FINAL Construction Completion Report

2020 Bluff A Reclamation Project

Riley Pass Abandoned Uranium Mine Sites

USFS Contract 12035518D0001
Tetra Tech Project 117-8343014
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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
BE	Brosz Engineering
CQC	Construction Quality Control
CQCP	Construction Quality Control Plan
CCR	Construction Completion Report
FSR	Forest Service Road
NFS	National Forest System
QA	Quality Assurance
RCP	Reinforced Concrete Pipe
RFP	Request for Proposal
TT	Tetra Tech
USFS	United States Forest Service
YGC	Young Gun Construction LLC

1.0 INTRODUCTION

This Construction Completion Report (CCR) summarizes the 2020 construction activities specific to the reclamation of Bluff A, which were completed as part of the Riley Pass Abandoned Uranium Mine Sites (Site). The Site is located in the North Cave Hills area of the Custer Gallatin National Forest within Harding County, South Dakota (**Appendix A**). The U.S. Forest Service (USFS), as Lead Agency under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) authority, oversees, manages, coordinates, designs and implements the work.

The USFS awarded the construction contract to Young Gun Construction LLC (YGC). Tetra Tech, Inc. (Tetra Tech) assisted the USFS by providing quality assurance (QA) oversight for this project through Contract 12035518D0001, Task Order 15. For the duration of the project, Chad Santone was the Contracting Officer and Dave Shimek was the Contracting Officer's Representative.

1.1 PROJECT LOCATION

The Site is located in the North Cave Hill land unit of the Custer Gallatin National Forest in Harding County, South Dakota. Bluff A is located in Sections 22 and 23, Township 22N, Range 5E, Black Hills Meridian. The Site is situated on National Forest System (NFS) land managed by the United States Department of Agriculture, Forest Service, Custer Gallatin National Forest.

1.2 PROJECT DESCRIPTION

The North Cave Hills contain 12 mined bluffs labeled "A" through "L". This project encompassed the reclamation work on Bluff A. Waste material was excavated from fifteen removal areas on Bluff A (A1 through A15 **Appendix A)** and placed in the consolidation area located on top of Bluff A. Following waste removal, borrow cover material was graded to create complex landforms consisting of ridges, subridges, and drainage ways. Cover soil, compost, fertilizer and seed were placed over disturbed areas.

Work included the following:

- Mobilization to and demobilization from the project Site. Providing the required bonding and Insurance.
- Waste excavation and haul to consolidation area.
- Bluff Subgrade Regrading – create complex landforms consisting of ridges, subridges, and drainage ways.
- Bluff Cover – Cover soil was excavated and transported to the removal and consolidation areas. These areas were composted, fertilized, and seeded.
- Borrow sources were developed.
    - Topsoil was stripped and stockpiled for borrow area reclamation.
    - The borrow area was regraded and topsoil replaced, and the area was composted, fertilized, seeded.

1.3 CONSTRUCITON PLANS AND SPECIFICATIONS

The project plans and specifications (hereinafter, "the Contract Documents") were prepared by Tetra Tech's design team. The Contract Documents consisted of seventeen (17) plan sheets, a bid form, Forest Service Standard Construction Specifications, and contract clauses.

2.0 CONSTRUCTION

2.1 BID AWARD AND PRE-CONSTRUCTION PERIOD

Young Guns Construction (YGC) was awarded the work contained in the solicitation for Contract 12035520C0001, prior to the June 22, 2020 issue of the Notice to Proceed. At that time, the contract period was set at 114 calendar days and calculated for completion no later than October 14, 2020. A Preconstruction conference was held on site also on June 22, 2020.

Appendix B contains Contractor submittals for the project which serve to memorialize certain contract requirements including construction schedule and materials to be incorporated into the project.

2.2 MAJOR CONSTRUCTION ACTIVITIES

Work began on June 22, 2020 with a contracted 114 calendar days to completion (projected October 14, 2020). Although change orders increased the contract term to 156 calendar days (November 25), YGC ended activities on, or about, October 5, 2020, with substantial completion issued by the RO on October 8, 2020, approximately 48 days prior to the contract deadline. Daily construction logs have been included in **Appendix C**, in which these have been briefly summarized in this report.

2.2.1 Sequence of construction

Construction followed the sequence proposed by YGC in Submittal 001 (**Appendix B**).

- YGC mobilized equipment to the site where it was inspected for residual offsite soils which could contain noxious weeds.
- Temporary sedimentation and erosion control measures (silt fence and straw wattles) were installed, placed according to the submitted plan.
- Waste from the Bluff A removal areas was excavated and hauled to the Bluff A consolidation area.
- Cover soil from the planned site (and later an off-site pit) was placed, spread, compacted and shaped in anticipation of final grade.
- Areas were surveyed, and digital terrain models were generated and reconciled to the design surfaces. YGC adjusted field work to meet plans and specifications.
- The waste excavation and consolidation areas were verified in accordance with the Final Verification Sampling Plan (VSP) (Tetra Tech 2015a). Non-compliant locations were reworked to provide additional cover to achieve compliance.
- Exposed surfaces were hydroseeded.
- Temporary measures including accesses, haul roads, and sediment control measures were removed, and YGC de-mobilized.

The following table lists major project construction milestones.

Table 2-1 Project Milestones

Project Milestone	Date	Notes
Pre-Construction Meeting	6/22/20	
Notice to Proceed	6/22/20	
Contractor Mobilization	6/22/20	

Project Milestone	Date	Notes
Begin Installation of Sedimentation & Erosion Control Measures	6/23/20	
Excavation of Consolidation Area	6/30/20	
Excavation, Transport, Stockpiling of Mine Waste	7/9/20	Began with A4, A5, A19
Placement into Consolidation Area	7/10/20	
On-Site Borrow Pit Excavation & Testing	7/6/20	
Capping, Compaction, & Shaping with Select Borrow	7/9/20	
Execution of Modification 1	7/27/20	To expand limit of on-site borrow area +$90,850: New Contract Value: $889,582.85 +14 Days: New Contract End: 11/03/2020
Suspend Work Issued	8/10/20	By formal letter from CO
Suspend Work Rescinded	8/18/20	By email from CO
Off-Site Borrow Pit Excavation & Testing	8/19/20	Feist Property borrow site
Execution of Modification 2	8/19/20	To provide for off-site borrow area +$324,100: New Contract Value: $1,213,682.85 +21 Days: New Contract End: 11/24/2020
Begin Final Grading of Consolidation Area	8/24/20	
Begin Verification Testing	9/1/20	End testing 9/2/20
Field Survey Verification of Consolidation Area Sub Grades	9/8/20	
Begin Surface Treatment of Consolidation Area	9/14/20	Compost & Cover Soil
Mitigate Identified Consolidation Area “Hot Spots”	9/16/20	
Begin Reclamation of Feist Borrow Site	9/17/20	End 9/18/20
Begin Hydroseed	9/23/20	End 10/1/20
Demolish, Dismantle & Discard Temporary Erosion Controls	10/5/20	
Contractor Demobilization	10/5/20	
Substantial Completion by RO	10/8/20	
Execution of Modification 3	Pending as of 12/1/2020	To reconcile installed/used quantities with contract values & provide for contractor stand by time during work suspension +$70,716: New Contract Value: $1,213,682.85 No additional time

2.3 IRREGULARITIES AND CONSTRUCTION CHALLENGES

Construction was executed generally in accordance with the Gantt chart, prepared and submitted by YGC. As with any project, there were some delays and unanticipated events. As mentioned previously, these issues did not excessively delay completion. The most notable issues were:

- The discovery of substantially less usable cover soil in the designated borrow area on site. An alternate location was identified on nearby private property. It was tested and used to supply most of the required cover material. This change came at a significant increase in cost, since a separate excavation, loading, and hauling operation was required. Instead of borrow material being immediately adjacent to the Bluff A sites, large haul equipment was required to make 30-minute round trips.
- After measurable rainfall, transient steep slopes made equipment operation tenuous as even tracked vehicles tended to slide.
- Transient slopes also hampered efforts to water condition materials being deposited as the tanker truck was unable to access several of the sites in progress.
- Grubbed tree roots were expected to be ground on site and used for mulch. However, the rocky soil entrained in the root balls made grinding infeasible. Burning these were ruled out as hot, dry conditions made uncontrolled wildfire and unacceptable risk. Therefore, while small debris, which could be ground and chipped, was used as intended, root mat was consolidated and buried on the site.
- The discovery of wide expanses of ledge rock in consolidation areas, which required redesign of grades, which, in turn, affected contract earthwork volumes.
- Base design information was gathered and reduced using LiDAR, and advanced aerial topographic surveying technique. However, the method has limitations where the earth surface is obscured (by vegetation, snow, etc.). As the contract required finished grades to a very close tolerance, discrepancies in the base data, which had been obscured by low brush, were compounded as the contractor worked to meet those requirements.
- Exploratory pits of the borrow area on site revealed insufficient cap and cover material within the designated location. The additional cost and time associated with this was included in contract change 0001.
- Despite the larger area investigation, sufficient soils were not located. During a RO-directed work suspension, an off-site borrow pit was identified on adjacent private property. The additional cost and time to operate and restore this site was included in contract change 0002. Contract change 0003 included compensation for contractor standby time during the suspension.

2.4 QUALITY ASSURANCE DURING CONSTRUCTION

Tetra Tech (Mr. Tom Bumstead, P.E.) was engaged by USFS to remain on site during all construction activity during the entirety of the project, keeping notes and preparing the daily logs and their weekly summaries for the RO and Tetra Tech design staff (Mr. Larry Cawlfield, P.E.). Construction challenges directly related to the premise of the construction contract were identified and conveyed to the RO and to the design staff for consideration and resolution. Examples of such situations and obstacles included:

- Insufficient cover material available from the on-site borrow pit,
- Application of hydroseed mix in conjunction with slash, and
- Discrepancies between LIDAR base elevations and those reported from earthmoving GPS interfaces.

Section 4.0, Lessons Learned, describes additional issues, along with recommendations for their resolution.

2.5 CONSTRUCTION MANAGEMENT

Hunter Kalisiak was YGC project manager for the duration of the project. Initially, Eric Atkins was project superintendent from June 22, 2020 until September 5, 2020. On 9/9/20, Dave Nash was assigned to replace Mr. Atkins as project superintendent. Routine communication was verbal. Change orders and significant design modifications were documented by written communication between YGC and USFS. Minor field modifications were addressed through onsite verbal communication and documentation in the daily logs. Daily logs prepared by Tetra Tech are included in **Appendix C**.

2.6 COMMUNICATION WITH CONTRACTOR

Most communication with YGC was handled informally, and the need for written communication was limited to engineering design changes, work orders, and contract modifications. Construction progress meetings were held each Wednesday between the USFS and YGC. Meeting agendas typically included review of safety issues, construction progress updates, expected construction activities for the coming week, upcoming submittals and discussion of project issues. The QA Team representatives also discussed project-related issues with YGC as they arose, which were documented in field notebooks and daily logs, relayed to the USFS.

2.7 SUBMITTALS

Table 2-2, following, lists project submittals with submittal dates. **Appendix B** contains copies of submittals.

Table 2-2 Construction Submittals on Record

Submittal Number	Title	Version	Date Prepared*
001	Construction Schedule	Original	June 18, 2020
002	Contractor Health and Safety Plan	Original	June 18, 2020
003	Traffic Control Plan	Original Revised	
004	Erosion Control Plan	Original	June 19, 2020
005	Decontamination Plan	Original	June 18, 2020
006	Borrow Plan	Original	June 19, 2020
007	Temporary Haul Road Plan	Original	
008	Superintendent Designation	Original Revised	June 22, 2020 September 9, 2020
028	HAZWOPER Certificates (5 total) Additional personnel (1)	Original Revised	June 29, 2020 September 11, 2020
031	Subcontractor Agreement (Brosz Engineering)	Original	June 2, 2020
041	Straw Wattles	Original Additional	
042	Silt Fence Fabric	Original	

Submittal Number	Title	Version	Date Prepared*
051	Borrow Pit Soil Samples	Original Additional Additional	July 14, 2020 July 15, 2020 July 16, 2020
052	Compost Tests	Original Additional	July 21, 2020 August 17, 2020
053	Seeding Mixture	Original	
054	Feist Borrow Site Soil Tests	Original	August 3, 2020
055	Fertilizer	Original	September 23, 2020

* The record of submittals provided reflects the best available information on file. Where no reference date is provided, none is apparent in the record. The presence of multiple submittals for an item with multiple dates suggests that revisions were requested to the original submittal.

In addition to the above, YGC provided copies of their certified payroll records. **Appendix D** provides copies of the payroll records.

2.8 PROJECT DELAYS

The RO issued a stop work order from August 10, 2020 through August 18, 2020 to address borrow material shortage issues. The contractor was issued change orders to compensate for standby time, and the additional effort associated with operating and reclaiming an off-site borrow pit. The contract was also amended to provide thirty-five (35) additional days for delays associated with these project changes.

No weather days were granted for completion of the project; although, progress was occasionally slowed or delayed due to inclement weather (including heavy down-pours and regional lightning) and its effects (hazardous, slick working surfaces and roadways).

2.9 PROJECT CLOSEOUT

The 2020 Bluff A construction efforts concluded on October 8, 2020 with the RO's acknowledgement of substantial completion. Periodic inspections over the duration of the project were conducted by USFS's Mr. David Shimek (Contracting Officer Representative) and Mr. Peter Werner (On Scene Coordinator) along with YGC's Hunter Kalisiak. A final project inspection was conducted by Tetra Tech, YGC, and USFS representatives.

3.0 CONTRACT MODIFICATIONS

Construction work was completed in general accordance with project specifications. The following sections specify noteworthy changes to the contract.

3.1 PLAN REVISIONS

Several plan revisions were made to the engineering design during the project. **Appendix E**, the contract modifications, reference these changes and adjustments, and as-built drawings of the final reclamation surface are included in **Appendix A**.

3.2 CONTRACT MODIFICATIONS DURING CONSTRUCTION

The USFS issued work orders and project modifications during the construction season. **Appendix E** includes copies Amendment of Solicitation/Modification of Contract forms and supporting documents.

Three contract modifications were issued by the USFS during the 2020 season. The modifications are summarized below:

1. Contract Modification No. 1 – This modification expanded the on-site borrow area for additional suitable materials. It provided an additional 14 construction days and increased the contract by $90,850.
2. Contract Modification No. 2 – This modification established the off-site borrow site, providing for the testing, excavation, transport, and restoration of the private property. It provided an additional 21 construction days and increased the contract by $324,100.
3. Contract Modification No. 3 – This modification reconciled the invoiced quantities with the contract estimates, compensated for standby time during the stop-work, and provided for the replacement of straw and tackifier with bonded fiber matrix. It increased the contract by $70,216.20 and added no additional time to the contract.

Contract modifications are summarized in the following table. Source documents are contained in **Appendix E**.

Table 3-1 Contract Modification Summary

Modification Number	Description	Change in Contract Price	New Contract Value
1	Expanded borrow pit area	$90,850.00	$889,582.85
2	Provided for off-site borrow operation	$324,100.00	$1,213,682.85
3	Final quantities reconciliation, standby time, replacement of specified surface stabilization with bonded fiber matrix	$70,716.20	$1,284,399.05

3.3 COMPLETED QUANTITIES

The Schedule of items in the contract specifies the method of measurement, unit, estimated quantity, unit price and total price. The total contract amount, including Modifications 1 through 3 (#3 unexecuted as of the date of this report), totaled $1,284,399.05. The total project cost invoiced on Invoice 7, including work up through project completion was $1,274,499.05. The difference of $9,900 is for about 300 cubic yards of Borrow Cover Material which remains unbilled.

Appendix F summarizes the quantities and the values of each contract line item completed for the project through project completion as represented by Invoice 7 ($82,455.62), submitted by the Contractor at demobilization on October 8, 2020. Final applied quantities were determined through CQC, oversight personnel, and topographic surveys.

4.0 LESSONS LEARNED

Although this reclamation was not an extraordinarily complex project, certain challenges inevitably present themselves in any construction effort. In earthwork, these are most often related to the site itself, whether topographic, location, or geologic. Anticipating future work on this site, it is appropriate to examine the most obtrusive of the issues and consider them when planning the next project. These are discussed in some detail below.

- Survey Control – The intent of this project is to obliterate or significantly reduce the evidence of historical industrial activity on the site. Using deliberate grading designs, the finished area is intended to blend into the surrounding landscape. To achieve that, however, work must adhere to very close tolerances and requires a nearby network of horizontal and vertical control points from which the equipment can calibrate and reference the plans.
    - *Recommendation – Additional control stations must be set within the project work area.*
- Design Surface – The design topographic information was gathered using LiDAR techniques, which rely on clear view of the earth surface from overhead. Brush, vegetation, or other obstructions create inaccuracies in the primary design database.
    - *Recommendation – Prior to design, digital elevation models should be field checked by ground-based survey crews with special focus on areas where the ground is obscured.*
- Borrow Area Investigation – The Bluff A borrow area contained such a significant rock/boulder component that it was essentially unusable. Field investigations during the design phase seeking borrow materials must scrutinize sites much more critically.
    - *Recommendation – Given the known rocky, thin soiled nature of the Riley Pass site overall, it may be prudent to seek and secure off-site locations for contingency from the outset.*
- Design Revisions for Concealed Conditions – The Natural Regrade process was chosen to design renovated landforms which blended closely with the surrounding area and required little to none of the traditional permanent mechanical stabilization techniques (like benching, rip rap, matting, etc.). It is best suited for post-mining operations where the excavated surface is the design starting point and material is "built up" to create the new natural surface. These projects, however, introduce Natural Regrade at a slightly different point in the construction lifecycle, where subsurface obstructions are not apparent until the finished surface is already designed, and the contractor is on site moving material. This sequencing anomaly makes expedient adjustments to the final integrated grading plan extremely difficult. Contractor delays while waiting for surveys and redesigns, as well as rework are expensive.
    - *Recommendation – Massive rock is the most onerous of the concealed conditions which require plan adjustment. A contingency for mass rock excavation to include blasting and crushing on site to allow the construction of the design plan might be more expedient and less costly than delays associated with redesign and rework of the surface.*
    - *Recommendation – Separate the excavation contract from the backfill and reclamation contract. In this way, the final design could be prepared based on an exposed earth surface. Otherwise obscured obstructions like mass rock could be integrated into the design and incorporated into the work plan.*
    - *Recommendation: Given the complexity of the natural regrade design process, much closer communication between the designer and the contractor is required as obstructions are revealed which may affect the finished grade earth form.*
- Bonded Fiber Matrix – Based on the current specification, it was difficult to assess the bonded fiber matrix application rate; in addition, it was difficult for the contractor to apply the bonded fiber matrix in areas of placed slash.

  - *Recommendation: Future contracts shall include a more detailed surface treatment specification, including application rates from the manufacturer and prohibiting the placement of slash on the reclamation area surface.*
- Compost – It was difficult for the construction contractor to effectively incorporate compost into the borrow cover soil due to the steep slopes.
  - *Recommendation: The compost specification should be updated to include mixing of compost prior to placement.*
- Timing of Contract and Work Periods – Dust control and maintaining worker safety due to warm temperatures was very difficult.
  - *Recommendation: Consider starting the construction work earlier in the season to avoid the hot/dry summer months.*
  - *Recommendation: Workdays began typically around 7 am and ended around 5:30 pm (the hottest period of the day). During much of the construction period, workable daylight hours began as early as 5 am. The same length workday would end before the hottest part of the day, and before the very common late afternoon thunderstorms when work was frequently ended because of hazardous site conditions anyway.*
- Alternate Dust Palliative – The daily heat and strong winds quickly dried road surfaces, making dust control an expensive ongoing challenge. Common chemical additives are available which bind fine soil particles and reduce airborne dust.
  - *Recommendation: USFS will evaluate using magnesium chloride and other low impact additives in watering passes on construction roadways to reduce the dust control and watering efforts.*
- Disposal – The Bluff A specification called for chipping stumps. However, this was nearly impossible due to rock and other debris incorporated within the stump removals.
  - *Recommendation: Consider burying the stumps in future contracts.*

5.0 VERIFICATION SAMPLING

Tetra Tech has prepared this section of the CCR to serve as the “Bluff A Verification Sampling Report” under Task Order No. 8 (Contract 12035518D001) on behalf of the USFS to document and present findings of environmental and radiological sampling conducted within the Bluff A survey area within the Riley Pass Uranium Mine Site. The following subsections provide an overview of the work performed as part of the verification sampling. For this section, figures and tables are presented to support the survey design and results and a standalone appendix. **Appendix G** is intended to provide supporting documentation required for verification sampling reporting. **Appendix G** also includes a number of subsections covering the different documentation.

5.1 VERIFICATION SAMPLING OVERVIEW

5.1.1 Background

In 2018, a waste characterization investigation was performed to characterize the source, nature, and extent of mine related contamination at Bluff A. The results of the work performed in that investigation are presented in the Bluff A Riley Pass Abandoned Uranium Mine Waste Characterization Sampling Report (Tetra Tech 2019). During the 2018 investigation, the original USFS boundary of Bluff A of 6 acres was expanded to over 39 acres in order to sufficiently characterize the extent of the contamination. The waste characterization field sampling and data evaluation efforts successfully delineated the lateral extent of mine related contamination with respect to cleanup action levels that had not been previously known at Bluff A. The 2018 investigation at Bluff A met requirements specified in the 2016 Action Memo, officially published by USFS on April 26, 2016 (USFS 2016). Prior to remediation, conditions at the Bluff A were determined to pose an imminent and substantial endangerment to human health and the environment due to presence of elevated concentrations of heavy metals and radionuclides

and thus Bluff A met criteria for initiating Removal Action under 40 CFR Section 300.415 (b)(2) of the National Contingency Plan. It was determined there was a need for removal action at Bluff A. The information and detail presented in that report allowed engineers to sufficiently design a remedy that would ensure the cleanup objectives would be attained. The area that was considered to require removal action was approximately 7 acres.

Risk-based concentration criteria for arsenic and radium-226 (Ra-226) were established for Riley Pass and identified in the 2016 Action Memo (USFS 2016). An analysis demonstrated that the contaminants of concern identified in the engineering evaluation and cost analysis (EE/CA) and risk assessment (USFS 2006) can be assessed by verifying the presence or absence of arsenic and Ra-226 in soil media (USFS 2016). The 2016 Action Memo presents risk-based cleanup levels developed for soil concentrations of arsenic and Ra-226 at Riley Pass. The 2016 Action Memo cleanup levels are as follows: (1) soils exceeding the cleanup level of 30 picocuries per gram (pCi/g) of Ra-226 will be considered waste and isolated during reclamation activities; (2) soils exceeding the cleanup level of 142 milligrams per kilogram (mg/kg) of arsenic will be considered waste and isolated during reclamation activities.

Tetra Tech followed the Final Verification Sampling Plan (VSP) [Tetra Tech 2015a] to conduct the sampling. The following subsections present information related to the verification sampling process and to ensure that sufficient information is provided to document attainment of cleanup standards per the Action Memo have been achieved at Bluff A. Verification sampling was performed in two phases during Fall of 2020 (August/September). The results of the verification sampling are discussed in some detail below. For the purposes of visualization, the verification sampling figures are integrated into this section of the report and not included as an appendix. **Appendix G** includes a variety of supporting information related to the verification sampling including scanned copy of field logbook, scanned field forms, photographic log, data validation report, laboratory reports, and other supporting documentation. The following subsection presents the components of the verification sampling survey design.

5.1.2 Survey Design

Using the approach stated in the VSP, the Bluff A survey area is to be released survey unit by survey unit. The survey unit design is a subjective process and was completed before the sampling efforts were initiated in the field. A discussion on survey unit classification and procedures for selecting survey unit locations and size is provided in **Section 7.3** of the VSP (Tetra Tech 2015a). The “verification area” is the area where contaminated soils were remediated during the construction season. Outside of the verification area there is no known mine related contamination above the cleanup action levels. Therefore, the focus of the survey design for the verification sampling was to conduct comprehensive and exhaustive sampling activities within the verification area. The initial verification area provided to the team and confirmed in the field was approximately 7 acres. A conservative approach was followed to overlay 100 square meter sampling grids (m^2) that intersected any portion of the verification area and thus adding an additional buffer across the region to which would be evaluated during the verification sampling field work.

Initially, a total of 405 grids of 100 m^2 were overlaid across the verification area which expanded the area to be surveyed from 7 acres to 10 acres (~43 percent increase). Following the field work some grids that were initially identified either had not been affected by construction activities and/or that the data from the previous investigation indicated the area was already not contaminated. To summarize, only 395 grids were actually surveyed or sampled; however, the extent of that final grid system covered nearly 9.7 acres or nearly 39 percent of an area larger than the verification area to ensure an adequate coverage buffer was included.

The next step in the process was to delineate survey units across the verification area. A maximum survey unit size of 12,000 m^2 was identified in the VSP. A total of four survey units (SU-1, SU-2, SU-3, and SU-4) were chosen for Bluff A and each survey unit was divided nearly equally across the verification area. **Table 5-1** provides a summary of the survey unit size, number of 100 m^2 grids, and total area for the Bluff A survey area. All survey units were below 12,000 m^2. **Figure 5-1** provides an overview of the 7-acre verification area (shown in red) as well as SU-1 (shown in blue), SU-2 (shown in green), SU-3 (shown in orange), and SU-4 (shown in pink). This

figure also shows the identifying sample IDs for each 100 m^2 grid contained within each of the survey units as well as the grids where soil samples were collected (shown in black) as part of the verification sampling process. The grids that were sampled were randomly selected from interior grids because grids on the edge in some cases had little or no construction occurring in many cases.

Table 5-1 Summary of Bluff A Survey Units

Survey Unit	# of Grids	Size (m^2)
SU-1	101	10,100
SU-2	110	11,000
SU-3	96	9,600
SU-4	88	8,800
Total	**395**	**39,500**

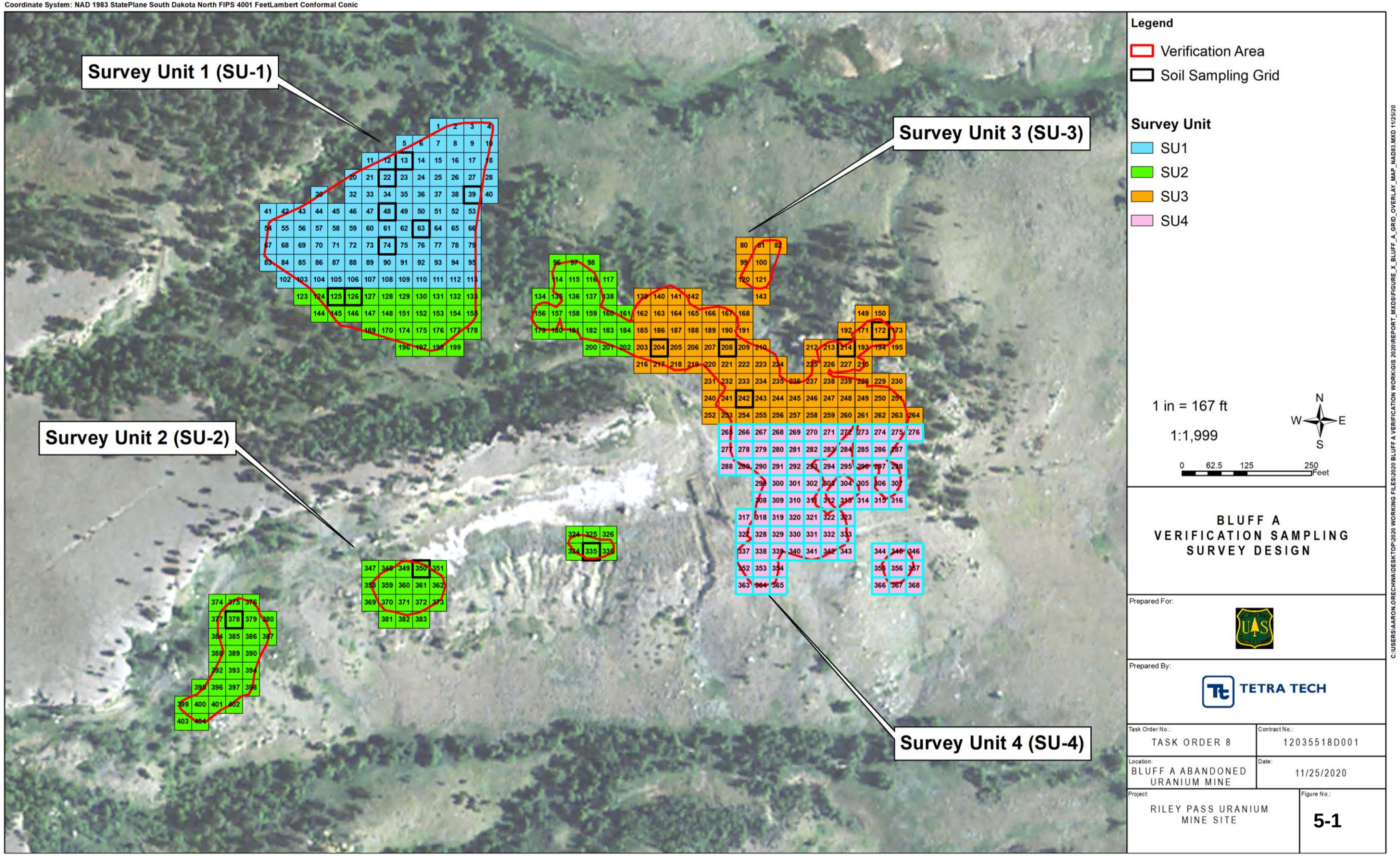


Figure 5-1 Bluff A Verification Sampling Survey Design

5.2 ARSENIC VERIFICATION SAMPLING

This subsection presents an overview, methodology, results, statistical evaluation, and a brief summary of the verification sampling as it relates to addressing arsenic soil contamination at Bluff A.

5.2.1 Overview

The VSP provides guidance for conducting verification surveys to assess post-remediation conditions at a site to ensure attainment of the cleanup standards has been achieved. For arsenic contamination, a combination of in situ X-ray fluorescence (XRF) field surveys and soil confirmation sampling is used to meet this objective.

In situ XRF field surveys have been shown to be effective tools to measure concentrations of arsenic in surface soil at a definitive level at Riley Pass (Tetra Tech 2013, 2015b). XRF field surveys were performed in accordance with the sampling methods presented in this section using a portable Niton XRF XL3t spectrum analyzer to meet the data quality objectives (DQOs) presented in the VSP. A correlation between in situ XRF arsenic concentrations and arsenic concentrations reported by the analytical laboratory (U.S. Environmental Protection Agency [EPA] Method 6020A) was developed for the site (Tetra Tech 2015a). This correlation was the primary method for estimating arsenic concentrations in the field. A correlation (coefficient of determination [R^2] = 0.897; Pearson Correlation-Coefficient [r] = 0.947) was calculated between the in situ XRF arsenic measurements and the laboratory-reported total arsenic concentrations. The following equation was used to convert the in situ XRF measurements to laboratory-equivalent arsenic concentrations at the site:

Equation 1 $$Lab\ Arsenic\ = 10^{0.352+0.891log_{10}(\text{XRF Arsenic})}$$

Where:

Lab arsenic	=	laboratory-reported arsenic concentration in surface soil (mg/kg)
XRF arsenic	=	XRF measured arsenic concentration in surface soil (mg/kg)

The in situ XRF field is an effective means of conducting verification sampling to determine that cleanup objectives of arsenic have been attained within each survey unit across Bluff A. However, the arsenic soil confirmation sampling is the primary tool used to assess whether cleanup objectives have been attained in soils for arsenic. The goals of soil confirmation sampling are to (1) confirm the efficacy of the in situ XRF field surveys; and (2) verify that the arsenic concentrations in soil meet the cleanup criteria established by the VSP (Tetra Tech 2015a) within the verification area. The VSP describes the procedures that should be used at the Riley Pass site to perform the XRF confirmation soil sampling. The VSP also addresses sample handling, labeling, documentation, preservation, shipping, and laboratory analysis. Tetra Tech followed the VSP for conducting arsenic soil confirmation sampling.

The following subsection presents the methods for both the in situ XRF survey and the arsenic soil confirmation sampling.

5.2.2 Methods

In situ XRF field surveys and soil confirmation sampling were both performed in accordance with the methods outlined in **Appendix A** and **Appendix C** of the VSP (Tetra Tech 2015a), respectively. The XRF field survey was performed at sampling locations spaced over a 10- by 10-meter systematic square grid within all survey units as shown in **Figure 5-1**. Within the center of each sampling grid a measurement was taken at a minimum count time of 60 seconds using a Niton Xl3t handheld XRF. Global positioning system (GPS) were collected at the actual measurement location using a sub-foot accurate Trimble Geo7XH and XRF measurement results were logged in the field. The data were post processed using Trimble Pathfinder software. A differential correction was performed

using GPS Pathfinder Office on all geospatial points collected during the project. The field team completed field forms with information such as sample ID, quality control information, reading number, date/time, and other observations.

Soil confirmation samples were collected at a frequency of 5 percent (1 in 20) within random pre-determined sampling grids per the statistical survey design outlined in the VSP. Soil sampling locations were selected prior to field deployment and after survey unit classification with a random number generator assuming a normal distribution. The actual soil sample locations were also marked in the field with the GPS. Following completion of the in situ XRF field survey, an informal analysis was performed using the in situ XRF arsenic data to ensure that a sufficient sample size was collected in the field and it was determined no additional samples were necessary to meet the statistical testing requirements. The soil samples were submitted to an EPA-accredited laboratory for analysis of arsenic following drying, homogenization. Arsenic was sampled using EPA Method 6020A with a 3050B partial digestion technique and the units of the results were presented in mg/kg which are equivalent to parts per million (ppm).

The results of the in situ XRF field surveys, including measurement locations and sampling results, are provided in **Section 5.2.3**. A statistical analysis to evaluate the in situ XRF field survey results is presented in **Section 5.2.4**. Statistical tests presented in the VSP were utilized to determine whether each survey unit met the release criterion for concentrations of arsenic in soil. **Table 5-2** presents the number of in situ XRF measurements and soil confirmation samples taken at of the each of the survey units at Bluff A. **Figure 5-2** shows the final Bluff A in situ XRF measurement locations shown in blue and the soil confirmation samples shown in yellow. A total of 398 in situ XRF measurements and 21 soil confirmation samples were collected across the four survey units within the Bluff A verification area.

Field personnel performed daily QC calibration checks and system checks for the instrument used. **Section 5.4** presents the results of QA/QC for the XRF field survey. The primary QA/QC methods for the in situ XRF field surveys are presented in **Appendix A** of the VSP. The primary QA methods for the XRF include manufacturer-recommend calibration and daily energy calibration checks. The primary QC methods for the XRF include the use of calibration checks, field duplicates, and precision measurements. Proper use of these methods is critical for a successful QC program and allow for collected XRF data to be used beyond a screening designation to more definitive uses, which is the case with this project. Calibration checks are performed by field engineers daily to (EPA 2007):

- Identify whether the XRF unit is properly calibrated to provide unbiased measurements for the elements of concern in the range of concern.
- Make sure the calibration stays constant over time.
- Identify and quantify potential interference effects.

Operational and QC requirements for each XRF instrument were followed and documented in the field logbook maintained by the analyst. The QA/QC data results, along with an evaluation of whether these results met project acceptance criteria per the in situ XRF field survey requirements outlined in the VSP, are provided in **Section 5.4**. A photographic log of XRF field survey activities and other project related activities are presented in **Appendix G1**. Sampling information of the in situ XRF field measurements is provided in **Appendix G2**, laboratory analytical reports are provided in **Appendix G3**, and field logbooks and field sheets are provided in **Appendix G4**.

