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**APPENDIX A
SITE PHOTOGRAPHS**

2015 AS-BUILT COMPLETION REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

Farallon PN: 683-057

SITE PHOTOGRAPHS
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Farallon PN: 683-057

- Photograph 1:** Sheet piles sitting in rail yard prior to installation, facing north.
- Photograph 2:** Farallon Consulting, L.L.C. collects soil samples on southern side of school, facing east.
- Photograph 3:** Holt Services installing a hot water flushing system well, facing west.
- Photograph 4:** Blue Iron installing sheet piles on eastern side of school, facing north.
- Photograph 5:** Water main installation through sheet pile on southern side of school, facing north.
- Photograph 6:** Blue Iron installing sheet piles on southern side of school, facing west.
- Photograph 7:** School interior showing sinking interior floor slab and preventative measures.
- Photograph 8:** School interior showing interior hot water flushing system piping, facing east.
- Photograph 9:** School interior showing recently poured concrete, facing south.
- Photograph 10:** School interior showing backfill and compaction, facing south.
- Photograph 11:** Blue Iron installing sheet piles on southern side of school, facing west.
- Photograph 12:** Blue Iron installing sheet piles northwest of school, facing north.
- Photograph 13:** End of sheet pile installation on northern side of school, facing east. Sheet piles are tied into ecology blocks.
- Photograph 14:** Geomembrane liner near northeastern corner of Site, facing west.
- Photograph 15:** Malcolm Drilling conducting permeation grouting, facing southwest.
- Photograph 16:** Glacier Environmental excavating recovery trench on southern side of school, facing east.
- Photograph 17:** Northern side of school showing trench box used for recovery well trenching, facing east.

Photograph 18: Glacier Environmental installing hot water flushing system pipe insulation, facing north.

Photograph 19: Glacier Environmental installing hot water flushing piping on eastern side of school, facing north.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 1: Sheet piles sitting in rail yard prior to installation, facing north.



Photograph 2: Farallon Consulting, L.L.C. collects soil samples on southern side of school, facing east.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



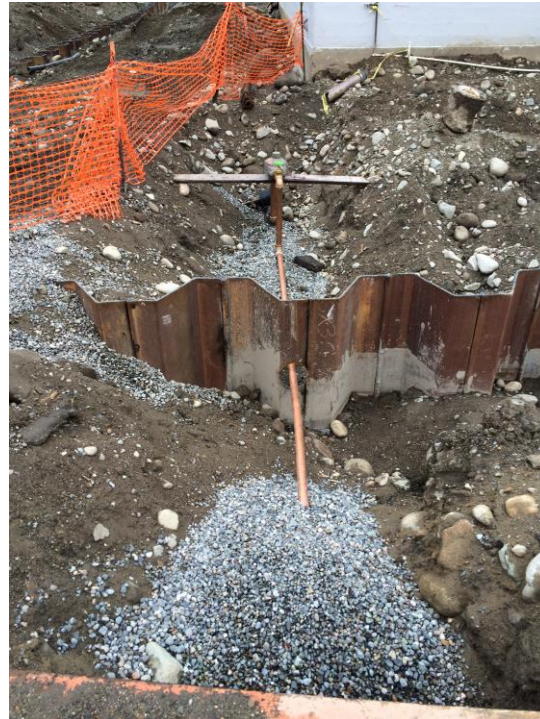
Photograph 3: Holt Services installing a hot water flushing system well, facing west.



Photograph 4: Blue Iron installing sheet piles on eastern side of school, facing north.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



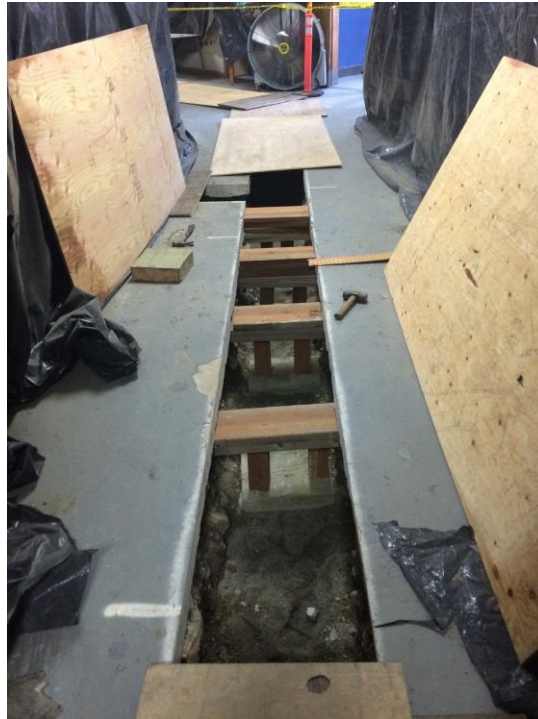
Photograph 5: Water main installation through sheet pile on southern side of school, facing north.



Photograph 6: Blue Iron installing sheet piles on southern side of school, facing west.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 7: School interior showing sinking interior floor slab and preventative measures.



Photograph 8: School interior showing interior hot water flushing system piping, facing east.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 9: School interior showing recently poured concrete, facing south.



Photograph 10: School interior showing backfill and compaction, facing south.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 11: Blue Iron installing sheet piles on southern side of school, facing west.



Photograph 12: Blue Iron installing sheet piles northwest of school, facing north.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 13: End of sheet pile installation on northern side of school, facing east. Sheet piles are tied into ecology blocks.



Photograph 14: Geomembrane liner near northeastern corner of Site, facing west.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 15: Malcolm Drilling conducting permeation grouting, facing southwest.



Photograph 16: Glacier Environmental excavating recovery trench on southern side of school, facing east.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 17: Northern side of school showing trench box used for recovery well trenching, facing east.



Photograph 18: Glacier Environmental installing hot water flushing system pipe insulation, facing north.



SITE PHOTOGRAPHS (continued)
2015 As-Built Completion Report
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington



Photograph 19: Glacier Environmental installing hot water flushing piping on eastern side of school, facing north.

APPENDIX B
2015 WEEKLY STATUS UPDATES

2015 AS-BUILT COMPLETION REPORT
BNSF Former Maintenance and Fueling Facility
Skykomish, Washington
Consent Decree No. 07-2-33672-9 SEA

FARALLON PN: 683-057



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 14 – 20, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Elcon (Electrician) Bravo Environmental, McMillen Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	6/14/15	No work conducted.
Monday	6/15/15	Decommissioning of heating oil tank by Ameresco, the school's contractor, was observed. Heating oil tank and vent lines filled with approximately 20 cubic yards of grout.
Tuesday	6/16/15	No work conducted.
Wednesday	6/17/15	<ul style="list-style-type: none"> • Site mobilization, including equipment, fencing, hand-washing and bathroom facilities, occurred. Traffic control and signage completed. • Supplemental excavation grid south of the school building established. • Tiltmeters were installed on the roof. • Catch basin inserts were installed as part of required temporary erosion and sediment control measures. • Relocation of interior features, including shop lawn mower, shop office desk with computer, and other miscellaneous shop equipment for trench and well installation, was performed. • Exterior saw cutting of asphalt pavement in 6th Street and Railroad Avenue



