

### 2012 AS-BUILT COMPLETION REPORT

BNSF FORMER MAINTENANCE AND FUELING FACILITY SKYKOMISH, WASHINGTON CONSENT DECREE NO. 07-2-33672-9 SEA

**Submitted by:** 

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**Farallon PN: 683-043** 

For:

BNSF

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April 26, 2013

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### 1.0 INTRODUCTION

This 2012 As-Built Completion Report (As-Built Report) was prepared pursuant to the requirements of Section 400 of Chapter 173-340 of the Washington Administrative Code (WAC 173-340-400), and describes the 2012 remediation construction activities completed for the BNSF Railway Company (BNSF) Former Maintenance and Fueling Facility in Skykomish, Washington (herein referred to as the Site). Site remediation activities are being conducted in accordance with the Cleanup Action Plan prepared by the Washington State Department of Ecology (Ecology) (2007) dated October 2007 (CAP). The remediation activities completed at the Site in 2012 were undertaken by BNSF pursuant to Consent Decree No. 07-2-33672-9 SEA between BNSF and Ecology and are part of an integrated and comprehensive remedial action for the Skykomish Site. The overall cleanup approach for the Site is described in the Master Engineering Design Report (RETEC Group, Inc. 2008). The remediation activities described in this As-Built Report were performed during the period from August through early September 2012.

This document summarizes the activities that were completed in 2012. The work was originally described in the 2010 Engineering Design Report (AECOM Environment [AECOM] 2010c) (2010 EDR), the 2010 Compliance Monitoring Plan Update (AECOM 2010a) (2010 CMP), and the 2011 Remediation As-Built Completion Report (AECOM 2012). This document also summarizes the monitoring that was completed in 2012, as well as other relevant construction activities.

The remainder of this As-Built Report is organized into the following sections:

- Section 2: Project Management and Organization. This section describes the roles and responsibilities of BNSF; Farallon Consulting, L.L.C. (Farallon); and the general contractor, Glacier Environmental Services, Inc. (Glacier), and their subcontractors in the completion of the 2012 remediation activities.
- **Section 3: Site Preparation.** This section describes the general Site preparation activities that were completed prior to the start of construction.
- Section 4: Construction Activities. This section describes the 2012 remediation construction activities, including activities described in the 2010 EDR, the 2010 Construction Plans and Specifications (AECOM 2010b) (2010 CPS), and the 2011 As-Built Remediation Completion Report (AECOM 2012).
- Section 5: Work to be Completed After 2012. This section describes the remaining remediation activities described in the planning documents that will begin or be completed after 2012.
- Section 6: Summary and Conclusions. This section provides an overview of the 2012 remediation activities at the Site and includes a summary of remaining remediation activities.
- Section 7: References. This section lists the documents cited in this report.



### 2.0 PROJECT MANAGEMENT AND ORGANIZATION

As described in the 2010 CPS, AECOM prepared the cleanup action planning documentation pertaining to the excavation of metals-impacted soil on BNSF property at the Site. In 2012, Farallon was selected by BNSF to provide construction observation services for the load-out of stockpiled soil remaining from 2011 remediation activities, and the excavation and load-out of metals-impacted soil in three discrete areas on BNSF property at the Site. In this capacity, Farallon served as liaison for BNSF with contractors, the Town of Skykomish (Town), and local stakeholders. Ecology retained responsibility for regulatory oversight of the remediation project. Brief descriptions of the roles of each contractor, subcontractor, and consultant involved in the 2012 remediation activities are provided below.

### 2.1 GENERAL CONTRACTOR

Glacier was selected by BNSF to perform the construction activities. The Glacier scope of services included:

- Performing utility locates;
- Performing erosion-control activities as required;
- Loading existing stockpiles of petroleum-contaminated and metals-impacted soil into railcars for transport to an authorized disposal facility;
- Excavating approximately 750 cubic yards of metals-impacted soil from three areas on the BNSF property as designated in the CAP;
- Loading the excavated soil into railcars for transport and disposal at an authorized wastehandling facility; and
- Backfilling and compacting excavated areas with material stockpiled on the Site to restore the affected areas of the BNSF property to pre-construction lines and grades.

### 2.2 CONSULTANTS AND CONTRACTORS TO BNSF

The following firms provided services to BNSF and Glacier in support of this project:

- Farallon: Construction observation; compliance monitoring in accordance with the 2010 CMP; and BNSF liaison with contractors, the Town, and local stakeholders;
- TestAmerica Laboratories, Inc.: Chemical analysis of soil samples; and
- Republic Services, Inc.: Impacted soil disposal.



### 3.0 SITE PREPARATION

The following section describes the general site preparation activities that were completed prior to the start of construction for the BNSF stockpile load-out and excavation activities.

### 3.1 PRE-CONSTRUCTION MEETINGS

A pre-construction meeting was held in Skykomish prior to mobilization. Meeting attendees included representatives of Glacier and Farallon. The key items discussed in the meeting were:

- Roles and responsibilities;
- Communication protocol;
- Site health and safety;
- Daily health and safety briefings;
- Project contacts;
- Submittal procedures; and
- Anticipated construction schedule.

### 3.2 TEMPORARY FACILITIES AND CONTROLS

This section describes the temporary facilities and controls employed during the project work to control surface water runoff during construction operations and coordinate truck traffic within the BNSF railyard.

### 3.2.1 Soil Handling Facility

The Soil Handling Facility is located on BNSF property and is covered by asphalt pavement placed over a high-density polyethylene (HDPE) liner (Figure 1). Approximately 1,500 cubic yards of petroleum-contaminated soil and 1,300 cubic yards of metals-impacted soil had been previously stockpiled at this location and was covered with a sheet plastic liner at the beginning of 2012 work. The stockpiled soil in the Soil Handling Facility on BNSF property was material remaining from excavation work performed at the Site during the 2011 construction season.

Soil stockpiled in the Soil Handling Facility during the 2012 work was covered with sheet plastic to prevent rainfall from coming into contact with impacted soils and to prevent wind erosion. The sheet plastic liner material that had been used to cover stockpiles was removed and disposed of with the impacted soil. A portion of the Soil Handling Facility asphalt and HDPE liner were removed to enable metals-impacted soil proximate to this location to be excavated.

### 3.2.2 Temporary Erosion and Sediment Controls

The existing stockpiles and those resulting from the BNSF property shallow metals excavation effort were covered with sheet plastic liner material to protect against rain and wind erosion. Each of the metals-impacted soil excavations on BNSF property was backfilled by Glacier the



same day the material was excavated so no erosion would occur. No precipitation events occurred during the 2012 excavation activities.

### 3.2.3 Railroad Flagger Traffic Control

Due to the proximity of construction to mainline railroad tracks, a railroad flagger was required to coordinate truck traffic within the BNSF property with BNSF personnel. The BNSF flagger alerted construction personnel of train traffic and when it was necessary to temporarily stop construction activities.



### 4.0 CONSTRUCTION ACTIVITIES

The 2012 remediation scope of work included the following activities that were described in the 2010 EDR and 2010 CPS:

- Load-out of impacted soil stockpiles remaining in the Soil Handling Facility from excavation performed during 2011; and
- Excavation and load-out of metals-impacted soil from three designated areas on BNSF property (Figure 1).

Daily field reports documenting this work are provided in Appendix A. Photographs depicting the construction activities are included in Appendix B.

The following subsections describe the 2012 construction activities in detail.

### 4.1 STOCKPILED SOILS LOAD-OUT AND DISPOSAL

Due to limitations in railcar availability, approximately 1,300 cubic yards of metals-impacted soil and approximately 1,500 cubic yards of petroleum- contaminated soil was not transported off the Site for disposal during the 2011 construction season. This soil remained in covered stockpiles within containment areas in the Soil Handling Facility.

The first work performed in 2012 was the load-out of the stockpiled material for transport off the Site to the Republic Services, Inc. Subtitle D waste disposal facility in Roosevelt, Washington. The soil was loaded into railcars using a front-end loader with an on-board scale. The front-end loader on-board scale enabled the railcar capacity to be maximized without exceeding load limits.

A total of 2,580 tons of petroleum-contaminated soil and 2,228 tons of metals-impacted soil that remained from the 2011 remediation activities was loaded and transported off the Site for disposal.

### 4.2 METALS-IMPACTED SOIL EXCAVATIONS

As required by the CAP, areas within the BNSF property impacted by lead and arsenic at concentrations greater than the cleanup levels of 250 and 20 milligrams per kilogram (mg/kg), respectively, were to be excavated to a depth of 2 feet below ground surface (bgs) and backfilled with clean fill. The 2011 Remediation As-Built Completion Report (AECOM 2012) identified three areas that still required excavation (Figures 2 through 4):

- The West End of the BNSF Railyard Area;
- The BNSF Operations Trailer Area; and
- The Soil Stockpile Area.



These areas and excavation control points are depicted on Figure 1 and have been designated as Areas A, B, and C, respectively. Excavation of these areas was completed sequentially to facilitate excavation, stockpiling, and backfilling while minimizing the area of open excavation.

Prior to excavation, the locations of each excavation area were staked by completing a Global Positioning System survey using a survey-quality Trimble instrument. Excavation depths were controlled in the field by manually measuring the depth of cut during the excavation. Excavated soil was temporarily stockpiled in the Soil Handling Facility and covered with sheet plastic to prevent erosion until the material could be loaded and transported for disposal.

### 4.3 EXCAVATION AREA SOIL SAMPLING AND ANALYSIS

In accordance with the 2010 CMP, soil samples were collected at a depth of 1 foot bgs from the excavation sidewalls at approximately 20-foot intervals to document conditions of the final limits of the prescribed excavation areas. The sample locations for the three discrete excavation areas are depicted on Figures 2 through 4. A total of 1,297 tons of metals-impacted soil was removed from the three excavation areas, loaded onto railcars, and transported to the Republic Services, Inc. Subtitle D waste disposal facility in Roosevelt, Washington.