Table 5-2 Sample Size for In Situ XRF and Soil Confirmation Samples for Arsenic Per Survey Unit

Survey Unit	Number of In Situ XRF Measurements	Number of Arsenic Soil Confirmation Samples
SU-1	103	6
SU-2	110	5
SU-3	97	5
SU-4	88	5
Total	398	21

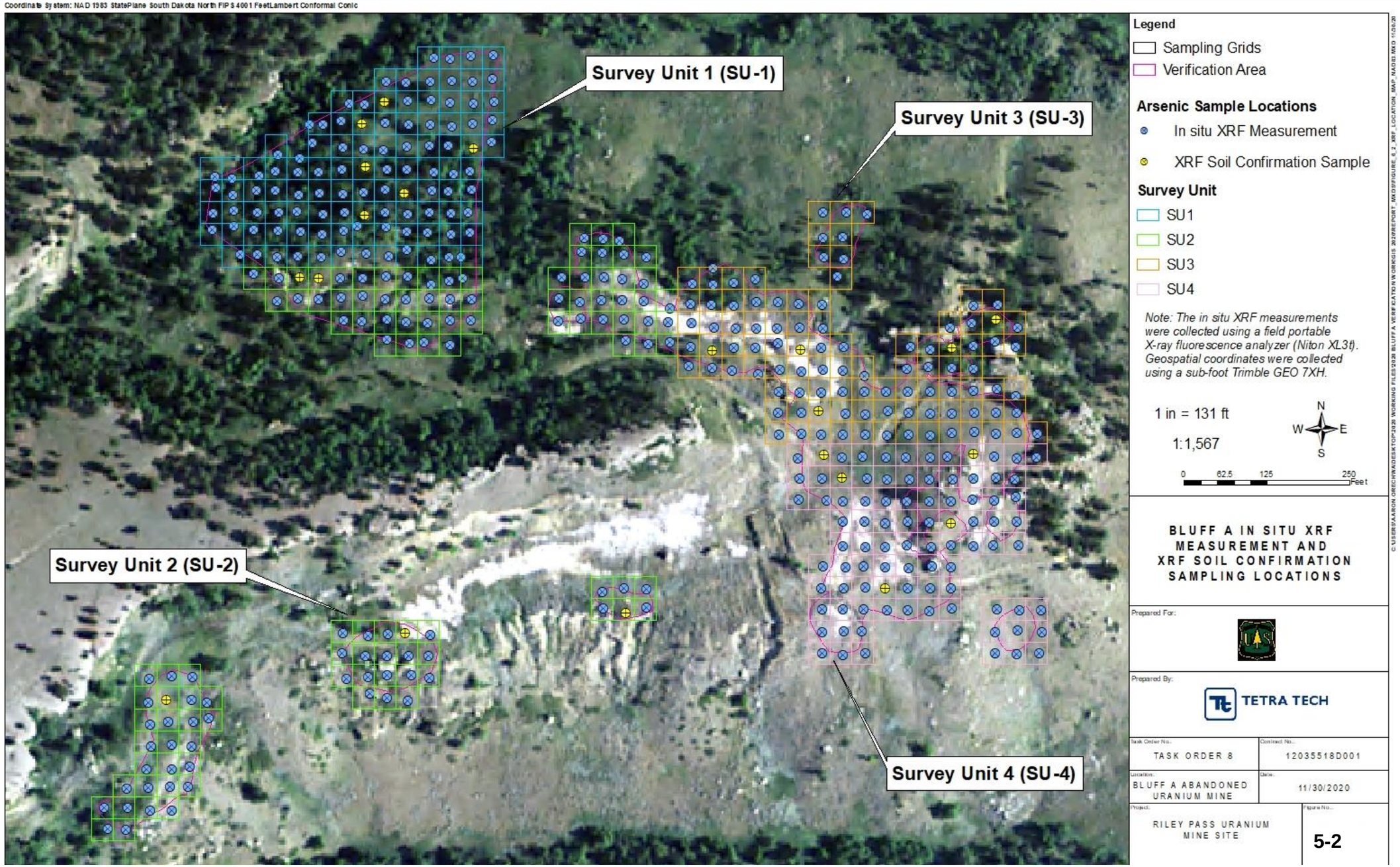


Figure 5-2 Bluff A in Situ XRF Measurement and XRF Soil Conformation Sampling Locations

5.2.3 Results

5.2.3.1 In Situ XRF Field Survey Results

A total of 398 in situ XRF measurements were taken in the field across the four survey units of Bluff A according the methods described in **Section 5.2** and the VSP (Tetra Tech 2015a). There were five measurements that were below the limit of detection for arsenic on the handheld XRF. The geospatial coordinates along with results of each in situ XRF measurement are provided in tabular format in **Appendix G**. After an evaluation of the XRF/lab regression model (**Section 5.2.4).** Tetra Tech determined that Equation 1 was acceptable for converting XRF to laboratory-equivalent measurements of arsenic in surface soils. Using Equation 1 to convert all in situ XRF measurements to laboratory-equivalent arsenic concentrations, Tetra Tech found that the arsenic concentration at Bluff A ranged between 4.28 mg/kg to 188 mg/kg with an average and median of 32.6 mg/kg and 31.3 mg/kg, respectively, across all of the Bluff A verification area. A total of 2 in situ XRF measurements out of 398 (0.5 percent) exceeded the cleanup level of 142 mg/kg.

The summary statistics of the laboratory equivalent in situ XRF results are presented in **Table 5-3**. The locations and color-coded results of in situ XRF arsenic measurements collected at Bluff A are displayed in **Figure 5-3**. Both of the measurements with exceedances are shown as red on **Figure 5-3** and are both at the edge or outside of the actual cleanup zone, both of these measurements were found near sandstone outcrops and may be attributed to natural arsenic found in the region. Additionally, both locations were on extreme slopes and therefore difficult to access. The results of the statistical evaluation of cleanup goal attainment are presented in **Section 5.2.4**.

The XRF field survey took place on September 1 and 2, 2020 and on September 16, 2020. On the final day, the XRF malfunctioned towards the end of the day when 55 measurements were left. After discussion with the project manager, the field team collected the remaining 55 soil samples and performed XRF analysis using the same type of instrument in a laboratory setting on September 24, 2020. Tetra Tech field engineers followed the established QA/QC protocol outlined in **Appendix A** of the VSP. The QA/QC results are provided in **Section 5.4**.

Table 5-3 Summary Statistics of In Situ XRF Arsenic Measurements (Lab Converted) for Bluff A

Summary Statistic	Units	SU1	SU2	SU3	SU4	All
Number of Measurements	#	103	110	97	88	398
Number of Detects	mg/kg	99	110	96	88	398
Number of Non-Detects	mg/kg	4	0	1	0	5
Minimum	mg/kg	6.22	7.04	4.28	15.6	4.28
Maximum	mg/kg	81.6	189	109	154.6	189
Standard Deviation	mg/kg	16.6	23.6	14.4	23.4	22.0
Average	mg/kg	18.3	31.5	38.9	43.8	32.6
Median	mg/kg	12.4	30.1	37.1	38.5	31.3
90th Percentile	mg/kg	48.9	55.8	49.4	64.6	56.6
95th Percentile	mg/kg	63.2	60.3	62.1	93.1	63.9
99th Percentile	mg/kg	68.8	93.3	95.1	131.7	109
Number of Points Exceeding 142 mg/kg Cutoff	#	0	1	0	1	2
% of Points Exceeding 142 mg/kg Cutoff	%	0%	0.91%	0%	1.14%	0.50%

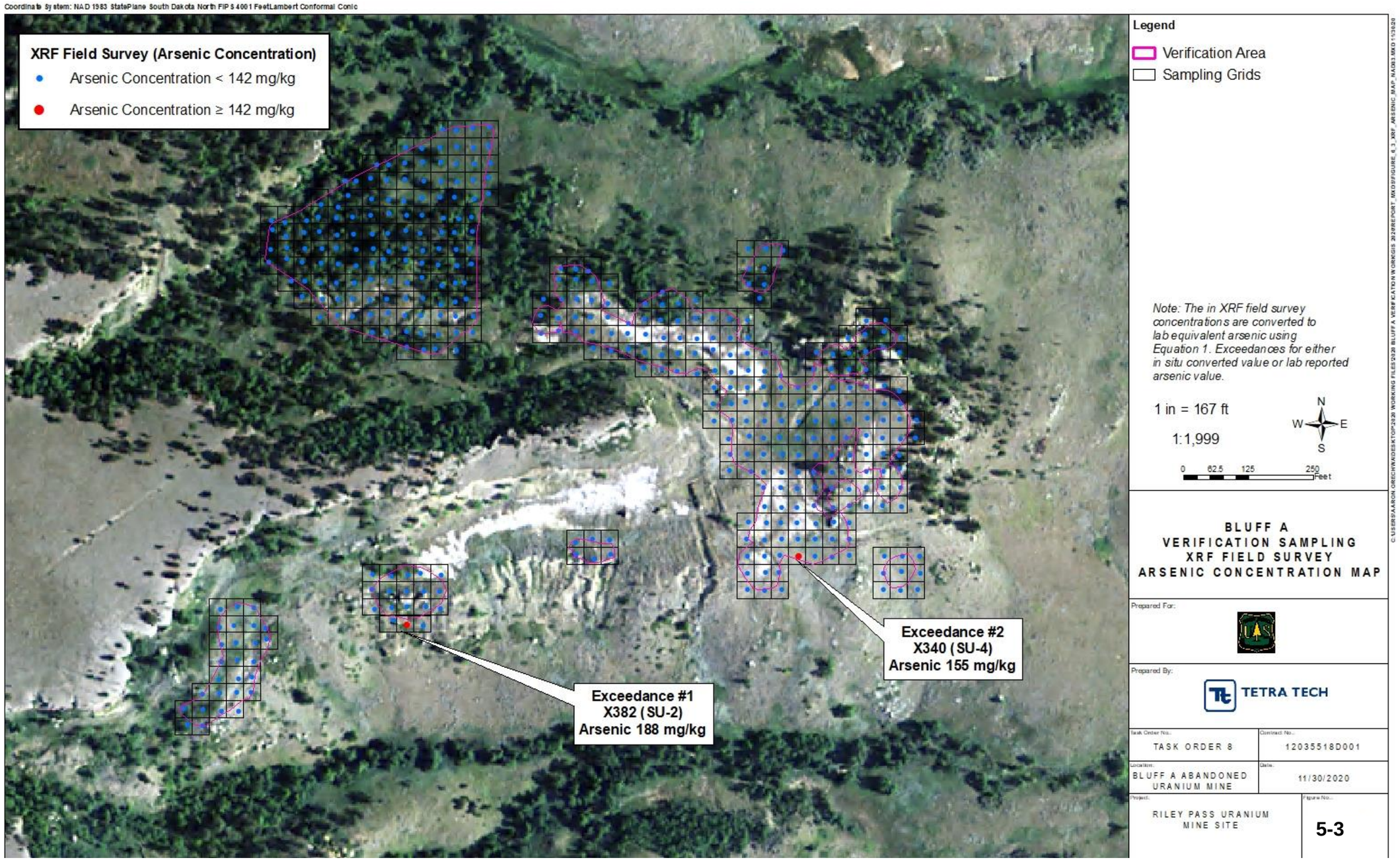


Figure 5-3 Bluff A Verification Sampling XRF Field Survey Arsenic Concentration Map

5.2.3.2 Arsenic Soil Confirmation Soil Samples

A total of 21 soil confirmation samples were collected as part of the verification sampling effort for arsenic. A total of two field duplicate samples were also collected. The soil confirmation sample locations are shown in **Figure 5-2**. **Table 5-4** summarizes the sample IDs, date, survey unit, laboratory reported arsenic concentration, raw in situ XRF arsenic measurement, and the laboratory equivalent converted arsenic XRF measurement. **Table 5-5** presents the summary statistics of the arsenic soil confirmation sampling for each survey unit as well as for the entire Bluff A verification area. The sampling results showed no exceedances for arsenic in the 21 soil samples. The arsenic ranged between 5.8 mg/kg and 86 mg/kg, with an average and median of 27.8 mg/kg and 24 mg/kg, respectively. Laboratory reports and data validation reports are provided in **Appendix G**.

Table 5-4 Summary of Arsenic Soil Verification Sampling (Laboratory and XRF Predicted)

Sample ID	Date	Survey Unit	Laboratory Reported Arsenic (mg/kg)	In Situ XRF Arsenic (ppm)	XRF Converted Arsenic (mg/kg)
AS-A13-01	9/16/2020	SU1	6.3	6.5	12
AS-A22-01	9/16/2020	SU1	6.6	6.6	12
AS-A39-01	9/16/2020	SU1	85	43	64
AS-A48-01	9/16/2020	SU1	7.1	6.7	12
AS-A63-01	9/16/2020	SU1	8.1	8.2	15
AS-A74-01	9/16/2020	SU1	7.2	5.6	10
AS-A125-01	9/16/2020	SU2	6.2	5.4	10
AS-A126-01	9/16/2020	SU2	7.4	9.0	16
AS-A172-01	9/2/2020	SU3	30	30	46
AS-A204-01	9/2/2020	SU3	26	25	40
AS-A208-01	9/2/2020	SU3	24	21	34
AS-A214-01	9/2/2020	SU3	31	27	43
AS-A242-01	9/2/2020	SU3	24	23	37
AS-A266-01	9/2/2020	SU4	33	28	44
AS-A273-01	9/2/2020	SU4	51	28	44
AS-A279-01	9/2/2020	SU4	33	34	52
AS-A304-01	9/2/2020	SU4	41	37	56
AS-A330-01	9/2/2020	SU4	86	94	128
AS-A335-01	9/2/2020	SU2	21	16	26
AS-A350-01	9/2/2020	SU2	5.8	6.3	12
AS-A378-01	9/2/2020	SU2	45	31	48

Table 5-5 Summary Statistics of Arsenic Soil Sampling Results for Bluff A

Summary Statistic	Units	SU1	SU2	SU3	SU4	All
Number of Samples	#	6	5	5	5	21
Number of Detects	mg/kg	6	5	5	5	21
Number of Non-Detects	mg/kg	0	0	0	0	0
Minimum	mg/kg	6.30	5.80	24.0	33.0	5.80
Maximum	mg/kg	85.0	45.0	31.0	86.0	86.0
Standard Deviation	mg/kg	31.8	16.8	3.32	22.1	23.8
Average	mg/kg	20.1	17.1	27.0	48.8	27.8
Median	mg/kg	7.15	7.40	26.0	41.0	24.0
90th Percentile	mg/kg	46.6	35.4	30.6	72.0	51.0
95th Percentile	mg/kg	65.8	40.2	30.8	79.0	85.0
99th Percentile	mg/kg	81.2	44.0	31.0	84.6	85.8
Number of Points Exceeding 142 mg/kg Cutoff	#	0	0	0	0	0
% of Points Exceeding 142 mg/kg Cutoff	%	0	0	0	0	0

5.2.4 Statistical Analysis

5.2.4.1 In Situ XRF Field Survey Statistical Evaluation

A statistical evaluation was performed on the in situ XRF field survey data for arsenic according to the VSP (Tetra Tech 2015a) to conduct sample size determination for the Sign test, perform the Sign test for each survey unit, and to evaluate the XRF/laboratory correlation. All ProUCL output files are included in **Appendix G**.

XRF Regression Evaluation

The regression model presented in **Equation 1** (**Section 5.2.1**) is applied to determine arsenic levels across all survey units and must be validated to ensure that the relationship established between in situ XRF and laboratory-reported arsenic concentrations requires further investigation. **Appendix C** of the VSP provides guidance for the evaluation of the existing regression model to provide definitive-level measurement. Once the arsenic laboratory-reported concentrations were available, the in situ XRF measurement and the laboratory arsenic concentrations were plotted on the existing regression model with 95 percent prediction limits as shown as red and blue lines in **Figure 5-4**. The project QC criteria specifies that 95 percent of the data must fall within these limits or further investigation is warranted. **Table 5-4** provides the laboratory-reported arsenic concentrations for the 21 primary arsenic soil confirmation samples collected at Bluffs A along with the corresponding in situ XRF arsenic measurement. These data pairs are plotted on the existing regression model as described in **Appendix C** of the VSP. As can be seen in **Figure 5-4**, all of the measurements fall within the acceptable range of values as stated in the VSP.

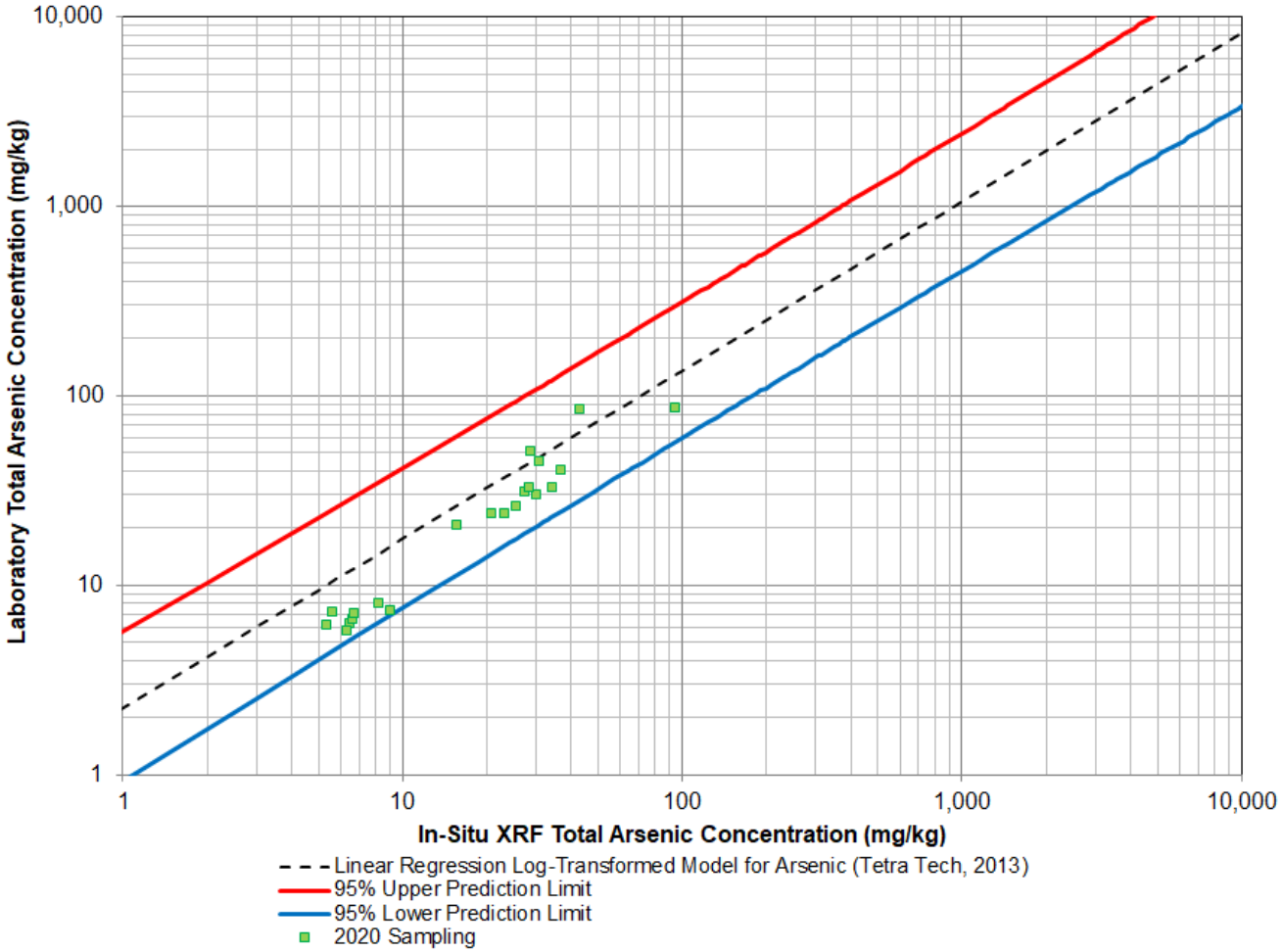


Figure 5-4 Validation of XRF Regression for Bluff A Verification Sampling

Sample Size Determination

The VSP specifies that a 1 in 20 sampling frequency be followed for collecting arsenic soil confirmation samples per in situ XRF measurement. However, a further check is required to evaluate whether the total number of in situ measurements is statistically adequate for the Sign test to be statistically powerful enough. After the verification sampling was completed, a statistical evaluation of the median and standard deviation of the estimated arsenic concentrations within each survey unit was conducted. The statistical software package ProUCL 5.1 was used to evaluate the sample size requirements for the single sided Sign test with Type I error of 5 percent and Type II error rate of 10 percent.

The width of the gray region was calculated by subtracting the maximum median for all survey units (38.5 mg/kg from SU-4) of the collected data from the arsenic cleanup criterion (142 mg/kg). The width of the gray region was 103.5 mg/kg. The maximum standard deviation of the arsenic data (23.6 mg/kg) at each survey unit was also required as an input parameter. As described above, both the highest standard deviation and median from the survey units within each survey area were used for the analysis, which provides a conservative check on the sample size requirements. The minimum sample size calculated from ProUCL for conducting the one-sided Sign test is 11 samples. The minimum number of in situ XRF measurements from a given survey unit was 88; therefore, there was significantly enough samples to conduct the Sign test.

Based on the analysis described above, enough in situ XRF measurements were collected to adequately estimate the median and to evaluate whether cleanup standards for arsenic soil concentrations within each survey unit were attained. The ProUCL output is provided in **Appendix G**.

Sign Test

The one sample Sign test for uncensored full data sets without nondetects using ProUCL was the primary statistical test used to evaluate the laboratory-estimated soil arsenic concentrations. Tetra Tech converted the in situ XRF arsenic measurements into equivalent total arsenic concentrations using the regression model (**Equation 1**). These data sets were then input into the statistical software ProUCL and run through the Sign test. The result of the test at a 95 percent significant level determines if the median of the data set is lower than the action level (soil cleanup criteria). The Sign test was run for all survey units within each survey area unless there were no arsenic measurements exceeding the arsenic cutoff level. For instance, there were no exceedances in SU-1 or SU-3; therefore, there was no need to run the analysis for those survey units. The Sign test was performed on SU-2 and SU-4, since each of those survey units had one measurement above the action limit. Both of the survey units passed, and it was concluded the median of the data was below the action level for a 5 percent Type I and 10 percent Type II error. The ProUCL output is provided in **Appendix G**.

5.2.4.2 Arsenic Soil Confirmation Statistical Evaluation

Section 5.2.4.1presents an analysis to evaluate if the arsenic cleanup objectives for each survey unit were achieved. The final check involves an analysis of the mean arsenic soil concentrations across the entire Bluff A verification survey area. Tetra Tech collected 21 arsenic soil confirmation samples across Bluff A, which was enough to statistically justify the calculation of the 95 percent UCL of the mean for the Bluff A survey area. ProUCL was used to calculate the 95 percent UCL of the mean arsenic concentrations for the Bluff A verification survey. The minimum sample size for estimating the mean with a margin of error of 14.2 mg/kg (10 percent of action level) and a standard deviation of 23.8 mg/kg, was found to be 13 samples. A total of 21 samples were collected, meeting the sample size requirements. Therefore, the analysis for UCL-95 was acceptable with the number of soil samples collected and the resultant value was calculated to be 36.8 mg/kg, well below the 142 mg/kg cleanup threshold. The soil cleanup objectives for mean arsenic soil confirmation samples was attained for the verification sampling survey areas at Bluffs A. The ProUCL output is provided in **Appendix G**.

5.2.5 Summary

To summarize, the verification sampling program at Bluff A for arsenic involved an XRF field survey with soil confirmation sampling. A total of 398 measurements were collected across four survey units. The estimated median arsenic concentrations within each survey unit were below the cleanup limits using the Sign test. Furthermore, 21 soil confirmation samples were collected across Bluff A to evaluate the mean concentration using laboratory analysis methods. The UCL95 was calculated to be 36.8 mg/kg for the entire Bluff A verification area which is nearly 4 times lower than the cleanup level of 142 mg/kg. Overall, the results indicate that Bluff A has been successfully remediated according to the statistical methods outlined in the VSP and no further action is needed. Furthermore, all of the QC requirements were achieved for both the XRF field survey and the soil confirmation sampling as further discussed in **Section 5.4**.

5.3 RADIUM-226 VERIFICATION SAMPLING

This subsection presents an overview, methodology, results, statistical evaluation, and a brief summary of the verification sampling as it relates to addressing Ra-226 soil contamination at Bluff A.

5.3.1 Overview

Gamma radiation surveys have been shown to be effective at identifying the spatial extent of radiation levels and predicting the concentration of Ra-226 in surface soils at Riley Pass. Previous site-specific studies found that there is a direct correlation between gamma exposure rate (microroentgens per hour [µR/hr) and Ra-226 (pCi/g) activity concentration for all study areas at Riley Pass (MSE 2009; Tetra Tech 2013). Gamma radiation surveys were performed through systematic walkovers with a detector height of 1-meter above the ground surface after remedial action had been completed in accordance with the methods outlined in the VSP. Tetra Tech (2015a) developed a site-specific gamma/Ra-226 correlation to guide cleanup boundaries and verification sampling. As discussed earlier, a 2018 investigation was performed at Bluff A. During this investigation a site-specific correlation was developed for Bluff A as outlined in Tetra Tech (2019).

During verification sampling of Bluff A, Tetra Tech utilized the Bluff A site-specific gamma/Ra-226 correlation for a number of reasons. The correlation for Bluff A is site-specific and should be applicable when applied directly to the data at Bluff A and the correlation is more conservative than the other correlation established in Tetra Tech (2015a). The correlation developed in 2018 was also found to better represent the gamma-radium relationship during verification sampling of the Bluff A verification areas sampled. Using this model, a gamma radiation level cutoff of 30.4 µR/hr corresponds to the Ra-226 cleanup level of 30 pCi/g.

The correlation is described by **Equation 2** and was developed using gamma exposure rate and Ra-226 soil concentrations collected as part of the 2018 Bluff A investigation. The following equation was used to convert the gamma radiation levels collected at the site to laboratory-equivalent Ra-226 activity concentrations in soil:

Equation 2 $\text{Lab Ra} - 226 = -24.35 + 1.787 * Gamma$

Where:

Lab Ra-226	=	laboratory-equivalent soil Ra-226 concentration (pCi/g)
Gamma	=	gamma exposure rate measurement (µR/hr)

In general, the initial results of gamma radiation surveys indicated the construction and removal action objectives were achieved for most of Bluff A. However, during both Trip 1 and Trip 2 there were some small areas identified that had slightly elevated gamma radiation levels. Tetra Tech conducted field oversight and was able to work with the contractor, per USFS direction, to sufficiently cover these areas with additional cover soil to ensure the levels were below the action limits for established for the site.

The following subsection presents the methods for both the in gamma radiation surveys and the Ra-226 soil confirmation sampling.

5.3.2 Methods

Gamma radiation surveys were performed in accordance with the methods outlined in **Appendix B** of the VSP (Tetra Tech 2015a). The DQO process presented in the VSP identified gamma exposure rate surveys to be used to provide information on the Ra-226 activity concentrations in surface soils within surveys units and to determine whether these values meet the project cleanup objectives. Ra-226 soil activity concentrations can be estimated using site-specific gamma/Ra-226 correlations developed for the site during the characterization study at Bluff A (Tetra Tech 2019). The purpose of the gamma radiation survey is to collect gamma exposure rate measurements within each survey unit after the removal action is completed and estimate Ra-226 surface soil concentrations.

Tetra Tech utilized mobile backpack scanning systems consisting of a 2- by 2-inch Ludlum Measurements, Inc. (Ludlum) 44-10 thallium-doped sodium iodide [NaI(Tl)] scintillation detectors and Ludlum Model 3000 data loggers coupled to handheld tablet computers running Environmental Restoration Group, Inc.'s (ERG) 105G GPS survey

system with RadScout software (ERG 2019). NaI(Tl) survey meters are used for scanning areas for gamma emitters because they are sensitive to gamma radiation and easily portable. A scanning rate of 0.5 meter per second (m/s) (about equal to 1 mile per hour) was used for distributed gamma emitting constituents as recommended by the U.S. Nuclear Regulatory Commission (NRC) (1992, 2000). The gamma exposure rate data were transmitted approximately once per second to a tablet and logged using RadScout software (ERG 2019). A detector height of 1-meter above ground surface is recommended by NRC (1992) and typically used for baseline radiological studies (Office of the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs/Nuclear Matters [OSD] 2012), including other projects by ERG (2009a, 2009b) and Tetra Tech (2010). All measurement data were automatically stored and processed with the measurement location information mapped and analyzed in real time. Real-time mapping allowed the field engineer to maintain position on predetermined scan transect lines and to identify any problems arising during the scanning efforts. Based on Tetra Tech's experience at similar sites, the NaI(Tl) detector response to significant above-background gamma radiation sources near the ground surface ranges horizontally to about 1.5 meters, giving the detector an estimated ground surface field of view about 3 meters in diameter (a 1.5-meter radius is about 5 feet). A scan density of 100 percent was achieved for all the gamma exposure rate surveys conducted for this project, with scan transects spaced approximately 2 meters apart in width. The Ludlum NaI(Tl) detector systems exhibit energy-dependent response characteristics; the radiation energy spectrum associated with background radiation from soils found at sites with uranium or Ra-226 contamination can be adequately characterized using these systems.

The Ludlum Model 3000 data logger system employs a calibration factor to internally convert detector counts per minute (cpm) to a gamma exposure rate in µR/hr. The calculated exposure rate, which is directly proportional to the measured count rate, is transmitted by the data logger to the scanning portable table system.

All radiological projects conducted by Tetra Tech incorporate data QA/QC protocols that meet internal quality objectives and *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (NRC 2000) guidelines. In general, QA includes qualitative factors that provide confidence in the results while QC involves quantitative field evidence that supports the validity of results. Data quality indicators as recommended in MARRSIM (NRC 2000) and the *Multi-Agency Radiological Laboratory Analytical Protocols Manual* (MARLAP) (NRC 2004) were used to ensure the data collected were reliable and of the highest quality. Tetra Tech utilized GPS-based gamma scanning systems with automated electronic data acquisition software to perform the gamma exposure rate surveys. The QA/QC survey procedures are widely used and represent accepted techniques for characterizing gamma radiation in the uranium industry.

Under the QC program, factory-calibrated instruments met onsite field-test criteria (such as calibration checks). Tetra Tech field personnel collected quantitative measurements as part of the QC program, including:

1. Pre-survey field instrument calibration checks
2. Daily field instrument calibration checks
3. Post-survey field instrument calibration checks

Under the QC program, all radiation-detection instruments used during field work were calibrated by an accredited laboratory within the past 12 months as recommended by the manufacturer. Data developed with the field-qualified instruments are then interchangeable, allowing instrument substitution as needed.

Ra-226 soil confirmation sampling was performed in accordance with the methods outlined in **Appendix C** of the VSP. Soil samples were collocated at the same predetermined grids as the arsenic confirmation samples; however, unlike the discrete arsenic sample a composite nine-point aliquot sample was collected throughout the 100 m^2 sampling grid. **Figure 5-1** displays the grids that were sampled for Ra-226 (shown in black). Before soil sampling, the corners of each sample plot were identified and marked in the field with pin flags. Ra-226 soil confirmation sampling was performed following the methods presented in **Appendix C** of the VSP. The soil

samples were submitted to an EPA-accredited laboratory for analysis of Ra-226 following drying, homogenization, and radon daughter equilibration as described in **Appendix B** of the VSP.

An explanation of the QA/QC methods for the radiation instrumentation, QC acceptance limits, and results of the calibration checks, is provided in **Section 5.4**. Factory calibration documentation for the detectors used during the surveys and QA/QC data results, along with an evaluation of whether these results met project acceptance criteria outlined in the VSP. A photographic log of field sampling activities and other project related activities are presented in **Appendix G1**. Laboratory analytical reports are provided in **Appendix G3**, and field logbooks and field sheets are provided in **Appendix G4**.

5.3.3 Results

5.3.3.1 Gamma Radiation Survey Results

Tetra Tech conducted a gamma radiation survey at Bluff A per the methods outlined in **Section 5.3.2** of this report and **Appendix B** of the VSP. All the radiation survey QA/QC project acceptance criteria for this project were achieved, as presented in **Section 5.4**. A total 39,432 individual gamma radiation measurements were collected within the verification area of Bluff A. The summary statistics of the individual gamma exposure rate measurements collected within each survey unit as well as the Bluff A verification area are provided in **Table 5-6**. The individual gamma exposure rates collected at Bluff A ranged between 8.7 and 28.7 µR/hr. The average and median gamma exposure rates within the survey area were 15.5 µR/hr and 15.1 µR/hr, respectively. There were no individual raw gamma measurements above the gamma cutoff level of 30.4 µR/hr. The gamma survey results are displayed in **Figure 5-5.**

Section 3.5 of the VSP specifies that all gamma radiation measurements be converted into predicted Ra-226 soil concentrations as part of the data post-processing. While none of the measurements were above the gamma cutoff level this analysis was still performed. All gamma radiation survey points were converted to estimated Ra-226 soil concentrations using Equation 2. Then a grid average was calculated for the all of the 100 m^2 sampling grids. A map showing the grid averaged Ra-226 soil concentrations across the 395 soil sampling grids is provided in **Figure 5-6**. **Table 5-6** provides summary statistics of the grid averaged predicted Ra-226 soil concentrations within each survey unit at the Bluff A verification area; this is useful information to compare with the laboratory analytical data collected in each survey unit to evaluate the correlation. **Section 5.3.4** provides the results of an evaluation of the existing gamma/Ra-226 regression model using the Bluff A site-specific linear regression model. None of the 395 sampling grids had predicted grid average Ra-226 soil concentrations above the Ra-226 cleanup level of 30 pCi/g.