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 14 – 20, 2015

Construction Observations		
		<p>and of concrete in schoolyard was performed.</p> <ul style="list-style-type: none"> • Electrical inspection of interior by Elcon. • Sheet pile was prepped in railyard. • Interior sewer pipe camera and survey was performed by Bravo Environmental.
Thursday	6/18/15	<ul style="list-style-type: none"> • Eight overburden samples were collected from the supplemental excavation in accordance with Addendum No. 3 to the 2010 Compliance Monitoring Plan Update. • Pre-Construction Meeting held at the Community Center. • Air & Noise Monitoring performed in accordance with the Air, Noise, and Odor Monitoring Plan dated February 10, 2015 (Appendix C to Addendum No. 3 to the 2010 Compliance Monitoring Plan Update). • Interior saw cutting performed. • Tiltmeter placement on the roof confirmed with McMillen Jacobs. Tiltmeter data loggers installed. • Demolition of asphalt pavement and concrete sidewalk south and east of school, and stockpiling of construction, demolition, and land-clearing debris (CDL) at soil handling facility performed. • Plastic sheeting and fans for interior dust control placed. • Sheet pile preparation performed in railyard • Interior utility locate performed.
Friday	6/19/15	<ul style="list-style-type: none"> • Weekly Air Petroleum Hydrocarbons (APH) samples collected in accordance with the Air, Noise, and Odor Monitoring Plan. • Interior saw cutting continued. • Access/egress for school staff established. • Road closure schedule submitted to the Skykomish Fire Department. • Inspection of the school septic tank performed by Gray and Osborne. • Demolition of asphalt pavement and concrete sidewalk south and east of school, and stockpiling CDL at soil handling facility continued. • Trees east of school removed.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 14 – 20, 2015

Construction Observations

		<ul style="list-style-type: none"> • Tiltmeters data logger installation completed. • Sheet pile preparation continued in railyard. • Soil handling facility preparation occurred.
Saturday	6/20/15	No work conducted.

Health and Safety Observations

- Daily health and safety meetings were conducted 6/17/2015 through 6/19/2015 in the job trailer, prior to construction.
- No near misses reported.

Water and Soil Sampling Observations and Testing Results

Eight overburden samples were collected from test pits in the supplemental excavation area south of the school building in accordance with Addendum No. 3 to the 2010 Compliance Monitoring Plan Update.

Anticipated Work for the Next Week

- Continue sheet pile preparation in railyard.
- Load out construction debris from railyard.
- Continue exterior selective demolition and begin interior selective demolition.
- Begin interior and exterior well installation.
- Excavate contaminated soil from supplemental excavation area and stockpile in soil handling facility.
- Replace water line in Railroad Avenue (if needed).
- Relocate Railroad Avenue sewer line.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: June 14 – 20, 2015

Changes and Modifications

Volatile organic compound (VOC) monitoring is being continuously performed inside the school in accordance with the Air, Noise, and Odor Monitoring Plan. While construction is occurring during the summer, the MiniRae 2000 photoionization detectors (PIDs) will be used to monitor for VOCs instead of the RaeGaurd 2 PIDs. The RaeGaurd 2 PIDs will be installed in conjunction with the programmable logic controller (PLC) and the other monitoring equipment to be installed in October 2015.

Photographs



Description: Protection monitoring on south side of school - tiltmeters.

Description: Preparing interior for saw cutting and well installation.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 14 – 20, 2015

Photographs



Description: Protection monitoring near southeast corner of teacherage - tiltmeters and sound meters.



Description: Sampling overburden soil from the supplemental excavation area.



Description: Saw cuts in shop for interior trenching.



Description: School contractor filling heating oil underground storage tank with grout.



WEEKLY PROGRESS REPORT

List of Attachments
None

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: June 14 – 20, 2015



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	June 21 to 27, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Elcon (Electrician), Bravo Environmental, McMillen Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	6/21/15	No work conducted.
Monday	6/22/15	<ul style="list-style-type: none"> Continued demolition of asphalt pavement and concrete sidewalk south and east of the school, and stockpile construction, demolition, and landscaping (CDL) debris at soil handling facility. Exported CDL debris from Hydraulic Control and Containment (HCC) stockpile. Excavated overburden from supplemental excavation and stockpile near soil handling facility. Holt began system well installation inside school shop. Holt began system well installation east of school. Marked exclusion zone with orange construction fencing.
Tuesday	6/23/15	<ul style="list-style-type: none"> Collected soil samples from supplemental excavation. Facilitated weekly progress meeting. Collected air particulate samples as part of protection monitoring. Continued demolition of play area west of school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 21 to 27, 2015

Construction Observations		
		<ul style="list-style-type: none"> • Exported CDL debris from HCC stockpile. • Excavated soil contaminated with total petroleum hydrocarbons from supplemental excavation area and stockpile in soil handling facility. • Holt continued system well installation inside school shop. • Holt continued system well installation outside of school. • Pacific Surveying and Engineering survey excavation limits prior to backfill.
Wednesday	6/24/15	<ul style="list-style-type: none"> • Collected air particulate samples as part of protection monitoring. • Continued demolition of play area west of school. • Exported CDL debris from HCC stockpile. • Holt continued system well installation interior inside school shop. • Holt continued system well installation outside of school. • Placed dunnage beneath basement slab per Change Order 04.
Thursday	6/25/15	<ul style="list-style-type: none"> • Collected air petroleum hydrocarbon (APH) samples as part of protection monitoring. • Holt continued system well installation interior inside school shop. • Holt continued system well installation outside of school. • Prepared 4-foot trench for sheet pile installation equipment east of school.
Friday	6/26/15	<ul style="list-style-type: none"> • Holt continued system well installation interior inside school shop. • Holt continued system well installation outside of school • Prepared trench for sheet pile installation equipment east of school. • Performed exterior demolition east of school. • Bravo Environmental pot hole for mechanically stabilized earth (MSE) wall, utilities near well installations, water service on Railroad Avenue, Puget Sound Energy (PSE) conduit, and 6th Street utilities.
Saturday	6/27/15	No work conducted.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: June 21 to 27, 2015

Health and Safety Observations

- Daily health and safety meetings were conducted each day from June 22 to 26, 2015 in the job trailer prior to construction.
- Farallon documented one near miss on June 18, 2015. While Farallon staff was collecting a soil sample from the excavator bucket, the operator bumped the controls, which released hydraulic fluid from the bucket and moved the bucket. The equipment safety was on. In the future, workers will keep bodies clear of bucket dangers when soil sampling.

Water and Soil Sampling Observations and Testing Results

Bottom and sidewall samples collected from the supplemental excavation area south of the school building in accordance with Addendum No. 3 to the 2010 Compliance Monitoring Plan Update were received from laboratory. Total petroleum hydrocarbons were not detected at concentrations exceeding the Remediation Level in any of the soil samples submitted for laboratory analysis by Northwest Method NWTPH-Dx.

Anticipated Work for the Next Week

- Continue loadout of construction debris from rail yard;
- Continue exterior and interior selective demolition;
- Continue interior well installation;
- Continue trench for sheet pile installation; and
- Begin sheet pile installation.

Changes and Modifications

The sheet pile subcontractor is delayed 1 week and will start June 29, 2015.

Sewer upgrades on Railroad Avenue +6 days. Glacier waiting for pipe installer availability.

Exterior drilling completed on June 26, 2015, ahead of schedule.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 21 to 27, 2015

Photographs



Description: Bravo Environmental locating MSE wall adjacent to sheet pile intersection.



Description: Glacier excavator removing overburden soil from supplemental excavation area.



Description: Holt drilling installing system groundwater monitoring wells inside school shop.



Description: Holt drilling installing system injections wells east of school.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: June 21 to 27, 2015

Photographs



Description: Supplemental excavation, looking south.



Description: Trenching for sheet pile installation.

Attachment: Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

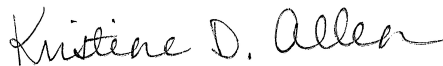
TestAmerica Job ID: 580-51063-1

Client Project/Site: BNSF Skykomish

For:

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

Attn: Gerald Portele



Authorized for release by:
6/24/2015 4:09:17 PM

Kristine Allen, Manager of Project Management
(253)248-4970

kristine.allen@testamericainc.com

LINKS

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results through
TotalAccess

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.

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Job ID: 580-51063-1

Laboratory: TestAmerica Seattle

Narrative

**Job Narrative
580-51063-1**

Comments

No additional comments.

Receipt

The samples were received on 6/23/2015 1:18 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 12.4° C.