Farallon reviewed the resultant analytical data to ensure that the quality assurance/quality control criteria established in the 2010 CMP were satisfied. The laboratory analytical reports for the samples collected from the final limits of the excavation areas are included in Appendix C.

### 4.4 STOCKPILED SOIL HANDLING AND DISPOSAL

The impacted soil stockpiled in the Soil Handling Facility was loaded onto railcars and transported off the Site to the Republic Services, Inc. Subtitle D waste disposal facility in Roosevelt, Washington. The metals-impacted soil was loaded into the railcars using a front-end loader with an on-board scale to maximize the quantity of soil loaded into each railcar without exceeding load limits. A total of 3,524 tons of metals-impacted soil and 2,580 tons of petroleum-contaminated soil was transported to the disposal facility.

### 4.5 BACKFILL

The BNSF property metals-excavation areas were backfilled with 1.25-inch crushed rock from available backfill material stockpiles on the Site. The backfill material had been delivered and stockpiled at the Site during the 2011 construction season. The backfill was compacted using vibratory equipment to an unyielding condition acceptable to BNSF.



### 5.0 WORK TO BE COMPLETED AFTER 2012

This section describes the remediation activities that were identified in the 2010 EDR and 2010 CPS, but were either not completed during the 2012 construction season or re-scheduled for future years. Subsequent as-built report documentation will describe completion of these activities.

### 5.1 HYDRAULIC CONTROL AND CONTAINMENT SYSTEM OPERATION

The Hydraulic Control and Containment (HCC) System is operated on a 24-hour basis, 7 days a week in accordance with the *Operations and Maintenance Manual for Hydraulic Control and Containment System* (AECOM 2011). HCC System operations in 2013 will cover the period from January 1 through December 31, 2013. The 2013 HCC System Operations Report will be completed in 2014.

### 5.2 AIR SPARGING SYSTEM OPERATION

The air sparging system is operated on a 24-hour basis, 7 days a week in accordance with the *Operations and Maintenance Manual for Air Sparge System-Final* (AECOM 2009). BNSF is currently evaluating the performance and status of the air sparging system to determine whether there is a need for continued operation.

### 5.3 SCHOOLYARD EXCAVATION

During the 2013 construction season, petroleum-contaminated soil and metals-impacted soil will be excavated from the Skykomish Schoolyard, pending access-agreement negotiations with the School District, and Ecology review and approval of plans and specifications. This phase of work will include connecting the School to the Town sewer system, and installing an irrigation system for the Schoolyard. The Schoolyard excavation design package is currently under review by Ecology and the School District. The 2013 remediation schedule can be developed once an access agreement has been signed.

### 5.4 CLEANUP BENEATH THE SCHOOL BUILDING

Remediation of petroleum-contaminated soil beneath the Skykomish School building is planned to begin in 2014 following the installation of the hot water flushing remediation system. Access-agreement negotiations and development of plans and specifications are ongoing with the School District. The final remediation schedule can be developed once an access agreement has been signed.

### 5.5 UTILITY AND TOWN RESTORATION

Final Town right-of-way restoration was completed east of the east side of Sixth Street during the 2011 construction season. Permanent storm sewer, water, electrical utilities, permanent roadways, sidewalks, and landscaping were installed east of Sixth Street. Final restoration from Sixth Street westward is anticipated to be completed after the remedial work has been completed at the Skykomish School.



### 6.0 SUMMARY AND CONCLUSIONS

During 2012, soil excavation, loading, transport, and disposal remediation activities occurred at the BNSF Former Maintenance and Fueling Facility in Skykomish, Washington on behalf of BNSF. The quantities of material removed from the Site and disposed of during the 2012 Skykomish remediation activities included the following:

- 1,297 tons of metals-impacted soil was excavated from three discrete areas on BNSF property and transported to the Republic Services, Inc. Subtitle D landfill in Roosevelt, Washington for disposal.
- 3,524 tons of metals-impacted soil that had been stockpiled at the Soil Handling Facility was transported to the Republic Services, Inc. Subtitle D landfill in Roosevelt, Washington for disposal.
- 2,580 tons of petroleum-contaminated soil that had been stockpiled at the Soil Handling Facility was transported to the Republic Services, Inc. Subtitle D landfill in Roosevelt, Washington for disposal.

Petroleum- and metals-impacted soil stockpiled from the 2011 remediation construction activities at the Site was loaded out from the Soil Handling Facility. No stockpiles of impacted soil remain on the Site at this time.

The remaining areas of metals-impacted soil on BNSF property described in the 2010 CPS were excavated and loaded out for disposal. The only remaining soil requiring excavation and disposal off the Site as described in the 2010 CPS is located in the Skykomish Schoolyard, and likely will be excavated during the 2013 construction season.

Both the HCC system and the air sparging system were operated throughout 2012. The HCC system will continue to be operated in 2013. The air sparging system is continuing operation at this time. However, BNSF is currently evaluating the performance and status of the system to assess the need for continued operation.

The remaining portion of the work described in the 2010 CPS is anticipated to be completed in 2013 and 2014, subject to access negotiations. This work includes excavating impacted soil located in the Skykomish Schoolyard, remediating impacted soil beneath the Skykomish School building, and installing the remaining utilities within and west of Sixth Street. The Skykomish Schoolyard excavation is anticipated to occur during the 2013 construction season, pending access-agreement negotiations.



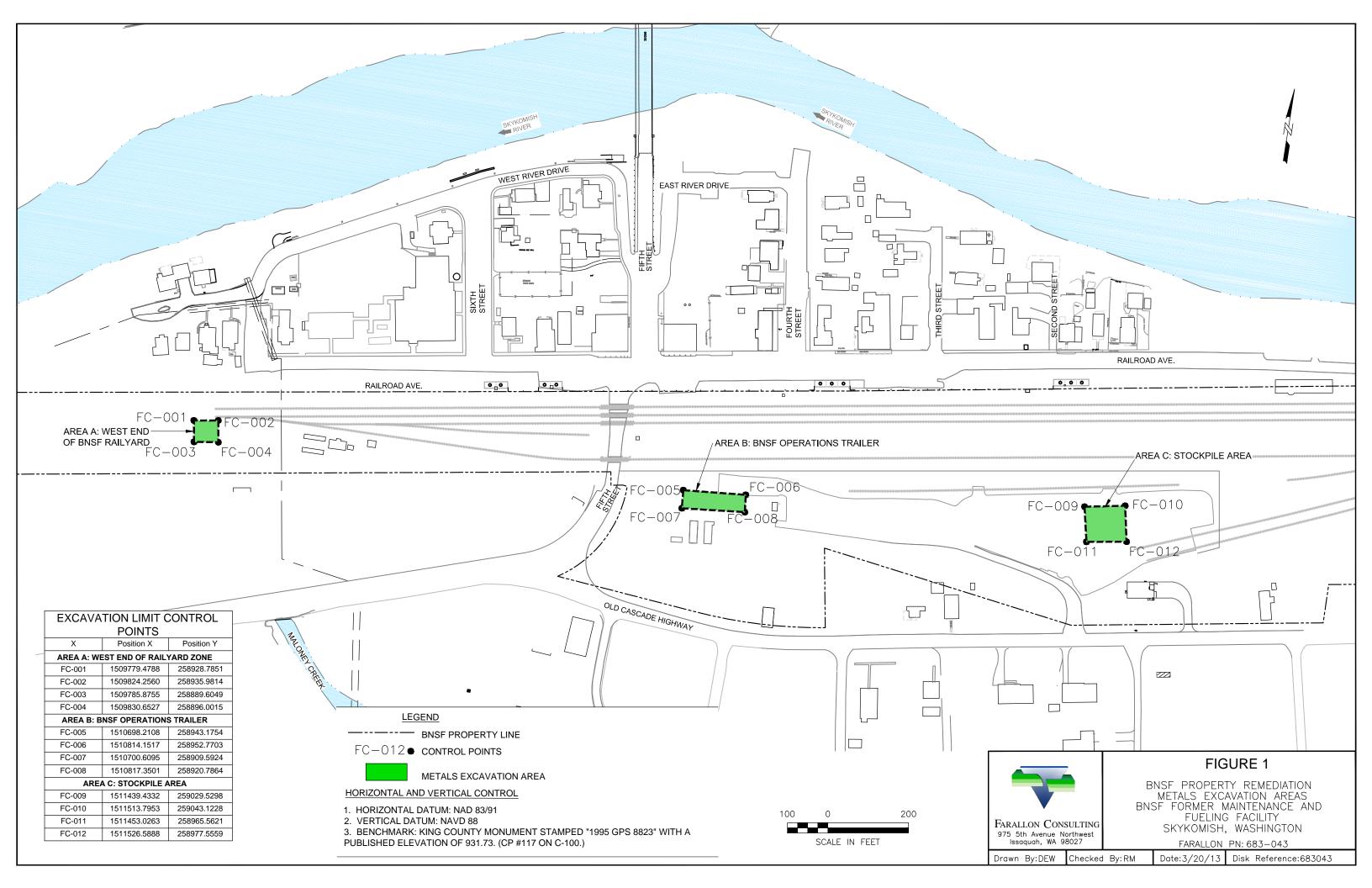
### 7.0 REFERENCES

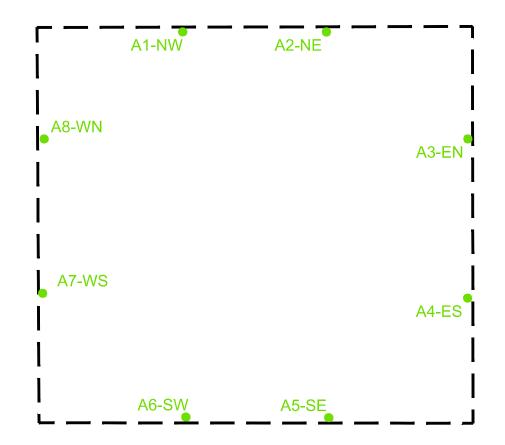
- AECOM Environment (AECOM). 2009. Operations and Maintenance Manual for Air Sparge System-Final. Prepared for BNSF Railway Company. December 30.
- ——. 2010a. 2010 Compliance Monitoring Plan Update (DRAFT), BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for the BNSF Railway Company. February.
- ——. 2010b. 2010 Construction Plans and Specifications, BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for the BNSF Railway Company. March 29.
- ——. 2010c. 2010 Engineering Design Report, BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for the BNSF Railway Company. May 3.
- ———. 2011. Operations and Maintenance Manual for Hydraulic Control and Containment System. Prepared for BNSF Railway Company. April 8.
- ——. 2012. 2011 Skykomish Remediation As-Built Completion Report. BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for the BNSF Railway Company. August.
- RETEC Group, Inc. 2008. Master Engineering Design Report; BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for the BNSF Railway Company. January.
- Washington State Department of Ecology (Ecology). 2007. Cleanup Action Plan for BNSF Former Maintenance and Fueling Facility, Skykomish, Washington. Prepared for BNSF Railway Company. October.