Table 5-6 Summary Statistics of Gamma Radiation Survey Results at Bluff A

Summary Statistic	Units	SU1	SU2	SU3	SU4	All
Number of Measurements	#	10,633	9,946	9,391	9,462	39,432
Minimum	µR/hr	10.2	8.7	9.7	9.9	8.7
Maximum	µR/hr	26.8	28.7	27.0	27.4	28.7
Standard Deviation	µR/hr	2.4	2.2	2.2	2.2	2.4
Average	µR/hr	15.4	14.5	16.5	15.7	15.5
Median	µR/hr	14.9	14.2	16.3	15.4	15.1
90th Percentile	µR/hr	18.7	17.1	19.5	18.5	18.6
95th Percentile	µR/hr	20.5	18.3	20.4	19.5	20.0
99th Percentile	µR/hr	23.2	22.1	22.5	22.0	22.6
Number of Points Exceeding 30.4 µR/hr Cutoff	#	0	0	0	0	0
% of Points Exceeding 30.4 µR/hr Cutoff	%	0%	0%	0%	0%	0%

Table 5-7 Summary Statistics of Grid Averaged Radium-226 Results at Bluff A

Summary Statistic	Units	SU1	SU2	SU3	SU4	All
Number of Measurements	#	101	110	96	88	395
Minimum	pCi/g	0.4	0.0	0.4	0.6	0.0
Maximum	pCi/g	12.2	9.8	12.7	10.0	12.7
Standard Deviation	pCi/g	3.0	2.0	2.8	2.4	2.8
Average	pCi/g	3.6	2.1	5.4	4.0	3.7
Median	pCi/g	2.7	1.6	4.7	3.6	3.0
90th Percentile	pCi/g	8.3	4.9	9.0	7.5	8.0
95th Percentile	pCi/g	10.5	6.8	9.9	8.2	9.5
99th Percentile	pCi/g	11.8	8.8	12.4	9.5	11.8
Number of Points Exceeding 30.4 µR/hr Cutoff	#	0	0	0	0	0
% of Points Exceeding 30.4 µR/hr Cutoff	%	0%	0%	0%	0%	0%

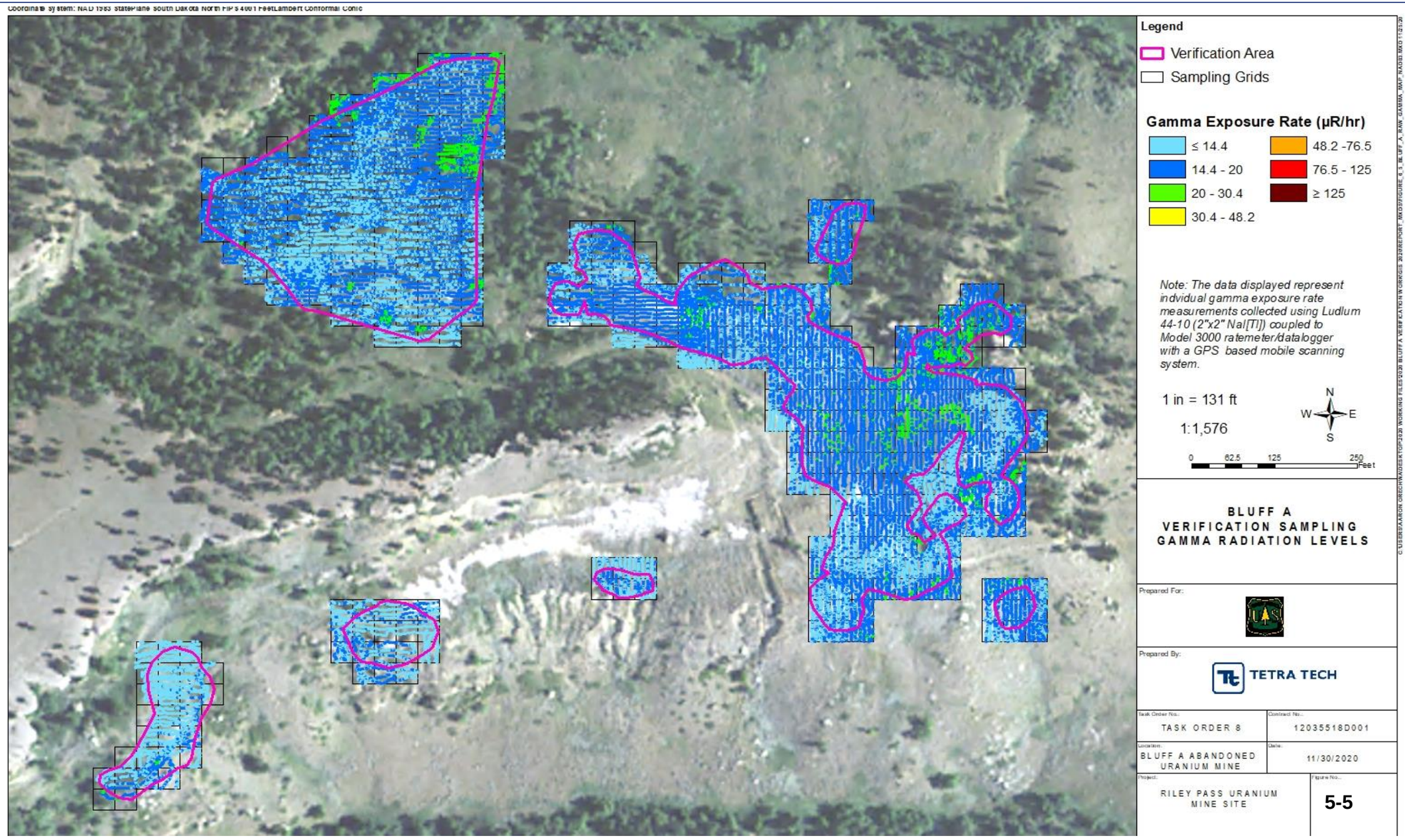


Figure 5-5 Bluff A Verification Sampling Gamma Radiation Levels

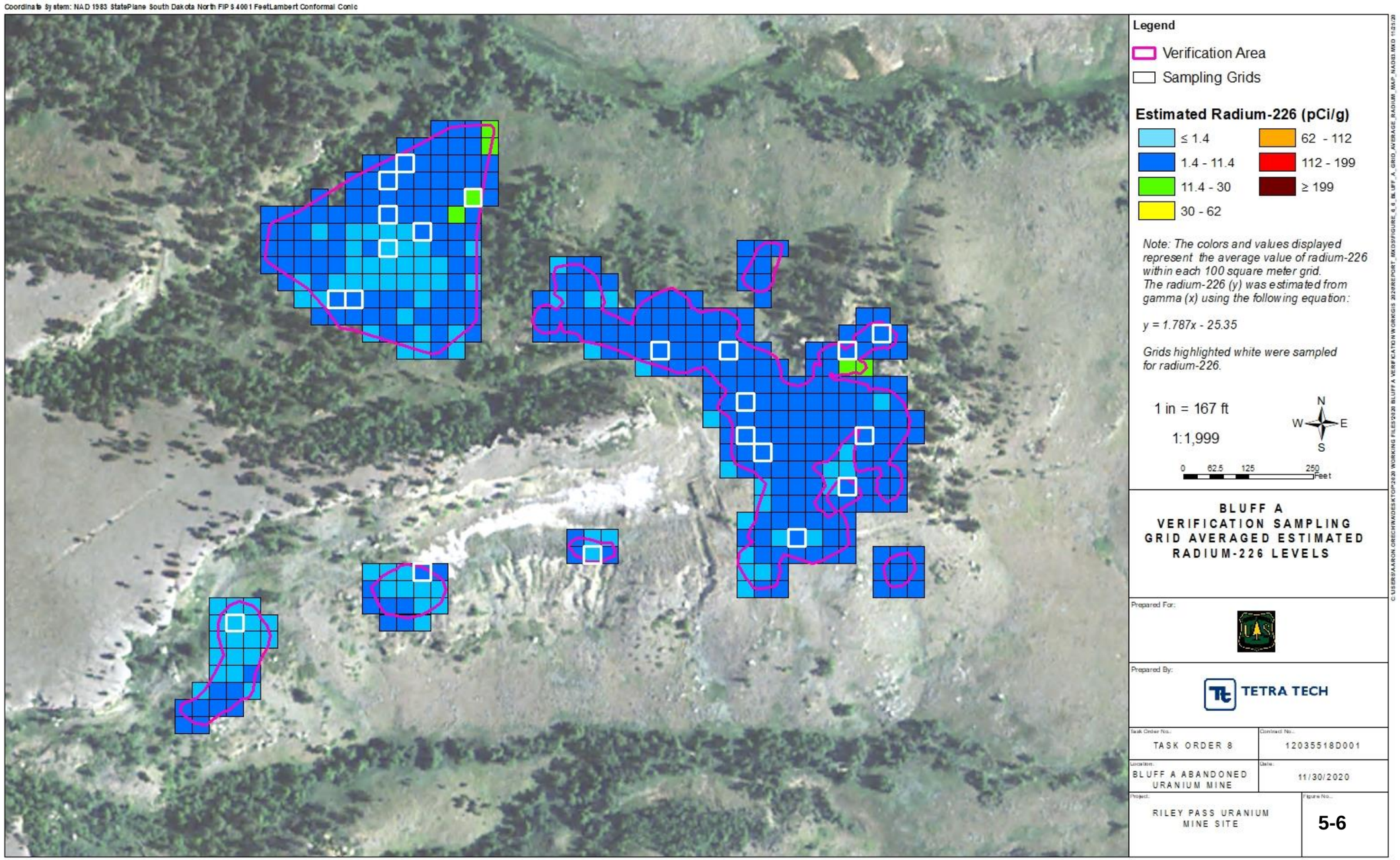


Figure 5-6 Bluff A Verification Sampling Grid Averaged Estimated Radium-226 Levels

5.3.3.2 Radium-226 Soil Confirmation Sampling Results

The gamma radiation levels were all below the cutoff of 30.4 µR/hr (**Table 5-6**); consequently, so were the grid averaged estimated Ra-226 levels (**Table 5-7**), indicating the cleanup objectives were achieved for Ra-226. All 21 soil samples submitted for Ra-226 were below the cutoff of 30 pCi/g as well. **Table 5-8** presents the summary of the analytical laboratory results for the Ra-226 soil confirmation soil samples. **Table 5-9** presents the summary statistics of the Ra-226 soil confirmation data across individual survey units and across the entire Bluff verification area. The Ra-226 soil concentrations ranged between 1.3 pCi/g and 6.6 pCi/g, with an average and median of 3.3 pCi/g and 3.8 pCi/g, respectively.

Table 5-8 Summary of Radium-226 Soil Confirmation Samples

Sample ID	Date	Survey Unit	Radium-226 (pCi/g)	+/- (pCi/g)	Grid Average Gamma Exposure Rate (µR/hr)
RA-A13-01	9/15/2020	SU1	1.41	0.33	14.7
RA-A22-01	9/15/2020	SU1	1.8	0.33	16.0
RA-A39-01	9/15/2020	SU1	6.55	0.92	20.0
RA-A48-01	9/15/2020	SU1	1.59	0.31	14.2
RA-A63-01	9/15/2020	SU1	4.47	0.66	14.6
RA-A74-01	9/15/2020	SU1	1.6	0.35	13.7
RA-A125-01	9/15/2020	SU2	1.76	0.36	14.6
RA-A126-01	9/15/2020	SU2	2.19	0.38	14.5
RA-A172-01	9/2/2020	SU3	4.91	0.72	18.1
RA-A204-01	9/2/2020	SU3	4.39	0.64	16.5
RA-A208-01	9/2/2020	SU3	3.99	0.56	16.1
RA-A214-01	9/2/2020	SU3	5.56	0.79	19.2
RA-A242-01	9/2/2020	SU3	4.1	0.61	16.7
RA-A266-01	9/2/2020	SU4	4.73	0.65	18.3
RA-A273-01	9/2/2020	SU4	2.9	0.45	15.9
RA-A279-01	9/2/2020	SU4	4.83	0.68	18.1
RA-A304-01	9/2/2020	SU4	1.36	0.29	14.5
RA-A330-01	9/2/2020	SU4	2.8	0.44	15.1
RA-A335-01	9/2/2020	SU2	3.77	0.52	13.8
RA-A350-01	9/2/2020	SU2	4.04	0.56	14.7
RA-A378-01	9/2/2020	SU2	1.28	0.31	12.6

Table 5-9 Summary Statistics of Radium-226 Soil Sample Results at Bluff A

Summary Statistic	Units	SU1	SU2	SU3	SU4	All
Number of Samples	#	6	5	5	5	21
Minimum	pCi/g	1.4	1.3	4.0	1.4	1.3
Maximum	pCi/g	6.6	4.0	5.6	4.8	6.6
Standard Deviation	pCi/g	2.1	1.2	0.6	1.5	1.6
Average	pCi/g	2.9	2.6	4.6	3.3	3.3
Median	pCi/g	1.7	2.2	4.4	2.9	3.8
90th Percentile	pCi/g	5.5	3.9	5.3	4.8	4.9
95th Percentile	pCi/g	6.0	4.0	5.4	4.8	5.6
99th Percentile	pCi/g	6.4	4.0	5.5	4.8	6.4
Number of Points Exceeding 30.4 µR/hr Cutoff	#	0	0	0	0	0
% of Points Exceeding 30.4 µR/hr Cutoff	%	0%	0%	0%	0%	0%

5.3.4 Statistical Analysis

As stated in Section 6.3.2 and Section 6.3.3, there were no exceedances of cutoff levels for either the gamma radiation survey or the Ra-226 soil confirmation soil sampling. Therefore, no further statistical testing was required. However, an evaluation of the efficacy of the Bluff A gamma/radium correlation was performed. Equation 2 was presented in Tetra Tech (2019) as the primary method for determining Ra-226 levels across Bluff A and was used for this verification sampling event. However, it must be validated to ensure that the relationship between gamma exposure rates and laboratory-reported Ra-226 concentration remains accurate. **Appendix C** of the VSP specifies that the regression model between gamma/Ra-226 be evaluated using the Ra-226 soil confirmation samples and the gamma plots that were conducted during the 2020 verification sampling. The Ra-226 laboratory-reported concentrations and gamma exposure rates provided in **Table 5-8** and are plotted on the regression model presented in Tetra Tech (2019) with 95 percent upper and lower prediction limits as shown as dashed lines in **Figure 5-7**. The project QC criteria specifies that 95 percent of the data must fall within these limits which was achieved as can be seen in **Figure 5-7**.

Furthermore, an analysis was performed to evaluate the predicted Ra-226 concentration across all of Bluff A using the gamma radiation survey data and the soil confirmation data. The average Ra-226 concentration data estimated from the grid averaged gamma radiation survey using Equation 1 was 3.7 pCi/g and the average Ra-226 soil concentration from the analytical laboratory data was 3.3 pCi/g, a relative percent difference of 11 percent indicating a good agreement using the Bluff A site-specific correlation.

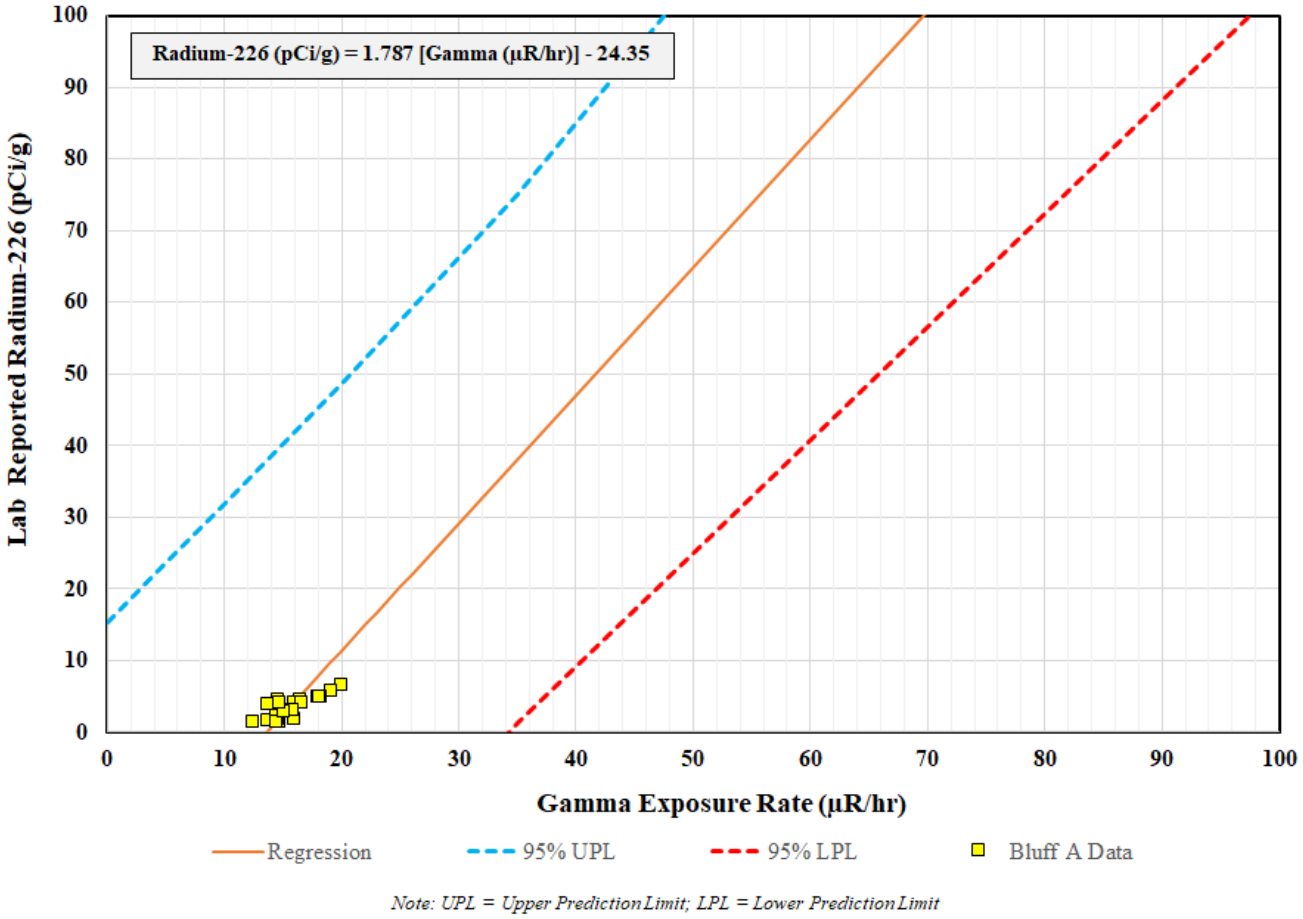


Figure 5-7 Validation of Bluff A Ra-226 Correlation

5.3.5 Summary

To summarize, the verification sampling program at Bluff A for Ra-226 involved a gamma radiation survey with soil confirmation sampling. A total of 39,432 measurements were collected across four survey units and across 395 sampling grids, each grid being 100 m^2. There were no exceedances for Ra-226 using either method so no statistical analysis was required to show the cleanup objectives were achieved. Furthermore, the gamma-radium correlation was evaluated to show a strong agreement with the site-specific equation developed for Bluff A. Additionally, there was strong agreement between the two methods for estimation of the mean of Ra-226 at Bluff A (< 11 percent RPD). All of the QC requirements were achieved for both the gamma radiation survey and the soil confirmation sampling as further discussed in **Section 5.4**.

5.4 QUALITY ASSURANCE/QUALITY CONTROL

An important objective of the verification sampling is to include data quality assessment and quality assurance/quality control (QA/QC) procedures to ensure the data collected during the cleanup verification surveys are of the correct type, quality, and quantity to support the intended use of making a statistically sound conclusion regarding the cleanup attainment status of the entire site. This section presents the QA/QC results for the verification sampling work performed at Bluff A.

5.4.1 Gamma Survey QA/QC

5.4.1.1 Pre-Survey and Post-Survey Calibration Checks

Pre-survey and post-survey measurements were collected in a laboratory setting on all potential instruments to be used in the field as described in Section 3.2 of the VSP. Only one instrument was used (Green) for the gamma radiation survey. The background results are provided in **Figure 5-8** in the form of a histogram showing the pre-trip (left) and post-trip (right). The pre-trip gamma exposure rate is 16.49 µR/hr and the post-trip gamma exposure rate is 17.3 µR/hr, an RPD of 5 percent. The cesium-137 source check results are provided in **Figure 5-9** in the form of a histogram showing the pre-trip (left) and post-trip (right). The pre-trip gamma exposure rate is 163 µR/hr and the post-trip gamma exposure rate is 158 µR/hr, an RPD of 3 percent. The project QC acceptance criteria was achieved for pre-trip and post-trip analysis. The gamma radiation instrument calibration documentation is provided in **Appendix G6**.

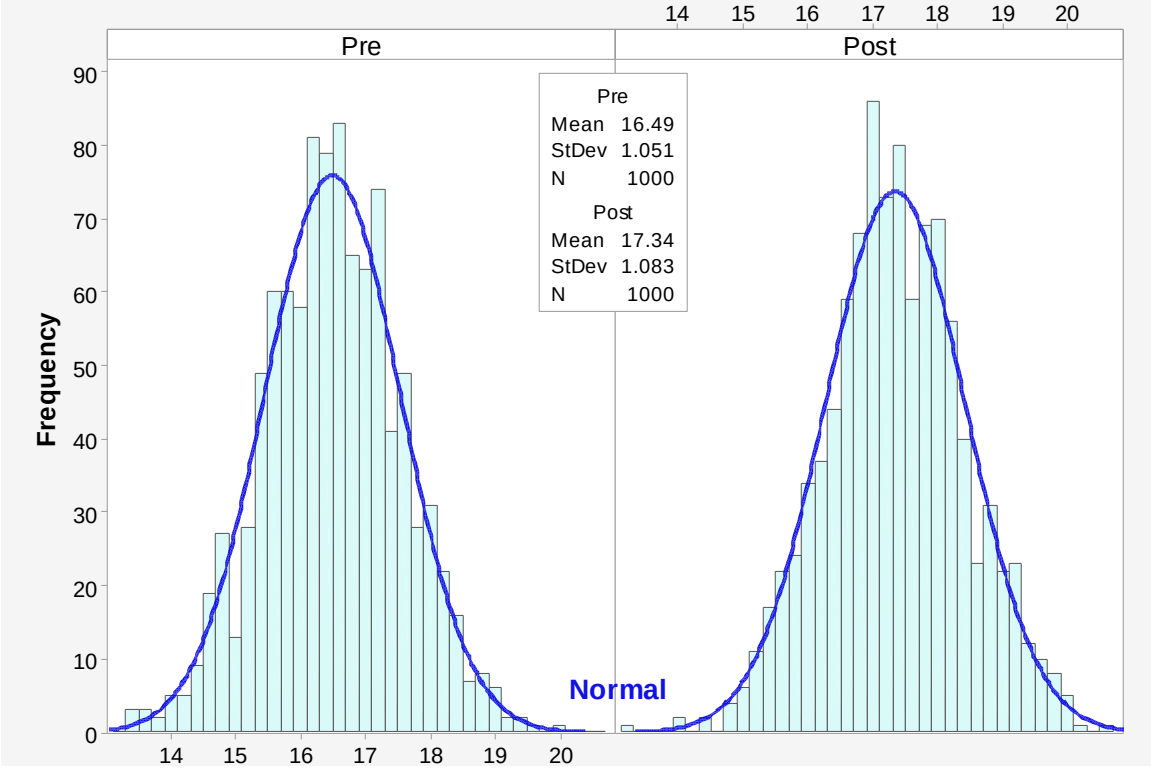


Figure 5-8 Pre-Trip and Post-Trip QC Measurements (Background)

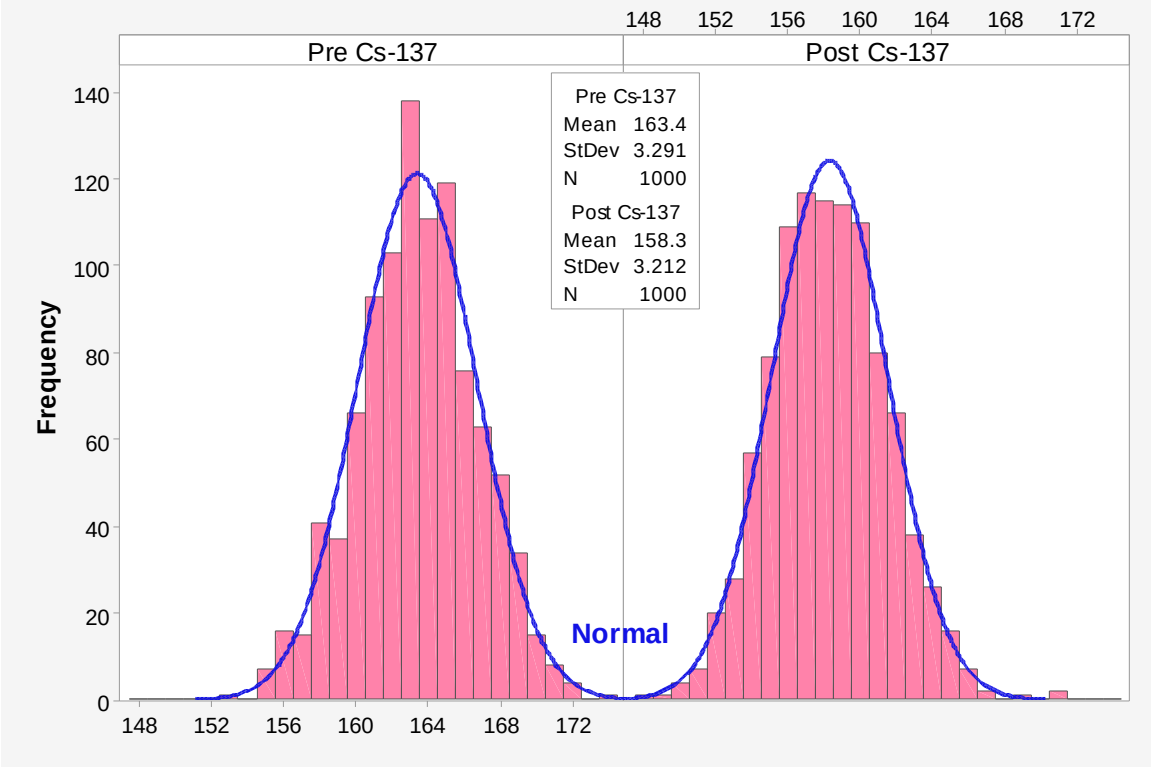


Figure 5-9 Pre-Trip and Post-Trip QC Measurements (Cesium-137)

5.4.1.2 Daily Calibration Checks

Initial QC measurements were performed at the USFS job trailer on August 31, 2020 to establish a baseline for background, field strip, and source check calibration limits as described in **Section 3.2** of the VSP. **Figure 5-10** shows a photo of the instrument QC measurements being performed for background; this same configuration was used throughout the project. **Table 5-10** presents the baseline QC measurements collected for the verification sampling work. The baseline measurements involved conducting field strip, background, and cesium-137 check source calibration checks on the instrument that would be utilized for the field. A total of 10 measurements were collected for each of the parameters described above. These data were then used as a baseline for future QC measurements to be compared with to ensure the instrument was working properly before and after the field work each day. Only one gamma instrument was used for the duration of the field work. Field QC measurements were collected daily both before and after field operations. The results of the daily pre- and post- calibration checks are provided in **Table 5-11**. All of the measurements fell within the limits established during the baseline study. All of the measurements conducted throughout the duration of the project met the project QC acceptance criteria.



Figure 5-10 Photo of Background Calibration QC Check at USFS Trailer

Table 5-10 Summary of Baseline Field QC Measurements from August 31, 2020

Reading No.	Field Strip (µR/hr)	Background (µR/hr)	Cs-137 Check Source (µR/hr)
1	12	14	32
2	13	12	30
3	12	13	32
4	14	13	28
5	14	13	31
6	13	14	29
7	13	14	31
8	14	13	30
9	11	14	34
10	14	13	31
Average	**13**	**13**	**31**
Standard Deviation	**1.1**	**0.5**	**1.9**
3x Standard Deviation	**3**	**2**	**6**
Limit	**9.95 - 16.6**	**11.8 - 15.0**	**24.9 - 36.3**

Table 5-11 Summary of Daily Field Calibration QC Checks

Date	QC Type	Field Strip (µR/hr)	Background (µR/hr)	Cs-137 Check Source (µR/hr)
8/31/2020	Pre	13.3	13.6	31.5
8/31/2020	Post	13.0	13.5	31.2
9/1/2020	Pre	13.1	13.1	31.2
9/1/2020	Post	13.1	13.4	31.9
9/2/2020	Pre	13.7	13.2	31.2
9/2/2020	Post	13.6	13.8	31.7
9/15/2020	Pre	13.9	13.0	31.4
9/15/2020	Post	13.8	13.5	31.3
9/16/2020	Pre	13.4	12.5	30.3
9/16/2020	Post	13.2	12.7	30.9

5.4.2 XRF Field Survey

5.4.2.1 Daily Calibration Checks

Daily calibration checks were performed using a RCRA standard soil cup with 400 mg/kg arsenic. **Table 5-12** provides the daily results for the three days in the field (9/1/20, 9/2/20, and 9/16/20) and for the samples that were run in the lab following the field work on 9/24/20. All of the results are within the range of the standard and also showed a high precision where the relative standard deviation (RSD) was near 1 percent. The XRF instrument calibration documentation is provided in **Appendix G**.

Table 5-12 Summary of Daily RCRA Calibration Checks for XRF

Reading	9/1/2020 (Field)	9/2/2020 (Field)	9/16/2020 (Field)	9/24/2020 (Lab)
1	391	385	397	456
2	398	384	399	453
3	391	378	396	450
4	390	381	396	445
5	391	385	382	458
6	401	386	398	443
7	389	387	397	454
8	394	383	391	451
9	397	390	396	460
10	395	379	399	453
Average	**394**	**384**	**395**	**452**
Standard Deviation	**4**	**4**	**5**	**5**
RSD	**0.99%**	**0.96%**	**1.30%**	**1.18%**

5.4.2.2 XRF Field Duplicates and Precision Measurements

In accordance with the VSP, XRF field duplicates were performed at a frequency of 1 in 20. **Table 5-13** and **Table 5-14** present the field duplicates for 9/2/20 and 9/26/20, respectively. The average RPD across the project was 11 percent. The project QC acceptance criteria was achieved for duplicate analysis.

Additionally, a precision analysis was performed at a minimum of once per 200 measurements. This involved taking multiple measurements (typically 7) at a single location and evaluating the precision of these measurements. **Table 5-15** presents the precision measurements taken for the project. Two samples were taken, and the RSD was less than 10 percent for each. The project QC acceptance criteria was achieved for precision analysis.

Table 5-13 XRF Field Duplicates (9/2/20)

XRF Reading No.	Date	Sampling Grid ID	XRF Arsenic (ppm)	RPD
201	9/2/2020	335	16	11%
202	9/2/2020	335	17	
235	9/2/2020	378	31	1%
236	9/2/2020	378	30	
262	9/2/2020	350	6	4%
263	9/2/2020	350	6	
267	9/2/2020	279	34	22%
268	9/2/2020	279	27	
269	9/2/2020	266	28	10%
270	9/2/2020	266	31	
271	9/2/2020	242	23	8%
272	9/2/2020	242	21	
273	9/2/2020	273	28	7%
274	9/2/2020	273	31	
283	9/2/2020	304	37	15%
284	9/2/2020	304	43	
285	9/2/2020	330	94	3%
286	9/2/2020	330	91	
287	9/2/2020	214	27	0%
288	9/2/2020	214	27	
289	9/2/2020	172	30	1%
290	9/2/2020	172	30	
291	9/2/2020	208	21	10%
292	9/2/2020	208	19	
293	9/2/2020	204	25	1%
294	9/2/2020	204	25	

Table 5-14 XRF Field Duplicates (9/16/20)

XRF Reading No.	Date	Sampling Grid ID	XRF Arsenic (ppm)	RPD
352	9/16/2020	125	5	9%
353	9/16/2020	125	6	
358	9/16/2020	126	9	25%
359	9/16/2020	126	7	
360	9/16/2020	74	6	31%
361	9/16/2020	74	8	
362	9/16/2020	63	8	11%
363	9/16/2020	63	9	
364	9/16/2020	48	7	31%
365	9/16/2020	48	9	
366	9/16/2020	22	7	28%
367	9/16/2020	22	9	
369	9/16/2020	13	6	16%
370	9/16/2020	13	6	
371	9/16/2020	39	43	4%
372	9/16/2020	39	45	

Table 5-15 Summary of XRF Replicate Measurements

Reading	Replicate 1	Replicate 2
	Grid 378	Grid 273
1	30	29
2	31	28
3	34	27
4	30	30
5	34	28
6	31	28
7	34	29
Average	**32**	**29**
Standard Deviation	**2**	**1**
RSD	**6.59%**	**3.49%**

5.4.3 Soil Sampling QA/QC

5.4.3.1 Field Duplicate Analysis

Field duplicates were collected at a frequency of 1 in 20. Since there were 21 samples collected, 2 field duplicates were collected and submitted for analysis of arsenic and Ra-226. **Table 5-16** provides the duplicate analysis for the arsenic field duplicates that had an RPD of 3 percent and 21 percent, both within project QC acceptance criteria. Similarly, **Table 5-17** provides the duplicate analysis for the Ra-226 field duplicates that had a duplicate error ratio (DER) of 0.242 and 0.564, both within project QC acceptance criteria.

Table 5-16 Arsenic Soil Sample Field Duplicate Analysis

Sample ID	Type	Date	Arsenic (mg/kg)	RPD
AS-A125-01	Primary	9/16/2020	6.2	3%
AS-A125-02	Field Duplicate	9/16/2020	6.4	
AS-A335-01	Primary	9/2/2020	21	21%
AS-A335-02	Field Duplicate	9/2/2020	26	

Table 5-17 Radium-226 Soil Sample Field Duplicate Analysis

Sample ID	Type	Date	Radium-226 (pCi/g)	Radium-226 (pCi/g)	DER
RA-A125-01	Primary	9/15/2020	1.76	0.36	0.242
RA-A125-02	Field Duplicate	9/15/2020	1.53	0.31	
RA-A335-01	Primary	9/2/2020	3.77	0.52	0.564
RA-A335-02	Field Duplicate	9/2/2020	2.98	0.47	

5.4.3.2 Stage 2A Data Validation

Data were validated per National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review data validation guidance document, the NRC MARLAP (NRC 2004) document, and ALS Environmental SOP 713 Rev. 15 and SOP 715 Rev. 19, and Tetra Tech internal procedures. No rejection of data was found to be necessary. See Stage 2A Data Validation Deliverables for each individual work order found in **Appendix G7** of this document for more details.

5.4.4 Summary

All project QC acceptance criteria were achieved for the Bluff A verification sampling work performed in 2020.

5.5 FINAL SUMMARY

The construction activities performed at Bluff A during the 2020 field season were successful at meeting cleanup attainment goals and objectives. As outlined in this report, the verification sampling showed the verification area to meet both the arsenic and Ra-226 cleanup standards of 142 mg/kg and 30 pCi/g, respectively.

The average arsenic soil concentration within the verification area determined by in situ XRF field survey and by soil confirmation sampling is 32.6 mg/kg and 27.8 mg/kg, respectively. The RPD between the two methods is

16 percent, indicating a good agreement. Assuming the higher value, the average arsenic soil concentration within the verification zone is 4.4 times lower than the risk-based action level. Prior to remediation construction activities, the average arsenic soil concentration within the verification area based on the 2018 XRF field survey was 55.5 mg/kg. Therefore, within the verification area the arsenic soil concentration reduction was decreased by 41 percent. Prior to construction activities, the Bluff A investigation in 2018 reported an average arsenic soil concentration across the entire 39-acre survey area of 32.2 mg/kg. Tetra Tech conducted an analysis to evaluate the entire Bluff A survey area following construction activities as shown on **Figure 5-11**. This analysis showed the new estimated arsenic concentration across the region is 26.3 mg/kg, or a reduction of 18 percent. The arsenic soil concentration across the verification area was significantly reduced (41 percent) when compared to pre-remediation conditions and the entire Bluff A regional arsenic value was also reduced (18 percent) when compared to pre-remediation conditions.

The average Ra-226 soil concentration within the verification area determined by in gamma radiation surveys and by soil confirmation sampling is 3.7 pCi/g and 3.3 pCi/g, respectively. The RPD between the two methods is 11 percent, indicating a good agreement. Assuming the higher value, the average Ra-226 soil concentration within the verification zone is 8.1 times lower than the risk-based action level. Prior to remediation construction activities, the average Ra-226 soil concentration within the verification area based on the 2018 gamma radiation surveys was 20.7 pCi/g. Therefore, within the verification area the Ra-226 soil concentration reduction was decreased by 82 percent. Prior to remediation construction activities, the Bluff A investigation in 2018 reported an average Ra-226 soil concentration across the entire 39-acre survey area of 8.9 pCi/g. Tetra Tech conducted an analysis to evaluate the entire Bluff A survey area following construction activities as shown on **Figure 5-12**. This analysis showed the new estimated Ra-226 concentration across the region is 4.2 pCi/g, or a reduction of 53 percent. The Ra-226 soil concentration across the verification area was significantly reduced (82 percent) when compared to pre-remediation conditions and the entire Bluff A regional Ra-226 value was also reduced (53 percent) compared to pre-remediation conditions.

To conclude, the remediation construction activities at Bluff A were successful in reducing arsenic and Ra-226 soil concentrations within the verification area by 41 percent and 82 percent, respectively. For both contaminants, the verification sampling showed the cleanup attainment standards were achieved for Bluff A. Additionally, a regional reduction across the larger Bluff A zone also saw reductions of arsenic and Ra-226 at 18 percent and 53 percent, respectively.