GC Semi VOA

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

General Chemistry

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

Organic Prep

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

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Glossary

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

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-SW

Lab Sample ID: 580-51063-1

Date Collected: 06/23/15 10:17

Matrix: Solid

Date Received: 06/23/15 13:18

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	89		0.10		%			06/24/15 08:20	1
Percent Moisture	11		0.10		%			06/24/15 08:20	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-SW

Lab Sample ID: 580-51063-1

Date Collected: 06/23/15 10:17

Matrix: Solid

Date Received: 06/23/15 13:18

Percent Solids: 88.9

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		28		mg/Kg	☼	06/24/15 08:16	06/24/15 11:53	1
Motor Oil (>C24-C36)	ND		56		mg/Kg	☼	06/24/15 08:16	06/24/15 11:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	81		50 - 150				06/24/15 08:16	06/24/15 11:53	1



Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-WW

Lab Sample ID: 580-51063-2

Date Collected: 06/23/15 10:21

Matrix: Solid

Date Received: 06/23/15 13:18

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		0.10		%			06/24/15 08:20	1
Percent Moisture	18		0.10		%			06/24/15 08:20	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-WW

Lab Sample ID: 580-51063-2

Date Collected: 06/23/15 10:21

Matrix: Solid

Date Received: 06/23/15 13:18

Percent Solids: 82.0

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		30		mg/Kg	☼	06/24/15 08:16	06/24/15 12:41	1
Motor Oil (>C24-C36)	ND		60		mg/Kg	☼	06/24/15 08:16	06/24/15 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	71		50 - 150				06/24/15 08:16	06/24/15 12:41	1



Client Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-BOT

Lab Sample ID: 580-51063-3

Date Collected: 06/23/15 10:31

Matrix: Solid

Date Received: 06/23/15 13:18

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10		%			06/24/15 08:20	1
Percent Moisture	7.3		0.10		%			06/24/15 08:20	1

Client Sample Results

Client: Farallon Consulting LLC
 Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-BOT

Lab Sample ID: 580-51063-3

Date Collected: 06/23/15 10:31

Matrix: Solid

Date Received: 06/23/15 13:18

Percent Solids: 92.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg	☼	06/24/15 08:16	06/24/15 13:05	1
Motor Oil (>C24-C36)	ND		50		mg/Kg	☼	06/24/15 08:16	06/24/15 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl</i>	89		50 - 150				06/24/15 08:16	06/24/15 13:05	1



QC Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-193054/3-A
Matrix: Solid
Analysis Batch: 193032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 193054

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		25		mg/Kg		06/24/15 08:16	06/24/15 11:29	1
Motor Oil (>C24-C36)	ND		50		mg/Kg		06/24/15 08:16	06/24/15 11:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150	06/24/15 08:16	06/24/15 11:29	1

Lab Sample ID: LCS 580-193054/1-A
Matrix: Solid
Analysis Batch: 193032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 193054

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)	500	472		mg/Kg		94	70 - 125
Motor Oil (>C24-C36)	502	496		mg/Kg		99	64 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o</i> -Terphenyl	89		50 - 150

Lab Sample ID: LCSD 580-193054/2-A
Matrix: Solid
Analysis Batch: 193032

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 193054

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)	500	494		mg/Kg		99	70 - 125	5	16
Motor Oil (>C24-C36)	502	532		mg/Kg		106	64 - 127	7	17

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -Terphenyl	94		50 - 150

Lab Sample ID: 580-51063-1 DU
Matrix: Solid
Analysis Batch: 193032

Client Sample ID: EXV15-AS2-SW
Prep Type: Total/NA
Prep Batch: 193054

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
#2 Diesel (C10-C24)	ND		ND		mg/Kg	☼	NC	35
Motor Oil (>C24-C36)	ND		ND		mg/Kg	☼	NC	35

Surrogate	DU %Recovery	DU Qualifier	Limits
<i>o</i> -Terphenyl	78		50 - 150

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-51063-1 DU
Matrix: Solid
Analysis Batch: 193055

Client Sample ID: EXV15-AS2-SW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Solids	89		91		%		2	20

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Method: D 2216 - Percent Moisture (Continued)

Lab Sample ID: 580-51063-1 DU
Matrix: Solid
Analysis Batch: 193055

Client Sample ID: EXV15-AS2-SW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	11		9.3		%		18	20

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

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Client Sample ID: EXV15-AS2-SW

Date Collected: 06/23/15 10:17

Date Received: 06/23/15 13:18

Lab Sample ID: 580-51063-1

Matrix: Solid

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			193054	06/24/15 08:16	EKK	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	193032	06/24/15 11:53	EKK	TAL SEA
Total/NA	Analysis	D 2216		1	193055	06/24/15 08:20	EKK	TAL SEA

Client Sample ID: EXV15-AS2-WW

Date Collected: 06/23/15 10:21

Date Received: 06/23/15 13:18

Lab Sample ID: 580-51063-2

Matrix: Solid

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			193054	06/24/15 08:16	EKK	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	193032	06/24/15 12:41	EKK	TAL SEA
Total/NA	Analysis	D 2216		1	193055	06/24/15 08:20	EKK	TAL SEA

Client Sample ID: EXV15-AS2-BOT

Date Collected: 06/23/15 10:31

Date Received: 06/23/15 13:18

Lab Sample ID: 580-51063-3

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			193054	06/24/15 08:16	EKK	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	193032	06/24/15 13:05	EKK	TAL SEA
Total/NA	Analysis	D 2216		1	193055	06/24/15 08:20	EKK	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: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C553	02-17-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
D 2216		Solid	Percent Moisture
D 2216		Solid	Percent Solids



Sample Summary

Client: Farallon Consulting LLC
Project/Site: BNSF Skykomish

TestAmerica Job ID: 580-51063-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-51063-1	EXV15-AS2-SW	Solid	06/23/15 10:17	06/23/15 13:18
580-51063-2	EXV15-AS2-WW	Solid	06/23/15 10:21	06/23/15 13:18
580-51063-3	EXV15-AS2-BOT	Solid	06/23/15 10:31	06/23/15 13:18

1

2

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8

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10

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51063

		LABORATORY INFORMATION Laboratory: TEST AMERICA Address: TACOMA, WA City/State/ZIP: TACOMA, WA Project State of Origin: WA Project City: SKYKOMISH BNSF Project Number: BNSF Work Order No.: BNSF Project Name: BNSF Contact: Bruce Shepherd TURNAROUND TIME <input checked="" type="checkbox"/> 1-day Rush <input type="checkbox"/> 2-day Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> Standard 10-Day <input type="checkbox"/> Other:		SHIPMENT INFORMATION Shipment Method: Tracking Number: Project Number: 683-057 Project Manager: Beth Padgett Email: Bpadgett@ferroinc.com Phone: (425) 245-0800 Fax:	
CONSULTANT INFORMATION Company: Farallon Consulting Address: 975 5th Ave NW City/State/ZIP: Issaquah, WA 98027 BNSF Work Order No.: BNSF Project Name: BNSF Contact: Bruce Shepherd TURNAROUND TIME <input checked="" type="checkbox"/> 1-day Rush <input type="checkbox"/> 2-day Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> 5- to 8-day Rush <input type="checkbox"/> Standard 10-Day <input type="checkbox"/> Other:		METHODS FOR ANALYSIS BNSF Standard (Level II) <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Other Deliverables? <input type="checkbox"/> EDD Req. Format? <input type="checkbox"/>		LABORATORY INFORMATION Project Manager: Beth Padgett Phone: Fax:	
SAMPLE INFORMATION Sample Identification Containers Date Time Filtered Y/N Sampler Type (Comp/Grab) Matrix		COMMENTS Hold 40 40		LAB USE	
EXVIS-AS2-SW EXVIS-AS2-LW EXVIS-AS2-BOT		1 6/23/15 10:17 PL N 6 S 1 6/23/15 10:21 PL N 6 S 1 6/23/15 10:31 PL N 6 S		(Meth mix) (get clean)	
Cooler/TB DigIR for 2.4unc 12.1 Cooler Dscfs WCPacks Packing Bobbie C. Dns		Barcode 580-51063 Chain of Custody		Date/Time: 6/23/15 13:18 Date/Time:	
Requisitioned By: Matt B... Requisitioned By: Requisitioned By: Received by Laboratory:		Date/Time: 6/23/15 1:18 Date/Time: Date/Time: Date/Time:		Comments and Special Analytical Requirements: Date/Time: 6/23/15 13:18 Date/Time: Date/Time: Date/Time:	
ORIGINAL - RETURN TO LABORATORY WITH SAMPLES		DUPLICATE - CONSULTANT		BNSF COC No. Custody Seal No.	



Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-51063-1

Login Number: 51063

List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
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?	True	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	June 28 to July 4, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Elcon (Electrician), Bravo Environmental, McMillan Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	6/28/15	No work conducted.
Monday	6/29/15	<ul style="list-style-type: none"> Jacobs collected and reviewed tiltmeter and vibration monitoring data. Holt continued system well installation inside school shop. Holt demobilized equipment for exterior well installations. Blue Iron assembled sheet pile installer. Glacier constructed reaction pad to assemble sheet pile equipment on. Glacier performed exterior demolition west of school. Glacier prepared sheet piles in railyard. Glacier began backfilling supplemental excavation with structural aggregate. Glacier exported stockpiled construction, demolition, and landscaping debris from railyard. Farallon performed noise and dust monitoring downwind of construction and at the Shawver property. Volatile organic compound (VOC) monitoring was performed continuously in three locations inside the school.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	June 28 to July 4, 2015

Construction Observations		
Tuesday	6/30/15	<ul style="list-style-type: none"> BNSF Health and Safety Audit and Training was conducted in Job Trailer. Holt continued system well installation inside school shop. Blue Iron continued to assemble sheet pile rig. Glacier performed exterior demolition west of school. Bravo Environmental potholed for water service line on Railroad Avenue, and interior utilities near locations for well installations. Glacier compacted structural fill in area of supplemental excavation. GeoTest performed compaction testing. Farallon performed noise and dust monitoring downwind of construction and at the nearest occupied building. VOCs were monitored continuously in three locations inside the school. Farallon collected indoor air samples in five locations inside the school. Samples were submitted for laboratory analysis for Air-phase Petroleum Hydrocarbons.
Wednesday	7/1/15	<ul style="list-style-type: none"> Holt continued system well installation inside school hallway. Blue Iron commenced sheet pile installation. Glacier performed exterior demolition east of school. Bravo Environmental located water service line and video surveyed sewer line in school hallway. Farallon performed noise and dust monitoring, and collected diesel exhaust particulate samples downwind of construction and at the nearest occupied building. VOCs were monitored continuously in three locations inside the school.
Thursday	7/2/15	<ul style="list-style-type: none"> Holt continued system well installation inside school shop. Glacier exposed and repaired broken sewer line beneath basement hallway. Glacier performed exterior demolition north of school. Bravo Environmental potholed utility locations from the trench in the basement. Blue Iron continued with sheet pile installation. Farallon performed noise and dust monitoring downwind of construction



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 28 to July 4, 2015

Construction Observations		
		and at the nearest occupied building. VOCs were monitored continuously in three locations inside the school.
Friday	7/3/15	<ul style="list-style-type: none"> VOCs were monitored continuously in three locations inside the school.
Saturday	7/4/15	<ul style="list-style-type: none"> VOCs were monitored continuously in three locations inside the school.

Health and Safety Observations	
<ul style="list-style-type: none"> Daily health and safety meetings were conducted each day from June 29 to July 2, 2015 in the job trailer prior to construction. No near misses were reported. 	

Water and Soil Sampling Observations and Testing Results
No water or soil sampling was conducted.

Anticipated Work for the Next Week
<ul style="list-style-type: none"> Install recovery trench; Continue interior selective demolition and trenching; Continue interior well installation; and Continue sheet pile installation.

Changes and Modifications
<p>Sheet pile subcontractor +7 days due to delayed start date. Discussing with Blue Iron the possibility of working longer days to stay on schedule.</p> <p>Recovery trench +3 days. Glacier will begin recovery trench north of school once sheet pile rig and equipment is clear of 6th Avenue.</p> <p>Sewer upgrades on Railroad Avenue +6 days. Glacier is waiting for pipe and installer availability.</p>

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: June 28 to July 4, 2015

Photographs



Description: Blue Iron assembles Giken auger crush equipment.



Description: Blue Iron installing sheet pile east of school.



Description: Bravo Environmental air knifing for water service line south of school.



Description: Glacier demolishing concrete for trench inside school shop.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: June 28 to July 4, 2015

Photographs



Description: Contaminated soil temporarily stockpiled in soil handling facility.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 5 to July 11, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Elcon (Electrician), Bravo Environmental, McMillan Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	7/5/15	No work conducted.
Monday	7/6/15	<ul style="list-style-type: none"> • Holt continued well installation inside school. • Bravo Environmental air knifed interior well locations to approximately 5 feet below grade. • Bravo Environmental air knifed to expose water service connection to school. • Blue Iron continued sheet pile installation. • Glacier performed soil excavation for interior Hot Water Flushing (HWF) system trench. • Farallon performed noise and dust monitoring downwind of construction and at the Shawver property. Volatile organic compounds (VOCs) were monitored continuously in three locations inside the school.
Tuesday	7/7/15	<ul style="list-style-type: none"> • Holt continued well installation inside school. • Glacier excavated interior trench for HWF system piping. • Glacier excavated boulder obstruction from the sheet pile path.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	July 5 to July 11, 2015

Construction Observations		
		<ul style="list-style-type: none"> Blue Iron continued with sheet pile installation. Farallon performed noise and dust monitoring downwind of construction and at the nearest occupied building. VOCs were monitored continuously in three locations inside the school. Farallon collected indoor air samples in five locations inside the school. Samples were submitted for laboratory analysis for air-phase petroleum hydrocarbons.
Wednesday	7/8/15	<ul style="list-style-type: none"> Holt continued system well installation inside school. Blue Iron continued sheet pile installation. Glacier performed pre-excitation for sheet pile installation to loosen cobbles and remove boulders. Glacier excavated interior trench for HWF system piping. Glacier patched sheet piles in railyard. Farallon performed noise and dust monitoring, and collected diesel exhaust particulate samples downwind of construction and at the Shawver's property. VOCs were monitored continuously in three locations inside the school.
Thursday	7/9/15	<ul style="list-style-type: none"> Holt continued interior and exterior system well installation. Glacier located irrigation system and utilities west of school. Glacier performed select demolition of utilities west of school. Glacier performed pre-excitation for sheet pile installation. Blue Iron continued sheet pile installation. Farallon performed noise and dust monitoring downwind of construction and at the Shawver's Property. VOCs were monitored continuously in three locations inside the school.
Friday	7/10/15	<ul style="list-style-type: none"> Holt continued interior and exterior system well installation of school. Glacier located irrigation and utilities west of school. Glacier performed select demolition of utilities west of school. Glacier performed pre excavation for sheet pile installation. Glacier performed oil recovery from sheet pile pre-excitation



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 5 to July 11, 2015

Construction Observations		
		<ul style="list-style-type: none"> Blue Iron continued sheet pile installation. Glacier reinstalled tiltmeters #1 and #6 on the School roof as shown on the Geotechnical Monitoring Plan. Farallon performed noise and dust monitoring downwind of construction and at the Shawver's Property. VOCs were monitored continuously in three locations inside the school.
Saturday	7/11/15	<ul style="list-style-type: none"> Glacier located irrigation and utilities west of school. Glacier performed select demolition of utilities west of school. Sheet pile installation trench excavation. Blue Iron continued sheet pile installation. Glacier patched sheet piles in railyard. Farallon performed noise and dust monitoring downwind of construction and at the Shawver's Property. VOCs were monitored continuously in three locations inside the school.