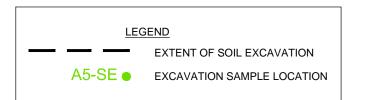
### **FIGURES**

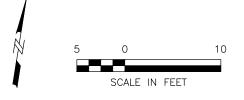
2012 AS-BUILT COMPLETION REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043









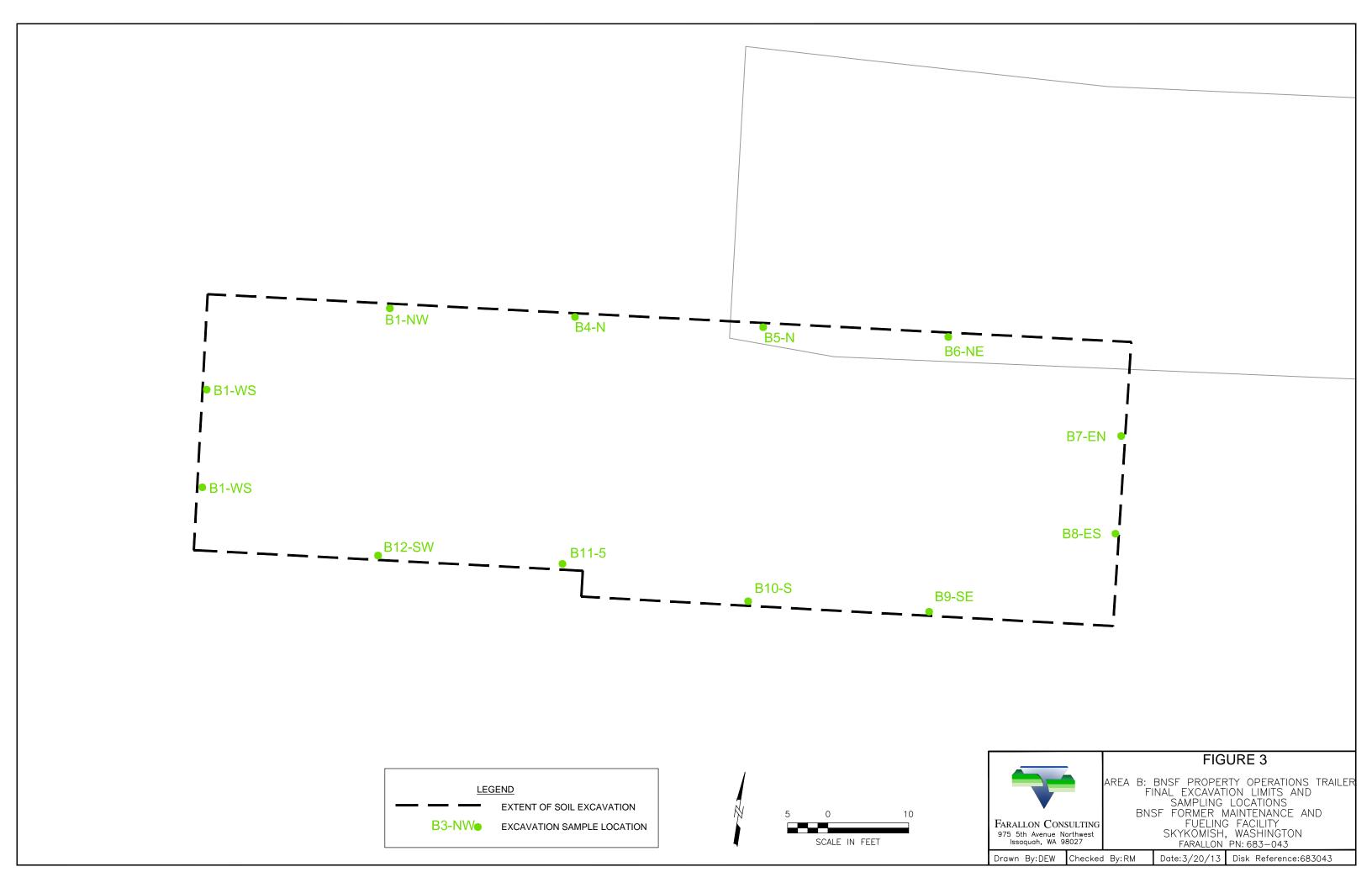


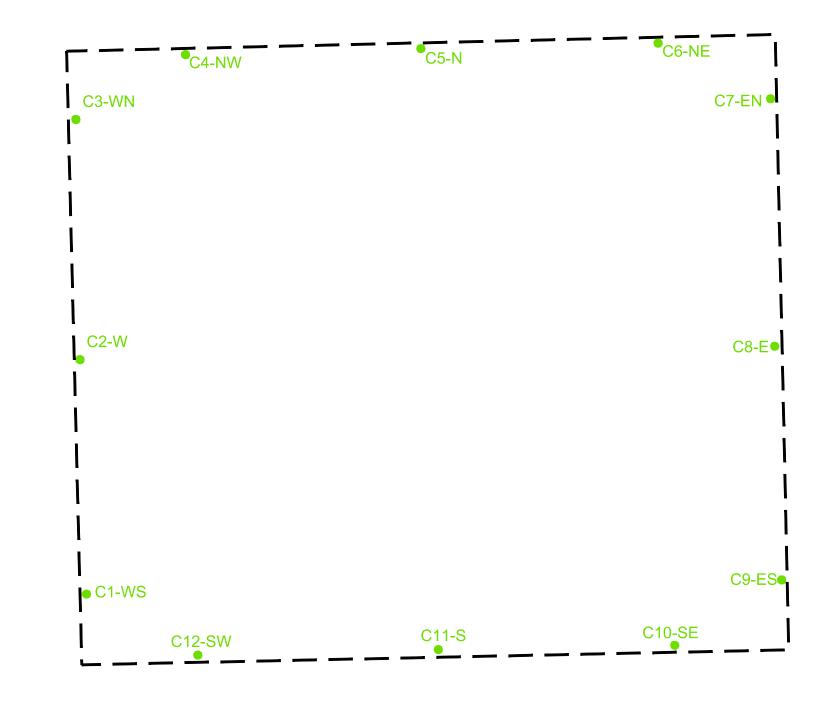
### FIGURE 2

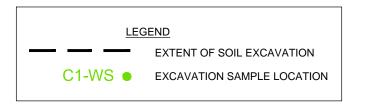
AREA A: WEST END OF BNSF RAILYARD
FINAL EXCAVATION LIMITS AND
SAMPLING LOCATIONS
BNSF FORMER MAINTENANCE AND
FUELING FACILITY
SKYKOMISH, WASHINGTON
FARALLON PN: 683-043

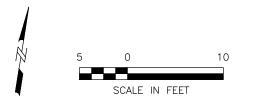
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# FIGURE 4

AREA C: PROPERTY SOIL STOCKPILE AREA FINAL EXCAVATION LIMITS AND SAMPLING LOCATIONS
BNSF FORMER MAINTENANCE AND FUELING FACILITY
SKYKOMISH, WASHINGTON FARALLON PN: 683-043

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### **TABLE**

2012 AS-BUILT COMPLETION REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043

# Table 1 Metals Excavation Areas Soil Analytical Data 2012 As-Built Completion Report Skykomish, Washington Farallon PN: 683-043

Excavation Area Location	Sample Identification	Sample Date	Sample Depth (feet) 1	Arsenic (mg/kg)	Lead (mg/kg)
	A1-NW	09/05/12	1	46	240
	A2-NE	09/05/12	1	30	250
	A3-EN	09/05/12	1	11	240
	A4-ES	09/05/12	1	16	850
Area A:West End of RYZ	A5-SE	09/05/12	1	120	49
	A6-SW	09/05/12	1	100	42
	A7-WS	09/05/12	1	13	48
	A8-WN	09/05/12	1	11	21
	A-DUP-1	09/05/12	1	8.7	200
	B1-WS	09/06/12	1	4.1	5.0
	B2-WN	09/06/12	1	8.3	8.0
	B3-NW	09/06/12	1	3.5	3.2
	B4-N	09/06/12	1	8.2	51
	B5-N	09/06/12	1	7.7	4.5
	B6-NE	09/06/12	1	3.5	130
A D. DNGE O	B7-EN	09/06/12	1	8.7	59
Area B: BNSF Operations Trailer	B8-ES	09/06/12	1	5.5	5.6
	B9-SE	09/06/12	1	6.5	5.2
	B10-S	09/06/12	1	5.0	5.5
	B11-S	09/06/12	1	2.7	11
	B12-SW	09/06/12	1	3.9	4.0
	B-DUP-1	09/06/12	1	3.2	74
	B-DUP-2	09/06/12	1	3.4	4.1