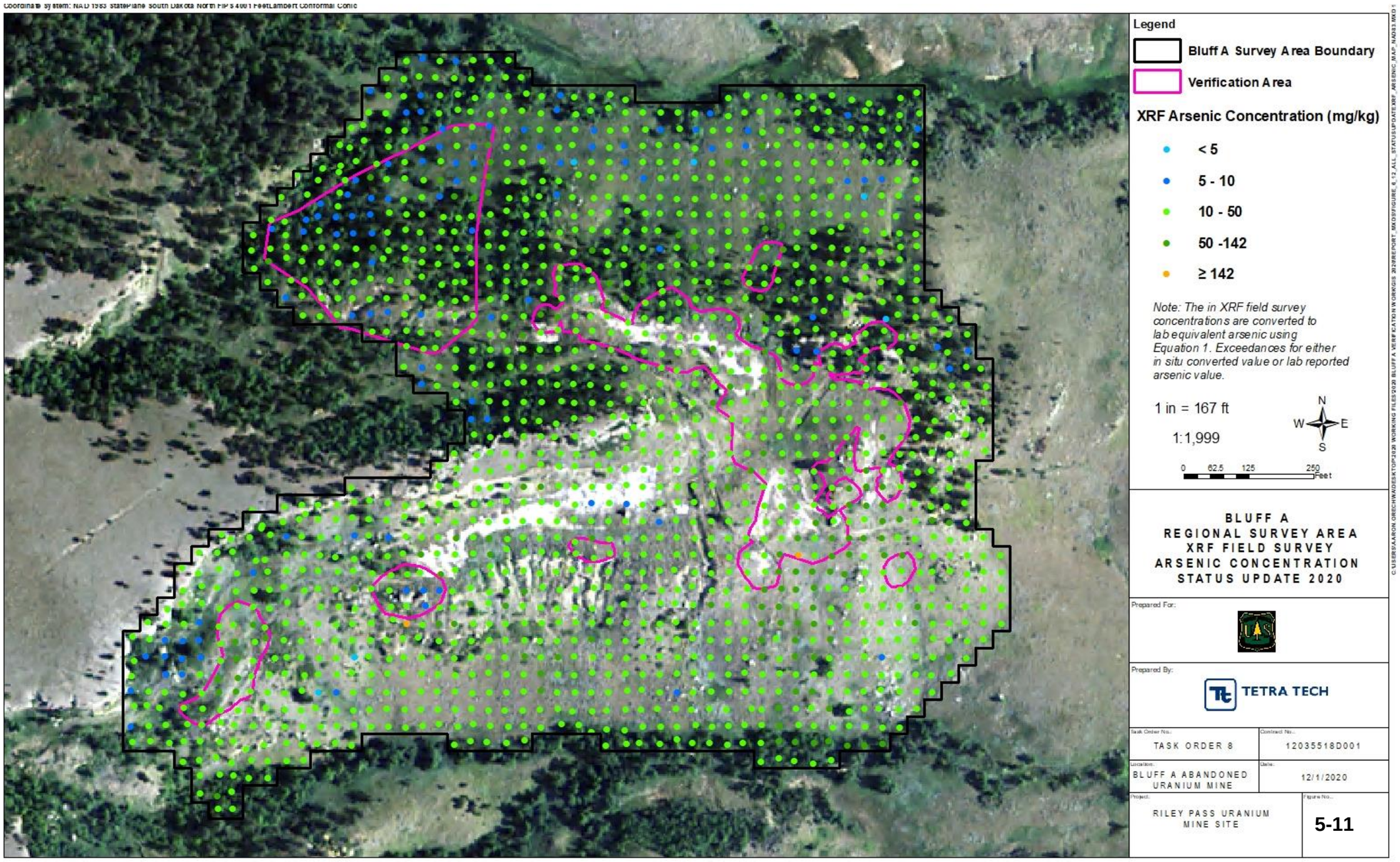


Figure 5-11 Bluff A Regional Survey Area XRF Field Survey Arsenic Concentration Status Update 2020

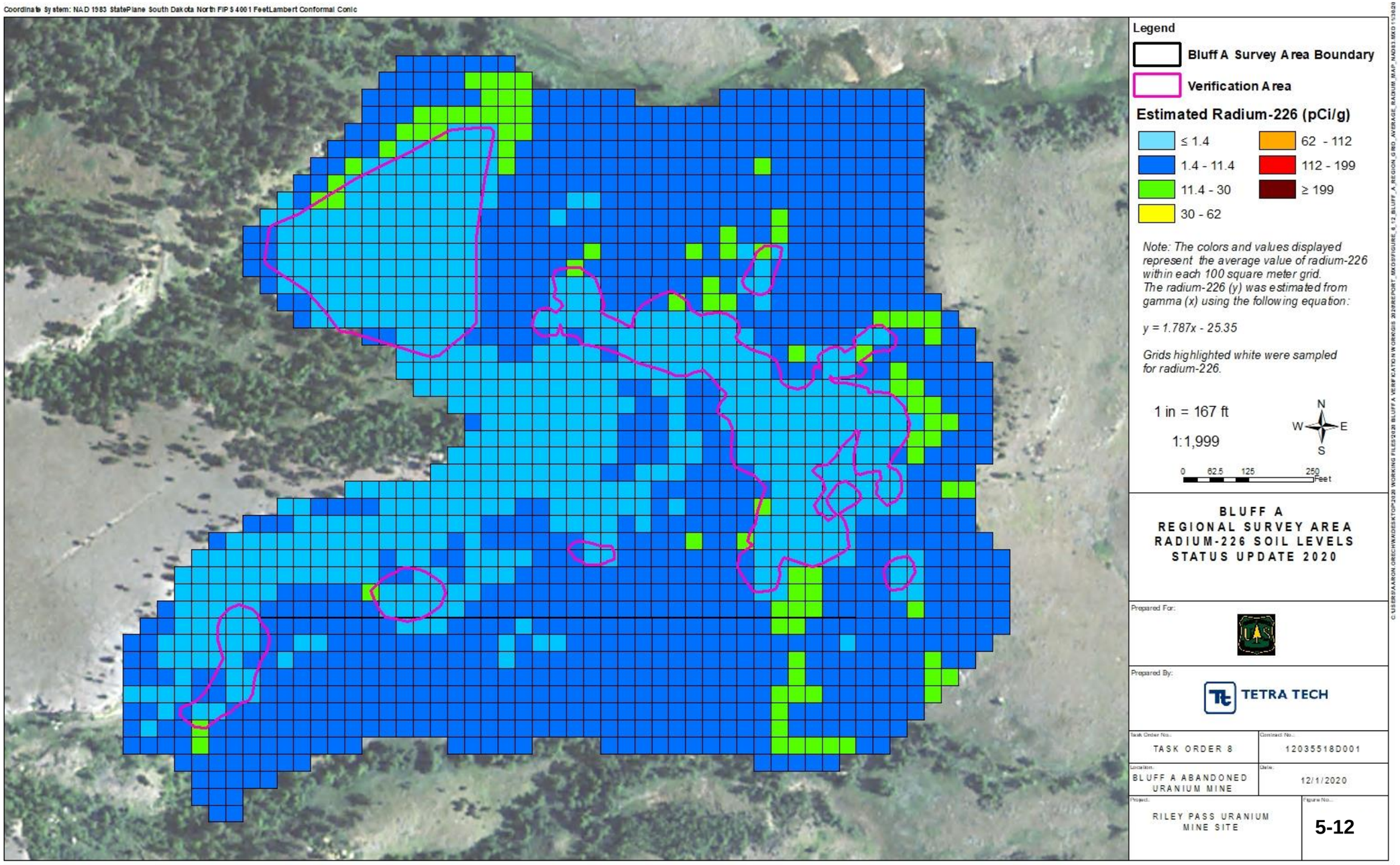


Figure 5-12 Bluff A Regional Survey Area Radium-226 Soil Levels Status Update 2020

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APPENDIX A – DRAWINGS

APPENDIX A1 – CONSTRUCTION DRAWINGS

UNITED STATES DEPARTMENT OF AGRICULTURE
CUSTER GALLATIN NATIONAL FOREST
RILEY PASS URANIUM MINE SITES

BLUFF A RECLAMATION PROJECT

SHEET INDEX

SHEET NO.	SHEET TITLE
G-101	COVER AND SHEET INDEX
G-102	ESTIMATED QUANTITIES
C-101	SITE OVERVIEW AND ACCESS PLAN
C-102	BLUFF A NORTH REMOVAL PLAN
C-103	BLUFF A SOUTH REMOVAL PLAN
C-104	BLUFF A NORTH REGRADING PLAN
C-105	BLUFF A SOUTH REGRADING PLAN
C-106	BLUFF A NORTH REGRADING VOLUMES PLAN
C-107	BLUFF A SOUTH REGRADING VOLUMES PLAN
X-101	BLUFF A CROSS SECTIONS
C-108	CONSOLIDATION AREA GRADING PLAN
C-109	CONSOLIDATION AREA GRADING VOLUMES PLAN
X-102	CONSOLIDATION AREA SECTIONS
C-110	BORROW PLAN
D-101	COVER DETAILS
D-102	TYPICAL EROSION CONTROL DETAILS

APPROVED BY:

R1 DIRECTOR OF ENGINEERING _____ DATE _____

FOREST SUPERVISOR _____ DATE _____

ON SCENE COORDINATOR _____ DATE _____

RECOMMENDED BY:

DISTRICT RANGER _____ DATE _____

FOREST ENGINEER _____ DATE _____

RECOMMENDED BY:

MICHAEL HATTEN, P.E. _____ DATE _____

LARRY CAWLFIELD, P.E. _____ DATE _____

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 13675
LARRY CAWLFIELD
SOUTH DAKOTA

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 11220
MICHAEL L. HATTEN
SOUTH DAKOTA

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825 WEST CUSTER AVENUE
HELENA, MT 59602
PHONE: 406-443-5210 FAX: 406-442-7182
www.tetratech.com

TETRA TECH

PROJECT LOCATION:
HARDING COUNTY, SOUTH DAKOTA
CUSTER GALLATIN NATIONAL FOREST

CLIENT INFORMATION:
UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE, SIOUX RANGER DISTRICT
NORTHERN REGION

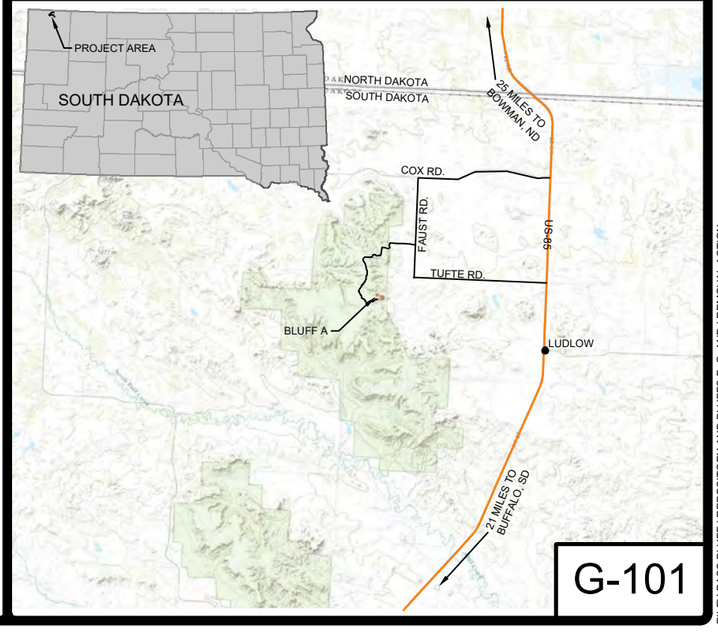
Tt PROJECT No.:
117-8343006

CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:

ISSUED:
12/16/19 - ISSUED FOR BID

VICINITY MAP:



G-101

RILEY PASS BLUFF I REPOSITORY AND BLUFFS F, G, AND I REMOVAL ACTION

FY20 RILEY PASS
Bluff A Reclamation
ESTIMATED QUANTITIES

Item No.	Description	Method of Measure	Unit	Estimated Quantity	Unit Price
15101	Mobilization	LSQ	LS	All	-------
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LSQ	LS	All	-------
15713	Soil Erosion and Pollution Control	LSQ	LS	All	-------
15801	Watering for Dust Control	AQ	1000 gal	320	
20102*	Clearing and Grubbing	CQ	Acre	6.2	
20450*	Mine Waste Excavation and Consolidation, Compaction A	CQ	CY	20,715	
20451*	Subgrade Regrading, Compaction A	CQ	CY	10,500	
20452*	Borrow Cover Soil Excavation and Placement	CQ	CY	15,100	
20453*	Final Grading	CQ	Acre	6.2	
62550*	Compost	CQ	Acre	6.2	
62504*	Seeding Dry Method or Hydraulic Method	CQ	Acre	6.2	
62505*	Mulching, Dry Method or Hydraulic Method	CQ	Acre	6.2	
62508*	Fertilizer, Dry Method	CQ	Acre	6.2	

* Indicates items to be paid as Contract Quantities

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MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

ESTIMATED QUANTITIES

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

G-102

Bar Measures 1 inch

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SURVEY CONTROL			
	N	E	Z
CONTROL POINTS			
CP19 (1/4 S22 S23)	756,543.64	1,082,022.93	3,163.17
CP06	747,230.36	1,087,319.04	3,321.14
CP07	747,468.70	1,090,586.67	3,295.49

HORIZONTAL DATUM: SOUTH DAKOTA STATE PLANE, NAD83 US SURVEY FEET
VERTICAL DATUM: NAVD88

3114/FULLER PASS

TO HWY 85

TUFTE ROAD

31233

3123

DECK CUT TIMBER

CP19

A1 A3 A4 A5 A6 A7 A8 A2

CONSOLIDATION AREA

BLUFF A

A9 A16 A11 A10 A17 A12-13 A14 A15

31237

31231

31236

BORROW AREA

CONTRACTOR ACCESS AND STAGING AREA

CP06 6679 FT

CP07 6520 FT

BLUFF B

N

0 300 600 1200

LEGEND

- EXISTING ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- PROPERTY BOUNDARY
- PRIMARY ACCESS ROAD
- ACCESS ROAD ALTERNATIVES
- WASTE
- BORROW AREA
- CONSOLIDATION AREA
- 33 SECTION LINE / NUMBER
- CP19 SURVEY CONTROL POINT

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Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SITE OVERVIEW AND ACCESS PLAN

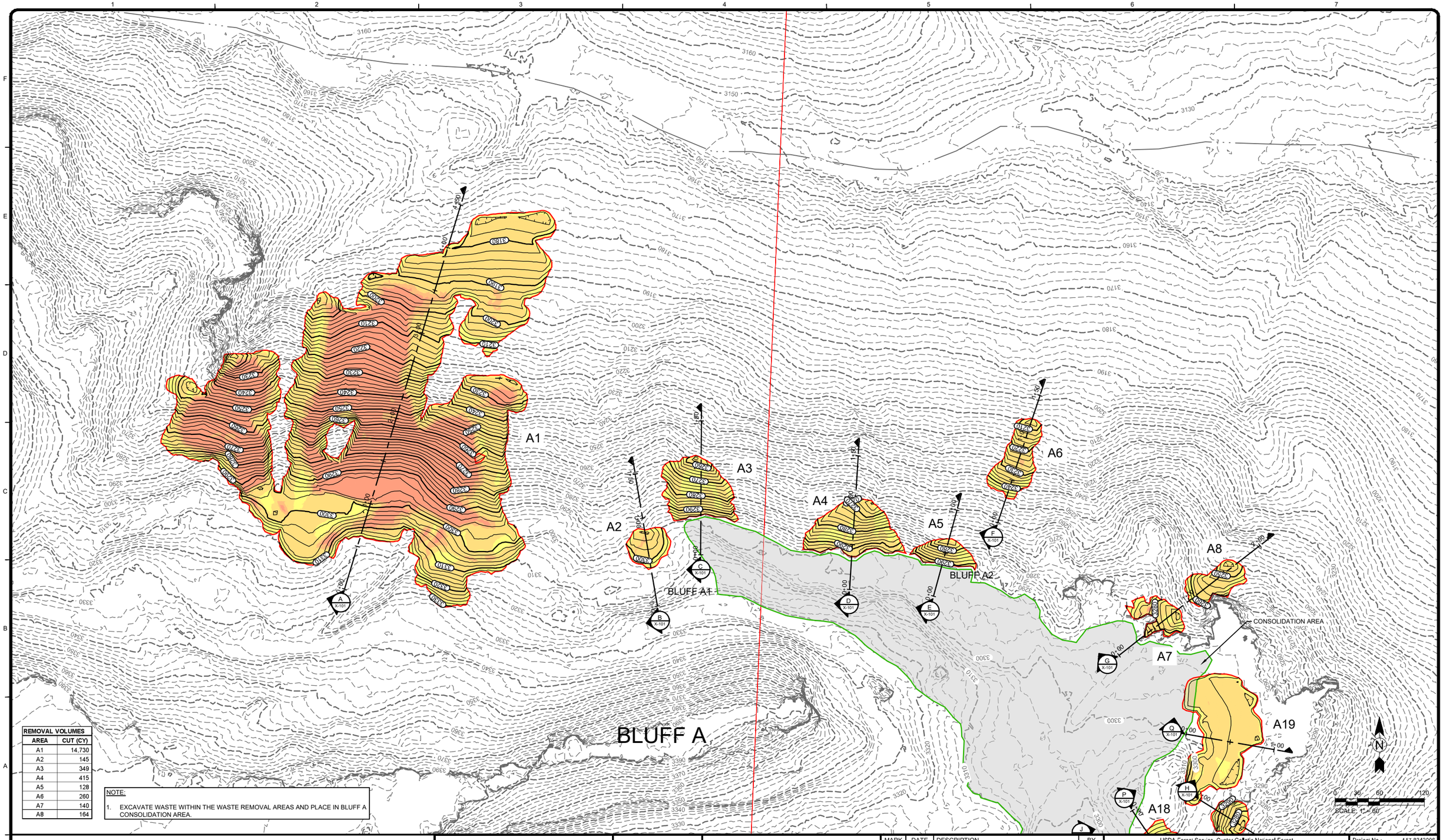
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REMOVAL VOLUMES	
AREA	CUT (CY)
A1	14,730
A2	145
A3	349
A4	415
A5	128
A6	260
A7	140
A8	164

NOTE:

1. EXCAVATE WASTE WITHIN THE WASTE REMOVAL AREAS AND PLACE IN BLUFF A CONSOLIDATION AREA.

LEGEND

- WASTE REMOVAL
- CONSOLIDATION AREA

REMOVAL DEPTHS

- 0-2ft REMOVAL
- 2-4ft REMOVAL
- 4-5ft REMOVAL
- >5ft REMOVAL

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Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A NORTH REMOVAL PLAN

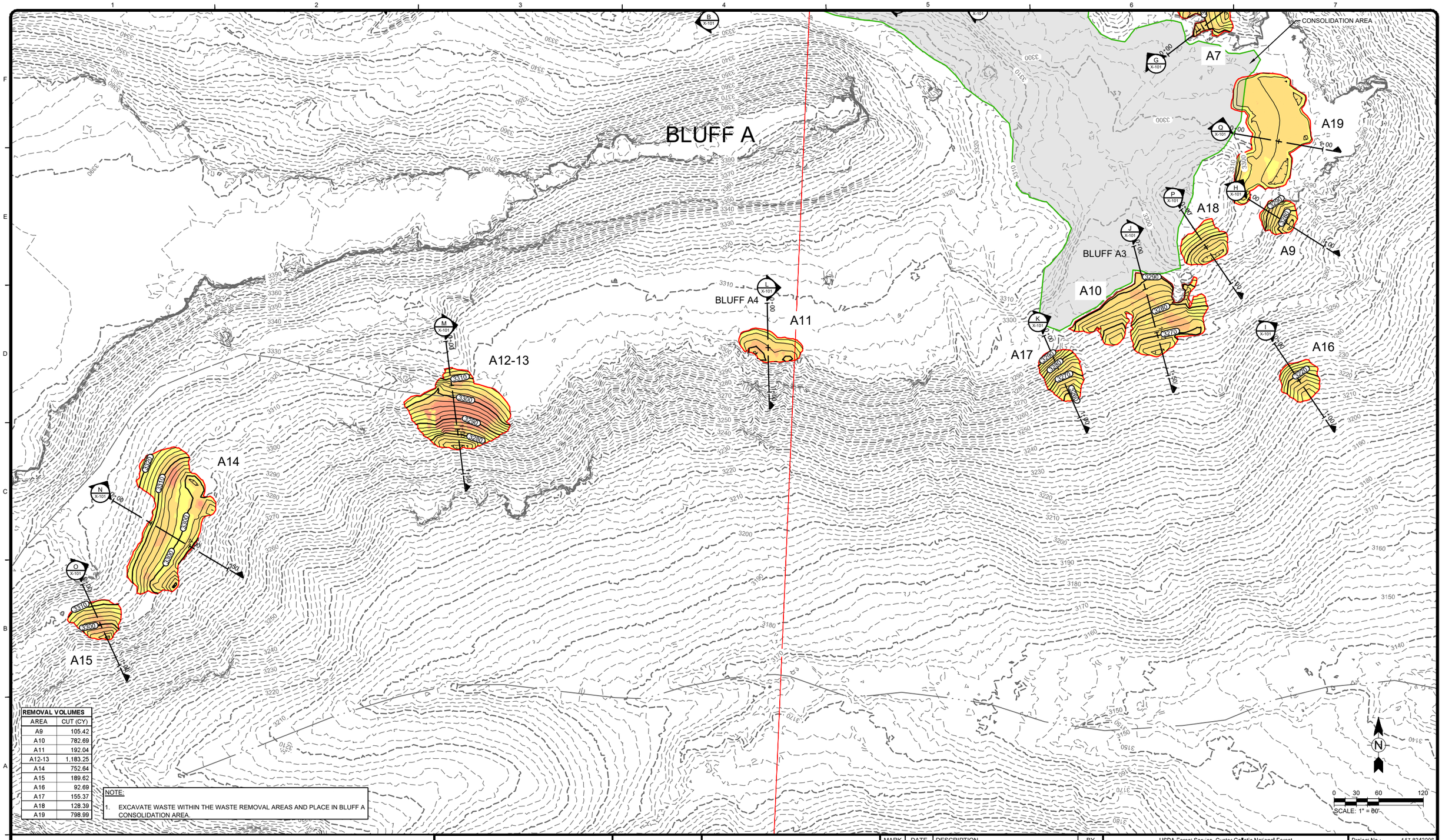
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Bar Measures 1 inch

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REMOVAL VOLUMES	
AREA	CUT (CY)
A9	105.42
A10	782.69
A11	192.04
A12-13	1,183.25
A14	752.64
A15	189.62
A16	92.69
A17	155.37
A18	128.39
A19	798.99

NOTE:

1. EXCAVATE WASTE WITHIN THE WASTE REMOVAL AREAS AND PLACE IN BLUFF A CONSOLIDATION AREA.

LEGEND

- WASTE REMOVAL
- CONSOLIDATION AREA

REMOVAL DEPTHS

- 0-2ft REMOVAL
- 2-4ft REMOVAL
- 4-5ft REMOVAL
- >5ft REMOVAL

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SOUTH REMOVAL PLAN

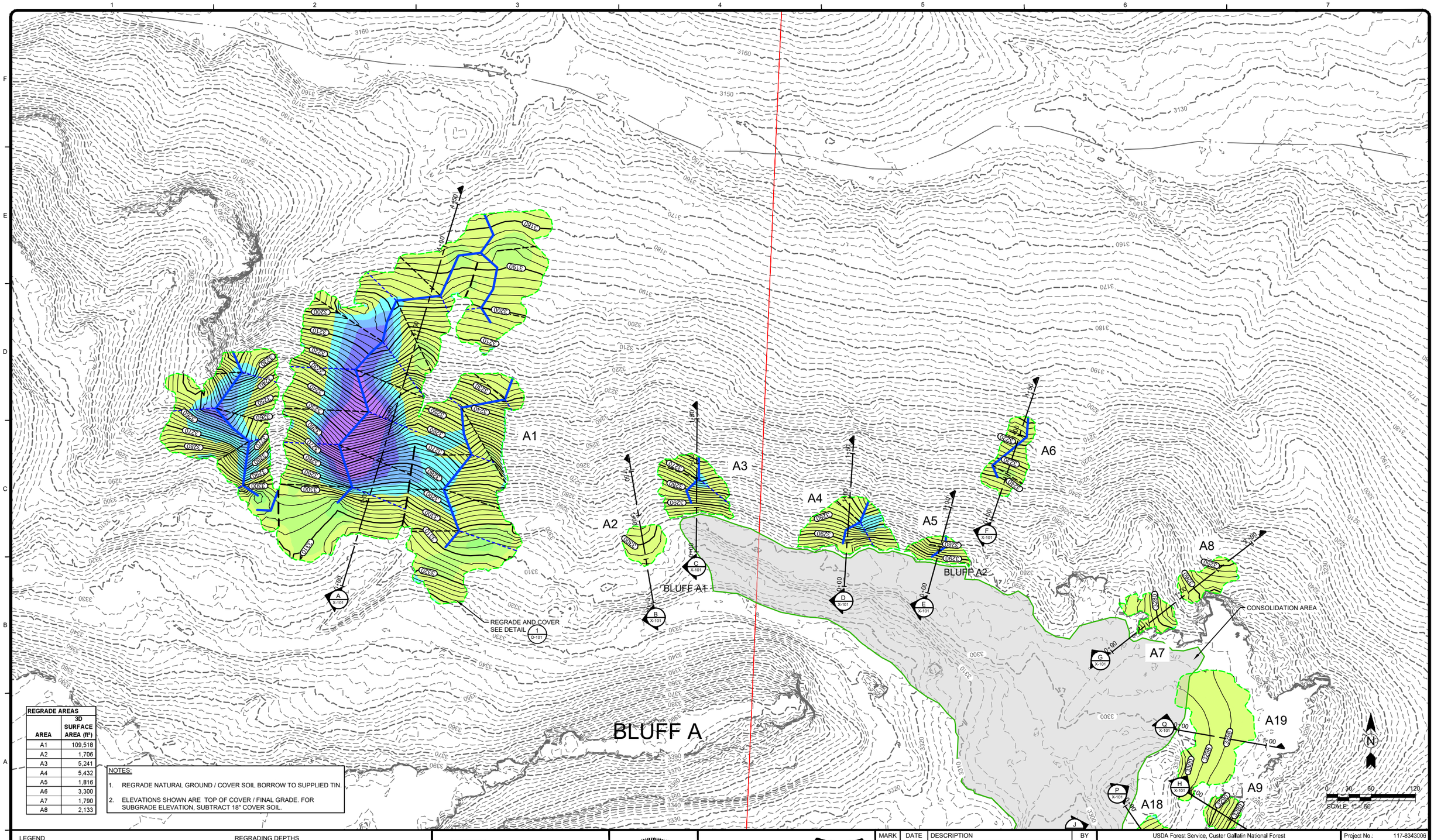
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REGRADE AREAS	
AREA	3D SURFACE AREA (ft²)
A1	109,518
A2	1,706
A3	5,241
A4	5,432
A5	1,816
A6	3,300
A7	1,790
A8	2,133

NOTES:

1. REGRADE NATURAL GROUND / COVER SOIL BORROW TO SUPPLIED TIN.
2. ELEVATIONS SHOWN ARE TOP OF COVER / FINAL GRADE. FOR SUBGRADE ELEVATION, SUBTRACT 18" COVER SOIL.

LEGEND

- REGRADE AND COVER
- GEOFLUV CHANNEL
- GEOFLUV SUB-VALLEY
- GEOFLUV PRIMARY RIDGE
- GEOFLUV SUB-RIDGE

REGRADING DEPTHS

>12ft CUT	0-4ft FILL
8-12ft CUT	4-8ft FILL
4-8ft CUT	8-12ft FILL
0-4ft CUT	>12ft FILL

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A NORTH REGRADING PLAN

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BLUFF A

BLUFF A1

BLUFF A3

BLUFF A4

A7

A9

A10

A11

A12-13

A14

A15

A16

A17

A18

A19

CONSOLIDATION AREA

REGRADE AND COVER
SEE DETAIL 1 D-101

REGRADE AREAS	
AREA	3D SURFACE AREA (ft²)
A9	1,443
A10	8,431
A11	1,946
A12-13	8,006
A14	9,960
A15	2,103
A16	1,768
A17	2,491
A18	8,791
A19	2,022

NOTES:

1. REGRADE NATURAL GROUND / COVER SOIL BORROW TO SUPPLIED TIN.
2. ELEVATIONS SHOWN ARE TOP OF COVER / FINAL GRADE. FOR SUBGRADE ELEVATION, SUBTRACT 18" COVER SOIL.

SCALE: 1" = 60'

LEGEND

- REGRADE AND COVER
- GEOFLUV CHANNEL
- GEOFLUV SUB-VALLEY
- GEOFLUV PRIMARY RIDGE
- GEOFLUV SUB-RIDGE

REGRADING DEPTHS

>12ft CUT	0-4ft FILL
8-12ft CUT	4-8ft FILL
4-8ft CUT	8-12ft FILL
0-4ft CUT	>12ft FILL

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Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SOUTH REGRADING PLAN

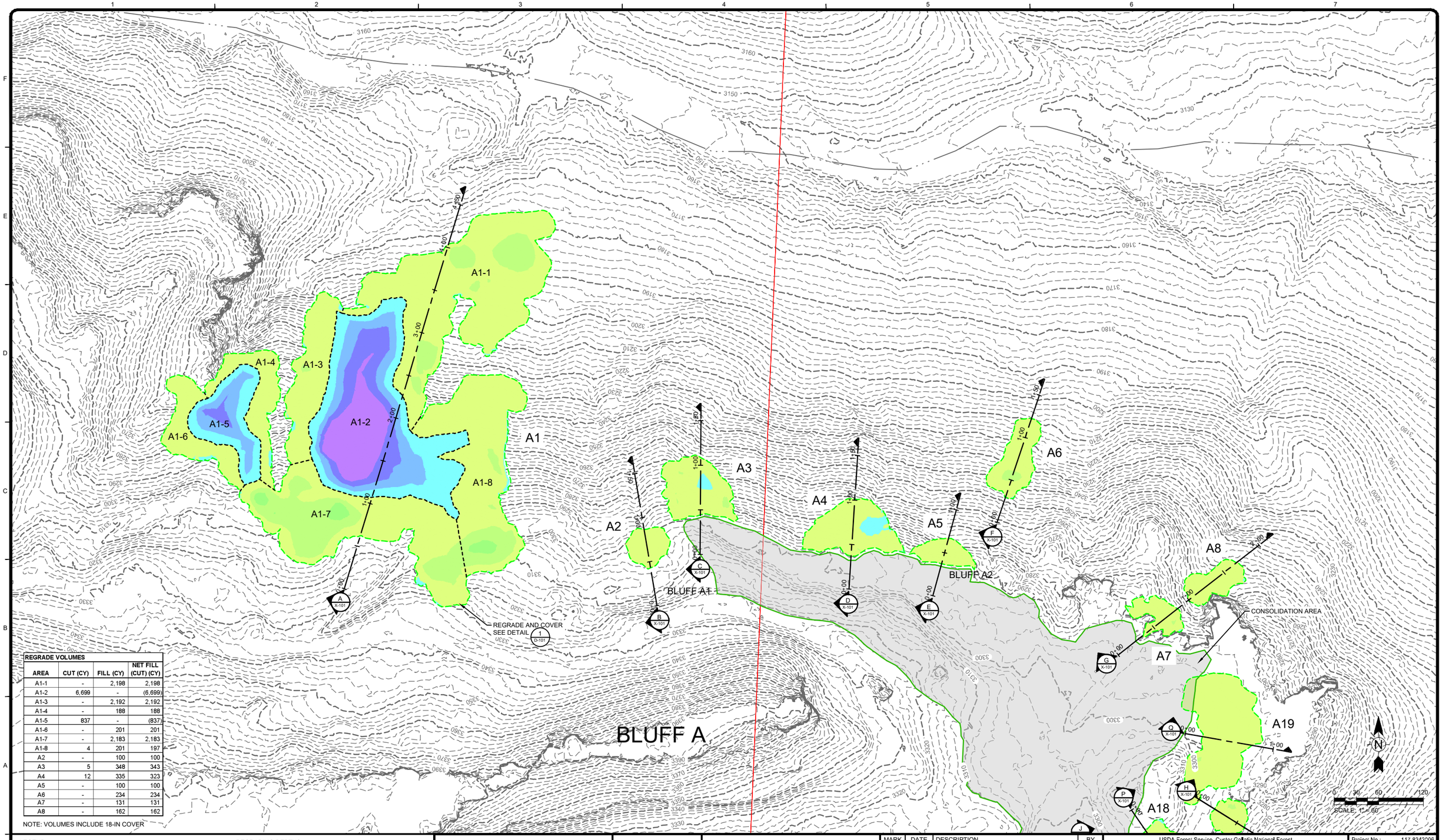
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REGRADE VOLUMES			
AREA	CUT (CY)	FILL (CY)	NET FILL (CUT) (CY)
A1-1	-	2,198	2,198
A1-2	6,699	-	(6,699)
A1-3	-	2,192	2,192
A1-4	-	188	188
A1-5	837	-	(837)
A1-6	-	201	201
A1-7	-	2,183	2,183
A1-8	4	201	197
A2	-	100	100
A3	5	348	343
A4	12	335	323
A5	-	100	100
A6	-	234	234
A7	-	131	131
A8	-	162	162

NOTE: VOLUMES INCLUDE 18-IN COVER

LEGEND

REGRADE AND COVER (SEE DETAIL)

CONSOLIDATION AREA

REGRADING DEPTHS

>12ft CUT	0-4ft FILL
8-12ft CUT	4-8ft FILL
4-8ft CUT	8-12ft FILL
0-4ft CUT	>12ft FILL

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A NORTH REGRADING VOLUME PLAN

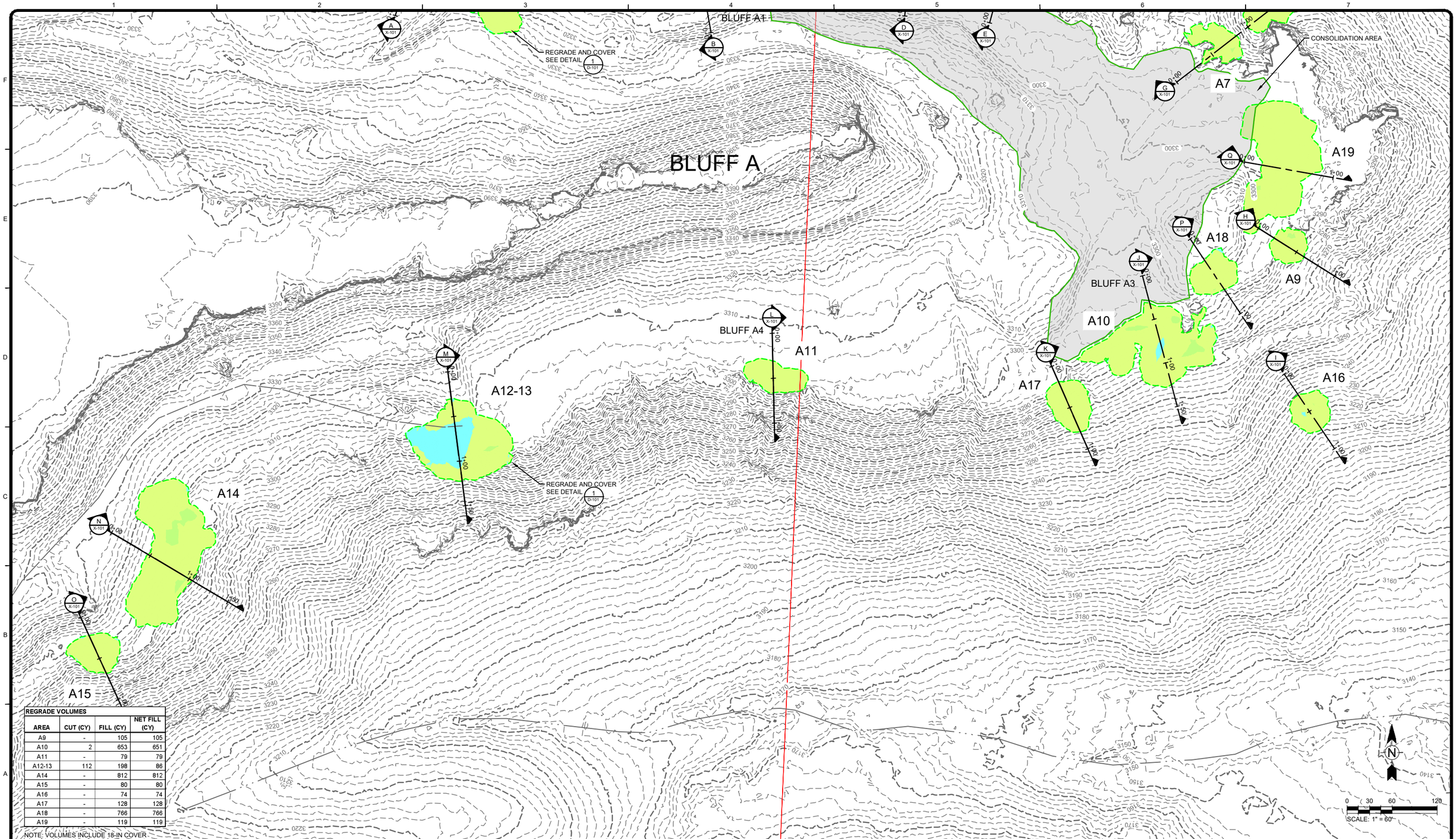
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REGRADE VOLUMES			
AREA	CUT (CY)	FILL (CY)	NET FILL (CY)
A9	-	105	105
A10	2	653	651
A11	-	79	79
A12-13	112	198	86
A14	-	812	812
A15	-	80	80
A16	-	74	74
A17	-	128	128
A18	-	766	766
A19	-	119	119

NOTE: VOLUMES INCLUDE 18-IN COVER

LEGEND

REGRADE AND COVER (SEE DETAIL)

CONSOLIDATION AREA

REGRADING DEPTHS

>12ft CUT	0-4ft FILL
8-12ft CUT	4-8ft FILL
4-8ft CUT	8-12ft FILL
0-4ft CUT	>12ft FILL

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SOUTH DAKOTA

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0	12/16/19	ISSUED FOR BID	SEF

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Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SOUTH REGRADING VOLUME PLAN

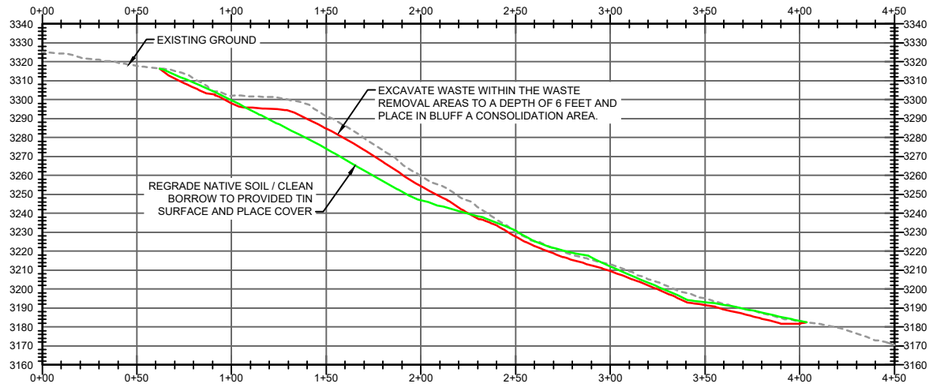
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Checked By:	MLH

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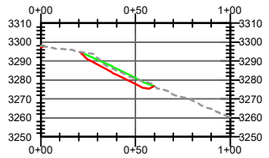
Bar Measures 1 inch

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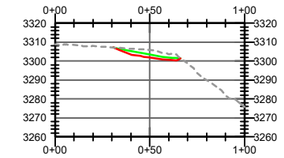
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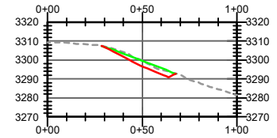
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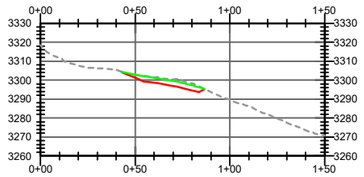
H C-103 SECTION H 1" = 40'



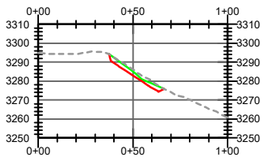
L C-103 SECTION L 1" = 40'



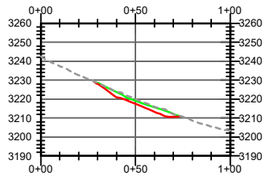
P C-103 SECTION L 1" = 40'



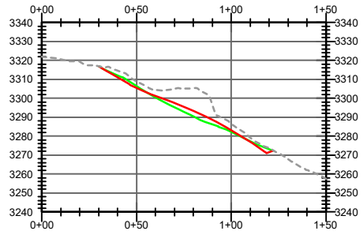
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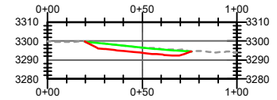
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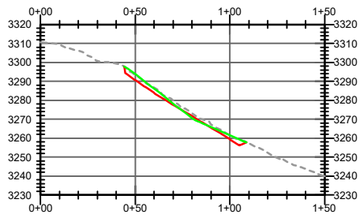
I C-103 SECTION I 1" = 40'



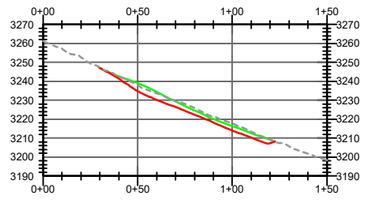
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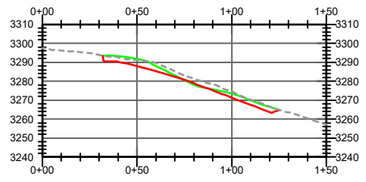
Q C-103 SECTION L 1" = 40'



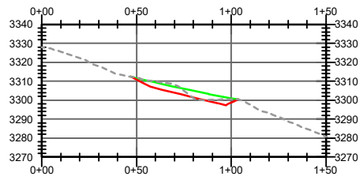
C C-102 SECTION C 1" = 40'



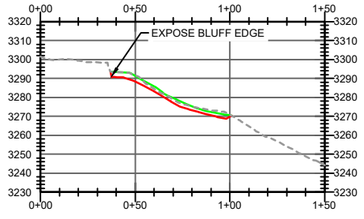
F C-102 SECTION F 1" = 40'



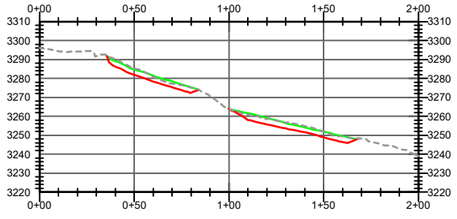
J C-103 SECTION J 1" = 40'



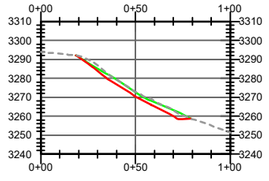
N C-103 SECTION N 1" = 40'



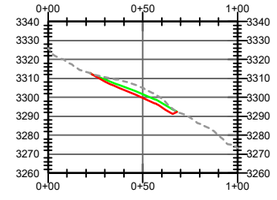
D C-102 SECTION D 1" = 40'



G C-102 SECTION G 1" = 40'



K C-103 SECTION K 1" = 40'



O C-103 SECTION O 1" = 40'

0 20 40 80

SCALE: 1" = 40'

LEGEND

- WASTE REMOVAL
- REGRADE FINISHED GROUND
- EXISTING GROUND

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REGISTERED PROFESSIONAL ENGINEER REG. NO. 13675 LARRY CAWLFIELD SOUTH DAKOTA

USDA FOREST SERVICE US DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SECTIONS

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

X-101

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Bar Measures 1 inch

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BLUFF A

BLUFF A1

BLUFF A2

BLUFF A4

CONSOLIDATION AREA
WASTE CAPACITY = 21,202cy
SOIL COVER VOL = 4,647cy
SOIL COVER 3D SURFACE AREA = 97,825ft²

NOTES:

1. PLACE BLUFF A WASTE IN CONSOLIDATION AREA, THEN PLACE COVER SOIL BORROW.
2. ELEVATIONS SHOWN ARE TOP OF COVER / FINAL GRADE. FOR SUBGRADE ELEVATION, SUBTRACT 18" COVER SOIL.