Health and Safety Observations
<ul style="list-style-type: none"> Daily health and safety meetings were conducted each day from July 6 to 11, 2015 in the job trailer prior to construction. Farallon documented one near miss on July 7, 2015. During the weekly construction progress update meeting in the job trailer, it was noted that the exhaust from the generator was directly adjacent to the intake fan for the job trailer cooling system. A smoke stack was added to the generator exhaust pipe and exhaust is now discharged higher than the intake fan for the job trailer.

Water and Soil Sampling Observations and Testing Results
No water or soil sampling was conducted.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 5 to July 11, 2015

Anticipated Work for the Next Week

- Install recovery trench;
- Continue interior selective demolition;
- Continue sheet pile installation;
- Interior system piping installation;
- Sheet pile Fire Department Connection (FDC) crossing; and
- Concrete foundation wall coring for system piping.

Changes and Modifications

Sheet pile subcontractor +7 days due to delayed start date. Blue Iron will begin working longer days and Saturdays to stay on schedule.

Recovery trench +7 days. Glacier will begin recovery trench north of school once sheet pile rig and equipment is clear of 6th Avenue.

Sewer upgrades on Railroad Avenue +14 days. Glacier is waiting for pipe and installer availability.

Photographs



Description: Blue Iron installing sheet pile along 6th Avenue, looking north.

Description: Glacier pre-excavating trench for sheet pile rig.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: July 5 to July 11, 2015

Photographs



Description: Holt installing soil vapor extraction well SVE-1 in cafeteria.



Description: Installation of injection well INJ-12 in hallway.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	July 12 to July 18, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Bravo Environmental, McMillan Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	7/12/15	No work conducted.
Monday	7/13/15	<ul style="list-style-type: none"> Glacier installed steel injection pipe for Hot Water Flushing (HWF) system. Glacier performed pre-excavation of trench south of school and removed large cobbles. Blue Iron continued sheet pile installation. Glacier patched sheet piles in railyard. Jacobs performed vibration monitoring along sheet pile installation. Farallon performed dust and noise monitoring during hours of construction. Volatile organic compounds (VOCs) were monitored continuously in three locations inside the school.
Tuesday	7/14/15	<ul style="list-style-type: none"> Glacier installed steel injection pipe for HWF system inside the school. Glacier began installation of soil vapor extraction (SVE) piping inside the school. Glacier performed pre-excavation of trench south of school and removed large cobbles. Blue Iron continued with sheet pile installation.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	July 12 to July 18, 2015

Construction Observations		
		<ul style="list-style-type: none"> Glacier patched sheet piles in railyard. Glacier placed catch basin structures west of school. Farallon performed noise and dust monitoring downwind of construction and at the Shawver property. VOCs were monitored continuously in three locations inside the school. Jacobs performed vibration monitoring adjacent to sheet pile installation. The Town of Skykomish replaced valve on School Water Service connection. Farallon collected indoor air samples from five locations inside the school. Samples were submitted for laboratory analysis for air-phase petroleum hydrocarbons. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Wednesday	7/15/15	<ul style="list-style-type: none"> Glacier installed steel injection pipe for HWF system inside the school. Glacier began installation of SVE piping inside the school. Blue Iron continued sheet pile installation south of school. Glacier patched sheet piles in railyard. Glacier placed catch basin structures west of school. Glacier exposed exterior school sewer lines connecting the school to the septic tank. Jacobs performed vibration monitoring adjacent to sheet pile installation. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Thursday	7/16/15	<ul style="list-style-type: none"> Glacier installed steel injection pipe for HWF system inside the school. Glacier continued installation of SVE piping inside the school. Blue Iron continued with sheet pile installation south of school. Glacier patched sheet piles in railyard. Glacier placed catch basin structures west of school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 12 to July 18, 2015

Construction Observations		
		<ul style="list-style-type: none"> • Glacier replaced exterior school sewer lines connecting the school to the septic tank. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Friday	7/17/15	<ul style="list-style-type: none"> • Glacier installed steel injection pipe and SVE pipe for HWF system inside the school. • Blue Iron continued with sheet pile installation south of school. • Glacier patched sheet piles in railyard. • Glacier removed obstruction from sheet pile No. 81 and pre-excavated trench in front sheet pile. • Glacier as-built new sewer pipe connecting school building to septic tank. • Glacier repaired the Fire Department Connection (FDC) pipe to school. The FDC pipe is back in service. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Gray and Osborne inspected the FDC pipe repair with sheet pile sleeve and the sewer pipe connecting school building to septic tank. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Saturday	7/18/15	<ul style="list-style-type: none"> • Glacier installed steel injection pipe and SVE pipe for HWF system inside the school. • Blue Iron continued with sheet pile installation south of school. • Glacier patched sheet piles in railyard. • Glacier removed obstruction from sheet pile No. 81 and pre-excavated trench in front sheet pile. • Glacier as-built new sewer pipe connecting school building to septic tank. • Glacier installed replacement School Water Service line.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 12 to July 18, 2015

Construction Observations

		<ul style="list-style-type: none"> • Glacier cleaned roads along truck path from school to soil handling facility. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
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Health and Safety Observations

		<ul style="list-style-type: none"> • Daily health and safety meetings were conducted each day from July 13 to 18, 2015 in the job trailer prior to construction. • Farallon documented one near miss on July 14, 2015. Following a weekly progress meeting, visitors to the site passed through the fall radius of the crane. Caution tape with cone delineators are being maintained to mark limits of fall radius.
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Water and Soil Sampling Observations and Testing Results

		<p>Eight soil samples were collected from the overburden soil stockpile in the soil handling facility. The analytical results of the eight soil samples were less than the soil reuse level as specified in the Addendum No. 3 to the 2010 Compliance Monitoring Plan.</p>
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Anticipated Work for the Next Week

		<ul style="list-style-type: none"> • Continue interior system piping installation; • Continue sheet pile installation; • Continue replacement of water service line; and • Install recovery trench and recovery wells.
--	--	--

Changes and Modifications

		<p>Sheet pile subcontractor +7 days due to delayed start date. Blue Iron will begin working longer days and Saturdays to stay on schedule.</p> <p>Recovery trench +7 days. Glacier will begin recovery trench north of school once sheet pile rig and equipment is clear of 6th Avenue.</p> <p>Install recovery wells/vaults +7 days due to delayed recovery trench start.</p> <p>Sewer upgrades on Railroad Avenue +20 days. Glacier is waiting for pipe and installer availability.</p>
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**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 12 to July 18, 2015

Photographs



Description: Blue Iron installing sheet pile along 6th Avenue.



Description: Glacier installing FDC along Railroad Avenue.



Description: Injection pipe installation in basement hallway.