# Table 1 Metals Excavation Areas Soil Analytical Data 2012 As-Built Completion Report Skykomish, Washington

Farallon PN: 683-043

Excavation Area Location	Sample Identification	Sample Date	Sample Depth (feet) 1	Arsenic (mg/kg)	Lead (mg/kg)
	C1-WS	09/07/12	1	7.3	47
	C2-W	09/07/12	1	13	80
	C3-WN	09/07/12	1	6.4	98
	C12-SW	09/07/12	1	5.7	99
	C 11-S	09/10/12	1	4.2	7.2
	C10-SE	09/10/12	1	3.1	3.4
Anna Callanda Inggara 1 Callanda	C4-NW	09/10/12	1	2.5	2.4
Area C: Metals-Impacted Soil Stockpile	C5-N	09/10/12	1	8.0	85
	C6-NE	09/10/12	1	7.9	310
	C7-EN	09/10/12	1	8.3	160
	C8-E	09/10/12	1	8.6	76
	C9-ES	09/10/12	1	7.0	62
	C-DUP-1	09/07/12	1	7.5	43
	C-DUP-2	09/10/12	1	8.9	190
MTCA Method A Cleanup Levels for Soil <sup>3</sup>	•	•		20	250

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

mg/kg = milligrams per kilogram

<sup>&</sup>lt;sup>1</sup>Depth in feet below ground surface.

<sup>&</sup>lt;sup>2</sup>Analyzed by U.S. Environmental Protection Agency Methods 6000/6010/7000 Series.

<sup>&</sup>lt;sup>3</sup>Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended November 2007.

# APPENDIX A 2012 DAILY FIELD NOTES

2012 AS-BUILT COMPLETION REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043



## FIELD REPORT

	Page <u>1</u> of <u>/</u>
Date: 8-29-12 Project #: 683-043	
Project: BAST METALS EXCAUATION	
Client:	Contractor: GLACKER
Weather: OVER CAST	Temp: <u>78°</u>
Equipment Used: PID, GPS	
Hours: 2.6 Mileage: 130	Project Manager: SCRRY PORTECE
Contractor Staff	
Prepared By: ANDREW UNING	Reviewed By:
Comments:	
11:50 ARRIVE ONSITE HEET	THINE FROM GLACIER, WHO
15 INSPECTING WELL PUMPS	
12:00 MAP OUT CENTRAL	EXCAUATION USING 6PS.
	COPT NE CORNER, WHICH IS
	STING
	ICCURACY ON TREATMENT SYSTEM
A	SS GPS APPGARS TO HAVE
Z'-3' NIURACY HARK ON	T ENST EXCAUNTION.
13:15 KIDY OF WEE	T EXCAUATIONS PICK UP NAILS
	6 HARK CORNERS IN
ASPHALT	0.7.00.653
	ALATION CORNERS, EXCEPT PASTER
14:30 26AVE SITE	
17:30 LEAVE 3116	



# FIELD REPORT Page \_\_\_ of \_\_ \_ Project #: \_\_\_\_ 683-043 Project: BNSF Sky METER Excav. Site Address: Sky Komisy Client: \_ BNSF Contractor: Weather: Sunuy \_\_ Temp: Equipment Used: \_\_ Mileage: \_\_\_\_\_ Project Manager: \_\_\_ Hours: Contractor Staff Prepared By: Reviewed By: Comments: AZ-NE 13-EN A4-ES & A-DUR-) 15-SE