LEGEND

- GRADE AND COVER
- GEOFLUV CHANNEL
- GEOFLUV PRIMARY RIDGE
- GEOFLUV SUB-VALLEY
- GEOFLUV SUB-RIDGE

CONSOLIDATION AREA GRADING DEPTHS

>4ft CUT	8-12ft FILL
0-4ft CUT	12-16ft FILL
0-4ft FILL	16-20ft FILL
4-8ft FILL	>20ft FILL

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LARRY CAWLFIELD
SOUTH DAKOTA

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A CONSOLIDATION AREA GRADING PLAN

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

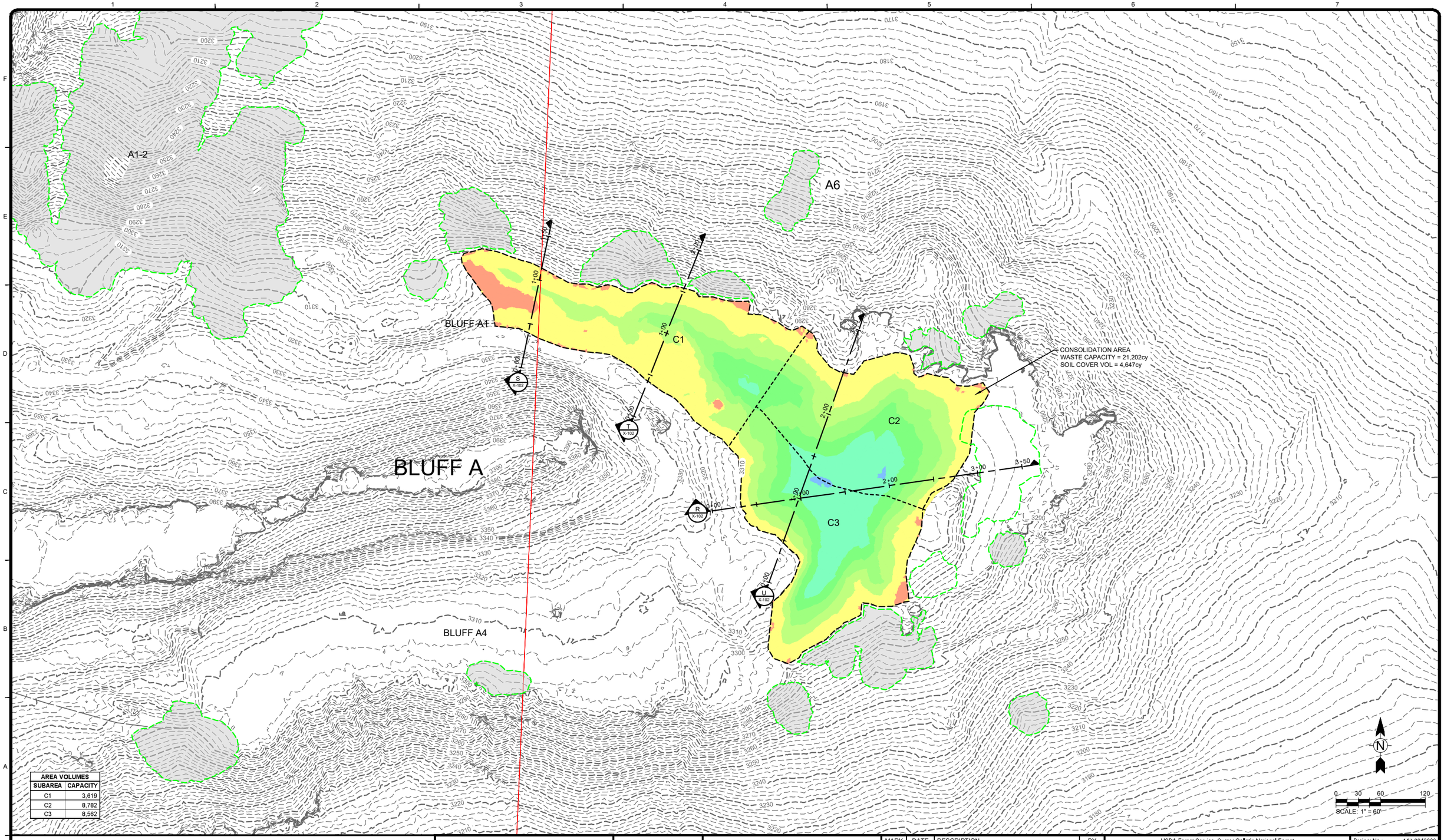
C-108

SCALE: 1" = 60'

Bar Measures 1 inch

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AREA VOLUMES	
SUBAREA	CAPACITY
C1	3,619
C2	8,782
C3	8,562

LEGEND

GRADE AND COVER SOIL

CONSOLIDATION SUBAREA BOUNDARIES

CONSOLIDATION AREA GRADING DEPTHS

>4ft CUT	8-12ft FILL
0-4ft CUT	12-16ft FILL
0-4ft FILL	16-20ft FILL
4-8ft FILL	>20ft FILL

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A CONSOLIDATION AREA VOLUMES PLAN

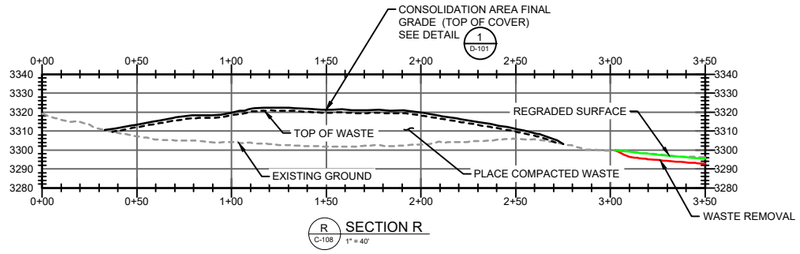
Project No.:	117-8343006
Designed By:	SEF
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Checked By:	MLH

C-109

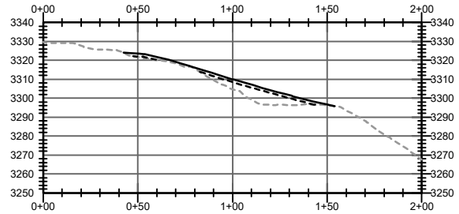
Bar Measures 1 inch

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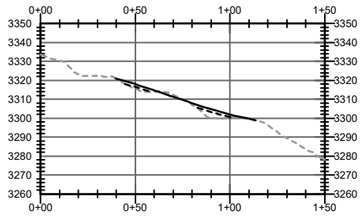
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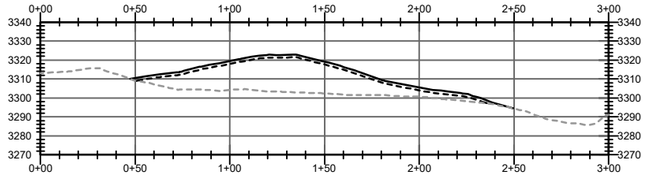
R C-108 SECTION R 1" = 40'



T C-108 SECTION T 1" = 40'



S C-108 SECTION S 1" = 40'



U C-108 SECTION U 1" = 40'

0 20 40 80
SCALE: 1" = 40'

LEGEND
- TOP OF COVER
- TOP OF WASTE
- WASTE REMOVAL
- REGRADE FINISHED GROUND
- EXISTING GROUND

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A CONSOLIDATION AREA SECTIONS

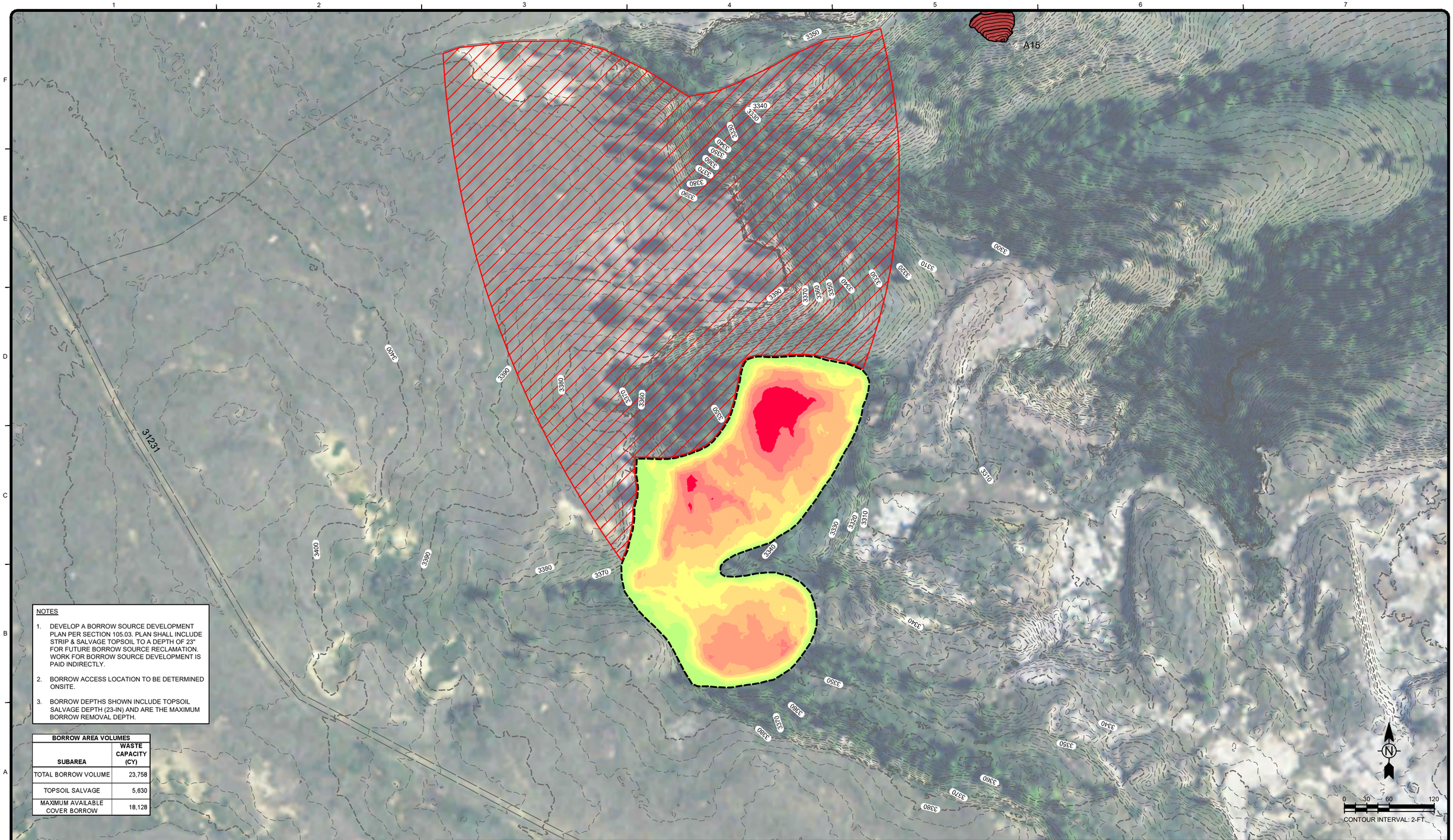
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Bar Measures 1 inch

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BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A BORROW AREA PLAN

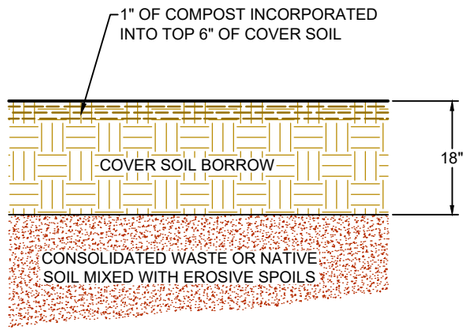
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C-110

Bar Measures 1 inch

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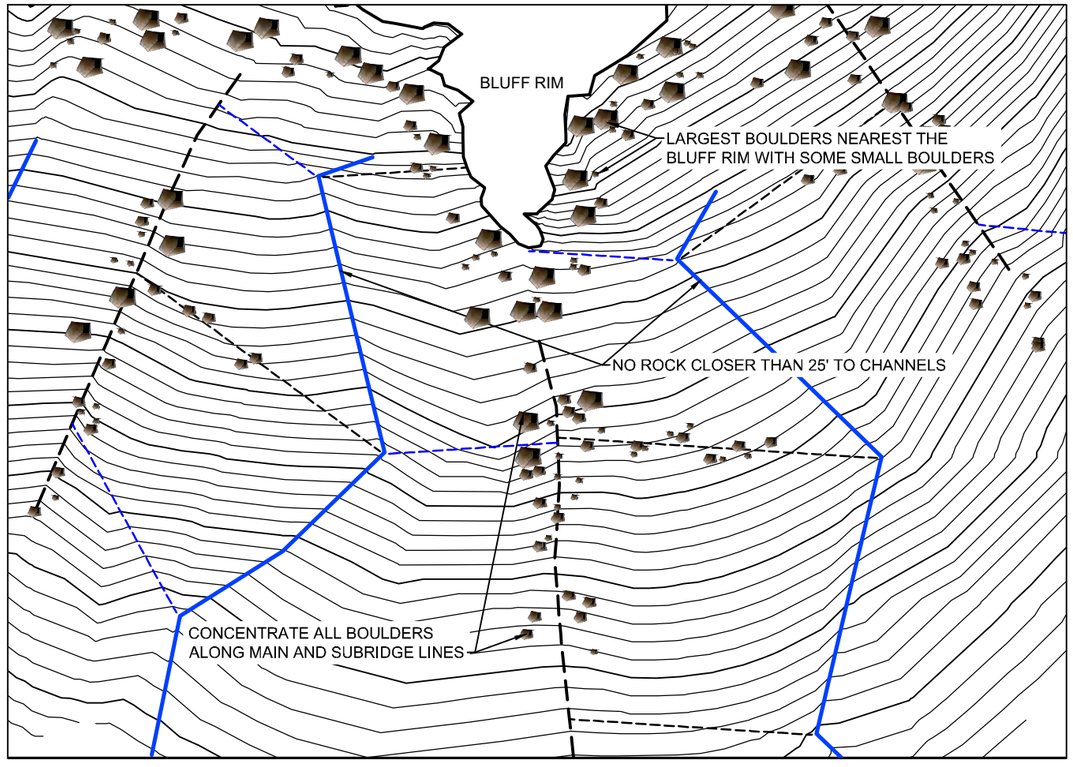
1 COVER DETAIL
NOT TO SCALE

LEGEND

- COMPOST INCORPORATED INTO BORROW
- CLEAN COVER SOIL BORROW
- CONSOLIDATED WASTE OR NATIVE SOIL MIXED WITH EROSIVE SPOILS

NOTES

1. COVER INCLUDES COMPOST, FERTILIZER, SEED, AND MULCH.



2 TYPICAL ROCK PLACEMENT PATTERN PLAN VIEW
NOT TO SCALE



3 TYPICAL ROCK PLACEMENT
NOT TO SCALE

LEGEND

- GEOFLUV CHANNEL
- GEOFLUV PRIMARY RIDGE
- GEOFLUV SUB-VALLEY
- GEOFLUV SUB-RIDGE

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BLUFF A REMOVAL ACTION
AND REPOSITORY

TYPICAL COVER DETAILS

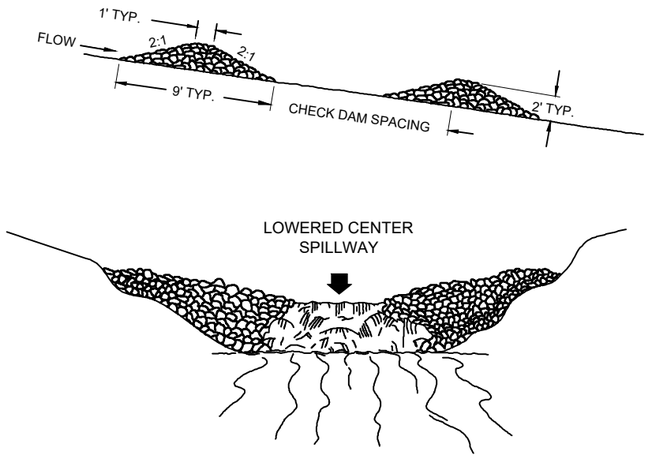
Project No.:	117-8343006
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1 GRAVEL CHECK DAM DETAIL
NOT TO SCALE

NOTES:

1. A CHECK DAM IS A SMALL DEVICE CONSTRUCTED OF GRAVEL, SANDBAGS, OR FIBER ROLLS, PLACED ACROSS A NATURAL OR MAN-MADE CHANNEL OR DRAINAGE DITCH. CHECK DAMS REDUCE SCOUR AND CHANNEL EROSION BY REDUCING FLOW VELOCITIES AND ENCOURAGING SEDIMENT DROPOUT.

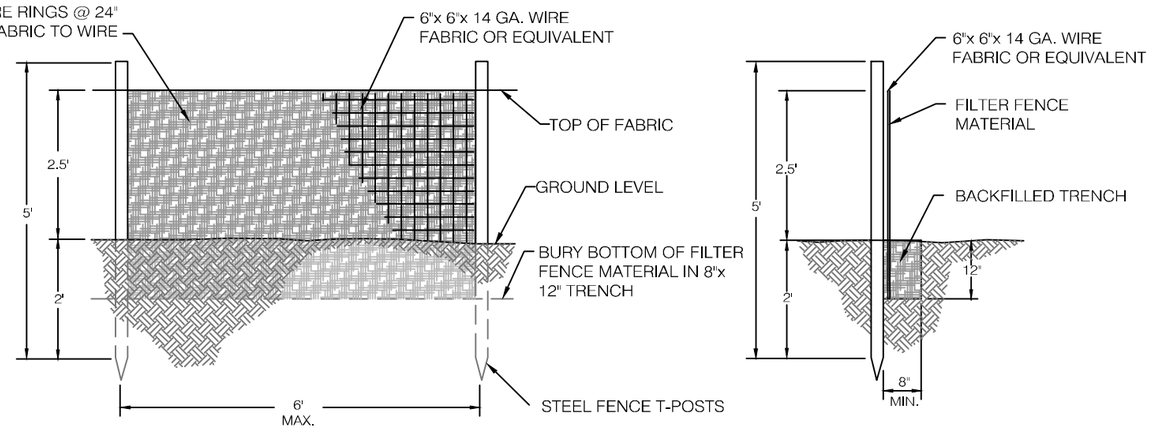
2. PLACE CHECK DAMS AT A DISTANCE THAT WILL ALLOW SMALL POOLS TO BE FORMED BEHIND EACH DAM.

3. CHECK DAMS CONSTRUCTED FROM GRAVEL MUST BE 100% PASSING THE 2" SCREEN AND 10% MAXIMUM PASSING THE NO. 4 SIEVE. DAM MATERIAL MAY BE PITRUN OR CRUSHED AGGREGATE.

4. REMOVE SEDIMENT FROM BEHIND THE DAM WHEN IT ACCUMULATES TO ONE-HALF THE ORIGINAL HEIGHT UNLESS ITS DRAINAGE AREA HAS BEEN STABILIZED.

5. DISTANCES BETWEEN CHECK DAMS ARE AS FOLLOWS:
   - FROM 1% TO 3% PLACE CHECK DAMS AT 300 FT. SPACING
   - FROM 3% TO 4% PLACE CHECK DAMS AT 200 FT. SPACING
   - FROM 4% + PLACE CHECK DAMS AT 100 FT. SPACING

   CHECK DAM SPACING MAY BE ADJUSTED ON A PROJECT-BY-PROJECT BASIS BY THE ENGINEER. DO NOT USE CHECK DAMS ON <1% GRADES UNLESS DETERMINED NECESSARY BY THE ENGINEER.



2 FILTER FENCE DETAIL
NOT TO SCALE

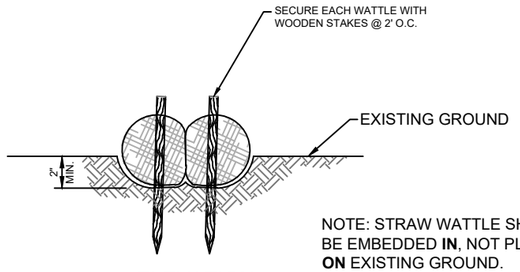
DESCRIPTION: A FILTER FENCE IS A VERTICAL BARRIER CONSTRUCTED FROM GEOTEXTILE. THE GEOTEXTILE IS TYPICALLY SUPPORTED BY A WOVEN WIRE FENCE.

CONSTRUCTION: FILTER FENCES SHALL BE INSTALLED PRIOR TO DISTURBING AREAS REQUIRING THE BMP OR AS SLOPE GRADES ARE ACHIEVED. THE FILTER FENCE SHALL BE BUILT ALONG THE TERRAIN CONTOUR SO THAT WATER IS FILTERED UNIFORMLY ALONG THE FENCE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, IN DITCHES OR SWALES, THE FENCE SHALL CURVE UPSTREAM AT THE ENDS TO PREVENT FLOW FROM BY-PASSING THE FENCE. FILTER FENCES SHALL NOT BE PLACED IN LIVE STREAMS. THE FENCES SHALL BE POSITIONED TO PREVENT SEDIMENT FROM ENTERING DRAINAGES.

MAINTENANCE AND MONITORING: INSPECT THE FILTER FENCE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ONE INSPECTION SHALL OCCUR DURING THE FIRST RUNOFF PRODUCING EVENT TO ASSURE PROPER FUNCTIONING. REPAIR OR REPLACE IF NECESSARY. SEDIMENT MUST BE REMOVED WHEN IT REACHES ONE THIRD THE HEIGHT OF THE FENCE. REMOVE OR GRADE AND SEED SEDIMENT DEPOSITS BEFORE REMOVING THE FENCE. FILTER FENCES SHALL BE REMOVED BY OTHERS AFTER FINAL SITE STABILIZATION IS ACHIEVED.



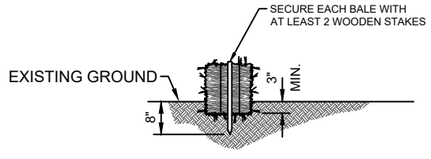
PLAN



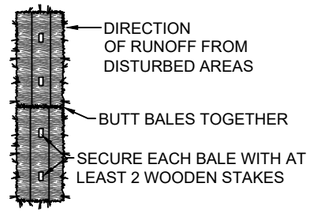
ELEVATION

NOTE: STRAW WATTLE SHALL BE EMBEDDED **IN**, NOT PLACED **ON** EXISTING GROUND.

3 STRAW WATTLE DETAIL
NOT TO SCALE



ELEVATION



PLAN

4 STAW BALE DETAIL
NOT TO SCALE

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SOUTH DAKOTA

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USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

TYPICAL EROSION CONTROL DETAILS

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

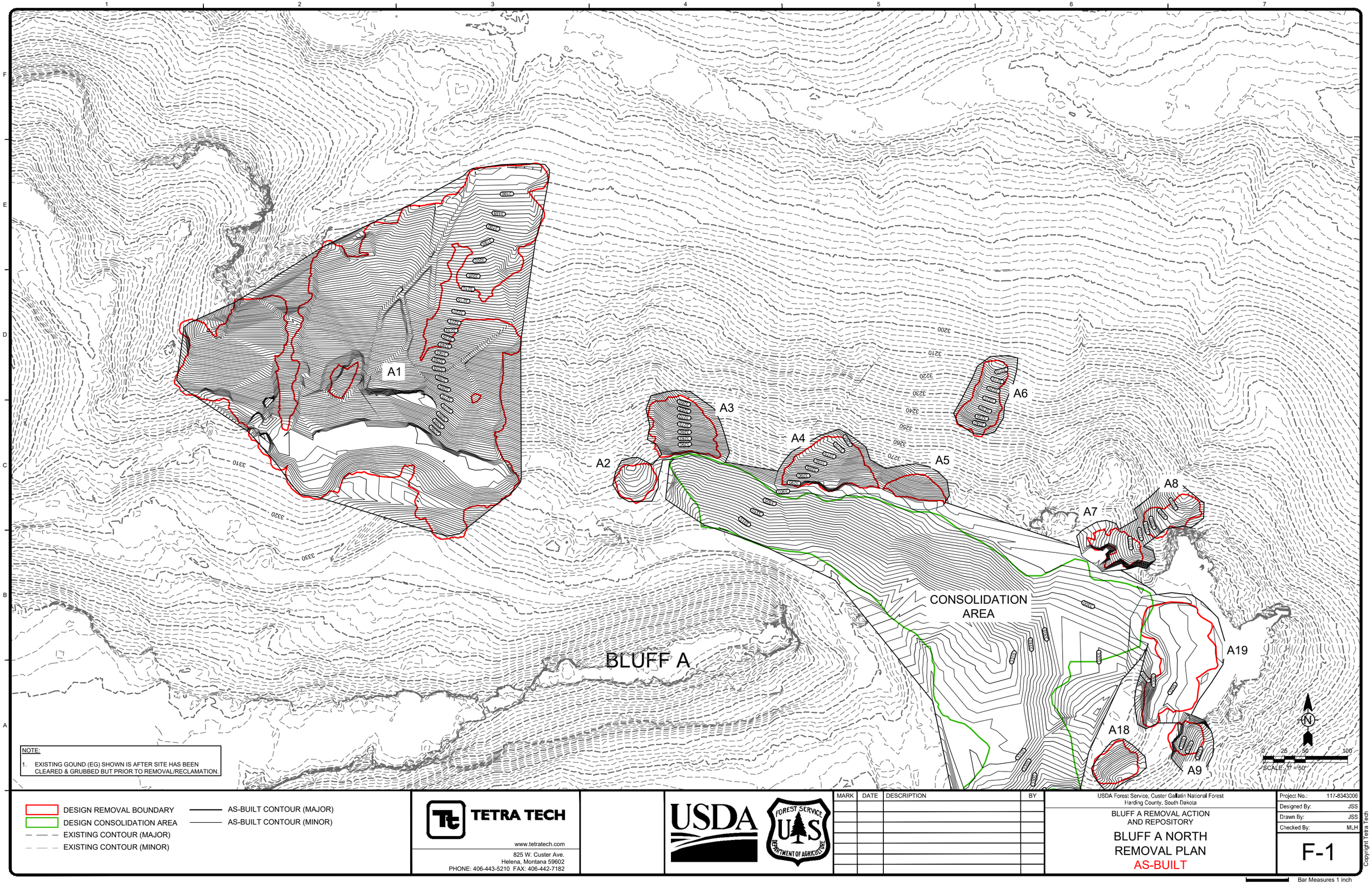
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Bar Measures 1 inch

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APPENDIX A2 – AS-BUILT DRAWINGS



NOTE:

1. EXISTING GOUND (EG) SHOWN IS AFTER SITE HAS BEEN CLEARED & GRUBBED BUT PRIOR TO REMOVAL/RECLAMATION.

DESIGN REMOVAL BOUNDARY
DESIGN CONSOLIDATION AREA
EXISTING CONTOUR (MAJOR)
EXISTING CONTOUR (MINOR)
AS-BUILT CONTOUR (MAJOR)
AS-BUILT CONTOUR (MINOR)

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USDA FOREST SERVICE DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A NORTH REMOVAL PLAN AS-BUILT

Project No.:	117-8343006
Designed By:	JSS
Drawn By:	JSS
Checked By:	MLH

F-1

Bar Measures 1 inch

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BLUFF A

CONSOLIDATION AREA

A9

A10

A11

A12-13

A14

A15

A16

A17

A18

A19

3330 3310 3300 3290 3280 3270 3260 3250 3240 3230

N

0 25 50 100

SCALE: 1" = 50'

DESIGN REMOVAL BOUNDARY
DESIGN CONSOLIDATION AREA
EXISTING CONTOUR (MAJOR)
EXISTING CONTOUR (MINOR)
AS-BUILT CONTOUR (MAJOR)
AS-BUILT CONTOUR (MINOR)

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USDA FOREST SERVICE DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SOUTH REMOVAL PLAN
AS-BUILT

Project No.:	117-8343006
Designed By:	JSS
Drawn By:	JSS
Checked By:	MLH

F-2

Bar Measures 1 inch

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11/25/2020 11:39 AM - H:\RILEY PASS\BLUFF A - COMPARISON SURFACE\BLUFF A REMOVAL PLAN - AS BUILT.DWG

APPENDIX B – SUBMITTALS



Construction Schedule

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 18, 2020

Construction Schedule
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak
Project Manager
Safety and Health Manager

Date

Eric Atkins
Project Supervisor
Site Health and Safety Officer

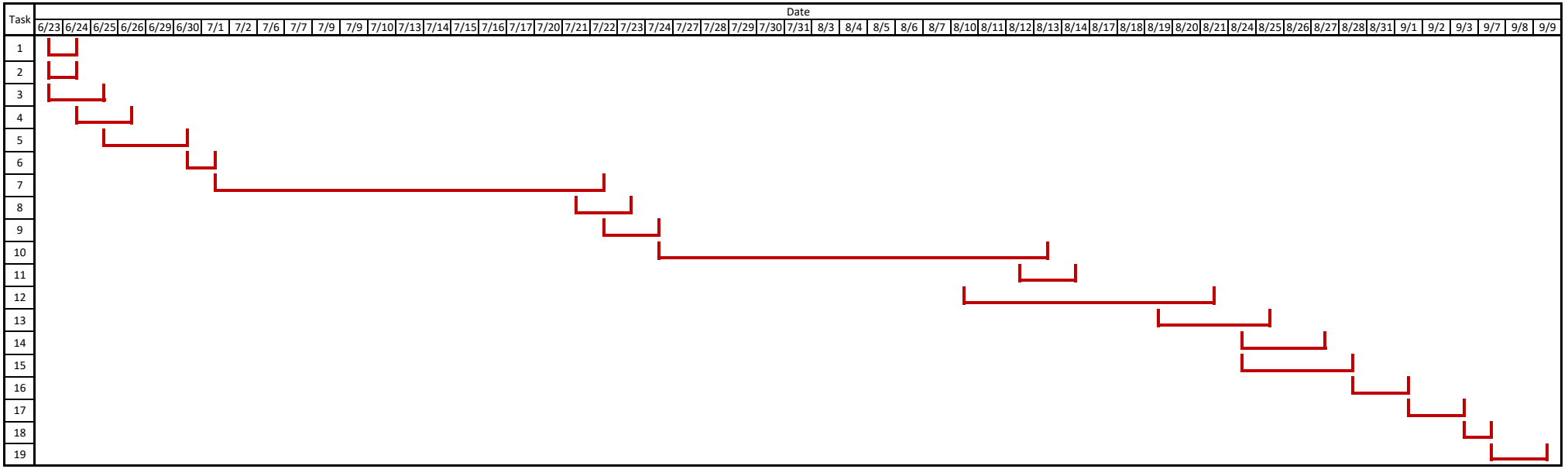
Date

Young Gun Construction, LLC is pleased to submit this construction schedule. The schedule will be revised and resubmitted if the work is 2 weeks or more behind schedule.

At this time, there are no known other projects that have been awarded in the Riley Pass area. As projects are awarded, Young Gun Construction LLC will work with USFS and any other contractors as needed to make sure all construction activities work together seamlessly with no interruption of work.

All traffic control items will be in place before construction work starts. As the project schedule is updated and if there is any need to update the Traffic Control Plan, both documents will work hand in hand and be updated as needed during construction work.

At this time, we do not expect any contingencies for sequence of work.



Project work plan includes:
Task 1 – Set up appropriate temporary traffic control and work signs for start of work.
Task 2 – Surveyor will stake waste removal and consolidation areas.
Task 3 – Mobilization and bringing in additional equipment for more aggressive work.
Task 4 – Place erosion control items, as needed, downslope from disturbed areas.
Task 5 – Clear and Grub where needed within the waste removal and consolidation areas.
Task 6 – Surveyor will survey existing ground.
Task 7 – Excavate, consolidate and compact mine waste.
Task 8 – Surveyor will survey waste removal areas and the consolidation area.
Task 9 – Strip topsoil from borrow area. Stockpile cover soil to expose subgrade.
Task 10 – Excavate, place, and compact subgrade over mine waste.
Task 11 – Surveyor will survey subgrade.
Task 12 – Excavate and place cover soil.
Task 13 – Final Grading.
Task 14 – Surveyor will survey final grading.
Task 15 – Restore borrow site/verification testing.
Task 16 – Spread and incorporate compost.
Task 17 – Place salvaged boulders/rocks.
Task 18 – Spread fertilizer.
Task 19 – Spread seeding and mulching using hydraulic method.



Site-Specific Health and Safety Plan

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 18, 2020

Site-Specific Health and Safety Plan
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak Project Manager Safety and Health Manager	Date

Eric Atkins Project Supervisor Site Health and Safety Officer	Date

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ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
ANSI	American National Standards Institute
AWS	American Welding Society
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CIH	Certified Industrial Hygienist
CSP	Certified Safety Professional
CPR	Cardiopulmonary Resuscitation
dBA	Decibels A-weighted
EPA	U.S. Environmental Protection Agency
FM/UL	Factory Mutual/Underwriters Laboratories
GFCI	Ground-Fault Circuit Interupter
HAZCOM	Hazard Communication
HAZWOPER	Hazardous Operations and Emergency Response
IARC	International Agency for Research on Cancer
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
OSC	On Scene Coordinator
OSHA	Occupational Safety and Health Administration
PM	Project Manager
PS	Project Supervisor
PPE	Personal Protective Equipment
SDS	Safety Data Sheet
SHM	Safety and Health Manager
SHSO	Site Health and Safety Officer

SSHP	Site-Specific Health and Safety Plan
USFS	U.S. Forest Service
UV	Ultraviolet

1. PROJECT BACKGROUND AND SCOPE

Young Gun Construction LLC will maintain and ensure the Site-Specific Health and Safety Plan (SSHP) is adhered to, updated, and revised as needed. The SSHP establishes the scope and procedures that will be used to identify and minimize health and safety hazards to persons performing work defined under Contract 12035520C0001 providing construction services for the excavation and consolidation of mine waste. This document contains information about common work hazards and specific actions and equipment that may be used to protect workers. The intent of this document is to serve as an accident prevention plan for known hazards and a contingency plan if new hazards are encountered or emergencies arise.