Description: Sewer drain pipe installation west of school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 19 to July 25, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental
	Skykomish School District	Subconsultant:	Bravo Environmental, McMillan Jacobs Associates, Gray and Osborne (Town's Consultant), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	7/19/15	No work conducted.
Monday	7/20/15	<ul style="list-style-type: none"> • Glacier installed injection pipe and Hot Water Flushing (HWF) pipe for HWF system inside the school. • Blue Iron continued sheet pile installation. • Glacier patched sheet piles in railyard. • Glacier removed obstruction from sheet pile no. 81 and pre-excavated trench in front sheet pile. • Glacier surveyed new sewer pipe connecting school building to septic tank. • Glacier repaired fire department connection (FDC) pipe to school. FDC pipe is back in service. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. Volatile organic compounds (VOCs) were monitored continuously in three locations inside the school.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: July 19 to July 25, 2015

Construction Observations		
Tuesday	7/21/15	<ul style="list-style-type: none"> • Glacier installed recovery trench northeast of school. • Blue Iron continued with sheet pile installation southwest of school. • Glacier cut sheet piles to 1 foot below design finish grade. • Glacier installed storm drain system west of school. • Farallon performed dust and noise monitoring at downwind location and at Shawver property during Glacier hours of construction. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon collected indoor air samples from five locations inside the school. Samples were submitted for laboratory analysis for air-phase petroleum hydrocarbons. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Wednesday	7/22/15	<ul style="list-style-type: none"> • Glacier installed recovery trench northeast of school. • Blue Iron continued sheet pile installation west of school. • Glacier cut sheet piles to 1 foot below design grade. • Glacier installed storm drain system west of school. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Thursday	7/23/15	<ul style="list-style-type: none"> • Glacier installed recovery trench south of school. • Blue Iron continued with sheet pile installation northwest of school. • Glacier cut sheet piles to 1 foot below design grade. • Glacier continued installation of storm drain system west of school. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed diesel particulate monitoring at downwind location and at Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 19 to July 25, 2015

Construction Observations		
Friday	7/24/15	<ul style="list-style-type: none"> • Glacier installed recovery trench southeast of school. • Blue Iron continued with sheet pile installation northwest of school. • Glacier cut sheet piles to 1 foot below design grade. • Glacier exposed concrete mass located at sheet pile/mechanically stabilized earthen (MSE) wall junction. • Glacier installed water line west of school. • Jacobs performed vibration monitoring adjacent to sheet pile installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously in three locations inside the school.
Saturday	7/25/15	<ul style="list-style-type: none"> • Glacier continued installation of recovery trench south and east of school. • Glacier installed flow meters and treatment piping inside the school. • Blue Iron finished sheet pile installation and demobilized the sheet pile equipment. • Jacobs performed vibration monitoring adjacent to sheet pile installation.

Health and Safety Observations
<ul style="list-style-type: none"> • Daily health and safety meetings were conducted each day from July 20 to 25, 2015 in the job trailer prior to construction; and • No near misses were reported.

Water and Soil Sampling Observations and Testing Results
Water and soil sampling was not conducted.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 19 to July 25, 2015

Anticipated Work for the Next Week

- Continue installation of recovery trench;
- Finish replacement of water service line;
- Finish installation of interior soil vapor extraction piping;
- Backfill interior trenches and prep for floor restoration;
- Permeation Grout at sheet pile/MSE wall junctions;
- Install exterior HWF system piping; and
- Finish storm drainage, sewer, and communication line restorations.

Changes and Modifications

Recovery trench +10 days. Glacier will begin recovery trench north of school once sheet pile rig and equipment is clear of 6th Avenue.

Install exterior system piping +10 days.

Install recovery wells/vaults +7 days due to delayed recovery trench start.

Permeation Grouting +6 days.

Overall Change +10 days.

Photographs



Description: Glacier excavating recovery trench northeast of school.



Description: Glacier excavating recovery trench southeast of school.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 19 to July 25, 2015

Photographs



Description: Trimming sheet pile to design grade west of school.



Description: Glacier excavating recovery trench east of school.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	July 26 to August 1, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental Services
	Skykomish School District	Subconsultant:	McMillan Jacobs Associates (Jacobs), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	7/26/15	No work conducted.
Monday	7/27/15	<ul style="list-style-type: none"> Glacier installed recovery trench south and east of school. Blue Iron finished demobilization. Glacier cut sheet piles to 1 foot below design grade. Glacier installed water line west of school. Glacier installed storm drainage pipe west of school. Glacier exposed communication conduit. Jacobs performed vibration monitoring adjacent to recovery trench installation. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. Volatile organic compounds (VOCs) were monitored continuously at three locations inside the school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 26 to August 1, 2015

Construction Observations		
Tuesday	7/28/15	<ul style="list-style-type: none"> • Glacier tested school water service line. • Glacier cut sheet piles to 1 foot below design grade. • Glacier installed water line west of school. • Glacier installed storm drainage pipe west of school. • Glacier repaired communication conduit and sewer service pipe west of school. • Farallon performed dust and noise monitoring at downwind location and at Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school. • Farallon collected air samples to be analyzed for air-phase petroleum hydrocarbons at six locations inside School, at downwind location, and at the Shawver property. • Farallon marked out scope of interior concrete restoration with Glacier.
Wednesday	7/29/15	<ul style="list-style-type: none"> • Glacier installed recovery trench west of school, beneath PSE power conduit. • Glacier cut sheet piles to 1 foot below design grade. • Glacier completed and performed final pressure test of water line west of school. • Glacier installed storm drainage pipe west of school. • Glacier repaired communication conduit west of school. • Glacier backfilled and compacted structural fill adjacent to sheet pile. • Jacobs performed vibration monitoring adjacent to recovery trench installation. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Thursday	7/30/15	<ul style="list-style-type: none"> • Glacier backfilled recovery trench. • Glacier installed exterior hot water flushing (HWF) injection piping west of school. • Glacier exposed communication conduit and eastern edge of mechanically

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 26 to August 1, 2015

Construction Observations		
		<p>stabilized earthen (MSE) wall liner.</p> <ul style="list-style-type: none"> Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Friday	7/31/15	<ul style="list-style-type: none"> Glacier backfilled recovery trench. Glacier installed exterior HWF injection piping south and west of school. Frontier Communications inspected communication conduit. Holt installed recovery wells. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Saturday	8/1/15	<ul style="list-style-type: none"> Glacier installed interior subslab depressurization piping in trench. Glacier installed exterior HWF injection piping west of school. Farallon performed dust and noise monitoring at downwind location and at the Teacherage building during working construction hours. VOCs were monitored continuously at three locations inside the school.

Health and Safety Observations
<ul style="list-style-type: none"> Daily health and safety meetings were conducted each day from July 27 to August 1, 2015 in the job trailer prior to construction; Farallon performed a Site-specific Safety Audit on July 25, 2015; and No near misses were reported.

Water and Soil Sampling Observations and Testing Results
<p>Groundwater samples were collected from monitoring wells 5-W-54 and 5-W-56 for geochemical and iron fouling analysis.</p> <p>No soil sampling was performed.</p>

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 26 to August 1, 2015

Anticipated Work for the Next Week

- Continue exterior pipe installation;
- Permeation grouting;
- Injection pipe pressure testing;
- Recovery well vault installation;
- Interior restoration; and
- Replacement of communication line.

Changes and Modifications

Glacier provided an updated project schedule on July 27, 2015. The adjusted schedule shows project completion prior to August 21, 2015. This schedule was distributed as part of the weekly progress meeting on July 28, 2015. All schedule changes listed below are modifications from the schedule provided on July 27, 2015.

Complete interior backfill +3 days.

Repair storm drain on 6th Street +4 days permeation grouting +3 days.

Install drain pipe around sheet pile +4 days. Overall change from July 27, 2015 schedule +4 days.

Photographs



Description: Glacier installs HWF injection piping along south side of the school.



Description: Glacier installs HWF injection piping along west side of the school.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: July 26 to August 1, 2015

Photographs



Description: Glacier installs HWF controls inside the basement of the school.