# FIELD REPORT (continued)

		a de			F	Page $\frac{2}{2}$ of $\frac{2}{2}$
Project:	Sky Konish	Metal Excavator Dat	e: 9/5/12	Project #: <u></u>	83-043	Гask #:
	~~~~~					
1225	- Area A	is 75°	lo comple	le; AU	sample	s faker
es	cecut 3	remaining	AU S	anole i	taken	canox
1.44	bgs;	idewall. so	uples tak	en in	what a	-PD-ens
OS	CluCles	material;	opprox	0,5-1.5	A bg	5 He
Soci	is black	- with cha	Neval, C	oal cind	er ma	lenal.
Cincler	muterial	is continued	e beyon	nd exca	vation S	dowalk
Duplicate	· Sample	taken at	H4-ES	location	nj Cincle	2
mare	nal exter	uds beyond	0 2 4	695 1h	South-WE	<b>3</b> <del>/</del>
Corner	of Excav	ation; 150	uilcans o	usile w/	2 Contair	evç
each	, each c	entainer can	n hold 3	Bo tous;	Each Re	rilear
will	hold G	eo fons; So,	il 15 bei	ng Stockep	viled in	
pared	Stockpile	avea; SE	cornerist	Stockpile	area,	***********
1350	- Final	Sidenall s	anole k	aken; 61a	ever w	<i>. y</i>
	thuch Excar	when & then	backfill	Avea	4 today	, Take
	nal me	priotos prior	to backt	<i>el [</i>		
1410 -	DT. OPF	SUTE TO FOUND	lon office			
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TAL-1001 (06/08)



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Hours: Mileage:	Project Manager:
Prepared By:	Reviewed By:
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# FIELD REPORT Page of Date: 9/7/12 Project #: 683-043 Task #: Project: Sky Metals Excavation Site Address: Sky Komosig \_\_\_\_\_ Contractor: Glaew Client: Weather: Svy. \_\_\_\_\_ Temp: \_\_\_\_ Equipment Used: \_\_\_\_ Mileage: \_\_\_\_\_ Project Manager: \_\_\_\_ Hours: aricl Johnson Reviewed By: Prepared By: Comments: marked off of delineators;



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# APPENDIX B SITE PHOTOGRAPHS

2012 AS-BUILT COMPLETION REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043



#### **SITE PHOTOGRAPHS**

#### 2012 As-Built Completion Report Skykomish, Washington Farallon PN: 683-043

- **Photograph 1**: Area A: View from FC-001 looking southeast at final excavation limits
- **Photograph 2**: Area A: View from A1-NW sample point looking north at excavation wall soil profile.
- **Photograph 3**: Area A: View from FC-004 looking northwest following compaction of backfill aggregate.
- **Photograph 4**: Area B: View from FC-005 looking southeast at building footings encountered during excavation.
- **Photograph 5**: Area B: View from FC-006 looking west at final excavation limits.
- **Photograph 6**: Area B: View from FC-008 looking northwest at final excavation limits.
- **Photograph 7**: Area B: View from FC-007 looking east following compaction of backfill aggregate.
- **Photograph 8**: Area C: View from FC-009 looking east during excavation.
- **Photograph 9**: Area C: View from FC-012 looking east at metals-impacted soil stockpiled in soil-handling facility.
- **Photograph 10**: Area C: View from FC-012 looking northwest at final excavation limits.
- **Photograph 11:** Loadout: View from soil-handling facility looking east at railcars being loaded with impacted soil.
- **Photograph 12**: Loadout: View from FC-009 looking southwest at stockpile of impacted soil excavated during 2011 remediation.



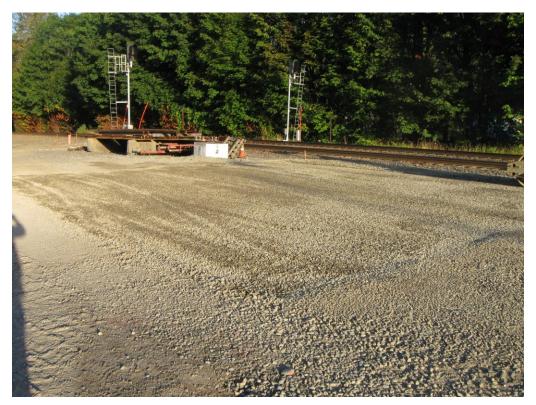


Photograph 1: Area A: View from FC-001 looking southeast at final excavation limits.



Photograph 2: Area A: View from A1-NW sample point looking north at excavation wall soil profile.





Photograph 3: Area A: View from FC-004 looking northwest following compaction of backfill aggregate.



**Photograph 4**: Area B: View from FC-005 looking southeast at building footings encountered during excavation.





**Photograph 5**: Area B: View from FC-006 looking west at final excavation limits.



**Photograph 6**: Area B: View from FC-008 looking northwest at final excavation limits.





Photograph 7: Area B: View from FC-007 looking east following compaction of backfill aggregate.



**Photograph 8**: Area C: View from FC-009 looking east during excavation.





Photograph 9: Area C: View from FC-012 looking east at metals-impacted soil stockpiled in soil-handling facility.



Photograph 10: Area C: View from FC-012 looking northwest at final excavation limits.





Photograph 11: Loadout: View from soil-handling facility looking east at railcars being loaded with impacted soil.



**Photograph 12**: Loadout: View from FC-009 looking southwest at stockpile of impacted soil excavated during 2011 remediation.

## APPENDIX C LABORATORY ANALYTICAL REPORTS

2012 AS-BUILT COMPLETION REPORT BNSF Former Maintenance and Fueling Facility Skykomish, Washington Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-043



THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Seattle 5755 8th Street East Tacoma, WA 98424 Tel: (253)922-2310

TestAmerica Job ID: 580-34879-1

Client Project/Site: Skykomish Metals Excavation

For:

Farallon Consulting LLC 975 5th Avenue NW Suite 100 Issaquah, Washington 98027

Attn: Gerald Portele

Knistène D. aller

Authorized for release by: 9/18/2012 1:04:34 PM

Kristine Allen Project Manager I

kristine.allen@testamericainc.com

·····LINKS ······

Review your project results through

Total Access

**Have a Question?** 



Visit us at: www.testamericainc.com

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.

Client: Farallon Consulting LLC Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

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Sample Summary	54
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9

#### **Case Narrative**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Job ID: 580-34879-1

**Laboratory: TestAmerica Seattle** 

#### Narrative

#### Receipt

The samples were received on 9/11/2012 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

The temperature of the cooler at receipt was 1.1° C.

#### Metals

No analytical or quality issues were noted.

#### **General Chemistry**

No analytical or quality issues were noted.

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0

**4** C

#### **Definitions/Glossary**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 580-34879-1

#### **Qualifiers**

#### Metals

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

#### **Glossary**

TEF

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points

Client: Farallon Consulting LLC

**Client Sample ID: A1-NW** 

Date Collected: 09/05/12 10:30

Date Received: 09/11/12 15:35

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-1

Percent Solids: 79.6

Matrix: Solid

09/17/12 11:06

Method: 6020 - Metals (ICP/MS)  Analyte  Arsenic	Result 46	Qualifier	RL	MDL	Unit mg/Kg	D	Prepared 09/13/12 12:31	Analyzed 09/14/12 13:10	Dil Fac
Lead	240		0.24		mg/Kg	₽	09/13/12 12:31	09/14/12 13:10	10
General Chemistry Analyte Percent Solids	Result	Qualifier	RL 0.10	MDL	Unit %	<u>D</u>	Prepared	Analyzed 09/17/12 11:06	Dil Fac

0.10

%

Client: Farallon Consulting LLC

**Client Sample ID: A2-NE** 

Date Collected: 09/05/12 10:45 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-2

Percent Solids: 80.0

•	
	Matrix: Solid

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	30		0.59		mg/Kg	<del>\</del>	09/13/12 12:31	09/14/12 13:42	10
Lead	250		0.24		mg/Kg	₩	09/13/12 12:31	09/14/12 13:42	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			09/17/12 11:06	1
Percent Moisture	20		0.10		%			09/17/12 11:06	1

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Client Sample ID: A3-EN	Lab Sample ID: 580-34879-3
Date Collected: 09/05/12 11:20	Matrix: Solid
Date Received: 09/11/12 15:35	Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac ₩ 0.53 09/13/12 12:31 09/14/12 13:46 Arsenic 11 mg/Kg 10

Lead	240		0.21		mg/Kg	₩	09/13/12 12:31	09/14/12 13:46	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/17/12 11:06	1
Percent Moisture	16		0.10		%			09/17/12 11:06	1

Client: Farallon Consulting LLC

**Client Sample ID: A4-ES** Date Collected: 09/05/12 11:20

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Matrix: Solid

Percent Solids: 80.4

ab	Sample	ID: 5	80-348	79-4
			Matrice	0-11-4

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16		0.53		mg/Kg	<del>\</del>	09/13/12 12:31	09/14/12 13:50	10
Lead	850		0.21		mg/Kg	₩	09/13/12 12:31	09/14/12 13:50	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			09/17/12 11:30	1
Percent Moisture	20		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: A5-SE** 

Date Collected: 09/05/12 12:20 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-5

Matrix: Solid
Percent Solids: 67.6

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	120		0.57		mg/Kg	<del>\</del>	09/13/12 12:31	09/14/12 13:53	10
Lead	49		0.23		mg/Kg	₽	09/13/12 12:31	09/14/12 13:53	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68		0.10		%			09/17/12 11:30	1
Percent Moisture	32		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

Client Sample ID: A6-SW

Date Collected: 09/05/12 13:45 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-6

Matrix: Solid	
Percent Solids: 91 7	

Method: 6020 - Metals (ICP/MS) Analyte Arsenic	100	Qualifier	RL 0.49	MDL	Unit mg/Kg	D	Prepared 09/13/12 12:31	Analyzed 09/14/12 13:57	Dil Fac
Lead	42		0.19		mg/Kg	345	09/13/12 12:31	09/14/12 13:57	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/17/12 11:30	1
Percent Moisture	8.3		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: A7-WS** 

Date Collected: 09/05/12 13:50

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-7

Matrix: Solid

Percent Solids: 62.6

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.68		mg/Kg	₩	09/13/12 12:31	09/14/12 14:00	10
Lead	48		0.27		mg/Kg	₩	09/13/12 12:31	09/14/12 14:00	10

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	63		0.10		%			09/17/12 11:30	1
Percent Moisture	37		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

Client Sample ID: A8-WN Date Collected: 09/05/12 13:05 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-8

Percent Solids: 65.5

Lab	Sample	יטו.	300-34073-0
			Matrix: Solid

Method: 6020 - Metals (ICP/MS) Analyte Arsenic	Result	Qualifier	RL 0.65	MDL	Unit mg/Kg	<u>D</u>	Prepared 09/13/12 12:31	Analyzed 09/14/12 14:04	Dil Fac
Lead	21		0.26		mg/Kg	₩	09/13/12 12:31	09/14/12 14:04	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	66		0.10		%			09/17/12 11:30	1
Percent Moisture	34		0.10		%			09/17/12 11:30	1

5

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Client: Farallon Consulting LLC

**Client Sample ID: A-DUP-1** Date Collected: 09/05/12 11:20

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Matrix: Solid

Percent Solids: 73.0

ab	Sample	ID:	580-34879-9	
			Matrix: Calid	

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.7		0.65		mg/Kg	₩	09/13/12 12:31	09/14/12 14:07	10
Lead	200		0.26		mg/Kg	₽	09/13/12 12:31	09/14/12 14:07	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/17/12 11:30	1
Percent Moisture	27		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: B1-WS** 

Date Collected: 09/06/12 13:09 Date Received: 09/11/12 15:35

**Percent Solids** 

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-10

09/17/12 11:30

09/17/12 11:30

Mat	rix: Solid
Percent So	lids: 96.5

	Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Arsenic	4.1		0.42		mg/Kg	₩	09/13/12 12:31	09/14/12 14:11	10
	Lead	5.0		0.17		mg/Kg	₽	09/13/12 12:31	09/14/12 14:11	10
-	General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.10

0.10

%

%

97

3.5

Client: Farallon Consulting LLC

Client Sample ID: B2-WN

Date Collected: 09/06/12 13:20 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-11

ab Sample ID: 560-34679-11

Matrix: Solid
Percent Solids: 77.7

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.3		0.56		mg/Kg	₩	09/13/12 12:31	09/14/12 14:14	10
Lead	8.0		0.22		mg/Kg	₩	09/13/12 12:31	09/14/12 14:14	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10		%			09/17/12 11:30	1
Percent Moisture	22		0.10		%			09/17/12 11:30	1

5

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10

Client: Farallon Consulting LLC

Client Sample ID: B3-NW

Date Collected: 09/06/12 13:58 Date Received: 09/11/12 15:35

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-12

Matrix: Calid

09/17/12 11:30

Matrix: Solid
Percent Solids: 92.8

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.5		0.45		mg/Kg	<del>\</del>	09/13/12 12:31	09/14/12 14:25	10
Lead	3.2		0.18		mg/Kg	₽	09/13/12 12:31	09/14/12 14:25	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/17/12 11:30	1

0.10

7.2

6

8

9

Client: Farallon Consulting LLC

Client Sample ID: B4-N

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-13

Date Collected: 09/06/12 14:10	Matrix: Solid
Date Received: 09/11/12 15:35	Percent Solids: 94.8

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.2		0.48		mg/Kg	<u>\$</u>	09/13/12 12:31	09/14/12 14:29	10
Lead	51		0.19		mg/Kg	₩	09/13/12 12:31	09/14/12 14:29	10
General Chemistry	D M	0	DI.	MDI	11		<b>D</b>	Anahmad	Dil 5
Analyte	Result	Qualifier	RL	MIDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/17/12 11:30	1
Percent Moisture	5.2		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

Client Sample ID: B5-N

Date Collected: 09/06/12 14:15

Date Received: 09/11/12 15:35

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-14

Matrix: Solid

09/17/12 11:30

Percent Solids: 93.5

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Arsenic	7.7		0.46		mg/Kg		09/13/12 12:31	09/14/12 14:33	10
Lead	4.5		0.18		mg/Kg	₽	09/13/12 12:31	09/14/12 14:33	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/17/12 11:30	1

0.10

%

6.5

Client: Farallon Consulting LLC

**Client Sample ID: B6-NE** 

Date Collected: 09/06/12 14:49

Date Received: 09/11/12 15:35

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-15

09/17/12 11:30

Percent Solids: 90.1

Matrix: Solid

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.5		0.55		mg/Kg	<u></u>	09/13/12 12:31	09/14/12 14:36	10
Lead	130		0.22		mg/Kg	₽	09/13/12 12:31	09/14/12 14:36	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	90		0.10		%			09/17/12 11:30	

0.10

%

9.9

Client: Farallon Consulting LLC

**Client Sample ID: B7-EN** 

Date Collected: 09/06/12 15:51 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-16

Matrix: Solid	
Percent Solids: 90.7	

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Arsenic	8.7		0.50		mg/Kg	₽	09/13/12 12:31	09/14/12 14:40	10
Lead	59		0.20		mg/Kg	\$	09/13/12 12:31	09/14/12 14:40	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/17/12 11:30	1
Percent Moisture	9.3		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: B8-ES** 

Date Collected: 09/06/12 15:51 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-17

Matrix: Solid	
Percent Solids: 97.1	

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.5		0.49		mg/Kg	*	09/13/12 12:31	09/14/12 14:43	10
Lead	5.6		0.20		mg/Kg	₩	09/13/12 12:31	09/14/12 14:43	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97		0.10		%			09/17/12 11:30	1
Percent Moisture	2.9		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: B9-SE** 

Date Collected: 09/06/12 14:49

Date Received: 09/11/12 15:35

Lead

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-18

© 09/13/12 12:31

Matrix: Solid

09/14/12 14:47

Percent Solids: 97.2

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		0.48		mg/Kg	*	09/13/12 12:31	09/14/12 14:47	10

5.2

General Chemistry Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	97	0.10		%			09/17/12 11:30	1
Percent Moisture	2.8	0.10		%			09/17/12 11:30	1

0.19

mg/Kg

Client: Farallon Consulting LLC

Client Sample ID: B10-S

Date Collected: 09/06/12 14:45

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-19

Matrix: Solid

Percent Solids: 95.2

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		0.50		mg/Kg	<del>*</del>	09/17/12 07:28	09/17/12 11:15	10
Lead	5.5		0.20		mg/Kg	₩	09/17/12 07:28	09/17/12 11:15	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/17/12 11:30	1
Percent Moisture	4.8		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

Client Sample ID: B11-S

Date Collected: 09/06/12 14:40

Date Received: 09/11/12 15:35

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-20

Percent Solids: 83.3

Matrix: Solid

09/17/12 11:30

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.7		0.52		mg/Kg	<u> </u>	09/17/12 07:28	09/17/12 11:40	10
Lead	11		0.21		mg/Kg	₩	09/17/12 07:28	09/17/12 11:40	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10		%			09/17/12 11:30	1

0.10

%

Client: Farallon Consulting LLC

Client Sample ID: B12-SW

Date Collected: 09/06/12 14:34 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-21

Percent Solids: 95.7

_	Matrix: Solid
	Doroont Colido: 05.7

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.9		0.48		mg/Kg	<u></u>	09/17/12 07:28	09/17/12 11:44	10
Lead	4.0		0.19		mg/Kg	₽	09/17/12 07:28	09/17/12 11:44	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10		%			09/17/12 11:30	1
Percent Moisture	4.3		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: B-DUP-1** 

Date Collected: 09/06/12 14:49 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-22

Matrix: Solid
Percent Solids: 72.6

Method: 6020 - Metals (ICP/MS) Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Arsenic	3.2		0.63		mg/Kg	₩	09/17/12 07:28	09/17/12 11:47	10
Lead	74		0.25		mg/Kg	₩	09/17/12 07:28	09/17/12 11:47	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10		%			09/17/12 11:30	1
Percent Moisture	27		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

Client Sample ID: B-DUP-2

Date Collected: 09/06/12 14:49

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-23

Matrix: Solid

Percent Solids: 84.4

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.4		0.48		mg/Kg	<u></u>	09/17/12 07:28	09/17/12 11:51	10
Lead	4.1		0.19		mg/Kg	₽	09/17/12 07:28	09/17/12 11:51	10

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10		%			09/17/12 11:30	1
Percent Moisture	16		0.10		%			09/17/12 11:30	1

Client: Farallon Consulting LLC

**Client Sample ID: C1-WS** 

Date Collected: 09/07/12 14:12

Date Received: 09/11/12 15:35

**Percent Solids** 

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-24

Percent Solids: 93.7

Matrix: Solid

09/17/12 12:15

09/17/12 12:15

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.43		mg/Kg	<del>\</del>	09/17/12 07:28	09/17/12 11:54	10
Lead	47		0.17		mg/Kg	₩	09/17/12 07:28	09/17/12 11:54	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.10

0.10

94

6.3

%

%

Client: Farallon Consulting LLC

**Client Sample ID: C-DUP-1** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-25

Date Collected: 09/07/12 14:12	Matrix: Solid
Date Received: 09/11/12 15:35	Percent Solids: 93.8

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.5		0.46		mg/Kg	<del>\</del>	09/17/12 07:28	09/17/12 11:58	10
Lead	43		0.18		mg/Kg	₩	09/17/12 07:28	09/17/12 11:58	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94		0.10		%			09/17/12 12:15	1
Percent Moisture	6.2		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

Client Sample ID: C2-W

Date Collected: 09/07/12 14:12

Date Received: 09/11/12 15:35

**Percent Solids** 

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-26

Percent Solids: 89.8

Matrix: Solid

09/17/12 12:15

09/17/12 12:15

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13		0.51		mg/Kg	<del>\</del>	09/17/12 07:28	09/17/12 12:02	10
Lead	80		0.20		mg/Kg	₩	09/17/12 07:28	09/17/12 12:02	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.10

0.10

90

10

%

%

Client: Farallon Consulting LLC

**Client Sample ID: C3-WN** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-27

Date Collected: 09/07/12 14:12	Matrix: Solid
Date Received: 09/11/12 15:35	Percent Solids: 93.1

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.4		0.49		mg/Kg	₩	09/17/12 07:28	09/17/12 12:05	10
Lead	98		0.20		mg/Kg	₽	09/17/12 07:28	09/17/12 12:05	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/17/12 12:15	1
Percent Moisture	6.9		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

**Client Sample ID: C12-SW** 

Date Collected: 09/07/12 15:10

Date Received: 09/11/12 15:35

**Percent Solids** 

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-28

09/17/12 12:15

09/17/12 12:15

Percent Solids: 94.2

Matrix: Solid

Method: 6020 - Metals (ICP/MS Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.0	0.47	mg/Kg	☼	09/17/12 07:28	09/17/12 12:09	10
Lead	62	0.19	mg/Kg	₽	09/17/12 07:28	09/17/12 12:09	10
General Chemistry	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

0.10

0.10

94

**5.8** 

%

%

Client: Farallon Consulting LLC

Client Sample ID: C11-S

Date Collected: 09/10/12 13:58

Date Received: 09/11/12 15:35

**Percent Solids** 

**Percent Moisture** 

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-29

Matrix: Solid

09/17/12 12:15

Percent Solids: 85.9

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.6		0.54		mg/Kg	*	09/17/12 07:28	09/17/12 12:52	10
Lead	76		0.21		mg/Kg	₩	09/17/12 07:28	09/17/12 12:52	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/17/12 12:15	1

0.10

%

86

Client: Farallon Consulting LLC

Client Sample ID: C10-SE

Date Collected: 09/10/12 13:58 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-30

Matrix: Solid
Percent Solids: 91.5

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.3		0.49		mg/Kg	*	09/17/12 07:28	09/17/12 12:23	10
Lead	160		0.20		mg/Kg	₩	09/17/12 07:28	09/17/12 12:23	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/17/12 12:15	1
Percent Moisture	8.5		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

**Client Sample ID: C-DUP-2** 

Date Collected: 09/10/12 13:58 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-31

Matrix: Sol	id
Percent Solids: 91	3

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.9		0.47		mg/Kg	₽	09/17/12 07:28	09/17/12 12:27	10
Lead	190		0.19		mg/Kg	₩	09/17/12 07:28	09/17/12 12:27	10
General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91		0.10		%			09/17/12 12:15	1
Percent Moisture	8.7		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-32

Percent Solids: 85.7

**Client Sample ID: C4-NW** Date Collected: 09/10/12 14:10 Matrix: Solid Date Received: 09/11/12 15:35

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.7		0.58		mg/Kg	<u></u>	09/17/12 07:28	09/17/12 12:30	10