Changes to the established personal protective equipment (PPE) levels required for tasks may be implemented by the Project Supervisor (PS) if new hazards are identified or existing hazards are eliminated, with concurrence from the Project Safety and Health Manager (SHM).

1.1 Project Location

The Riley Pass Uranium Mine Site is located in the North Cave Hills land unit of the Custer Gallatin National Forest in Harding County, South Dakota. Bluff A is located in Sections 22 and 23, Township 22 North, Range 5 East, Black Hills Meridian. The Site is approximately 100 miles north of Belle Fourche, South Dakota, 25 miles north of Buffalo, South Dakota, and 30 miles south of Bowman, North Dakota. The nearest town is Ludlow, South Dakota, which is approximately 5 miles to the east of the Site. The Site is accessed by turning west off U.S. Highway 85 onto Tufte Road, 2 miles north of Ludlow; then following Tufte Road right/north; then turning left on Fuller Pass which turns into Forest Service Road (FSR) #3114 at the National Forest boundary; then turn left onto FSR #3123; finally turning left on FSR #31231. The site location is provided in Figure 1-1.

Figure 1-1 Project Location



1.2 Scope of Work

Young Gun Construction LLC will provide the necessary equipment and personnel to perform the required tasks. The scope of work will consist of performing various activities associated with the consolidation and cover of mine waste. Below is a brief description of the construction work.

1.2.1 Riley Pass Bluff A Reclamation

- Construction surveying and staking; verification of identified project boundary points
- Excavation, transportation, and consolidation of mine waste
- Excavation of borrow material and placement as cover on mine waste
- Road maintenance on project haul roads
- Clearing and grubbing, and removal of woody debris and brush
- Coordination with contractors working on other projects in the area as required.
- Establishment of traffic control

1.3 Project Organization

The Project Manager (PM) has overall responsibility to ensure the project meets all technical objectives in a safe manner. This includes ensuring that adequate staff and resources are available to implement the SSHP. The PM will fill the Safety and Health Manager (SHM) position.

1.3.1 Project Supervisor

The Project Supervisor (PS) has responsibility for all field activities and enforces safe work practices by all field team members and subcontractors. The PS oversees the safety of any visitors who enter the site. The PS maintains regular communication with the PM. The PS will fill the Site Health and Safety Officer (SHSO) position.

1.3.2 Project Health and Safety Manager/ Site Health and Safety Officer

The SHM and SHSO are responsible for implementation of the SSHP. The SHM and SHSO are required to recognize safety and health hazards and take corrective actions to eliminate or mitigate them. The SHM/SHSO will implement and enforce the SSHP at the project site, and give the initial safety briefing at the start of the project. The SHSO will conduct the daily safety meetings and will interface as required with the Project SHM/PM. Additionally; the SHSO will conduct the following:

- Orders the immediate shut-down of site activities in the case of a medical emergency or imminent danger.
- Ensures protective clothing and equipment are properly used, stored and maintained.
- Enforces the site access requirements and restricts visitors from active work areas at the site unless the area is placed in a safe condition with no potential for exposure to safety or health hazards.

- Monitors field team members for signs and symptoms of exposure caused by heat stress, cold stress or chemical exposure

A safety log will be kept for all activities. This log will include daily safety meeting topics, training given, first aid administered, visits of all outside personnel and any incidents of a health and safety nature.

1.3.3 Construction Subcontractors

All subcontractors will comply with the requirements established in this SSHP. Subcontractors shall be fully contracted, licensed and insured and shall follow all applicable OSHA, EPA, and State of South Dakota regulatory requirements associated with their scope of services. Evidence of insurance and required licenses will be provided to the PM prior to starting subcontracted tasks. In addition, subcontractor workers and supervisors shall attend the required SSHP Training and tailgate safety briefings and meet all other applicable training requirements specified by the SHM/SHSO. Each subcontractor will designate a single representative with whom the PS will communicate. Each subcontractor has sole responsibility for their employees.

Young Gun Construction LLC will observe subcontractors' safety performance to ensure compliance with this SSHP. Individual subcontractors are responsible for observation of hazards and unsafe practices of their personnel and taking the appropriate corrective action to eliminate or mitigate all hazards. All unsafe acts, conditions, or incidents will immediately be brought to the attention of the SHM and SHSO.

Where subcontractors fail to comply with SSHP or other contractual requirements, their contract may be terminated by Young Gun Construction LLC.

1.3.4 Other Construction Personnel

All construction personnel, including equipment operators and subcontractor support personnel assigned to the project, will understand and comply with the requirements of this SSHP. The PS (or designee) will conduct a formal pre-job briefing and daily safety meetings. Once at the project site, construction personnel are responsible for identifying any potentially unsafe situations or conditions to the PS or SHM/SHSO for corrective action.

1.3.5 Worker and Visitor Safety Responsibility

Each trained worker has a personal responsibility for ensuring they recognize site hazards and take appropriate action to minimize exposure to these hazards. All personnel who enter the active work area will receive a site-specific SSHP briefing and shall wear all required PPE as directed by the SHM/SHSO. All personnel will follow the policies set forth in this SSHP as well as any other site-specific documents that are developed.

All persons seeking admittance to the work area, including South Dakota Department of Environment and Natural Resources personnel, U.S. Forest Service (USFS) personnel, and other site visitors are subject to the provisions of this site-specific SSHP. Visitors are responsible for abiding by all signs and instructions from the PS while at the project site. Visitors will be restricted from entering controlled work areas unless they meet all training requirements and wear appropriate PPE. Visitors with no official business at the project site will not be allowed to enter the active work areas.

1.3.6 Key Personnel

Table 1-1. Key Project Personnel.

Company/Title	Name	Phone Number
Project Manager/Site Safety and Health Manager	Hunter Kalisiak	C (701) 523-1289
Project Supervisor/Site Health and Safety Officer	Eric Atkins	C (208) 512-0516

2. HAZARD IDENTIFICATION AND MITIGATION

This section identifies existing and anticipated hazards based on the project scope of work and to provides controls to eliminate or mitigate these hazards. The hazard mitigation objective will be accomplished by the following:

- Evaluation of each major project task to determine the physical hazards and chemical and biological exposure potential to project personnel by all routes of entry.

- Determination of necessary engineering controls, isolation methods, administrative controls, and work practices. Where these measures will not adequately control hazards, PPE will be determined to further protect personnel from hazards.

- The risk, presented by these hazards to personnel entering established work zones, is dependent on both the nature of tasks being performed and the proximity of personnel to the hazards. Engineering controls will be implemented (whenever possible) along with administrative controls, work control practices, and wearing of PPE to further mitigate potential exposures to hazardous agents and physical hazards.

2.1 COVID-19

All suggestions, recommendation and regulations from the South Dakota Department of Health as well as from Harding County will be followed during all work activities.

All employees and subcontractors area asked to follow South Dakota Department of Health "Precautions to Avoid Illness" and to complete the following items before reporting to work and during work hours.

- Complete self-assessments to check for symptoms compatible with COVID-19 which include:
    - Fever or chills
    - Cough
    - Shortness of breath or difficult breathing
    - Fatigue
    - Muscle or body aches
    - Headache
    - New loss of taste or smell
    - Sore throat
    - Congestion or runny nose
    - Nausea or vomiting
    - Diarrhea
- Wash hands or use hand sanitizer regularly
- Cover coughs and sneezes
- Practice social distancing including limiting the number of people in vehicles

- Clean and disinfect frequently touched surfaces

Daily records will be kept of all Young Gun Construction employees and subcontractors who are on site in case someone falls ill so that those who have been in contact with the person who falls ill can be notified.

2.2 Hazards and Mitigations

Minimal potential for exposure to the following contaminants during the project construction tasks are not anticipated if the standard operating procedures and technical requirements discussed below are followed. Other potential chemical hazards may be present from chemicals and fuels in use at the project site. Table 2-1 lists the applicable exposure limits and brief toxicological information for each of the chemical hazards of potential concern and the primary source for these hazards at each site.

Table 2-1. Evaluation of Potential Chemicals Agents.

Material or Chemical	Exposure Limit (Permissible Exposure Limit and Threshold Limit Value)	Route(s) of Exposure	Symptoms of Overexposure (Acute and Chronic)	Target Organs and System	Carcinogen (Source)	Matrix or Source
Diesel fuel	TLV - 100 mg/m^3 (ACGIH - as total hydrocarbons)	Inhalation, ingestion, skin or eye contact	Eye irritation; respiratory system changes; dermatitis	Eye, respiratory system	No	Fuel handling during refueling of diesel powered equipment
Arsenic	TLV – 0.01 mg/m^3 PEL – 0.01 mg/m^3	Inhalation, ingestion, skin or eye contact	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation	Respiratory system, skin, liver	IARC -1, Human Carcinogen	Present in mine waste
Molybdenum	TLV - mg/m^3 (as respirable dust) PEL – 15 mg/m^3 (as total dust)	Inhalation, ingestion	Respiratory irritation, fatigue, headache	Respiratory system	No	Present in mine waste
Erionite, fibrous dust	No PEL or TLV Not regulated by EPA or OSHA	Inhalation	Lung disease, lung cancer and mesothelioma; upper respiratory tract	Lungs	IARC -1, Human Carcinogen	Erionite contaminated gravel/soil
Crystalline Silica, Respirable Dust	TLV - 0.025 mg/m^3 Quartz (respirable) PEL – 0.050 mg/m^3	Inhalation, eye contact	Cough, dyspnea (breathing difficulty), wheezing; decreased pulmonary function, progressive respiratory symptoms (silicosis); irritation eyes	Respiratory, eyes	A2 - ACGIH (quartz) Yes - NIOSH	Naturally occurring in hard rock and soil
Ra-226	Whole body limit = 1.25 rem/qtr or 5 rem (50 mSv) per year (approx. 2.5 mrems/hr for all work hours)	Inhalation, ingestion, skin or eye contact	Nausea and vomiting, diarrhea, malaise, loss of appetite, hemorrhaging, depilation, and reduced white blood cell count.	Lymphocytes, bone marrow, gastro-intestinal, gonads, and other fast-growing cells.	Yes - OSHA	Present in mine waste

2.3 Safety and Physical Hazards and Mitigation

Industrial safety and physical hazards will present the greatest hazards while performing tasks at the project site. The following sections describe specific industrial safety hazards related to the construction activities and procedures to be followed to eliminate or minimize these hazards.

2.3.1 Overhead Objects and Hazards

All personnel who enter the active work area will wear a minimum of Level D PPE that includes head protection. No personnel will be allowed to position themselves or any body part under any suspended load at any time regardless of the height. Protective systems or administrative controls will be used during excavation operations to minimize the potential for falling material.

2.3.2 Material Handling and Back Strain

Material handling and maneuvering of various pieces of equipment may result in employee injury. Personnel will not physically lift objects weighing more than 50 lbs. or one-third their body weight (whichever is less), objects that are awkward or unbalanced alone, and will use the following manual lifting technique:

- Evenly distribute the load. Set feet solidly. Get as close to the load as possible. Bend legs about 90 degrees at the knees.

- Keep the back as straight as possible. Grip the object firmly. Straighten the legs to lift the object and at the same time, bring the back to a vertical position.

- Carry the object close to the body. Never carry a load that you cannot see over or around. Make sure the path of travel is clear. Never turn at the waist to change direction or to put the object down. Turn the whole body and crouch down to lower the object.

2.3.3 Repetitive Motion and Musculoskeletal Disorders

Tasks to be conducted may expose personnel to repetitive-motion hazards, vibration, undue physical stress, overexertion, awkward postures, or other ergonomic risk factors that may lead to musculoskeletal disorders. Musculoskeletal disorders can cause a number of conditions including pain, numbness, tingling, stiff joints, difficulty moving, muscle loss, and sometimes paralysis. The SHM/SHSO will evaluate project tasks and provide recommendations to reduce the potential for musculoskeletal disorders.

2.3.4 Fire and Flammable Materials Hazards

Fuel will be required for equipment used during construction activities. Flammable hazards exist during transfer of flammable or combustible liquids. Portable fire extinguishers with a minimum rating of 10A/20BC shall be strategically located at the site to combat the incipient stage of fires. Extinguishers will be located in all active work areas, on or near all facility equipment that have exhaust heat sources, and on or near all equipment capable of generating ignition or having the potential to spark.

2.3.4.1 Combustible Materials

The accumulation of combustible materials will be controlled. Disposal of combustible materials shall be assessed at the end of each day. Combustibles such as trash, cardboard, rags, wood, and plastic will be disposed in appropriate waste containers and removed from the site on a routine basis. All solvent waste,

oily rags and flammable liquids shall be kept in fire resistant covered containers until removed from the project site. Vehicles will not be parked in areas of high grass.

2.3.4.2 Flammable and Combustible Liquids

The requirements of 29 CFR 1926.152, "Flammable and Combustible Liquids" will be followed as all times. Only Factory Mutual/Underwriters Laboratories, Inc. (FM/UL) -approved flammable liquid containers, labeled with the content, will be used to store fuel. It is anticipated that only vehicle mounted tanks or fuel trucks will be used to fuel heavy equipment. If portable fuel containers (e.g., 5-gallon safety cans) are used, they will be stored at least 50 feet from any facilities and ignition sources or stored inside an approved flammable storage cabinet. Heavy equipment will be fueled at the designated storage location or work area that has been cleared of combustible materials. Fuel truck drivers will be trained and qualified in operation of their truck, with specific emphasis on the driving, operational, and safety considerations.

2.3.5 Welding, Cutting or Grinding

All welding and cutting tasks will be conducted in accordance with 29 CFR 1926, Subpart J, "Welding and Cutting."

Personnel conducting the welding, cutting, or grinding tasks will wear the appropriate PPE based on the nature of the task. All eye and face protection will meet the requirements of American National Standards Institute (ANSI) standard Z87, "Occupational and Educational Eye and Face Protection Devices" (ANSI, 2003). Protective clothing will meet the requirements of ANSI/American Welding Society (AWS), "Safety in Welding and Cutting" (ANSI/AWS, 1994).

2.3.6 Compressed Gas Cylinders

Compressed gas cylinders may be used at project sites for cutting operations (if required). All cylinders will be stored and handled in accordance with Compressed Gas Association (CGA), "Safe Handling of Compressed Gases in Containers, P-1" (CGA, 2000) and 29 CFR 1926.350, "Gas Welding and Cutting." The following are some of the critical requirements from these standards:

- Cylinders being transported, moved, or stored shall be secured in the vertical position and shall have valve protection caps installed.

- Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials by a minimum of 20 feet or by a noncombustible barrier at least 5 feet high having a fire resistant rating of at least one-half hour.

- Cylinder valves shall be closed when work is finished.

2.3.7 Hand and Powered Equipment and Tools

29 CFR 1926, Subpart I, "Tools - Hand and Power" will be followed for all work performed with powered equipment, including hand tools. All portable equipment and tools will be properly maintained and used according to the manufacturer's specifications by qualified individuals. All tools will be inspected by the user prior to use to ensure they are in good working condition, guards are in place, and cords are in good condition. Any tool found to be damaged will be tagged and taken out of service. Electric power operated tools shall either be of the approved double-insulated type or grounded and all

electric tools used outdoors will have a ground-fault circuit interrupter (GFCI) protection inline. Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.

2.3.8 Hoisting and Rigging of Materials

Hoisting and rigging of materials may be conducted using a boom truck or similar vehicle equipped with a boom hoist if a forklift is not used.

- All rigging and rigging practices shall meet the requirements of 29 CFR 1926.251, "Rigging Equipment for Material Handling."
- The operator shall comply with the manufacturer's specifications and limitations applicable to the operation of the equipment.
- Qualified signalpersons and riggers shall be used.
- The operator or designated person for mobile cranes or boom trucks will perform a documented inspection each day.
- The area around the lift (including the swing radius) will be limited to only the personnel required for the hoisting activity.
- The equipment operator shall ensure that that the crane is level and, where necessary, blocked; the load is well secured and balanced in the sling or lifting device before it is lifted more than a few inches; the lift and swing path is clear of obstructions and adequate clearance is maintained from electrical sources; and all personnel are clear of the swing radius of the boom and counterweight.

2.3.9 Heavy Equipment and Moving Machinery

Hazards associated with the operation of heavy equipment include injury to personnel (e.g., struck-by and caught-between hazards) and equipment and property damage. Additionally, operation of this equipment will create airborne dust. A water truck will be used as needed during all equipment operations to wet the ground surface and minimize dust generation and personnel exposures. All heavy equipment will be operated in the manner in which it was intended and in accordance with manufacturer's instructions and limitations. Only authorized qualified personnel will be allowed to operate equipment. All heavy equipment will be inspected, operated, and maintained in accordance with 29 CFR 1926.601, "Motor Vehicles" and have rollover protection compliant with 29 CFR 1926.1000, "Rollover Protective Structures for Material Handling Equipment." Equipment will be inspected daily using the applicable Construction Safety Checklists. These checklists will be filed and made available at the site by the SHM/SHSO. Erosive mine spoils can be found throughout the site and are subject to tunneling, piping and collapsing. Holes can appear suddenly in roads or working areas. Caution will be exercised at all times when operating heavy equipment in or near areas containing erosive mine spoils. In the event that erosive or piping soils are encountered, the area of concern will be delineated with caution tape, traffic cones, and other signage. Young Gun Construction LLC will initiate investigations at the direction of the PS to determine the extent of the soil piping area, and mitigative actions may be taken at the direction of the PS.

Additional safe work practices include the following:

- All heavy equipment will have a backup (reverse signal) alarm.
- Walking directly behind or to the side of heavy equipment without the operator's knowledge is prohibited. All precautions will be taken before moving heavy equipment.
- While operating heavy equipment in the work area, the equipment operator will maintain communication with a designated person who will be responsible for providing direct voice contact or approved standard hand signals. In addition, all facility personnel in the immediate work area will be made aware of the equipment operations.
- All equipment will be kept out of traffic lanes and access ways and will be stored so as not to endanger personnel at any time.
- All unattended equipment will have appropriate reflectors or be barricaded if left on roadways.
- All parked equipment will have the parking brake set and chocks will be used on wheeled vehicles when equipment is parked on inclines.
- Heavy equipment designed for off-road use will not be operated on public highways.

2.3.10 Commercial Vehicle Movement and Highway Operations

Large commercial vehicles (i.e., industrial haul and water trucks) and equipment will be used for hauling mine waste and cover material. Designated traffic lanes and routes will be established for this equipment when operating on the project site. Established vehicle traffic lanes and routes will be communicated to all personnel and drivers during the pre-job briefing and will be marked and delineated where feasible to prevent inadvertent entry or crossing by personnel or other equipment.

Entry to and exit from the project site is controlled by a Forest Service Gate. The Forest Service will issue a key to project personnel for use for the duration of work. Project personnel are responsible for ensuring the gate is closed and locked when work activities are not occurring.

A vehicle traffic control plan will be developed to document the planned transportation routes, entrances, and operating requirements.

2.3.11 Excavations

Excavation tasks will be conducted and monitored in accordance with 29 CFR 1926, Subpart P, "Excavations". It is not anticipated that "trenching" activities will be required, or that personnel will enter a trench. However, the elements of the excavation standard will be enforced as required, including the requirement for an excavation Competent Person.

Personnel shall be prevented from accessing the area adjacent to the excavation edge by placing temporary fencing at a minimum of 6 feet from the excavation edge and posting the fence line with signage indicating the hazard (e.g., DANGER, OPEN EXCAVATION, DO NOT ENTER, or equivalent).

If the site roadway runs adjacent to the excavation, then barricades with flashing warning lifts shall be set up on the excavation side of the road to prevent vehicles from approaching the excavation edge.

2.3.12 Electrical Hazards and Energized Systems

Only authorized qualified electricians shall be allowed to install, modify, or work on electrical systems. This includes installation of a temporary electrical supply or modification of permanent electrical supply equipment. The following precautions shall be observed:

- Prior to use, all electrical equipment, power tools, and extension cords shall be inspected for damage. Damaged or defective electrical equipment shall be removed from service immediately.
- All temporary wiring, including all electrical power tools and extension cords, must have a GFCI installed or power tools must be double insulated and be FM/UL-approved.
- All electrical wiring or systems shall be considered energized unless under the protection of lockout/tagout.
- Safe clearance shall be maintained between overhead power lines and equipment.
- If work on electrical systems is necessary (by qualified electricians), these practices will conform to the requirements of 29 CFR 1926, Subpart K, "Electrical" and the most current version of NFPA 70 (National Electrical Code, 2017) and 70E (Standard for Electrical Safety in the Workplace, 2015).

2.3.13 Overhead Electrical Transmission Lines

All overhead wires are considered to be energized unless and until the person owning the line, or the electrical utility authorities, indicates that it is not an energized line or that it has been visibly grounded or insulated.

2.3.14 Chemical Exposure

The primary chemical exposure concern for the project is arsenic and Ra-226, with a highest reported concentration of 2,953 mg/kg. Excavation, loading, transport, and placement of mine waste may result in exposure to arsenic (and the corresponding total dust and respirable dust). The project will implement the following measures to control personnel exposure to site contaminants:

- Equipment will be operated with doors and windows closed.
- Cab filters will be checked and replaced as required by the equipment manufacturer or when excessive loading is observed.
- Liberal use of water spray/dust control will be implemented as necessary to control dust.
- Ground personnel and equipment operators shall maintain an upwind location to the extent possible.
- The Project SHM will be consulted regarding the need for personal exposure monitoring for respirable dust and arsenic.
- Wash hands frequently, especially before eating or drinking
- Avoid handing soil, especially known contaminated mine waste

- Remove dust and dirt from clothing and footwear before leaving project area. If all dust and dirt is not able to be removed before leaving site, keep dirty clothes separate and wash separately.

2.4 Environmental Hazards and Mitigation

Environmental hazards will present potential hazards to personnel during project tasks. These hazards will be identified and mitigated to the extent possible. This section describes these environmental hazards and states what procedures and work practices will be followed to mitigate them through engineering controls (where feasible), administrative controls, or through the use of PPE.

2.4.1 Noise

Noise levels at the equipment operator's position and ground personnel close to the equipment will be monitored at the beginning of the project to determine which personnel and areas will require hearing protection (where noise levels exceed 85 dBA) in accordance with 29 CFR 1926.52, "Occupational Noise Exposure". New pieces of equipment brought on site or operations will be monitored to determine the need for hearing protection.

2.4.2 Temperature and Sunburn Hazards

All project personnel must understand the hazards associated with heat and cold stress and take preventive measures to minimize the effects. American Conference of Governmental Industrial Hygienists (ACGIH) guidelines will be considered when determining work-rest schedules, warm-up breaks, or when to halt work activities because of temperature extremes.

2.4.2.1 Heat Stress

Personnel must inform the SHM/SHSO or construction manager when experiencing any signs or symptoms of heat stress or observing a fellow worker experiencing symptoms. Heat stress stay times or work/rest regimens will be documented on the appropriate plan of the day briefing form by the SHM/SHSO (as required). Table 2-3 lists heat stress signs and symptoms of exposure.

Table 2-3. Heat Stress Signs and Symptoms of Exposure.

Heat-Related Illness	Signs and Symptoms	Emergency Care
Heat rash	Red skin rash and reduced sweating.	Keep the skin clean, change all clothing daily, and cover affected areas with powder containing cornstarch or with plain cornstarch.
Heat cramps	Severe muscle cramps and exhaustion, sometimes with dizziness or periods of faintness.	Move the patient to a nearby cool place; give the patient half-strength electrolytic fluids; if cramps persist, or if signs that are more serious develop, seek medical attention.
Heat exhaustion	Rapid, shallow breathing; weak pulse; cold, clammy skin; heavy perspiration; total body weakness; dizziness that sometimes leads to unconsciousness.	Move the patient to a nearby cool place, keep the patient at rest, give the patient half-strength electrolytic fluids, treat for shock, and seek medical attention. DO NOT TRY TO ADMINISTER FLUIDS TO AN UNCONSCIOUS PATIENT!
Heat stroke	Deep, then shallow, breathing; rapid, strong pulse, then rapid, weak pulse; dry, hot skin; dilated pupils; loss of consciousness (possible coma); seizures or muscular twitching.	Cool the patient rapidly. Treat for shock. If cold packs or ice bags are available, wrap them and place one bag or pack under each armpit, behind each knee, one in the groin, one on each wrist and ankle, and one on each side of the neck. Seek medical attention as rapidly as possible. Monitor the patient's vital signs constantly. DO NOT ADMINISTER FLUIDS OF ANY KIND!

The following monitoring procedures will be considered when the ambient air temperature exceeds 70 F), the relative humidity is high (greater than 50%), or when the workers exhibit symptoms of heat stress:

- The heart rate should be measured by the radial pulse for 30 seconds, as early as possible in the resting period. The heart rate at the beginning of the rest period should not exceed 110 beats per minute, or 20 beats per minute above resting pulse,

- If the heart rate is higher, the next work period should be shortened by 33%, while the length of the rest period stays the same. If the pulse rate still exceeds 110 beats per minute at the beginning of the next rest period, the following work cycle should be further shortened by 33%,

- Continue this procedure until the rate is maintained below 110 beats per minute, or 20 beats per minute above resting pulse,

- Alternately, the oral temperature can be measured before the workers have something to drink. If the oral temperature exceeds 99.6 degrees Fahrenheit (ºF) at the beginning of the rest period, the following work cycle should be shortened by 33%, and

- Continue this procedure until the oral temperature is maintained below 99.6ºF.

NOTE: Heat exhaustion and heat stroke are extremely serious conditions that can result in death and should be treated as such. The PS or designee should immediately request an ambulance (911), be dispatched, and the individual cooled (as described above) based on the nature of the heat stress illness.

2.4.2.2 Ultraviolet Light Exposure

Personnel will be exposed to ultraviolet light (UV) (i.e., sunlight) when conducting project tasks. Sunlight is the main source of UV known to damage the skin and to cause skin cancer. The amount of UV exposure depends on the strength of the light, the length of exposure, and whether the skin is protected.

No UV rays or suntans are safe. The following are actions that may be taken to minimize UV exposure include:

- Wear long-sleeve shirt to protect arms
- Sunscreen will be available for use

2.4.3 Inclement Weather Conditions

When inclement or adverse weather conditions develop that may pose a threat to persons or property at the project site (e.g., sustained strong winds 25 miles per hour [mph] or greater, electrical storms, heavy precipitation, or extreme heat or cold), conditions will be evaluated and a decision made by the SHM/SHSO (with input from other personnel) to halt work, employ compensatory measures, or proceed.

2.4.3.1 Lightning Hazards and Protection

The building provides the greatest safety from a lightning strike. In general, vehicles (with windows rolled up), provide adequate safety if you do not touch the metal surfaces of the vehicle.

The SHSO will be responsible for checking the local forecast.

When lightning is within 6 to 12 miles, personnel will be warned by radio to be ready to evacuate the work area to a safe sheltered location (i.e., the field trailer or building). The SHM/SHSO will then contact the National Weather Service for an updated weather forecast. When lightning is detected at or less than six (6) miles from the (Strike Alert or "30-30" Rule), then all equipment will be placed in a safe configuration and personnel will shelter in the field trailer or building. The 30-30 Rule uses the following guidelines for determining the threat of lightning in a specified area:

- **30 Seconds:** Count the seconds between seeing lightning and hearing thunder. If this time is less than 30 seconds, lightning is still a potential threat. Seek shelter immediately.
- **30 minutes:** After the last lightning flash, wait 30 minutes before leaving shelter. Half of all lightning deaths occur after the storm passes. Stay in a safe area until you are sure the threat has passed.

2.4.4 Wildlife and Biological Hazards

The project is located in an area that provides habitat for various wild animals, rodents, ticks, mosquitoes, rattlesnakes, and poisonous/noxious plants. Hazard mitigation means include:

- Do not feed or approach any large animals. Do not leave food overnight at the site unless it is secured properly. Spray an insect repellent containing DEET on exposed skin areas.
- If a tick is found embedded in your skin, remove it and place it into a Ziploc bag. It will be analyzed if you become ill.
- Do not touch or handle known or questionable poisonous or noxious plants.
- Snakes, insects, and spiders may be encountered in staging areas, under existing structures, under boxes, and other areas that provide shelter. If potentially dangerous snakes or spiders are found or are suspected of being present, warn others, keep clear, and contact the SHSO for additional guidance.

2.4.5 Confined Spaces

No confined spaces are anticipated to be encountered at the project site. The Project SHM/SHSO will be contacted if there are any questions of whether a space meets the regulatory definition of a "confined space." If a space is classified as a confined space and entry is required (permit or non-permit required), the SHM/SHSO will be contacted for formal classification of the space in accordance with 29 CFR 1910.146, "Permit-required Confined Space".

2.5 Stop Work Authority

Task-site personnel should continually look for potential hazards and immediately inform the PS or SHM/SHSO of the hazards so that action can be taken to correct the condition. All personnel have the authority to initiate **STOP WORK** actions if it is perceived that an imminent safety or health hazard exists. Personnel working at the task site are responsible to use safe-work practices, report unsafe working conditions or acts, and exercise good housekeeping habits with respect to tools, equipment, and waste throughout the course of the project.

3. PERSONAL PROTECTIVE EQUIPMENT

PPE for this project has been selected based on the hazards analysis for tasks to be conducted and materials that are anticipated to be encountered. Based on this analysis, the SHM/SHSO has determined that Level D PPE will serve as the primary PPE for activities at the project sites. If additional hazards are encountered, action levels exceeded at the project site, or new tasks area added, the SHM/SHSO will be contacted and the hazards will be evaluated and control measures developed.

Under no circumstances will PPE be modified without express approval from the SHM/SHSO. If certain activities or conditions pose problems for workers using the assigned PPE, the SHM/SHSO will be contacted to help resolve the problem. This SSHP serves to meet 29 CFR 1910.132, "Personal Protective Equipment" hazard assessment requirements for general tasks.

3.1 Required Personal Protective Equipment

All personnel will be trained on the proper use, maintenance, and limitations of all PPE. Where specific OSHA standards govern required training, these will be required to be met. Level D PPE consists of:

- Appropriate work clothes
- ANSI approved hard hats, safety footwear, safety glasses, high visibility garments
- Work gloves – leather for all material handling tasks (cut resistant for debris handling)
- Other PPE as appropriate including chain saw chaps, face shields, hearing protection, coveralls.

If Level C PPE is required (i.e., respirator use), the Project SHM will be contacted and a workplace-specific Respiratory Protection Plan will be developed.

3.1.1 Inspection of PPE

All PPE components must be inspected prior to use and when in use within work areas. Once PPE is donned, self-inspection will serve as the principle forms of inspection. If at any time PPE should become damaged or unserviceable, an individual will inform others of the problem and proceed directly to the controlled work area exit point to doff and replace the equipment.

4. TRAINING

The SSHP is designed to provide information necessary to assure that personnel are aware of the hazards associated with the tasks to be performed and the materials that they will be working with. All workers will be required to provide objective evidence of having met required training requirements as applicable to their tasks. A copy of training records, certificates, or cards shall be provided to the PM prior to initiating project tasks or at the initial SSHP briefing. Site-Specific Work Scope and Health and Safety Training.

All workers and subcontractors assigned to the project who enter the controlled work areas shall attend initial SSHP training. Prior to entering the work areas, all personnel shall also participate in a daily safety briefing. Visitors will receive project training based on their access requirements to the specific work area. Visitors requesting access to the controlled areas must have a demonstrated need to access the area and meet all other applicable SSHP required training requirements and have objective evidence (training certificates or cards) before entry to controlled areas will be allowed.

4.1 HAZWOPER Training

Young Gun Construction LLC shall ensure that work is performed in accordance with 29 CFR 1910.120, “Hazardous Operations and Emergency Response (HAZWOPER).” All employees and subcontractors working onsite shall have current 40-hour (and annual refresher as required) OSHA HAZWOPER training including medical clearance. Documentation of training for site workers shall be readily accessible.

4.2 SSHP Briefing Content

The SSHP briefing shall include a review of the Site-Specific SSHP including site hazards and controls, project-specific hazard communication information, and review of applicable Safety Data Sheets (SDSs) for all chemical brought on site, and emergency actions. Additionally, personnel will review PPE requirements and the proper use and limitation of Level D PPE and any specialized equipment and applicable work control and safety procedures such as lockout/tagout.

Training will include a health and safety briefing on the following information:

- Names of personnel and alternates responsible for site safety and health.
- Hazards of the site and site work.
- Work practices by which the employee can minimize risks from hazards.
- Emergency response actions, contacts, and phone numbers.

Visitors will receive the same training that site personnel receive.

4.3 Attendance Documentation

All attendees of the site-specific SSHP training shall sign a training acknowledgment form (Appendix A) verifying their attendance and acknowledging the information that has been presented is understood and will be complied with. This briefing shall be held on or near the site during the mobilization phase of the

project and before any work is started. Specialty subcontractors will be briefed prior to the start of their work tasks.

4.4 Daily Safety Briefings

Daily tailgate safety briefings shall be used to augment the SSHP briefing and address site-specific concerns and any changes that arise during the course of the project. Prior to entering designated work areas, all personnel shall participate in a daily safety briefing. Where separate project activities prohibit all personnel from attending a single safety briefing, each work group will conduct a briefing. Documentation of attendance of the tailgate safety briefing shall be maintained in the PS logbook.

4.5 Equipment Operator Required Training and Qualifications

Documentation of the training and/or qualifications for equipment operators as required by 29 CFR 1926(b)(4) shall be provided to the PS or PM as requested. Anticipated training certification or qualifications will be required for:

- Heavy equipment operators
- Highway truck driver (commercial driver's license-CDL, appropriate DOT endorsements). All equipment will be inspected daily by the operator. Problems and deficiencies will be reported to the PS.

4.6 Hazard Communication

To ensure 29 CFR 1910.1200, Hazard Communication (HAZCOM) requirements are met, the following training and information will be provided. General hazard communication training will be provided as part of the SSHP briefing. The SHM/SHSO must approve all chemicals prior to bringing them on site. All Young Gun Construction LLC employees and subcontractors must provide the PS or SHM/SHSO with a copy of SDSs for any chemical for SHM/SHSO review prior to bringing it on site. The chemical's intended use and potential to impact other project workers and activities, and PPE requirements for use of chemical products must be explained to the SHM/SHSO. Copies of all SDS sheets will be kept at a central location at the project site and managed by the SHM/SHSO. Subcontractors are responsible for providing HAZCOM training to their personnel and to provide the PS with copies of objective evidence of HAZCOM training.

4.7 Subcontractors and All Site Visitors

All subcontractor and Forest Service project personnel requiring unescorted access to the controlled work areas shall be briefed on the SSHP and relevant daily safety briefing topics. Subcontractors will sign the appropriate training SSHP and other forms and wear a minimum of Level D PPE at all times.

Visitors will receive an abbreviated SSHP briefing on the general hazards, associated controls and site requirements, PPE requirements, and emergency actions. Visitors are required to wear hard hats, safety glasses, and safety footwear. Visitors who have not met the requirements for unescorted access will be escorted (line of site) by the PS or designee at all times.

4.8 Emergency Response Training

Emergency Response Training requirements will include review of this SSHP and training on all requirements listed in Section 8, “Emergency Response Plan.”

5. ACCIDENT AND INCIDENT REPORTING

All accidents no matter how minor will be reported to the SHM/SHSO and PS immediately. Depending on the nature of the event, additional notifications and reporting will be required as described below. The PS is responsible for collecting all information related to an accident on site. The PS will take immediate actions to mitigate any accident or medical actions as described in Section 7. Except for rescue and emergency measures, the accident scene shall not be disturbed until it has been released by the investigating official.

The PM, Program Manager, and SHM/SHSO will also be notified within 1 hour of any accidents on site. Additionally**, any accidents that occur will be immediately reported to the USFS On Scene Coordinator (OSC).** These accidents will be investigated in depth to identify all causes and to recommend hazard control measures and include:

- Fatal injury,
- Permanent totally disabling injury,
- Permanent partial disabling injury,
- One or more persons admitted to a hospital,
- Loss of an eye,
- Amputation,
- Property damage in an amount specified by EPA current accident reporting regulations, or
- Three of more employees become ill or have a medical condition which is suspected to be or related to the site.

If an accident, an explosion or fire, or release of toxic materials occurs during the course of the project, Young Gun Construction LLC shall notify the USFS OSC verbally or by telephone as soon as possible after emergency response agencies have been notified. Recording and reporting occupation injuries and illnesses shall be conducted in accordance with 29 CFR 1904. A written notification shall be provided within 24 hours. Within two (2) working days after an accident, a copy of the incident report with all available information shall also be submitted to the USFS OSC.

