample Volume	Ammonia-N	Nitrate-N
	MW-3	1/11/23 10:10	WW	2	250mL		
	MW-6	1/11/23 10:50	WW	2	250mL		
	MW-6-FD	1/11/23 10:50	WW	2	250mL		

Note Special Instructions/Comments

48 HR HOLD FOR NITRATES

Inspection Checklist

Received Intact?	(Y)	N
Labels & Chains Agree?	(Y)	N
Containers Sealed?	(Y)	N
No VOC Head Space?	Y	~~N~~
Cooler?	(Y)	N
Ice/Ice Packs Present?	Y	~~N~~

Temperature (°C): 13.1
Number of Containers: 6
Shipped Via:
Preservative: H2SO4

Date & Time: 11:05 1/11/23
Inspected By:

	Printed Name	Signature	Company	Date	Time
Relinquished by	TOM JENKINS		ALTA-SE	1/11/23	11:01
Received by	Cheyenne Garrett		Anatek	1/11/23	11:05
Relinquished by					
Received by					
Relinquished by					
Received by					

Samples submitted to Anatek Labs may be subcontacted to other accredited labs if necessary. This message serves as notice of this possibility. Subcontracted analyses will be clearly noted on the analytical report.

MDA0258

Due: 01/25/23

Anatek Labs, Inc.

Sample Receipt and Preservation Form

Client Name: ~~Alta~~ Alta SE

TAT: ~~Normal~~ RUSH: _____ days

Samples Received From: FedEx UPS USPS ~~Client~~ Courier Other: _____

Custody Seal on Cooler/Box: Yes ~~No~~ Custody Seals Intact: Yes No ~~N/A~~

Number of Coolers/Boxes: 1 Type of Ice: Wet Ice Ice Packs Dry Ice ~~None~~

Packing Material: Bubble Wrap Bags Foam/Peanuts Paper ~~None~~ Other: _____

Cooler Temp As Read (°C): 13.1 Cooler Temp Corrected (°C): _____ Thermometer Used: IR-4

				Comments:
Samples Received Intact?	~~Yes~~	No	N/A	
Chain of Custody Present/Complete?	~~Yes~~	No	N/A	
Labels and Chains Agree?	~~Yes~~	No	N/A	
Samples Received Within Hold Time?	~~Yes~~	No	N/A	
Correct Containers Received?	~~Yes~~	No	N/A	
Anatek Bottles Used?	~~Yes~~	No	Unknown	
Total Number of Sample Bottles Received: 6				

				Initial pH:	pH Paper ID:
Samples Properly Preserved?	~~Yes~~	No	N/A	<2 or	
If No, record preservation and pH-after details					
VOC Vials Free of Headspace (<6mm)?	Yes	No	N/A		
VOC Trip Blanks Present?	Yes	No	N/A		

Record preservatives (and lot numbers, if known) for containers below:

p 125ml - H2SO4 - Ammonia x 3

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

p 125ml - NO3 x 3

Received/Inspected By: CAS Date/Time: 11:05 1/11/23

Form F19.01 - Eff 1 Dec 2022

Page 1 of 1

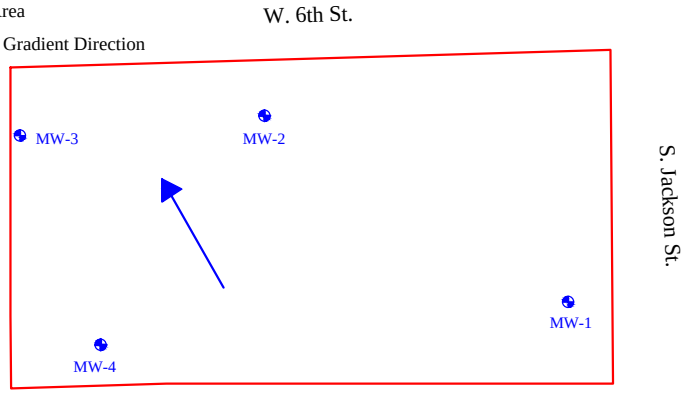
Attachment F
Groundwater Gradient Directions

LEGEND:

- Approximate Site Boundary
- MW-6 Well used in approximating Groundwater Gradient Direction for each timeframe
- Excavation Area
- Approximate Gradient Direction

MAY 2012 (TetraTech)

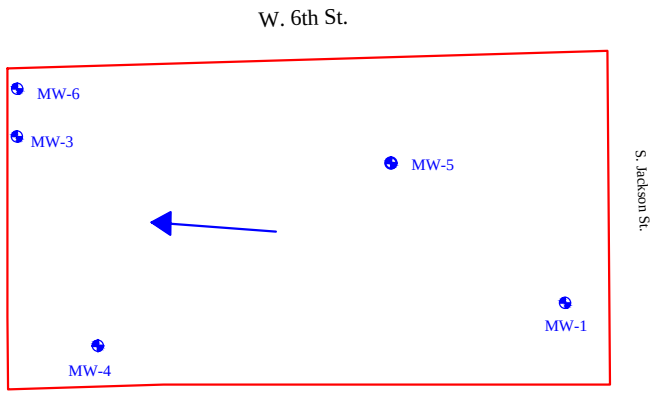
Pre-Remediation



DECEMBER 2014 (TerraGraphics)

Pre-Remediation

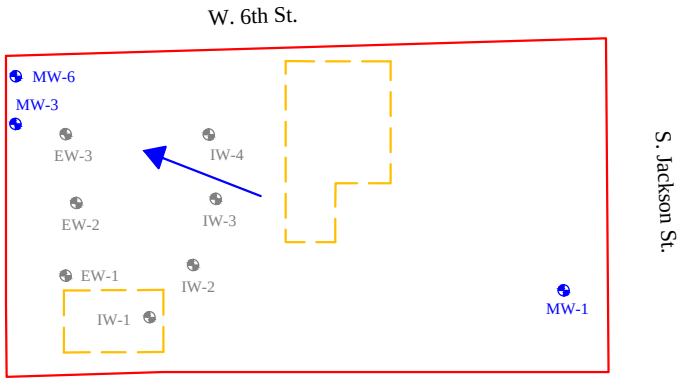
(MW-5 and MW-6 install)



FEBRUARY 2016 (TerraGraphics)

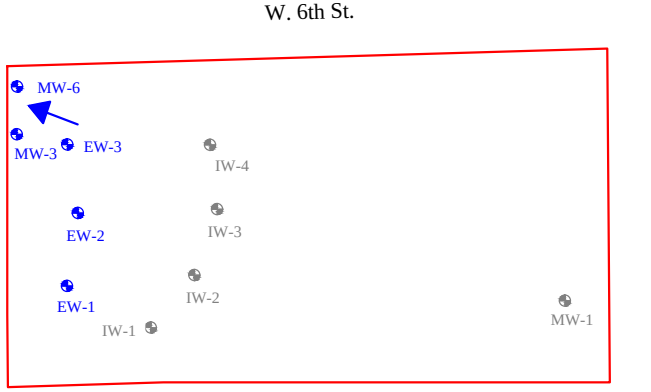
Post Excavation, Remediation System Install, Backfill, and First Injection;

MW-4 and -5 destroyed during excavation



JUNE 2016 (TerraGraphics)

Post Pump Testing and Second Injection



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PROJECT NAME: City of Moscow Brownfields 6th and Jackson

FIGURE X

Approximate Groundwater Gradient Direction over Time

This map was produced using information obtained from several different sources that have not been independently verified. These sources have also not provided information on the precision and accuracy of the data. Information on this map is not a substitute for survey data.