Lead	99		0.23		mg/Kg	₽	09/17/12 07:28	09/17/12 12:30	10
_									

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			09/17/12 12:15	1
Percent Moisture	14		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

**Client Sample ID: C5-N** 

Date Collected: 09/10/12 14:10

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-33

Percent Solids: 93.1

Matrix: Solid

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.2		0.46		mg/Kg	<del>\</del>	09/17/12 07:28	09/17/12 12:34	10
Lead	7.2		0.18		mg/Kg	₽	09/17/12 07:28	09/17/12 12:34	10

General Chemistry Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			09/17/12 12:15	1
Percent Moisture	6.9		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

**Client Sample ID: C6-NE** 

Date Collected: 09/10/12 14:10 Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-34

Percent Solids: 95.0

 p.:-			• . • .		
				0 - 11 -1	
		IV	ıatrıx:	Solid	
	_				

Method: 6020 - Metals (ICP/MS) Analyte	Result Qu	ualifier RL	MDL Uni	it D	Prepared	Analyzed	Dil Fac
Arsenic	3.1	0.48	mg.	g/Kg <sup>☆</sup>	09/17/12 07:28	09/17/12 12:38	10
Lead	3.4	0.19	mg.	g/Kg <sup>☼</sup>	09/17/12 07:28	09/17/12 12:38	10

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95		0.10		%			09/17/12 12:15	1
Percent Moisture	5.0		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Client Sample ID: C7-EN	Lab Sample ID: 580-34879-35
Date Collected: 09/10/12 15:30	Matrix: Solid
Date Received: 09/11/12 15:35	Percent Solids: 95.7

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5		0.47		mg/Kg	<u>\$</u>	09/17/12 07:28	09/17/12 12:41	10
Lead	2.4		0.19		mg/Kg	₩	09/17/12 07:28	09/17/12 12:41	10
General Chemistry							_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96		0.10		%			09/17/12 12:15	1
Percent Moisture	4.3		0.10		%			09/17/12 12:15	1

Client: Farallon Consulting LLC

Client Sample ID: C8-E

Date Collected: 09/10/12 16:18

Date Received: 09/11/12 15:35

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-36

Matrix: Solid

matrix. Cond	
Percent Solids: 88.5	

Method: 6020 - Metals (ICP/MS) Analyte Arsenic	Result 8.0	Qualifier	RL 0.48	MDL	Unit mg/Kg	D	Prepared 09/17/12 07:28	Analyzed 09/17/12 12:45	Dil Fac
Lead	85		0.19		mg/Kg	₩	09/17/12 07:28	09/17/12 12:45	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			09/17/12 12:15	1
Percent Moisture	11		0.10		%			09/17/12 12:15	1

6

8

9

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-37

Percent Solids: 92.3

**Client Sample ID: C9-ES** Date Collected: 09/10/12 16:40 Matrix: Solid

Date Received: 09/11/12 15:35

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.9		0.50		mg/Kg	*	09/17/12 07:28	09/17/12 12:48	10
Lead	310		0.20		mg/Kg	₩	09/17/12 07:28	09/17/12 12:48	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10		%			09/17/12 12:15	1
Percent Moisture	7.7		0.10		%			09/17/12 12:15	1

Client Sample ID: Method Blank

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

#### Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-119991/22-A

**Matrix: Solid** 

Analysis Batch: 120157

Prep Type: Total/NA

mg/Kg

mg/Kg

mg/Kg

96

97

Ü

80 - 120

80 - 120

80 - 120

Client Sample ID: A1-NW

20

**Prep Batch: 119991** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/13/12 12:31	09/14/12 13:03	10
Lead	ND		0.20		mg/Kg		09/13/12 12:31	09/14/12 13:03	10

мв мв

Lab Sample ID: LCS 580-119991/23-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Analyte

Arsenic

Lead

Lead

Lead

Analysis Batch: 120157

**Prep Batch: 119991** LCS LCS Spike %Rec. Result Qualifier Added Unit %Rec Limits 200 195 98 80 - 120 mg/Kg

48.2

48.5

296

Lab Sample ID: LCSD 580-119991/24-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

50.0

50.0

62.5

**Matrix: Solid** 

Analysis Batch: 120157

**Prep Batch: 119991** Spike LCSD LCSD %Rec. RPD Limit Analyte Added Result Qualifier Unit D %Rec Limits RPD Arsenic 200 198 mg/Kg 99 80 - 120 20

Lab Sample ID: 580-34879-1 MS Client Sample ID: A1-NW Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 120157 **Prep Batch: 119991** Sample Sample Spike MS MS %Rec. Qualifier Added %Rec Limits Analyte Result Result Qualifier Unit D ₽ 250 99 Arsenic 46 295 mg/Kg 80 - 120

Lab Sample ID: 580-34879-1 MSD

240

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 120157 **Prep Batch: 119991** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	46		242	330		mg/Kg	<del>-</del>	117	80 - 120	11	20
Lead	240		60.5	335	F	mg/Kg	₩	155	80 - 120	12	20

Lab Sample ID: 580-34879-1 DU Client Sample ID: A1-NW **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 120157

**Prep Batch: 119991** Sample Sample DU DU RPD Qualifier RPD Analyte Result Result Qualifier Unit D Limit 77 Arsenic 46 49.0 mg/Kg 20 6 ₽ 256 Lead 240 mg/Kg 20 6

Lab Sample ID: MB 580-120106/23-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 120278** 

Prep Type: Total/NA Prep Batch: 120106

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.50		mg/Kg		09/17/12 07:28	09/17/12 11:00	10
Lead	ND		0.20		mg/Kg		09/17/12 07:28	09/17/12 11:00	10

₩

108

mg/Kg

80 - 120

Project/Site: Skykomish Metals Excavation

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

Lab Sample ID: LCS 580-120106/24-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 120278 Prep Batch: 120106

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	 200	207		mg/Kg		104	80 - 120	
Lead	50.0	49.5		mg/Kg		99	80 - 120	

Lab Sample ID: LCSD 580-120106/25-A Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Total/NA Analysis Batch: 120278 **Prep Batch: 120106** LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits Limit Arsenic 200 207 104 80 - 120 20 mg/Kg 0 Lead 50.0 49.9 mg/Kg 100 80 - 120

Lab Sample ID: 580-34879-19 MS Client Sample ID: B10-S **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 120278 Prep Batch: 120106

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Arsenic 199 229 mg/Kg ₩ 112 80 - 120 5.0

Lab Sample ID: 580-34879-19 MSD Client Sample ID: B10-S

59 2

49.8

5.5

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 120278 Prep Batch: 120106** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	5.0		195	227		mg/Kg	<del>-</del> <del>-</del>	114	80 - 120	1	20
Lead	5.5		48.8	59.5		mg/Kg	₩	111	80 - 120	1	20

Lab Sample ID: 580-34879-19 DU Client Sample ID: B10-S Matrix: Solid Prep Type: Total/NA

**Analysis Batch: 120278** Prep Batch: 120106

-	Sample	Sample	DU	DU			•		RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Arsenic	5.0		4.99		mg/Kg	₩		0.8	20
Lead	5.5		5.41		mg/Kg	☼		0.9	20

#### Method: D 2216 - Percent Moisture

Lab Sample ID: 580-34965-A-13 DU Client Sample ID: Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch, 120206

Lead

Analysis Batch: 120206									
	Sample	Sample	DU	DU				RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
Percent Solids	79		79		%		 0.6	20	
Percent Moisture	21		21		%		2	20	

Lab Sample ID: 580-34879-4 DU Client Sample ID: A4-ES Prep Type: Total/NA

**Matrix: Solid** 

Analysis Ratch: 120210

Alialysis Batch. 120210								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	80		 77		%		 4	20

#### **QC Sample Results**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

#### Method: D 2216 - Percent Moisture (Continued)

Lab Sample ID: 580-34879-4 DU Client Sample ID: A4-ES **Matrix: Solid Prep Type: Total/NA** 

**Analysis Batch: 120210** 

	Sample	Sample	DU	DU				RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit	
Percent Moisture	20		 23		%	· <del></del>	 15	20	

Lab Sample ID: 580-34879-24 DU Client Sample ID: C1-WS **Prep Type: Total/NA** 

**Matrix: Solid** 

Analysis Batch: 120216

,	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Percent Solids	94		95		%		 0.9	20
Percent Moisture	6.3		5.5		%		14	20

Project/Site: Skykomish Metals Excavation

Client Sample ID: A1-NW

Client Sample ID: A2-NE

Date Collected: 09/05/12 10:45

Date Received: 09/11/12 15:35

Date Collected: 09/05/12 10:30 Date Received: 09/11/12 15:35

Lab Sample ID: 580-34879-1

**Matrix: Solid** 

Percent Solids: 79.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:10	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120206	09/17/12 11:06	RS	TAL SEA

Lab Sample ID: 580-34879-2

Percent Solids: 80.0

**Matrix: Solid** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:42	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120206	09/17/12 11:06	RS	TAL SEA

**Client Sample ID: A3-EN** Lab Sample ID: 580-34879-3 Date Collected: 09/05/12 11:20

**Matrix: Solid** Percent Solids: 84.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:46	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120206	09/17/12 11:06	RS	TAL SEA

**Client Sample ID: A4-ES** Lab Sample ID: 580-34879-4

Date Collected: 09/05/12 11:20 Date Received: 09/11/12 15:35

Date Received: 09/11/12 15:35

**Matrix: Solid** Percent Solids: 80.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:50	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: A5-SE Lab Sample ID: 580-34879-5

Date Collected: 09/05/12 12:20

**Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 67.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:53	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Project/Site: Skykomish Metals Excavation

Client Sample ID: A6-SW

Date Collected: 09/05/12 13:45 Date Received: 09/11/12 15:35

Client Sample ID: A7-WS

Date Collected: 09/05/12 13:50

Total/NA

Total/NA

Lab Sample ID: 580-34879-6

Matrix: Solid

Percent Solids: 91.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B		- <del></del> -	119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 13:57	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Lab Sample ID: 580-34879-7

**FCW** 

RS

**Matrix: Solid** 

Percent Solids: 62.6

TAL SEA

TAL SEA

TAL SEA

Lab

Date Received: 09/11/12 15:35 Batch Batch Dilution Batch Prepared Method **Prep Type** Туре Run Factor Number or Analyzed Analyst Total/NA Prep 3050B 119991 09/13/12 12:31 ZF

Client Sample ID: A8-WN Lab Sample ID: 580-34879-8

120157

120210

09/14/12 14:00

09/17/12 11:30

10

1

Date Collected: 09/05/12 13:05 Date Received: 09/11/12 15:35

6020

D 2216

Analysis

Analysis

**Matrix: Solid** Percent Solids: 65.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:04	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: A-DUP-1 Lab Sample ID: 580-34879-9

Date Collected: 09/05/12 11:20

**Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 73.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:07	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B1-WS Lab Sample ID: 580-34879-10

Date Collected: 09/06/12 13:09 Matrix: Solid Date Received: 09/11/12 15:35 Percent Solids: 96.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>		119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:11	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Project/Site: Skykomish Metals Excavation

Client Sample ID: B2-WN

Date Collected: 09/06/12 13:20 Date Received: 09/11/12 15:35

Lab Sample ID: 580-34879-11

Matrix: Solid Percent Solids: 77.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>		119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:14	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B3-NW Lab Sample ID: 580-34879-12 Date Collected: 09/06/12 13:58 **Matrix: Solid** 