6. SITE SAFETY AND HEALTH PLAN PROGRAMS

6.1 Fire Prevention and Protection

The potential for forest fires is a significant concern. Forest fires can be started by lightning strikes, sparks from friction, inappropriate hot work, discarded smoking materials, and arson. The following precautions will be taken to address this concern.

6.1.1 Fire Prevention

- Flammable liquids will be stored only in OSHA approved containers.
- If required, oxygen-acetylene units will be used and stored in a safe manner.
- Flameproof tarpaulins and enclosures will be provided for welding and burning operations when necessary. A Hot Work permit is required for all welding and burning operations.
- No vehicles will be parked off-road in areas of high grass. Vehicle travel off-road in high grass is prohibited except in the event of an emergency.
- Designated smoking areas will be established for the project. The smoking area will be demarcated within a protected area at least 35 feet from any combustible material with an approved receptacle.
- No burning for disposal will be permitted at the project site.
- Communication between Young Gun Construction LLC and the USFS OSC to determine the posted fire danger implemented by the US Forest Service to determine whether some operations need to be shut down to minimize the chance of a fire occurrence due to sparks.

6.1.2 Fire Protection

- Vehicles will contain one of each of the following items:
    - One round point #0 lady or equal shovel; an ax weighing a minimum of 2lbs and no less than 26in. in length, or a Pulaski;
    - One 1-gal capacity water container;
    - One fire extinguisher with a minimum of 2-1/2lb, a length no less that 26in and a rating of at least 4BC, or a paluski.
- Portable fire extinguishers shall be provided and maintained in all heavy equipment. Each extinguisher will have, at a minimum, a 2-1/2 pound capacity and a 4 BC rating.
- The emergency phone number for the additional fire resources is 911.
- A water truck will be in the proximate of the project area. This truck will be available to aid in extinguishing any fire that might occur.

- In the event an evacuation is ordered, the escape route is to **travel east on the east/west portion of Tufte Road, and turn left onto U.S. Highway 85. If evacuation is impossible a safe zone will be established. The USFS defines a safe zone as an area that is 4 times greater than the length of your fuel. An example of this safe zone is if an 80 foot tree is burning and has a 20 foot flame, the safe zone needs to be an area of 400 feet away from the fire. The safe zone for this project will be at a location along the escape route to be identified before construction activities begin. The water trucks should accompany personnel at this safe zone. If necessary, dispatch Black Hills Life Flight at (800) 232-2452 for evacuation assistance.**

6.2 Site Housekeeping

All site personnel are expected to make good housekeeping a priority at the job site. The following are general safe work practices that shall be followed at the work sites to minimize potential exposure of personnel to hazardous situations.

- All debris shall be collected in appropriately marked containers and all work areas kept free of such material.

- A clean area for breaks, eating and smoking shall be established. Unless otherwise prohibited, smoking, fluid intake, and the use of rest room facilities shall be permitted in this area.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that presents the possibility of hand to mouth transfer and ingestion of chemical hazards is prohibited in the controlled work areas.

6.3 Mechanical Equipment Inspection

Heavy equipment operators must perform daily operational safety inspections including brakes and braking mechanisms prior to use of all heavy equipment. The inspection checklist logbook must remain within the cab of all powered industrial trucks, haul trucks, and other heavy equipment. Do not operate any equipment that fails an inspection. Report all needed repairs to the site supervisor or personnel responsible for maintenance.

6.4 Sanitation

Potable water and soap (or sanitizing solution) will be available at the worksite to wash hands and face upon exiting the work area. Personnel shall wash their hands prior to eating or drinking, and/or prior to taking a smoke break. A portable toilet(s) will be provided at the project site.

6.5 Daily Safety Inspections

The SHM/SHSO will conduct frequent inspections of the work site to ensure compliance with SSHP requirements. A site inspection checklist will be used to document findings and corrective actions (as required). All inspection forms will be filed in the project trailer and a summary of the inspections will be communicated to the PM and the SHM/SHSO. Any newly identified job hazards (and associated controls) will be reviewed with the crew.

6.6 Hauling and Access Roads

Delivery trucks will be bringing import material into the project area. These trucks will be monitored to comply with the speed limit and if dust becomes an issue, a water truck will water the road. All vehicles, passenger or haul, will be strictly required to drive within the speed limit in the town of Ludlow, and 25 on the county or USFS roads into the sites, unless otherwise posted.

6.7 Communications

Satisfactory working two-way radios shall be used by personnel at the project site for communication. Additionally, cell phone use, when not operating equipment or trucks, will be utilized as service is available. The following project individuals at a minimum shall have a radio:

- All contractor's supervisors
- Contractor's SHSO and SHM
- Equipment operators, if necessary

6.8 Traffic Control Plan

The traffic control plan will be developed and submitted for review by Young Gun Construction LLC. Once approved, the Traffic control Plan will be implemented for project work.

6.9 Construction Area

A Controlled Work Area (CWA) will be established where excavation/consolidation activities are occurring. The CWA locations will be designated by the PS and boundaries will be marked with postings, and delineated with construction rope, ribbon, cones, fencing, or other temporary construction markings. These boundaries will be established at the main access points to the work location, and will not encompass the entire excavation or consolidation area(s).

7. EMERGENCY PREPAREDNESS RESPONSE PLAN

7.1.1 Pre-Emergency Planning

Before starting site operations, the PS will implement emergency contingency planning actions that include:

- Identifying the location and route to emergency medical services,
- Establishing site communications,
- Designating emergency warning signal and evacuation routes,
- Inventorying emergency equipment, and
- Communicating emergency procedures to personnel.

7.1.2 Personnel Roles, Lines of Authority

The PS takes the lead during site emergencies until off-site emergency responders arrive on-site. In cases of major emergencies, personnel will evacuate the site, contact local emergency responders, and rely on them to handle the emergency. Minor emergencies that are controllable on-site with emergency equipment located at the site will be addressed by on-site personnel with the approval of the site supervisor.

7.1.3 Emergency Recognition and Prevention

The PS and subcontractor competent person will conduct an initial site safety briefing to review the requirements of the site safety plan with site personnel. This briefing will include discussions on the recognition, prevention and control of emergencies anticipated on-site. Daily safety meetings will be held to emphasize emergency prevention and control measures.

7.1.4 Site Security and Control

Access to the site will be controlled by the PS until local emergency responders arrive. The PS will then relinquish site security/control to the authorized emergency response organization.

7.1.5 Site Communications

Site communications will provide means for both on-site and off-site communications. On-site communications will consist of verbal communications and line of sight observations. Off-site communications will be established to summon off-site emergency services and will consist of cellular telephones. When reporting an emergency situation to off-site emergency responders, the following information must be provided:

- Name of person making the call
- Telephone number and location of person making the call
- Name of person(s) exposed or injured

- Description of exposure and emergency
- Actions taken
- Name and location of site contact for emergency, if other than caller.

7.2 Medical Facility

In the event of a known or suspected injury or illness, the worker(s) shall be evaluated by a cardiopulmonary resuscitation (CPR) first-aid trained worker and stabilized for transportation to a medical facility as required.

In the event of an employee injury or illness requiring emergency medical care beyond the capabilities of on-site CPR and first-aid trained personnel, the closest, capable medical facility shall be notified as defined below and the appropriate actions taken.

All personnel must be provided with concise, clear directions and transportation to local emergency medical treatment services. The name, location and directions to the nearest hospital and directions to non-critical first-aid treatment are available below:

Southwest Healthcare Services
14 6thAvenue SW
Bowman, ND 58623
((701) 523-3226

Bowman Ambulance Service
606 1st St. NW
Bowman, ND 58623
(701) 523-3218

Black Hills Life Flight
(800) 232-2452

Driving Directions from the Riley Pass Bluff A Site to Southwest Healthcare Services are as follows:

1. Follow FSR #31231 northwest for approximately 0.2 miles
2. Turn right onto FSR #3123 and follow the road for approximately 2.1 miles
3. Turn right onto Fuller Pass/FSR #3114 and follow the road for approximately 1.1 miles
4. Head north on Tufte Road for approximately 2.0 miles
5. Turn right onto Cox Road and follow the road for approximately 4.1 miles
6. Turn left onto US 85 N and follow the road for approximately 19.2 miles
7. Turn left onto US 12 and follow the road for 0.1 Miles
8. Turn right onto 11th Ave SW and follow the road for 0.2 Miles
9. Turn right onto W Divide Street and follow the road for 0.4 miles.
10. Southwest Healthcare Services will be on the right at the corner of W Divide Street and 6th Avenue SW.

Figure 7-1 Driving route from Riley Pass Bluff Site to Southwest Healthcare Services.

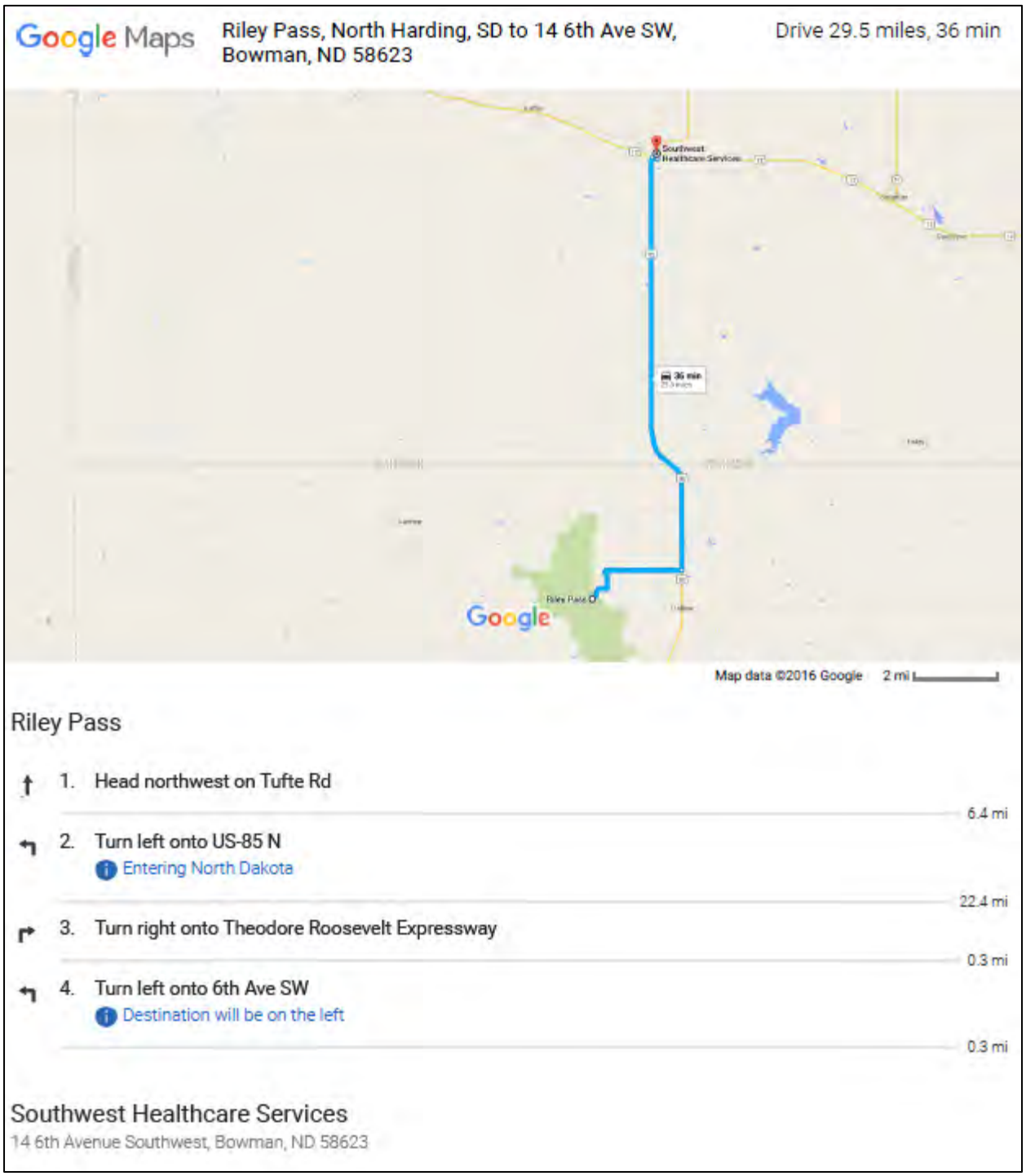


Table 7-1 Emergency Contacts.

Contact	Phone
Fire, Local Police, Ambulance	911
Southwest Healthcare Service	(701) 523-3226
Bowman Ambulance Service	(701) 523-3218
Ludlow Fire Department	(605) 278-6138
Harding County Sheriff's Department	(605) 375-3414
Black Hills Life Flight – Rapid City	(800) 232-2452
USFS OSC – Peter Werner	(406) 823-9009
USFS COR – David Shimek	(406) 839-3787
Project Manager – Hunter Kalisiak	(701) 523-1289
Project Supervisor – Eric Atkins	(208) 512-0516

7.2.1 Emergency Equipment

The following emergency equipment will be located in the support area and will be immediately available for site emergencies:

- Portable fire extinguishers (minimum 20 lb.-A/B/C);
- Industrial first aid kit;
- Spill kit; and
- Portable Eyewash station meeting ANSI Z-358.1- 2014 requirements, including the 15-minute flushing requirement.

8. RECORDS

8.1 Field Logbook and Site Attendance Record

The PS will keep a record of daily site events in the field logbook and will maintain accurate records of all personnel who are onsite each day in a site sign-in or attendance logbook. The PS is responsible for maintaining the site attendance record and for ensuring that all personnel on the project site sign in. The PS will generate a daily report from the log.

9. MEDICAL SURVEILLANCE

Project site personnel shall participate in the medical surveillance program as required in 29 CFR 1926.65. Medical surveillance examinations will be provided before assignment, annually (biannually given consent from medical provider), and after termination of hazardous waste site duties or employment.

The Occupational Health Provider will evaluate all information provided, including medical questionnaires, physical exam findings, blood chemistry and urinalysis results, preexisting medical conditions, nature of work to be performed, actual and potential hazards and exposures, and other factors deemed appropriate by the physician for determining the following for each employee:

- Ability to perform relevant occupational tasks,
- Ability to work in other PPE and heat/cold stress environments, and
- Requirement for entry into substance-specific medical surveillance programs.

If an employee suspects exposure, additional medical monitoring will be available and the employee must complete an employee exposure/injury incident report.

10. DOCUMENT CONTROL

All documents related to the project will be organized, maintained, and controlled, as electronic and/or hard copy documents.

11. REFERENCES

29 CFR 1910 Subpart I, "Personal Protective Equipment," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910 Subpart Q, "Welding, Cutting, and Brazing" *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910.144, "Safety Color Code for Marking Physical Hazards," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910.145, "Specifications for Accident Prevention Signs and Tags," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910.178(l), "Powered Industrial Trucks," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1910.1000, "Air Contaminants," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926 Subpart E, "Personal Protective and Lifesaving Equipment," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926 Subpart I, "Tools - Hand and Power," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926 Subpart J, "Welding and Cutting," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926 Subpart K, "Electrical," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926.20, "General Safety and Health Provisions," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926.25, "Housekeeping," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926.52, "Occupational Noise Exposure," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

29 CFR 1926.152, "Flammable and Combustible Liquids," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

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29 CFR 1926.251, "Rigging Equipment for Material Handling," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

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29 CFR 1926.601, "Motor Vehicles," *Code of Federal Regulations,* U.S. Government Printing Office, Washington, D.C.

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NFPA, 2000b, Parts I through III of NFPA 70 E "Electrical Safety Requirements for Employee Work Places," National Fire Protection Association, Quincy, Massachusetts.

APPENDIX A, Safety Briefing Sign-Off Form

SAFETY BRIEFING SIGN-OFF FORM

Printed Name	Signature	Date

APPENDIX B, Incident Report

Section 1: TIME AND PLACE OF INJURY/ILLNESS

[To be completed by Employee's Line Manager or Supervisor]

Preparer's Name/Title (person at location): Click here to enter text.		Preparer's Direct Phone Number: Click here to enter text.	
Where Accident Occurred (Address/Physical Location): Click here to enter text.		Did Accident Occur on: Worksite? ☐ Yes ☐ No Government Property? ☐ Yes ☐ No	
Date of Injury or Illness: **(MM/DD/YYYY)**	Time of Injury or Illness: _____ ☐ AM ☐ PM	Date of Incapacity: **(MM/DD/YYYY)**	Time of Incapacity: _____ ☐ AM ☐ PM
Was Employee Paid in Full for Day of Injury/Illness? ☐ Yes ☐ No		Was Employee Paid in Full for Day of Incapacity? ☐ Yes ☐ No	
Date Injury/Illness Reported: **(MM/DD/YYYY)**	Reported To: Click here to enter text.	Supervisor's Name: Click here to enter text.	If Fatal, Give Date of Death: **(MM/DD/YYYY)**

Name of Witness (es) Address City State Zip Phone #
Click here to enter text.

Section 2: EMPLOYEE INFORMATION

[To be completed by Employee's Line Manager or Supervisor]

Name of Employee (Last, First, Middle): Click here to enter text.	Home Phone Number: Click here to enter text.		Gender: ☐ Male ☐ Female
Employee's Complete Home Mailing Address (No PO Box #): Click here to enter text.	Work Phone Number: Click here to enter text.	Date of Birth: Click here to enter text.	Social Security Number: Click here to enter text.
Occupation/Job Title at Time of Injury or Illness: Click here to enter text.	Length of time in Current Position: Click here to enter text.		Marital Status: ☐ Married ☐ Single/Divorced ☐ Widowed ☐ Unknown
Project/Department: Click here to enter text.	Employment Status: ☐ Full time ☐ Part time ☐ Regular Employee ☐ Seasonal		
Hours Worked Per Day: Click here to enter text. Days Worked Per Week: Click here to enter text.	Regular Shift Hours: From: AM/PM To: AM/PM		Was Employee Paid Per Piece? ☐ Yes ☐ No Hourly Basis? ☐ Yes ☐ No

Section 3: NATURE OR CAUSE OF INJURY/ILLNESS [To be completed by Employee's Line Manager or Supervisor]		
Machine, Tool, or Object Causing Injury/Illness: Enter N/A if not applicable	Specific Part of Machine, Etc. Click here to enter text.	Were Safeguards or Safety Equipment Provided? ☐ Yes ☐ No Utilized? ☐ Yes ☐ No
Describe Fully How Injury or Illness Occurred (Must answer, what, where, when, and how): **Attach Additional Sheet of Paper if Necessary** Click here to enter text. Body Part(s) Injured: Click here to enter text. Left or Right Side (if applicable): Click here to enter text.		
Physician/Health Care Provider (Name, Address & Phone) Click here to enter text.	Hospital or Offsite Treatment: (Name, Address & Phone) Click here to enter text.	Initial Treatment: No Medical Treatment ☐ Minor by Employer ☐ Minor Clinic/Hosp ☐ Emergency Care ☐ Hospitalized >24 hrs ☐ Other ☐ _____

Section 4: REPORTING INJURY OR ILLNESS [To be completed by Risk Manager and HR Representative prior to submittal]			
Date Risk Management Notified: **(MM/DD/YYYY)**	Date Prepared: **(MM/DD/YYYY)**	Preparer's Name/Title (person at location): Click here to enter text.	Preparer's Direct Phone Number: Click here to enter text.
Probable Length of Disability (if known): Click here to enter text.	Has Employee Returned to Work: Yes ☐ No ☐	If Yes, on What Date? **(MM/DD/YYYY)**	If yes, at What Wage? $_____
Employee Wages at Time of Injury/Accident: $_____ ☐ per hour $_____ ☐ per week $_____ ☐ other		Date Hired: **(MM/DD/YYYY)** State: _____	NCCI Class Code (if known) Click here to enter text.

Attorney-Client Privileged Incident Report

Information provided in this report is a confidential attorney-client communication given to Company counsel for use in litigation that is reasonably expected to arise out of this incident. As a result, the information is privileged. Copies should not be provided outside the Company control group, on the grounds that such reports are privileged information.

EMPLOYEE STATEMENT
(To be completed by employee)

Your Name:	Your Place of Employment
Date/Time of Incident	Location Where Incident Occurred:

I, _____, make the following statement as part of the Employee Report of Injury and Illness reporting process. I make this statement of my own free will and without any threats or promises extended to me. I fully understand that this statement is given concerning my knowledge of my illness or injury.

Please state your version of what happened, where it happened, when it happened, and how it happened. Also indicate what part of the body was injured and the appropriate side (back, front, left, right, etc.)

Witnesses (if any):

Note: ***This statement is to be submitted with the report of injury/illness when the incident is reported to Risk Management*.**

_____/_____/_____

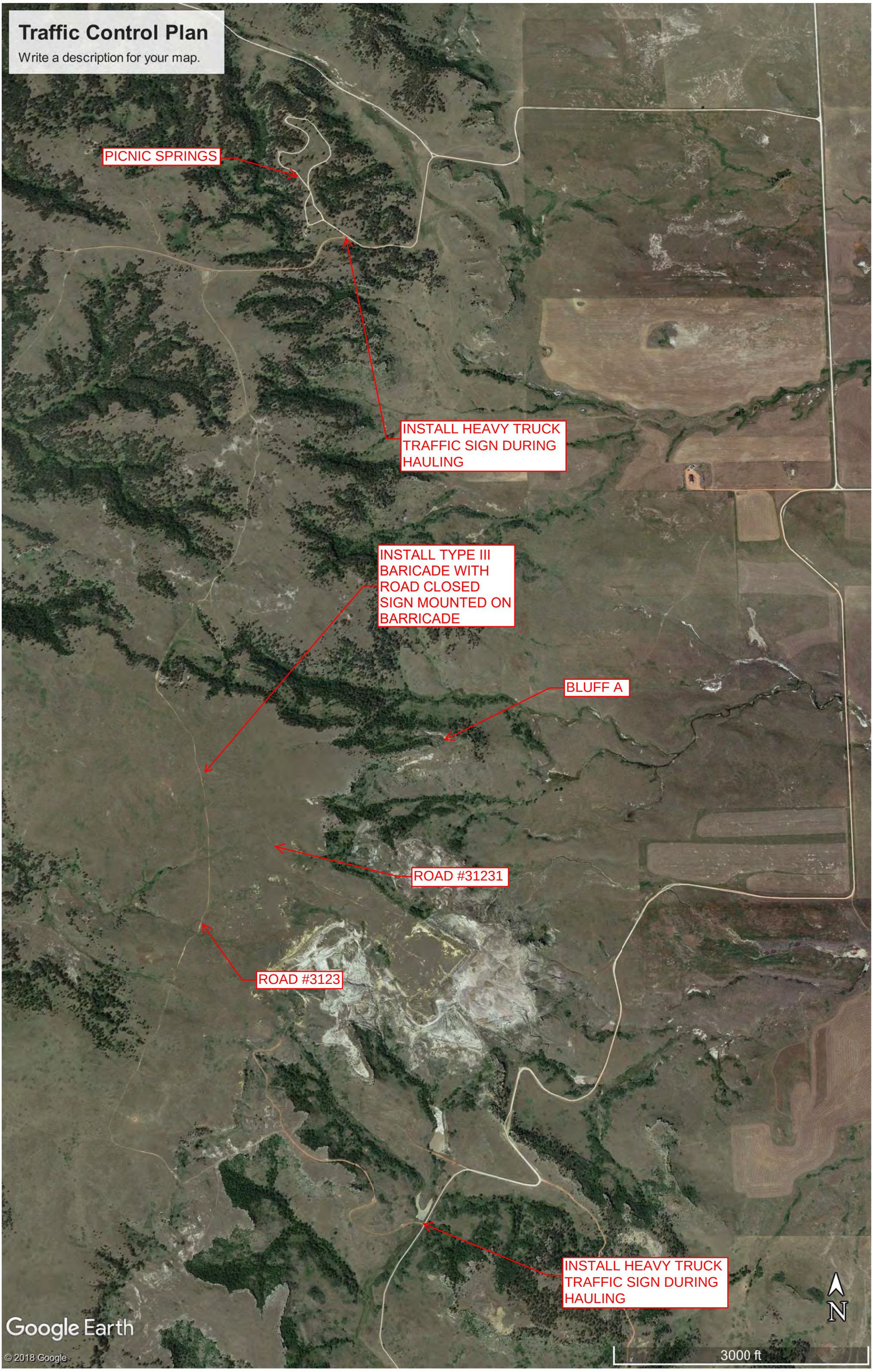
Signature of person **making** statement / Date Signature of Line Manager or Supervisor / Date

Attorney-Client Privileged Incident Report

Information provided in this report is a confidential attorney-client communication given to Company counsel for use in litigation that is reasonably expected to arise out of this incident. As a result, the information is privileged. Copies should not be provided outside the Company control group, on the grounds that such reports are privileged information.

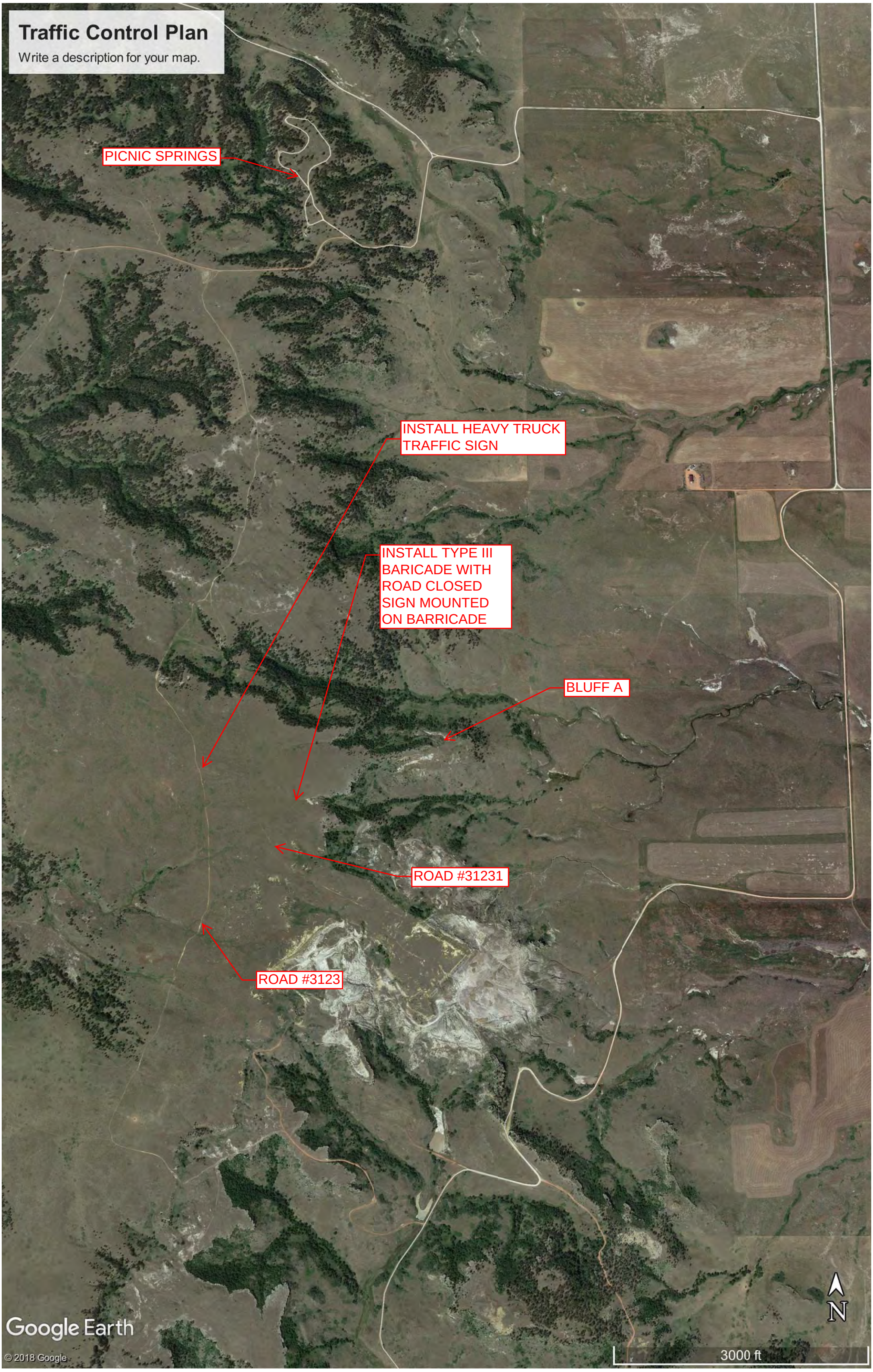
Traffic Control Plan

Write a description for your map.



Traffic Control Plan

Write a description for your map.





Erosion Control Plan

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 19, 2020

Erosion Control Plan
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak Project Manager	Date
Eric Atkins Project Supervisor	Date
Beth Young, CPESC Quality Manager	Date

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FIGURES

Figure 1: Project Location 1

ACRONYMS

BMP	Best Management Practice
CO	Contracting Officer
DOT	Department of Transportation
ECP	Erosion Control Plan
EPA	Environmental Protection Agency
FSR	Forest Service Road
GPS	Global Positioning System
USFS	U.S. Forest Service

1. OBJECTIVES

The objectives of the Erosion Control Plan (ECP) are to describe proposed Best Management Practices (BMP) to control site specific erosion and sediment impacts during construction activities for the Bluff A Reclamation project. Included is also temporary and permanent BMPs proposed to limit erosion and sediment impacts. The ECP is intended to provide necessary current guidelines to meet goals and to meet applicable county, state and federal regulations. The ECP will follow the South Dakota Department of Transformation (DOT) *Construction Field Manual, Construction Site Management and Erosion and Sediment Control* and the U.S. Environmental Protection Agency's *Storm Water Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices, October 2011*.

2. EXISTING CONDITIONS

2.1 Project Location

The Riley Pass Uranium Mine Site is located in the North Cave Hills land unit of the Custer Gallatin National Forest in Harding County, South Dakota. Bluff A is located in Sections 22 and 23, Township 22 North, Range 5 East, Black Hills Meridian. The Site is approximately 100 miles north of Belle Fourche, South Dakota, 25 miles north of Buffalo, South Dakota, and 30 miles south of Bowman, North Dakota. The nearest town is Ludlow, South Dakota, which is approximately 5 miles to the east of the Site. The Site is accessed by turning west off U.S. Highway 85 onto Tufte Road, 2 miles north of Ludlow; then following Tufte Road right/north; then turning left on Fuller Pass which turns into Forest Service Road (FSR) #3114 at the National Forest boundary; then turn left onto FSR #3123; finally turning left on FSR #31231. The site location is provided in Figure 1.

Figure 1: Project Location



2.2 Soils and Rainfall Conditions

Mining activities within the 1950s and 1960s left mine wastes that are finely graded material which are highly susceptible to wind and water erosion. According to the NRCS Websoil Survey, the project area consists of Cohagen fine sandy loam, Bullock-Cabbart complex, Cohagen-Rock outcrop-Cabba variant complex, and Werner-Watrous loams.

According to U.S. Climate Data (usclimatedata.com), Ludlow, SD receives an average annual precipitation of 15.59 inches. May and June typically have the highest average rainfall.

2.3 Existing Drainage

There are two existing drainage ditches to the north and the south of the project area. Doane Spring is to the north of the project and an unnamed drainage ditch is to the south. They converge just west of Tufte Road and merge into Petes Creek. Petes Creek is a tributary to Crooked Creek which is an EPA impaired waterbody due to the salinity and specific conductivity of the water.

3. SCOPE OF WORK

Young Gun Construction LLC will provide the necessary equipment and personnel to perform the required tasks. The scope of work will consist of performing various activities associated with the consolidation and cover of mine waste. Below is a brief description of the construction work.

3.1 Riley Pass Bluff A Reclamation

- Construction surveying and staking; verification of identified project boundary points
- Excavation, transportation, and consolidation of mine waste
- Excavation of borrow material and placement as cover on mine waste
- Road maintenance on project haul roads
- Clearing and grubbing, and removal of woody debris and brush
- Coordination with contractors working on other projects in the area as required.
- Establishment of traffic control

4. EROSION CONTROL

4.1 Proposed BMPs

This ECP shall be updated and modified as needed if field conditions change or require additional BMPs or changes in placement of BMPs is needed. If this ECP is modified or changed, it must be approved by the USFS. While work is ongoing, the ECP and BMP inspection reports shall be kept onsite. Young Gun Construction LLC will utilize the SWPPP Site Inspection Form found in the South Dakota Department of Transportation *Construction Field Manual, Construction Site Management and Erosion and Sediment Control* when completing inspections on installed BMPs.

The following sections list the proposed BMPs and potential erosion and sediment control issues that might arise during construction.

4.1.1 Limit Disturbed Areas

Limiting the disturbed areas by phasing construction activities and revegetating disturbed areas as soon as possible will help limit areas which could be susceptible to wind and water erosion. BMPs such as permanent seeding, and scarifying slopes or roughening slopes will be utilized.

4.1.2 Limit Stormwater Run-On

Where possible, limiting stormwater run-on will help limit the exposed excavation and regrade areas from potential stormwater erosion. BMPs such as diversions, berms, and ditches can be utilized to help divert stormwater around the project area.

4.1.3 Sediment Control

Sediment control BMPs that will be utilized on the project include stabilized construction access, gravel check dams, straw wattles, and filter fence. Stabilized construction access will be used to trap any sediment on vehicles and keep it from being tracked off site. Straw wattles and filter fence will be utilized to collect any sediment from being washed downstream from disturbed areas. Gravel check dams will be utilized within swales and drainage ditches to reduce velocities and trap sediment.

4.1.4 Other Controls

The other controls that will be implemented on site include solid waste management, and dust control. All employees are expected to keep the project site clean and clear of solid waste.

Young Gun Construction LLC will utilize a water truck for dust control. Daily weather and construction activities will determine the amount of dust control needed.

4.2 Maintenance and Inspection

Stabilized construction access should be inspected for excessive sediment buildup. Remove sediment and add additional scoria as needed to keep effectiveness of access.

Gravel check dams and silt fence should be inspected after each storm event and rebuilt/reinstalled as needed. Sediment should be removed from behind the gravel check dam and silt fence when the level of sediment reaches one third the height of the dam or fence.

Straw wattles should also be inspected after each storm event and reinstalled as needed. Sediment should be removed from behind the straw wattle.

Young Gun Construction LLC will utilize the SWPPP Site Inspection Form found in the South Dakota Department of Transportation *Construction Field Manual, Construction Site Management and Erosion and Sediment Control* when completing inspections on installed BMPs.

Unless directed by the CO, all temporary erosion and sediment control BMPs will be removed at the completion of the project.

Silt Fence

Straw Wattle

A1

A2

A3

A4

A5

A6

A7

A8

A18

A19

BLUFF A1

BLUFF A2

BLUFF A

CONSOLIDATION AREA

REMOVAL VOLUMES	
AREA	CUT (CY)
A1	14,730
A2	145
A3	349
A4	415
A5	128
A6	260
A7	140
A8	164

NOTE:

1. EXCAVATE WASTE WITHIN THE WASTE REMOVAL AREAS AND PLACE IN BLUFF A CONSOLIDATION AREA.

LEGEND

- WASTE REMOVAL
- CONSOLIDATION AREA

REMOVAL DEPTHS

- 0-2ft REMOVAL
- 2-4ft REMOVAL
- 4-5ft REMOVAL
- >5ft REMOVAL

N

0 30 60 120

SCALE: 1" = 60'

TETRA TECH
www.tetratech.com
825 W. Custer Ave.
Helena, Montana 59602
PHONE: 406-443-5210 FAX: 406-442-7182

REGISTERED PROFESSIONAL ENGINEER
13675
LARRY
CAWLFIELD
SOUTH DAKOTA

USDA FOREST SERVICE DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A NORTH REMOVAL PLAN

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

C-102

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Bar Measures 1 inch

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BLUFF A

BLUFF A3

BLUFF A4

CONSOLIDATION AREA

A7

A9

A10

A11

A12-13

A14

A15

A16

A17

A18

A19

REMOVAL VOLUMES	
AREA	CUT (CY)
A9	105.42
A10	782.69
A11	192.04
A12-13	1,183.25
A14	752.64
A15	189.62
A16	92.69
A17	155.37
A18	128.39
A19	798.99

NOTE:

1. EXCAVATE WASTE WITHIN THE WASTE REMOVAL AREAS AND PLACE IN BLUFF A CONSOLIDATION AREA.

Silt Fence

Straw Wattle

SCALE: 1" = 60'

LEGEND

WASTE REMOVAL

CONSOLIDATION AREA

REMOVAL DEPTHS

0-2ft REMOVAL

2-4ft REMOVAL

4-5ft REMOVAL

>5ft REMOVAL

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Helena, Montana 59602
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REGISTERED PROFESSIONAL ENGINEER
13675
LARRY CAWLFIELD
SOUTH DAKOTA

USDA FOREST SERVICE DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A SOUTH REMOVAL PLAN

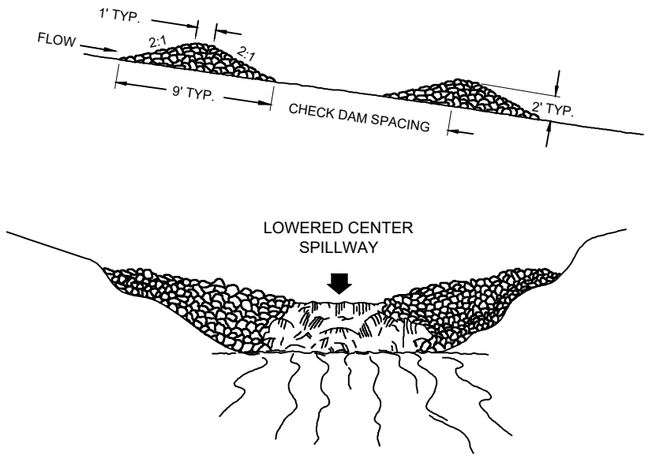
Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

C-103

Bar Measures 1 inch

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1 GRAVEL CHECK DAM DETAIL
NOT TO SCALE

NOTES:

1. A CHECK DAM IS A SMALL DEVICE CONSTRUCTED OF GRAVEL, SANDBAGS, OR FIBER ROLLS, PLACED ACROSS A NATURAL OR MAN-MADE CHANNEL OR DRAINAGE DITCH. CHECK DAMS REDUCE SCOUR AND CHANNEL EROSION BY REDUCING FLOW VELOCITIES AND ENCOURAGING SEDIMENT DROPOUT.