Description: Glacier installs recovery trench east of school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 2 to August 8, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental Services
	Skykomish School District	Subconsultant:	McMillan Jacobs Associates (Jacobs), Pacific Surveying and Engineering (Survey Crew)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	8/2/15	No work conducted.
Monday	8/3/15	<ul style="list-style-type: none"> • Glacier installed interior subslab depressurization (SSD) piping in trench. • Glacier installed and pressure tested exterior hot water flushing (HWF) injection piping with insulation west of school. • Holt Drilling installed remaining recovery and groundwater monitoring wells east of school. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. Volatile organic compounds (VOCs) were monitored continuously at three locations inside the school.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 2 to August 8, 2015

Construction Observations		
Tuesday	8/4/15	<ul style="list-style-type: none"> • Glacier pressure tested interior SSD piping. • Glacier installed interior vaults for the HWF system. • Holt Drilling developed interior and exterior groundwater monitoring wells east of school. • Glacier replaced communication line. • Glacier performed saw cutting of interior concrete for restoration. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school. • Farallon collected air samples to be analyzed for air-phase petroleum hydrocarbons at six locations inside the school, at downwind location, and at the Shawver property.
Wednesday	8/5/15	<ul style="list-style-type: none"> • Glacier installed interior HWF system vaults. • Malcom Drilling performed permeation grouting north of the school. • Glacier performed saw cutting of interior concrete for restoration. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Thursday	8/6/15	<ul style="list-style-type: none"> • Glacier prepared interior trenching for concrete restoration. • Malcolm performed primary permeation grouting at east and west ends of sheet pile. • Glacier exposed communication conduit and eastern edge of mechanically stabilized earthen (MSE) wall liner. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Friday	8/7/15	<ul style="list-style-type: none"> • Glacier prepared interior trenching for restoration. • Glacier installed horizontal soil vapor extraction pipe with solid wall chlorinated polyvinyl chloride at all interior well box crossings. • Glacier installed recovery well vaults. • Malcolm performed secondary permeation grouting at east and west ends of

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 2 to August 8, 2015

Construction Observations

		<p>sheet pile.</p> <ul style="list-style-type: none"> Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Saturday	8/8/15	<ul style="list-style-type: none"> Glacier prepared interior trenching for restoration. Glacier installed recovery well vaults. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.

Health and Safety Observations

- Daily health and safety meetings were conducted each day from August 3 to August 8, 2015 in the job trailer prior to construction; and
- One safety observation/near miss was recorded on Tuesday, August 4, 2015. The fire alarm in the school went off as a result of dust from saw cutting. The building was evacuated to the rally point, and the alarm was reset. Water is being used for dust control.

Water and Soil Sampling Observations and Testing Results

No water or soil sampling was performed.

Anticipated Work for the Next Week

- Continue exterior pipe installation;
- Continue recovery well vault installation; and
- Interior floor restoration (concrete).

Changes and Modifications

Glacier provided an updated project schedule on August 4, 2015. The adjusted schedule shows project completion prior to August 21, 2015. This schedule was distributed as part of the weekly progress meeting on August 4, 2015. All schedule changes listed below are modifications from the schedule provided on August 4, 2015.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 2 to August 8, 2015

Changes and Modifications

Complete interior backfill +4 days.
 Repair storm drain on 6th Street +5 days permeation grouting +0 days.
 Install drain pipe around sheet pile +4 days. Overall change from August 4, 2015 schedule +4 days.

Photographs



Description: Glacier installs HWF pipe insulation.



Description: Holt installs recovery wells.



Description: Malcolm performs permeation grouting.



Description: Interior backfill and compaction in the basement of the school, as part of preparing the interior trench for restoration.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 2 to August 8, 2015

Photographs



Description: Glacier installs recovery well vaults.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 9 to August 15, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental Services
	Skykomish School District	Subconsultant:	McMillan Jacobs Associates (Jacobs), Pacific Surveying and Engineering Survey Crew (PSE Surveyors)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	8/9/15	No work conducted.
Monday	8/10/15	<ul style="list-style-type: none"> • Glacier prepared interior trenching for restoration, including compaction, rebar, and vault tie in. • Glacier installed recovery well vaults. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. Volatile organic compounds (VOCs) were monitored continuously at three locations inside the school.
Tuesday	8/11/15	<ul style="list-style-type: none"> • Glacier installed storm drain pipe northeast and east of school. • Glacier installed hot water flushing (HWF) well head assemblies west of school. • Salinas Concrete (Salinas) poured the interior concrete slab in the school. • PSE Surveyors staked play equipment area, storm drain system, and topography of stockpiles in soil handling facility. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 9 to August 15, 2015

Construction Observations		
Wednesday	8/12/15	<ul style="list-style-type: none"> • Glacier installed storm drain pipe northeast and east of school. • Glacier installed HWF well head assemblies west of school. • Salinas continued pouring the interior concrete slab at the school. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school. • Farallon collected air samples to be analyzed for air-phase petroleum hydrocarbons at six locations inside the school, at a downwind location, and at the Shawver property.
Thursday	8/13/15	<ul style="list-style-type: none"> • Glacier installed HWF system piping east of school. • Glacier installed HWF well head assemblies west of school. • Glacier potholed for sewer connection in 6th Street. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Friday	8/14/15	<ul style="list-style-type: none"> • Glacier installed HWF system piping east of school. • Glacier installed HWF well head assemblies west and east of school. • Glacier potholed for sewer connection in 6th Street. • Glacier installed utility sheet pile penetrations. • Superior Cleaning cleaned basement and stairwells. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Saturday	8/15/15	<ul style="list-style-type: none"> • Glacier installed HWF system piping east of school. • Glacier installed HWF well head assemblies east of school. • Glacier installed utility sheet pile penetrations. • Glacier prepared floor for painting. • S&M Electric installed exterior HWF conduits. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 9 to August 15, 2015

Health and Safety Observations

- Daily health and safety meetings were conducted from August 10 to August 15, 2015 in the job trailer prior to construction; and
- No near misses were reported.

Water and Soil Sampling Observations and Testing Results

No water or soil sampling was performed.

Anticipated Work for the Next Week

- Continue exterior pipe and conduit installation;
- Install liner along mechanically stabilized earthen wall;
- Install sewer line at teacherage;
- Continue sheet pile penetrations;
- Install drainage pipe around sheet pile; and
- Continue interior cleaning.

Changes and Modifications

Glacier provided an updated project schedule on August 10, 2015. The adjusted schedule shows project completion on school property prior to August 21, 2015, with the exception of restoration east of the teacherage. This schedule was distributed as part of the weekly progress meeting on August 11, 2015. Schedule changes listed below are modifications from the schedule provided on August 10, 2015.

Complete interior backfill +4 days.

Repair storm drain on 6th Street +5 days permeation grouting +0 days.

Install sewer line on 6th Avenue +5 days. Waiting on updated design modification from Gray & Osbourne.

Install drain pipe around sheet pile +4 days. Overall change from August 10, 2015 schedule +4 days.

Restoration work on school property east of the teacherage to play equipment will be completed following June 21, 2015 per agreement with school superintendent.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 9 to August 15, 2015

Photographs



Description: Glacier installs rebar.

Description: Concrete slab interior of the school.



Description: Glacier installs storm drain system east of the school.

Description: Glacier installs sheet pile penetration.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 16 to August 22, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental Services (Glacier)
	Skykomish School District	Subconsultant:	McMillan Jacobs Associates (Jacobs), Pacific Surveying and Engineering Survey Crew (PSE Surveyors)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	8/16/15	<ul style="list-style-type: none"> Glacier installed hot water flushing (HWF) system piping east of school. Glacier prepared interior basement floor for painting. S&M Electrical installed exterior HWF conduits. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. Volatile organic compounds (VOCs) were monitored continuously at three locations inside the school.
Monday	8/17/15	<ul style="list-style-type: none"> Glacier installed HWF system piping well vaults and system conduit east of school. Painter prepared interior basement floor for painting, including sanding, grouting, and priming. S&M Electrical installed exterior HWF conduits. Glacier graded east of the school. Pacific Outdoor Products installed play equipment. Glacier's welder installed sleeve through sheet pile wall for teacherage. Superior Cleaners cleaned cafeteria and partial first floor hallway.