Date Received: 09/11/12 15:35 Percent Solids: 92.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:25	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B4-N Lab Sample ID: 580-34879-13

Date Collected: 09/06/12 14:10 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 94.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:29	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B5-N Lab Sample ID: 580-34879-14

Date Collected: 09/06/12 14:15 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 93.5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:33	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B6-NE Lab Sample ID: 580-34879-15 Date Collected: 09/06/12 14:49

**Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 90.1

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA	
Total/NA	Analysis	6020		10	120157	09/14/12 14:36	FCW	TAL SEA	
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA	

Project/Site: Skykomish Metals Excavation

**Client Sample ID: B7-EN** 

Date Collected: 09/06/12 15:51 Date Received: 09/11/12 15:35 Lab Sample ID: 580-34879-16

Matrix: Solid
Percent Solids: 90.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>	<del></del>	119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B8-ES Lab Sample ID: 580-34879-17

Date Collected: 09/06/12 15:51

Date Received: 09/11/12 15:35

Matrix: Solid
Percent Solids: 97.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:43	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B9-SE Lab Sample ID: 580-34879-18

Date Collected: 09/06/12 14:49

Matrix: Solid

Date Received: 09/11/12 15:35

Percent Solids: 97.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			119991	09/13/12 12:31	ZF	TAL SEA
Total/NA	Analysis	6020		10	120157	09/14/12 14:47	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B10-S Lab Sample ID: 580-34879-19

Date Collected: 09/06/12 14:45

Date Received: 09/11/12 15:35

Matrix: Solid
Percent Solids: 95.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:15	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B11-S Lab Sample ID: 580-34879-20

 Date Collected: 09/06/12 14:40
 Matrix: Solid

 Date Received: 09/11/12 15:35
 Percent Solids: 83.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>		120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:40	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Project/Site: Skykomish Metals Excavation

Client Sample ID: B12-SW

Date Collected: 09/06/12 14:34 Date Received: 09/11/12 15:35

Lab Sample ID: 580-34879-21

Matrix: Solid Percent Solids: 95.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>	- <del></del>	120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:44	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B-DUP-1 Lab Sample ID: 580-34879-22 Date Collected: 09/06/12 14:49 **Matrix: Solid** 

Date Received: 09/11/12 15:35 Percent Solids: 72.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B		·	120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:47	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: B-DUP-2 Lab Sample ID: 580-34879-23

Date Collected: 09/06/12 14:49 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 84.4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:51	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120210	09/17/12 11:30	RS	TAL SEA

Client Sample ID: C1-WS Lab Sample ID: 580-34879-24

Date Collected: 09/07/12 14:12 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 93.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:54	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C-DUP-1 Lab Sample ID: 580-34879-25

Date Collected: 09/07/12 14:12 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 93.8

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 11:58	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Project/Site: Skykomish Metals Excavation

Client Sample ID: C2-W

Date Collected: 09/07/12 14:12 Date Received: 09/11/12 15:35

Lab Sample ID: 580-34879-26

Matrix: Solid Percent Solids: 89.8

**Matrix: Solid** 

**Matrix: Solid** 

**Matrix: Solid** 

Percent Solids: 85.9

TAL SEA

Percent Solids: 94.2

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	<del></del>		120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:02	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Dilution

Factor

10

1

Run

Client Sample ID: C3-WN Lab Sample ID: 580-34879-27

Batch

09/17/12 12:15

Number

120106

120278

120216

Date Collected: 09/07/12 14:12

Date Received: 09/11/12 15:35

**Prep Type** 

Total/NA

Total/NA

Total/NA

Batch

Туре

Prep

Analysis

Analysis

Batch

Method

3050B

6020

D 2216

	P	ercent Solids: 93.1
Prepared		
or Analyzed	Analyst	Lab
09/17/12 07:28	RL	TAL SEA
09/17/12 12:05	FCW	TAL SEA

RS

Client Sample ID: C12-SW Lab Sample ID: 580-34879-28

Date Collected: 09/07/12 15:10

Date Received: 09/11/12 15:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAI SEA

Client Sample ID: C11-S Lab Sample ID: 580-34879-29

Date Collected: 09/10/12 13:58

Date Received: 09/11/12 15:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:52	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C10-SE Lab Sample ID: 580-34879-30

Date Collected: 09/10/12 13:58 Date Received: 09/11/12 15:35

**Matrix: Solid** Percent Solids: 91.5

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA	-
Total/NA	Analysis	6020		10	120278	09/17/12 12:23	FCW	TAL SEA	
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA	

Project/Site: Skykomish Metals Excavation

Client Sample ID: C-DUP-2

Date Collected: 09/10/12 13:58 Date Received: 09/11/12 15:35 Lab Sample ID: 580-34879-31

Matrix: Solid
Percent Solids: 91.3

_	Batch	Batch Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:27	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C4-NW

Date Collected: 09/10/12 14:10

Lab Sample ID: 580-34879-32

Matrix: Solid

Date Received: 09/11/12 15:35 Percent Solids: 85.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:30	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C5-N Lab Sample ID: 580-34879-33

 Date Collected: 09/10/12 14:10
 Matrix: Solid

 Date Received: 09/11/12 15:35
 Percent Solids: 93.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:34	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C6-NE Lab Sample ID: 580-34879-34

Date Collected: 09/10/12 14:10

Matrix: Solid

Date Received: 09/11/12 15:35

Percent Solids: 95.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:38	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

Client Sample ID: C7-EN Lab Sample ID: 580-34879-35

Date Collected: 09/10/12 15:30 Matrix: Solid
Date Received: 09/11/12 15:35 Percent Solids: 95.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:41	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

#### **Lab Chronicle**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID: 580-34879-36

Matrix: Solid

Percent Solids: 88.5

Client Sample ID: C8-E Date Collected: 09/10/12 16:18

Date Received: 09/11/12 15:35

		Batch	Batch		Dilution	Batch	Prepared		
F	Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Ī	Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
1	Total/NA	Analysis	6020		10	120278	09/17/12 12:45	FCW	TAL SEA
_1	Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

**Client Sample ID: C9-ES** Lab Sample ID: 580-34879-37

Date Collected: 09/10/12 16:40 **Matrix: Solid** Date Received: 09/11/12 15:35 Percent Solids: 92.3

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			120106	09/17/12 07:28	RL	TAL SEA
Total/NA	Analysis	6020		10	120278	09/17/12 12:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	120216	09/17/12 12:15	RS	TAL SEA

**Laboratory References:** 

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

## **Certification Summary**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

#### **Laboratory: TestAmerica Seattle**

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	<b>Expiration Date</b>
Alaska (UST)	State Program	10	UST-022	03-04-13
California	NELAC	9	1115CA	01-31-13
L-A-B	DoD ELAP		L2236	01-19-13
L-A-B	ISO/IEC 17025		L2236	01-19-13
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAC	10	WA100007	11-06-12
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-13

9

4

5

6

Q

16

## **Sample Summary**

Client: Farallon Consulting LLC

Project/Site: Skykomish Metals Excavation

TestAmerica Job ID: 580-34879-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-34879-1	A1-NW	Solid	09/05/12 10:30 0	9/11/12 15:35
580-34879-2	A2-NE	Solid	09/05/12 10:45 0	9/11/12 15:35
580-34879-3	A3-EN	Solid	09/05/12 11:20 0	9/11/12 15:35
580-34879-4	A4-ES	Solid	09/05/12 11:20 0	9/11/12 15:35
580-34879-5	A5-SE	Solid	09/05/12 12:20 0	9/11/12 15:35
580-34879-6	A6-SW	Solid	09/05/12 13:45 0	9/11/12 15:35
580-34879-7	A7-WS	Solid	09/05/12 13:50 0	9/11/12 15:35
580-34879-8	A8-WN	Solid	09/05/12 13:05 0	9/11/12 15:35
580-34879-9	A-DUP-1	Solid	09/05/12 11:20 0	9/11/12 15:35
580-34879-10	B1-WS	Solid	09/06/12 13:09 0	9/11/12 15:35
580-34879-11	B2-WN	Solid	09/06/12 13:20 0	9/11/12 15:35
580-34879-12	B3-NW	Solid	09/06/12 13:58 0	9/11/12 15:35
580-34879-13	B4-N	Solid	09/06/12 14:10 0	9/11/12 15:35
580-34879-14	B5-N	Solid	09/06/12 14:15 0	9/11/12 15:35
580-34879-15	B6-NE	Solid	09/06/12 14:49 0	9/11/12 15:35
580-34879-16	B7-EN	Solid	09/06/12 15:51 0	9/11/12 15:35
580-34879-17	B8-ES	Solid	09/06/12 15:51 0	9/11/12 15:35
580-34879-18	B9-SE	Solid	09/06/12 14:49 0	9/11/12 15:35
580-34879-19	B10-S	Solid	09/06/12 14:45 0	9/11/12 15:35
580-34879-20	B11-S	Solid	09/06/12 14:40 0	9/11/12 15:35
580-34879-21	B12-SW	Solid	09/06/12 14:34 0	9/11/12 15:35
580-34879-22	B-DUP-1	Solid	09/06/12 14:49 0	9/11/12 15:35
580-34879-23	B-DUP-2	Solid	09/06/12 14:49 0	9/11/12 15:35
580-34879-24	C1-WS	Solid	09/07/12 14:12 0	9/11/12 15:35
580-34879-25	C-DUP-1	Solid	09/07/12 14:12 0	9/11/12 15:35
580-34879-26	C2-W	Solid	09/07/12 14:12 0	9/11/12 15:35
580-34879-27	C3-WN	Solid	09/07/12 14:12 0	9/11/12 15:35
580-34879-28	C12-SW	Solid	09/07/12 15:10 0	9/11/12 15:35
580-34879-29	C11-S	Solid	09/10/12 13:58 0	9/11/12 15:35
580-34879-30	C10-SE	Solid	09/10/12 13:58 0	9/11/12 15:35
580-34879-31	C-DUP-2	Solid	09/10/12 13:58 0	9/11/12 15:35
580-34879-32	C4-NW	Solid	09/10/12 14:10 0	9/11/12 15:35
580-34879-33	C5-N	Solid	09/10/12 14:10 0	9/11/12 15:35
580-34879-34	C6-NE	Solid	09/10/12 14:10 0	9/11/12 15:35
580-34879-35	C7-EN	Solid	09/10/12 15:30 0	9/11/12 15:35
580-34879-36	C8-E	Solid	09/10/12 16:18 0	9/11/12 15:35
580-34879-37	C9-ES	Solid	09/10/12 16:40 0	9/11/12 15:35

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# Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-34879-1

Login Number: 34879 List Source: TestAmerica Seattle

List Number: 1 Creator: Riley, Nicole

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	
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?	False	This information is not filled out on the COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

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