WEEKLY PROGRESS REPORT

Project Name:	Skykomish Hot Water Flushing Remediation
Project Location:	Skykomish, Washington
Project No.:	683-057
Prepared By:	Beth Padgett
Report Period:	August 16 to August 22, 2015

Construction Observations		
		<ul style="list-style-type: none"> Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Tuesday	8/18/15	<ul style="list-style-type: none"> Glacier installed HWF system piping well vaults and system conduit east of school. Painter painted basement hallway floor in the school. Glacier graded east of the school. Pacific Outdoor Products installed play equipment. Glacier installed geo-membrane liner per Change Order 12. Glacier installed teacherage sewer line per plan, capped at both ends. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Wednesday	8/19/15	<ul style="list-style-type: none"> Glacier installed HWF system piping across Railroad Avenue. Glacier trimmed sheet pile wall east of school. Painter painted basement hallway floor in the school. Glacier graded east of the school. Pacific Outdoor Products installed play equipment. Salinas Concrete placed concrete for three walkways east and south of school. Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school. Farallon collected air samples to be analyzed for air-phase petroleum hydrocarbons at six locations inside the school, at a downwind location, and at the Shawver property.
Thursday	8/20/15	<ul style="list-style-type: none"> Glacier installed HWF system piping across Railroad Avenue. Glacier and the Town of Skykomish installed water service pipe across Railroad Avenue. Glacier placed tile in cafeteria.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: August 16 to August 22, 2015

Construction Observations

		<ul style="list-style-type: none"> • S&M Electrical installed electrical conduits. • Holt Drilling replaced groundwater monitoring well GWM-20 and existing monitoring well 5-W-50 west of school. • Pacific Outdoor Products installed play equipment. • Glacier installed drain pipe around west sheet pile. • Glacier placed structural fill, geo-membrane liner, and base course along east side of school. • Glacier compacted material east of school. • Glacier backfilled and compacted trench across Railroad Avenue. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school.
Friday	8/21/15	<ul style="list-style-type: none"> • Pacific Outdoor Products installed play equipment. • Glacier placed geo-membrane liner and base course along south and north side of school. • Glacier compacted material east, south, and north of school.
Saturday	8/22/15	No work conducted.

Health and Safety Observations

<ul style="list-style-type: none"> • Daily health and safety meetings were conducted from August 17 to August 22, 2015 in the job trailer prior to construction; and • No near misses were reported.
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Water and Soil Sampling Observations and Testing Results

No water or soil sampling was performed.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

Prepared By: Beth Padgett

Report Period: August 16 to August 22, 2015

Anticipated Work for the Next Week

- Continue interior floor painting/restoration;
- Restoration west of school;
- Continue interior cleaning;
- Install sewer line in Railroad Avenue;
- Install drainage pipe around sheet pile; and
- Install geo-membrane.

Changes and Modifications

Glacier provided an updated project schedule on August 17, 2015. The adjusted schedule shows project completion on school property prior to August 21, 2015, with the exception of restoration west of the teacherage. This schedule was distributed as part of the weekly progress meeting on August 18, 2015. Schedule changes listed below are modifications from the schedule provided on August 17, 2015.

Sewer line on Railroad Avenue +3 days.

Drain pile around sheet pile +3 days.

Repair irrigation +3 days.

Install sewer line on 6th Avenue—Waiting on updated design modification from Gray & Osbourne.

Overall change from August 17, 2015 schedule +3 days.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 16 to August 22, 2015

Photographs



Description: Glacier and Town of Skykomish installing water service pipe on Railroad Avenue.



Description: Glacier installing liner for Change Order 12.



Description: Glacier installing sewer pipe to teacherage.



Description: Glacier painters painting basement hallway floor.

**WEEKLY PROGRESS
REPORT**

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 16 to August 22, 2015

Photographs



Description: Lakeridge Paving placing asphalt along 6th Avenue.



Description: Pacific Outdoor Products installing play equipment.



Description: Salinas Concrete placing concrete sidewalk east of school.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing Remediation
 Project Location: Skykomish, Washington
 Project No.: 683-057
 Prepared By: Beth Padgett
 Report Period: August 23 to August 29, 2015

Report Submitted:		Contractor Name and Contact:	
To:	Washington State Department of Ecology	General:	Glacier Environmental Services (Glacier)
	Skykomish School District	Subconsultant:	McMillan Jacobs Associates (Jacobs), Pacific Surveying and Engineering Survey Crew (PSE Surveyors)
cc:	Bruce Sheppard, BNSF		
	Amy Essig Desai, Beth Padgett, Jeff Hamlin, Rich McManus, Farallon Consulting, L.L.C.		

Construction Observations		
Day	Date	Description of Field Activity, Observations, and Recommendations to Owner
Sunday	8/23/15	No work conducted.
Monday	8/24/15	<ul style="list-style-type: none"> • Glacier placed geo-membrane liner and base course along east and north side of the school. • Glacier installed subslab pressure probes. • Volatile organic compounds (VOCs) were monitored continuously at three locations inside the school.
Tuesday	8/25/15	<ul style="list-style-type: none"> • Glacier installed hot water flushing (HWF) system piping well vaults and system conduit east of school. • Painter painted basement hallway floor in the school. • Glacier graded east of the school. • Pacific Outdoor Products placed wood chips around play equipment. • Glacier installed geo-membrane liner per Change Order 12. • Glacier installed teacherage sewer line per plan, capped at both ends. • VOCs were monitored continuously at three locations inside the school.



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Construction Observations		
Wednesday	8/26/15	<ul style="list-style-type: none"> • Glacier installed HWF system piping across Railroad Avenue. • Glacier trimmed sheet pile wall east of school. • Painter painted basement hallway floor in the school. • Glacier graded east of the school. • Pacific Outdoor Products installed play equipment. • Salinas Concrete placed concrete for three walkways east and south of school. • Farallon performed dust and noise monitoring at downwind location and at the Shawver property during working construction hours. VOCs were monitored continuously at three locations inside the school. • VOCs were monitored continuously at three locations inside the school.
Thursday	8/27/15	VOCs were monitored continuously at three locations inside the school.
Friday	8/28/15	<ul style="list-style-type: none"> • Salinas Concrete placed concrete walkway on west side of school to play structure. • Glacier graded west side of school. • Glacier installed geo-membrane liner on west side of school. • Glacier installed sheet pile drain pipe on west side of school. • VOCs were monitored continuously at three locations inside the school. • Applied Professional Services located sewer line on north side of 6th Street.
Saturday	8/29/15	No work conducted.

Health and Safety Observations
<ul style="list-style-type: none"> • Daily health and safety meetings were conducted from August 24 to August 26, 2015 in the job trailer prior to construction; and • No near misses were reported.



WEEKLY PROGRESS REPORT

Project Name: Skykomish Hot Water Flushing
Remediation

Project Location: Skykomish, Washington

Project No.: 683-057

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Water and Soil Sampling Observations and Testing Results

No water or soil sampling was performed.

Anticipated Work for the Next Week

- Continue interior floor painting/restoration;
- Restoration west of school;
- Continue interior cleaning;
- Install sewer line in Railroad Avenue;
- Install drainage pipe around sheet pile; and
- Install cap.

Changes and Modifications

Glacier provided an updated project schedule on August 24, 2015. The adjusted schedule shows project completion on school property prior to August 21, 2015, with the exception of restoration west of the teahouse. This schedule was distributed as part of the weekly progress meeting on August 25, 2015. Schedule changes listed below are modifications from the schedule provided on August 24, 2015.

Install cap on west side of school +2 days.

Install concrete sidewalk and drainage +2 days.

Sewer line in Railroad Avenue +3 days.

Drain pile around sheet pile +3 days.

Load out contaminated soil +5 days.

Install sewer line in 6th Avenue—Waiting on updated design modification from Gray & Osbourne.

Overall change from August 24, 2015 schedule +3 days.

**WEEKLY PROGRESS
REPORT**

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 Project Location: Skykomish, Washington
 Project No.: 683-057
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Photographs



Description: Glacier removing distribution box and temporary sewer connection.



Description: Glacier placing sod along north and east side of school.