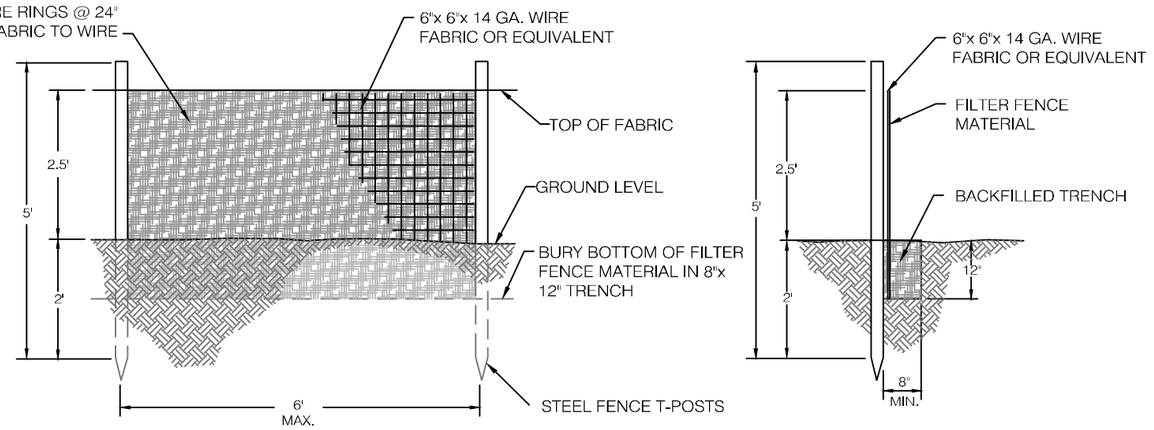
2. PLACE CHECK DAMS AT A DISTANCE THAT WILL ALLOW SMALL POOLS TO BE FORMED BEHIND EACH DAM.

3. CHECK DAMS CONSTRUCTED FROM GRAVEL MUST BE 100% PASSING THE 2" SCREEN AND 10% MAXIMUM PASSING THE NO. 4 SIEVE. DAM MATERIAL MAY BE PITRUN OR CRUSHED AGGREGATE.

4. REMOVE SEDIMENT FROM BEHIND THE DAM WHEN IT ACCUMULATES TO ONE-HALF THE ORIGINAL HEIGHT UNLESS ITS DRAINAGE AREA HAS BEEN STABILIZED.

5. DISTANCES BETWEEN CHECK DAMS ARE AS FOLLOWS:
   - FROM 1% TO 3% PLACE CHECK DAMS AT 300 FT. SPACING
   - FROM 3% TO 4% PLACE CHECK DAMS AT 200 FT. SPACING
   - FROM 4% + PLACE CHECK DAMS AT 100 FT. SPACING

   CHECK DAM SPACING MAY BE ADJUSTED ON A PROJECT-BY-PROJECT BASIS BY THE ENGINEER. DO NOT USE CHECK DAMS ON <1% GRADES UNLESS DETERMINED NECESSARY BY THE ENGINEER.



2 FILTER FENCE DETAIL
NOT TO SCALE

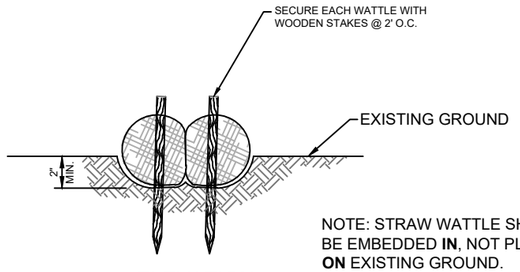
DESCRIPTION: A FILTER FENCE IS A VERTICAL BARRIER CONSTRUCTED FROM GEOTEXTILE. THE GEOTEXTILE IS TYPICALLY SUPPORTED BY A WOVEN WIRE FENCE.

CONSTRUCTION: FILTER FENCES SHALL BE INSTALLED PRIOR TO DISTURBING AREAS REQUIRING THE BMP OR AS SLOPE GRADES ARE ACHIEVED. THE FILTER FENCE SHALL BE BUILT ALONG THE TERRAIN CONTOUR SO THAT WATER IS FILTERED UNIFORMLY ALONG THE FENCE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, IN DITCHES OR SWALES, THE FENCE SHALL CURVE UPSTREAM AT THE ENDS TO PREVENT FLOW FROM BY-PASSING THE FENCE. FILTER FENCES SHALL NOT BE PLACED IN LIVE STREAMS. THE FENCES SHALL BE POSITIONED TO PREVENT SEDIMENT FROM ENTERING DRAINAGES.

MAINTENANCE AND MONITORING: INSPECT THE FILTER FENCE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ONE INSPECTION SHALL OCCUR DURING THE FIRST RUNOFF PRODUCING EVENT TO ASSURE PROPER FUNCTIONING. REPAIR OR REPLACE IF NECESSARY. SEDIMENT MUST BE REMOVED WHEN IT REACHES ONE THIRD THE HEIGHT OF THE FENCE. REMOVE OR GRADE AND SEED SEDIMENT DEPOSITS BEFORE REMOVING THE FENCE. FILTER FENCES SHALL BE REMOVED BY OTHERS AFTER FINAL SITE STABILIZATION IS ACHIEVED.



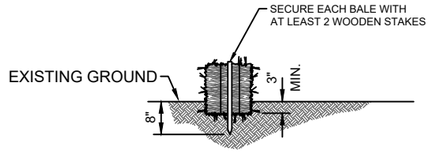
PLAN



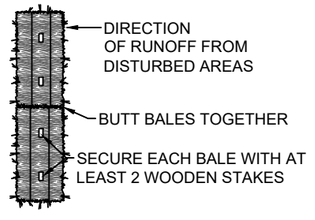
ELEVATION

NOTE: STRAW WATTLE SHALL BE EMBEDDED **IN**, NOT PLACED **ON** EXISTING GROUND.

3 STRAW WATTLE DETAIL
NOT TO SCALE



ELEVATION



PLAN

4 STAW BALE DETAIL
NOT TO SCALE

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REGISTERED PROFESSIONAL ENGINEER
REG. NO. 13675
LARRY CAWLFIELD
SOUTH DAKOTA

USDA FOREST SERVICE

MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

TYPICAL EROSION CONTROL DETAILS

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

D-102

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Bar Measures 1 inch

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Decontamination Plan

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 18, 2020

Decontamination Plan
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak
Project Manager

Date

Eric Atkins
Project Supervisor

Date

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FIGURES

Figure 1: Project Location..……...1

ACRONYMS

DQCR	Daily Quality Control Report
FSR	Forest Service Road
YGC	Young Guns Construction LLC
PPE	Personnel Protective Equipment
USFS	United States Forest Service

1. PURPOSE

Young Gun Construction LLC will maintain and ensure this Decontamination Plan is adhered to, updated, and revised as needed. The purpose of this Decontamination Plan is to describe the procedures for decontamination of equipment and personnel who have been exposed to contaminated material in order to eliminate the potential spread of the contaminated materials from the construction site.

2. BACKGROUND

The Riley Pass Uranium Mine Site is located in the North Cave Hills land unit of the Custer Gallatin National Forest in Harding County, South Dakota. Bluff A is located in Sections 22 and 23, Township 22 North, Range 5 East, Black Hills Meridian. The Site is approximately 100 miles north of Belle Fourche, South Dakota, 25 miles north of Buffalo, South Dakota, and 30 miles south of Bowman, North Dakota. The nearest town is Ludlow, South Dakota, which is approximately 5 miles to the east of the Site. The Site is accessed by turning west off U.S. Highway 85 onto Tufte Road, 2 miles north of Ludlow; then following Tufte Road right/north; then turning left on Fuller Pass which turns into Forest Service Road (FSR) #3114 at the National Forest boundary; then turn left onto FSR #3123; finally turning left on FSR #31231. The site location is provided in Figure 1.

Figure 1: Project Location



2.1 Contaminates of Concern

Mining activities within the 1950s and 1960s at the Riley Pass Mines have generated various wastes including slag piles, waste ore, and other deposited materials. The Following are the contaminates of concern:

- Arsenic
- Radium-226

- Molybdenum
- Uranium-238
- Uranium-235, and
- Uranium-234

2.2 Construction Activities

Contaminated mine waste will be excavated and consolidated as shown and described in the construction drawings. Once the mine waste has been excavated and consolidated, borrow material will be hauled from the borrow site and used as subsoil and cover soil.

During excavation and transporting the contaminated materials, all equipment will remain in the contamination area until the excavation is complete and the full decontaminations washing can be performed. Equipment not required for operation, such as personal vehicles, will not be permitted into the contaminated work are without permission from the Project Manager.

Haul routes will be approved by the USFS so that loading and unloading of contaminated waste will require the haul trucks to cross the decontamination area. All accidental spills of contaminated waste will be removed immediately.

3. DECONTAMINATION PROCEDURES

3.1 Decontamination Area

The decontamination area will be established within the project limits. All decontamination activities will occur within the decontamination area. The decontamination area will consist of a defined wash area, clean water tank/truck, high pressure pump and associated hoses. Decontamination water will be captured within the disturbance area for evaporation and infiltration of the wastewater. Erosion control BMPs will be placed downstream of the wash area in the event of overflow during storm events.

All equipment including, heavy equipment, trucks, personal vehicles, and handheld equipment that comes into contact with contaminated wasted will be decontaminated prior to leaving the project limits.

3.2 Equipment and Materials

During construction activities, equipment and materials used for excavation and hauling contaminated mine waste or which comes in contact with contaminated mine waste will be decontaminated to a level sufficient to prevent cross-contamination of subsequent work areas. Decontamination procedures will include:

- Remove all visible dirt/debris from equipment by brushing, scraping or washing;
- Wipe handheld equipment with a dry towel;
- Spray equipment using a water truck;

- Rinse equipment using water supplies from the water truck; and
- Inspection of any visible contamination.

In addition to decontamination prior to leaving the project limits, all equipment will be decontaminated after the completion of hauling contaminated mine waste and before the start of hauling clean borrow material back to the excavated areas.

3.2 Personnel Decontamination

Construction activities will be conducted in Level D or modified Level D personal protective equipment (PPE) unless upgrading is warranted. Decontamination of contaminants on clothing and PPE will consist of:

- Physical removal by scraping or wiping the article,
- Spray wiping using a water or decontamination solution (Alconox), and
- Laundering or disposing of the article.

All personnel will scrub hands and other exposed body parts prior to leaving the project site. All personnel will be subjected to the decontamination process prior to lunch breaks and at the end of work day.

4. RECORDS

Records of decontamination of all equipment will be logged in daily reports.

5. REFERENCES

10 CFR 835 Appendix D, *Surface Contamination Values*, January 2015.



Borrow Plan

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 19, 2020

Borrow Plan
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak Project Manager	Date
Eric Atkins Project Supervisor	Date

CONTENTS

1. INTRODUCTION 1

2. PROPOSED AREA 1

3. APPROACH 1

1. INTRODUCTION

Young Gun Construction LLC plans on using the Government provided subgrade and cover soil. The borrow area will be developed and used as needed to minimize the disturbed area and limit the potential for erosion. Water trucks will be used for dust control as well during all borrow excavation, hauling operations and reclamation of borrow area.

2. PROPOSED AREA

The Government provided borrow area is located southwest of Bluff A. See attached sheets C-101 and C-110 for borrow area location and details.

3. APPROACH

Borrow area development will include:

1. One sample from the borrow area will be collected and tested according to Table 204-1 in the 204 – Excavation and Embankment specification which is part of the contract specifications. Results will be provided to the COR. Assuming the sample passes, the development will continue as follows:

2. Construct haul roads where needed to access the borrow area. See the Temporary Haul Road Plan for details on haul road locations and additional details.

3. Strip and stockpile 6” of topsoil from the borrow area. The topsoil will be stockpiled in a location as to not cause issues or interference with access to the borrow area.

4. According to the Riley Pass Bluff A Soil Borrow Source Assessment (July 26, 2019), A and B horizon soil depths average 23 inches. Due to varying depths of the cover soil, excavation of the cover soil material will be visibly observed by the Project Manager or the Project Supervisor and the COR. Cover soil shall be excavated and stockpiled. Stockpiles shall be places in a location as to not cause issues or interference with access to the borrow area.

5. According to the Riley Pass Bluff A Soil Borrow Source Assessment (July 26, 2019), C horizon soil depths range from 30 to 120 inches below ground surface. Excavation of subsoil will be hauled to Bluff A and placed at a depth of 12” over the consolidation area. Subsoil will also be placed within the regrade areas per project plans.

6. Cover soil that was stockpiled shall be placed at a depth of 6” over the subsoil within the regrade area and the consolidation area.

7. The borrow area shall be reclaimed according to contract specifications. All grading shall be smooth with no slopes greater than 10%. All grading must drain freely.

The Borrow Plan shall describe borrow excavation operations, testing of material to ensure it meets the specifications, schedule, stockpile locations, haul routes, a final grading plan and reclamation seeding.

Stockpile Location

Temporary Haul Road

A15

31231

NOTES

1. DEVELOP A BORROW SOURCE DEVELOPMENT PLAN PER SECTION 105.03. PLAN SHALL INCLUDE STRIP & SALVAGE TOPSOIL TO A DEPTH OF 23" FOR FUTURE BORROW SOURCE RECLAMATION. WORK FOR BORROW SOURCE DEVELOPMENT IS PAID INDIRECTLY.
2. BORROW ACCESS LOCATION TO BE DETERMINED ONSITE.
3. BORROW DEPTHS SHOWN INCLUDE TOPSOIL SALVAGE DEPTH (23-IN) AND ARE THE MAXIMUM BORROW REMOVAL DEPTH.

BORROW AREA VOLUMES	
SUBAREA	WASTE CAPACITY (CY)
TOTAL BORROW VOLUME	23,758
TOPSOIL SALVAGE	5,630
MAXIMUM AVAILABLE COVER BORROW	18,128

0 30 60 120

CONTOUR INTERVAL: 2-FT

LEGEND

BORROW BOUNDARY

POTENTIAL BORROW ACCESS

BORROW DEPTHS

0-2 ft
2-4 ft
4-6 ft
6-8 ft
8-10 ft
10-12 ft
12-14 ft
14-17 ft

TETRA TECH
www.tetratech.com
825 W. Custer Ave.
Helena, Montana 59602
PHONE: 406-443-5210 FAX: 406-442-7182

REGISTERED PROFESSIONAL ENGINEER
13675
LARRY
CAWLFIELD
SOUTH DAKOTA

USDA FOREST SERVICE DEPARTMENT OF AGRICULTURE

MARK	DATE	DESCRIPTION	BY
0	12/16/19	ISSUED FOR BID	SEF

USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A BORROW AREA PLAN

Project No.:	117-8343006
Designed By:	SEF
Drawn By:	SEF
Checked By:	MLH

C-110

Bar Measures 1 inch

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Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755
701-523-1289
younggunconstructionllc@gmail.com

USDA – Forest Service
Region 1, Acquisition Management
Missoula Office
24 Fort Missoula Road
Missoula, MT 59804
Attn: Chad Santone, CO
David Shimek, COR

June 22, 2020

Superintendent Designation

Mr. Santone and Mr. Shimek,

Eric Atkins will be our project superintendent. He will be onsite at all times. If for some unknown reason he is not available to be onsite, Hunter Kalisiak (the project manager) will be on site in his stead.

Sincerely,

Hunter Kalisiak
Young Gun Construction LLC

Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755
701-523-1289
younggunconstructionllc@gmail.com

USDA – Forest Service
Region 1, Acquisition Management
Missoula Office
24 Fort Missoula Road
Missoula, MT 59804
Attn: Chad Santone, CO
David Shimek, COR

September 9, 2020

Superintendent Designation

Mr. Santone and Mr. Shimek,

Dave Nash will be our project superintendent. He will be onsite at all times. If for some unknown reason he is not available to be onsite, Hunter Kalisiak (the project manager) will be on site in his stead.

Sincerely,

Hunter Kalisiak
Young Gun Construction LLC



Temporary Haul Road Plan

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 19, 2020

Temporary Haul Road Plan
Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Approved By

Hunter Kalisiak
Project Manager

Date

Eric Atkins
Project Supervisor

Date

CONTENTS

1. TEMPORARY HAUL ROAD DETAILS AND RECLAMATION 1

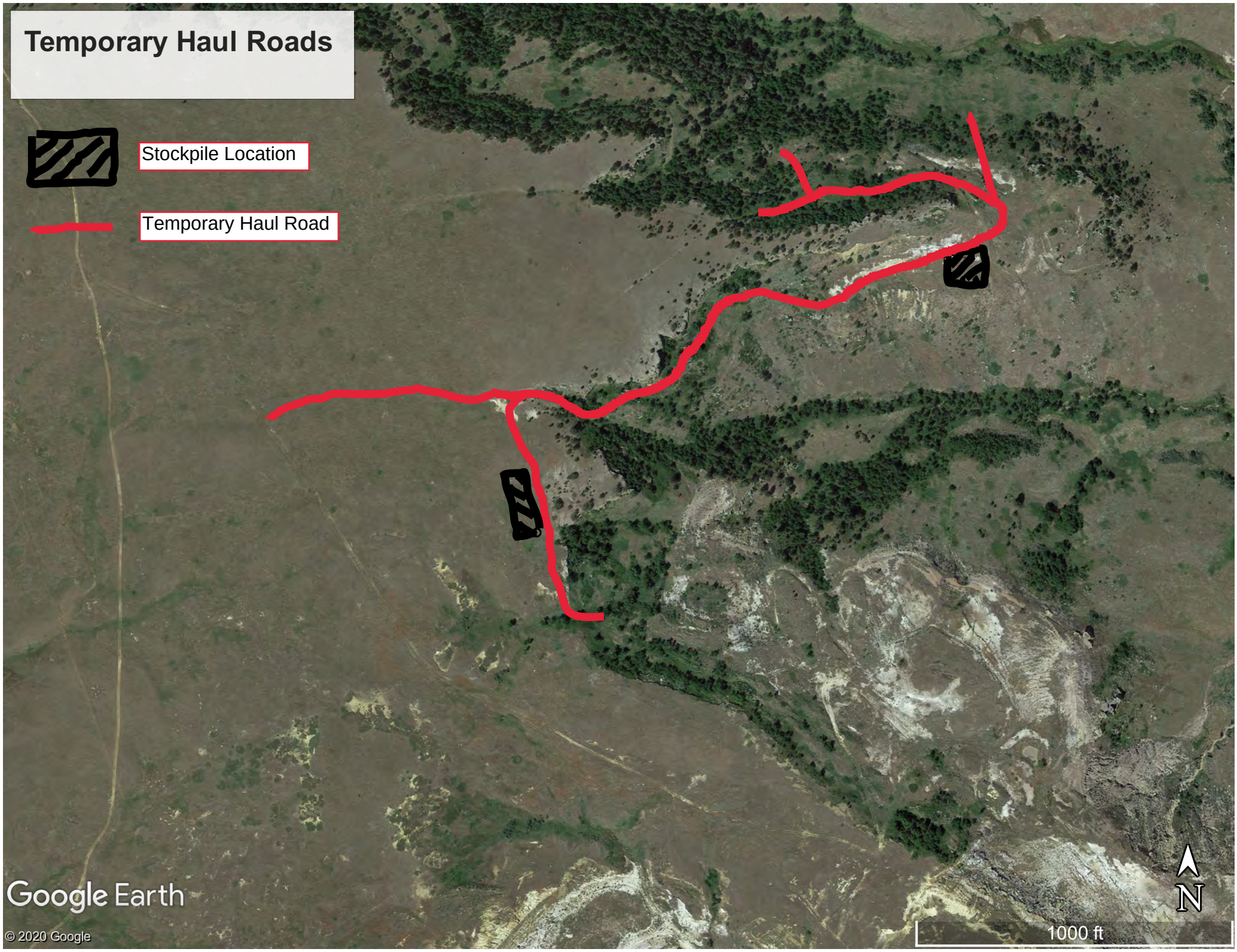
1. TEMPORARY HAUL ROAD DETAILS AND RECLAMATION

The temporary haul road will be constructed with a grader and have a width of 18 feet. The grader will windrow the topsoil to the side. If existing dirt is not adequate for the dump trucks to drive over, scoria will be added.

A water truck will be used to help with dust control. Additional regrading and smoothing will be done as needed. Additional scoria will be placed as needed as well.

The temporary haul roads will be reclaimed by using a ripper to rip out the road, seed the disturbed area and pull back the topsoil.

All work shall follow construction specifications.


Temporary Haul Roads
Stockpile Location
Temporary Haul Road
Google Earth
© 2020 Google
N
1000 ft

Stockpile Location

Temporary Haul Road

A15

31231

NOTES

1. DEVELOP A BORROW SOURCE DEVELOPMENT PLAN PER SECTION 105.03. PLAN SHALL INCLUDE STRIP & SALVAGE TOPSOIL TO A DEPTH OF 23" FOR FUTURE BORROW SOURCE RECLAMATION. WORK FOR BORROW SOURCE DEVELOPMENT IS PAID INDIRECTLY.
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MAXIMUM AVAILABLE COVER BORROW	18,128

N

0 30 60 120

CONTOUR INTERVAL: 2-FT

LEGEND

BORROW BOUNDARY

POTENTIAL BORROW ACCESS

BORROW DEPTHS

0-2 ft
2-4 ft
4-6 ft
6-8 ft
8-10 ft
10-12 ft
12-14 ft
14-17 ft

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MARK	DATE	DESCRIPTION	BY
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USDA Forest Service, Custer Gallatin National Forest
Harding County, South Dakota

BLUFF A REMOVAL ACTION AND REPOSITORY

BLUFF A BORROW AREA PLAN

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C-110

Bar Measures 1 inch

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HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 29, 2020

eTraining, Inc.

Certificate of Completion

This certifies that

Michael Buzalsky

has received 40 hours of training for successfully completing the

OSHA 40 Hour Hazwoper

OSHA 29 CFR 1910.120/1926.65 - 40 Hours

June 20, 2018 Certificate Number: 103410

www.etraintoday.com

Niall O'Malley, President

Larry A. Baylor, VP Content Development

Certificate of Completion

This certifies that

Mycah Atkins

has successfully completed

OSHA 40 Hour HAZWOPER Training

Annual Refresher Training Required

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And State OSHA/EPA Regulations as well including 29 CFR 1926.65(e)

This course is approved for 40 Contact Hours (4 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044)

Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 4 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2006261337825

Certificate Number

6/26/2020

Issue Date

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Annual Refresher Training Required



HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 30, 2020

Certificate of Completion

This certifies that

Jeff Giannonatti

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

This course (Version 2) is approved for 8 Contact Hours (0.8 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044).

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2006305338583

Certificate Number

6/30/2020

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eTraining, Inc.

Certificate of Completion

This certifies that

Michael Buzalsky

has received 8 hours of training for successfully completing the

Hazwoper 8 Hour Refresher 2020

OSHA 29 CFR 1910.120/1926.65 - 8 Hours

June 30, 2020 Certificate Number: 146777

www.etraintoday.com

Niall O'Malley, President

Larry A. Baylor, VP Content Development



HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

June 16, 2020

Certificate of Completion

This certifies that

Eric Atkins

has successfully completed

8 Hour HAZWOPER Refresher Training

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In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2003175325993

Certificate Number

3/17/2020

Issue Date

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Certificate of Completion

This certifies that

Hunter Kalisiak

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

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Jules Griggs	2003185280765	3/18/2020
Instructor	Certificate Number	Issue Date

Julius P. Griggs

Julius P. Griggs
Program Administrator

Craig Hamilton
Training Director

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OTS
HAZWOPERTraining.com
1100 Burloak Drive, Suite 300 Burlington,ON L7L
http://www.hazwopertraining.com/

Certificate of Completion

This certifies that

Beth Young

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2003185185820

Certificate Number

3/18/2020

Issue Date

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Certificate of Completion

This certifies that

shayde l. brengle

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2006095336063

Certificate Number

6/9/2020

Issue Date

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https://www.safetyunlimited.com

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Proof of initial certification and subsequent refresher training is NOT required to take refresher training

Certificate of Completion

This certifies that

Dave Nash

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

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Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 0.8 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2006095336099

Certificate Number

6/9/2020

Issue Date

ACCREDITED IACET PROVIDER

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Proof of initial certification and subsequent refresher training is NOT required to take refresher training

Certificate of Completion

This certifies that

Ryan Foust

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2006095336116

Certificate Number

6/9/2020

Issue Date

ACCREDITED IACET PROVIDER

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(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Proof of initial certification and subsequent refresher training is NOT required to take refresher training

Certificate of Completion

This certifies that

Kevin Ploszaj

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2006095336152

Certificate Number

6/9/2020

Issue Date

ACCREDITED IACET PROVIDER

SAFETY UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

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(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Scan this code or visit safetyunlimited.com/v to verify certificate.

Proof of initial certification and subsequent refresher training is NOT required to take refresher training

Certificate of Completion

This certifies that

Cody Holmes

has successfully completed

8 Hour HAZWOPER Refresher Training

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2006095336173

Certificate Number

6/9/2020

Issue Date

ACCREDITED IACET PROVIDER

SAFETY UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

2139 Tapo St., Suite 228 Simi Valley,CA 93063
(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Scan this code or visit safetyunlimited.com/v to verify certificate.

Proof of initial certification and subsequent refresher training is NOT required to take refresher training

Certificate of Completion

This certifies that

Jason Yearout

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

This course (Version 2) is approved for 8 Contact Hours (0.8 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044).

Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 0.8 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2006105336180

Certificate Number

6/10/2020

Issue Date

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Proof of initial certification and subsequent refresher training is NOT required to take refresher training



HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

August 13, 2020

Certificate of Completion

This certifies that

jae stenerson

has successfully completed

OSHA 40 Hour HAZWOPER Training

Annual Refresher Training Required

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And State OSHA/EPA Regulations as well including 29 CFR 1926.65(e)

This course is approved for 40 Contact Hours (4 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044)

Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 4 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2008121342687

Certificate Number

8/12/2020

Issue Date

ACCREDITED IACET PROVIDER

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SAFETY UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

2139 Tapo St., Suite 228 Simi Valley,CA 93063
(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Annual Refresher Training Required



HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

July 9, 2020

Certificate of Completion

This certifies that

Mickey Welch

has successfully completed

8 Hour HAZWOPER Refresher Training

Refresher certification does NOT necessarily indicate initial 24 or 40 Hour HAZWOPER certification

In Accordance w/Federal OSHA Regulation 29 CFR 1910.120(e) & (p)

And all State OSHA/EPA Regulations as well including 29 CFR 1926.65 for Construction.

This course (Version 2) is approved for 8 Contact Hours (0.8 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044).

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Julius P. Griggs

Julius P. Griggs
Instructor #892

2007075339244

Certificate Number

7/7/2020

Issue Date

ACCREDITED IACET PROVIDER

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SAFETY UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

2139 Tapo St., Suite 228 Simi Valley,CA 93063
(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Proof of initial certification and subsequent refresher training is NOT required to take refresher training



HAZWOPER Certifications

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

September 11, 2020

Certificate of Completion

This certifies that

Nathan Wagner

has successfully completed

OSHA 40 Hour HAZWOPER Training

Annual Refresher Training Required

In Accordance With Federal OSHA Regulation 29 CFR 1910.120(e)

And State OSHA/EPA Regulations as well including 29 CFR 1926.65(e)

This course is approved for 40 Contact Hours (4 CEUs) of continuing education per the California Department of Public Health for Registered Environmental Health Specialist (REHS) (Accreditation # 044)

Safety Unlimited, Inc., Provider #5660170-2, is accredited by the International Association for Continuing Education and Training (IACET) and is accredited to issue the IACET CEU. As an IACET Accredited Provider, Safety Unlimited, Inc. offers CEUs for its programs that qualify under the ANSI/IACET Standard. Safety Unlimited, Inc. is authorized by IACET to offer 4 CEUs for this program.

Julius P. Griggs

Julius P. Griggs
Instructor #892

2009101344739

Certificate Number

9/07/2020

Issue Date

ACCREDITED IACET PROVIDER

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SAFETY UNLIMITED, Inc.
OSHA Compliant Safety Training Since 1993

2139 Tapo St., Suite 228 Simi Valley,CA 93063
(888) 309-SAFE (7233) or 805 306-8027
https://www.safetyunlimited.com

Annual Refresher Training Required

STATEMENT AND ACKNOWLEDGMENT

OMB Control Number: 9000-0066
Expiration Date: 4/30/2022

Paperwork Reduction Act Statement - This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0066. We estimate that it will take .05 hours to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

PART I - STATEMENT OF PRIME CONTRACTOR

1. PRIME CONTRACT NUMBER	2. DATE SUBCONTRACT AWARDED	3. SUBCONTRACT NUMBER
12035520C0001	06/02/2020	

4. PRIME CONTRACTOR			5. SUBCONTRACTOR		
a. NAME			a. NAME		
Young Gun Construction LLC			Brosz Engineering, Inc.		
b. STREET ADDRESS			b. STREET ADDRESS		
10609 South Cave Road			109 S. Main, Box 357		
c. CITY	d. STATE	e. ZIP CODE	c. CITY	d. STATE	e. ZIP CODE
Ludlow	SD	57755	Bowman	ND	58623

6. The prime contract [X] does, [ ] does not contain the clause entitled "Contract Work Hours and Safety Standards Act -- Overtime Compensation."

7. The prime contractor states that under the contract shown in Item 1, a subcontract was awarded on the date shown in Item 2 to the subcontractor identified in item 5 by the following firm:

a. NAME OF AWARDING FIRM
Young Gun Construction LLC

b. DESCRIPTION OF WORK BY SUBCONTRACTOR
Brosz Engineering will perform surveying and office computations services for Young Gun Construction at Riley Pass – Bluff A.

8. PROJECT	9. LOCATION
Riley Pass Bluff A Reclamation	Sioux Ranger District, Custer -Gallatin National Forest Harding County, SD

10a. NAME OF PERSON SIGNING	11. BY *(Signature)*	12. DATE SIGNED
Hunter Kalisiak		6/18/2020
10b. TITLE OF PERSON SIGNING		
Owner		

PART II - ACKNOWLEDGMENT OF SUBCONTRACTOR

13. The subcontractor acknowledges that the following clauses of the contract shown in Item 1 are included in this subcontract:

- Contract Work Hours and Safety Standards Act - Overtime Compensation (If included in prime contract see Block 6)
- Payrolls and Basic Records
- Withholding of Funds
- Disputes Concerning Labor Standards
- Compliance with Construction Wage Rate Requirements and Related Regulations
- Construction Wage Rate Requirements
- Apprentices and Trainees
- Compliance with Copeland Act Requirements
- Subcontracts (Labor Standards)
- Contract Termination - Debarment
- Certification of Eligibility

14. NAME(S) OF ANY INTERMEDIATE SUBCONTRACTORS, IF ANY

A		C	
B		D	

15a. NAME OF PERSON SIGNING	16. BY *(Signature)*	17. DATE SIGNED
Jade Hedge		6-18-2020
15b. TITLE OF PERSON SIGNING		
Survey Manager		

Material Submittal

Project: Riley Pass Bluff A Reclamation
Contract No: 12035520C0001

Submittal: Straw Wattle

From: Young Gun Construction LLC
10609 S Cave Road
Ludlow, SD 57755

To: USDA – Forest Service
Chad Santone, CO
Peter Werner, OSC
David Shimek, COR
Tom Bumstead

Included: One (1) Electronic copy of weed free certification for straw wattles.

FlaxTech
naturally!

6122 Hwy 5 Rock Lake ND 58365

FlaxTech LLC certifies that its straw bio-logs (Wheetles) as manufactured and delivered through various distributors for use in South Dakota meet the requirements of the South Dakota Department of Transportation for use in controlling erosion and containing sediment during the revegetation of construction sites.

The straw used in the manufacture of the straw wattles has been inspected and is certified to be free of noxious weed seeds.

Ronald H Hendrickson

Ronald Hendrickson, President
FlaxTech LLC
6122 Hwy 5
Rock Lake, ND 58365

Bierschbach Equipment & Supply
3030 North Plaza Dr.
Rapid City, SD 57702
605-348-6440

Material Submittal

Project: Riley Pass Bluff A Reclamation
Contract No: 12035520C0001

Submittal: Straw Wattle

From: Young Gun Construction LLC
10609 S Cave Road
Ludlow, SD 57755

To: USDA – Forest Service
Chad Santone, CO
Peter Werner, OSC
David Shimek, COR
Tom Bumstead

Included: One (1) Electronic copy of weed free certification for straw wattles.

PATRIOT ENVIRONMENTAL PRODUCTS

PO Box 1480, Higley AZ 85236
Phone (480) 302-2234 • **Fax** (480) 988-3013
E-mail info@patriotenviro.net

9" Straw Wattles/Straw Logs/Restoration Logs

Used as a sediment filter barrier on slopes and erosion-prone areas. When installed, they reduce surface sheet flow erosion and capture sediment

SPECIFICATIONS

LENGTH:	25' STANDARD (OTHER LENGTHS CAN BE SPECIAL ORDERED)
DIAMETER:	9" (+/- 10%)
CORE:	AGRICULTURE, CERTIFIED NOXIOUS WEED FREE STRAW
NETTING TYPE:	UV STABILIZED/PHOTODEGRADABLE
NETTING WEIGHT:	HEAVY DUTY: 94% HIGH-DENSITY POLYETHYLENE WITH 6% UV INHIBITOR
NETTING THICKNESS:	STRAND THICKNESS OF 0.03", KNOT THICKNESS OF 0.055"
NETTING WEIGHT:	0.35-OUNCE PER FOOT (+/- 10%)
NETTING COLOR:	BLACK (OTHER COLORS CAN BE SPECIAL ORDERED)
ROLL WEIGHT:	AVERAGE 35 LBS. (+/- 10%)
WEIGHT PER LF:	NO LESS THAN 1.4 LBS (+/- 10%)

Our Sediment Control Products are used in a multitude of applications, providing benefits such as:

- Better filtering of runoff waters
- Preventing check dam blowouts
- Protecting water from going around check dams
- Preventing the spread of non-native vegetation
- Ease of use: Easier to handle and install than straw bales

Material Submittal

Project: Riley Pass Bluff A Reclamation
Contract No: 12035520C0001

Submittal: Silt Fence

From: Young Gun Construction LLC
10609 S Cave Road
Ludlow, SD 57755

To: USDA – Forest Service
Chad Santone, CO
Peter Werner, OSC
David Shimek, COR
Tom Bumstead

Included: One (1) Electronic copy of silt fence fabric information and picture of tag from wire backing roll.

WINFAB
INDUSTRIAL FABRICS

PRODUCT DATA SHEET

WINFAB 2098

WINFAB 2098 is manufactured using high tenacity polypropylene yarns that are woven to form a dimensionally stable network, which allows the yarns to maintain their relative position.
WINFAB 2098 resists ultraviolet deterioration, rotting, and biological degradation and is inert to commonly encountered soil chemicals.

PROPERTY	TEST METHOD	MARV English	MARV Metric
Tensile Strength (Grab)	ASTM D-4632	260 x 180 lbs	1155 x 800 N
Elongation	ASTM D-4632	15 x 15%	15 x 15%
UV Resistance (500 hrs)	ASTM D-4355	80%	80%
Apparent Opening Size (AOS)*	ASTM D-4751	30 US Std. Sieve	0.60 mm
Mullen Burst	ASTM D-3786	175 psi	1200 kPa
Water Flow Rate	ASTM D-4491	75 gpm/ft²	3045 lpm/m2

*Maximum Average Roll Valve

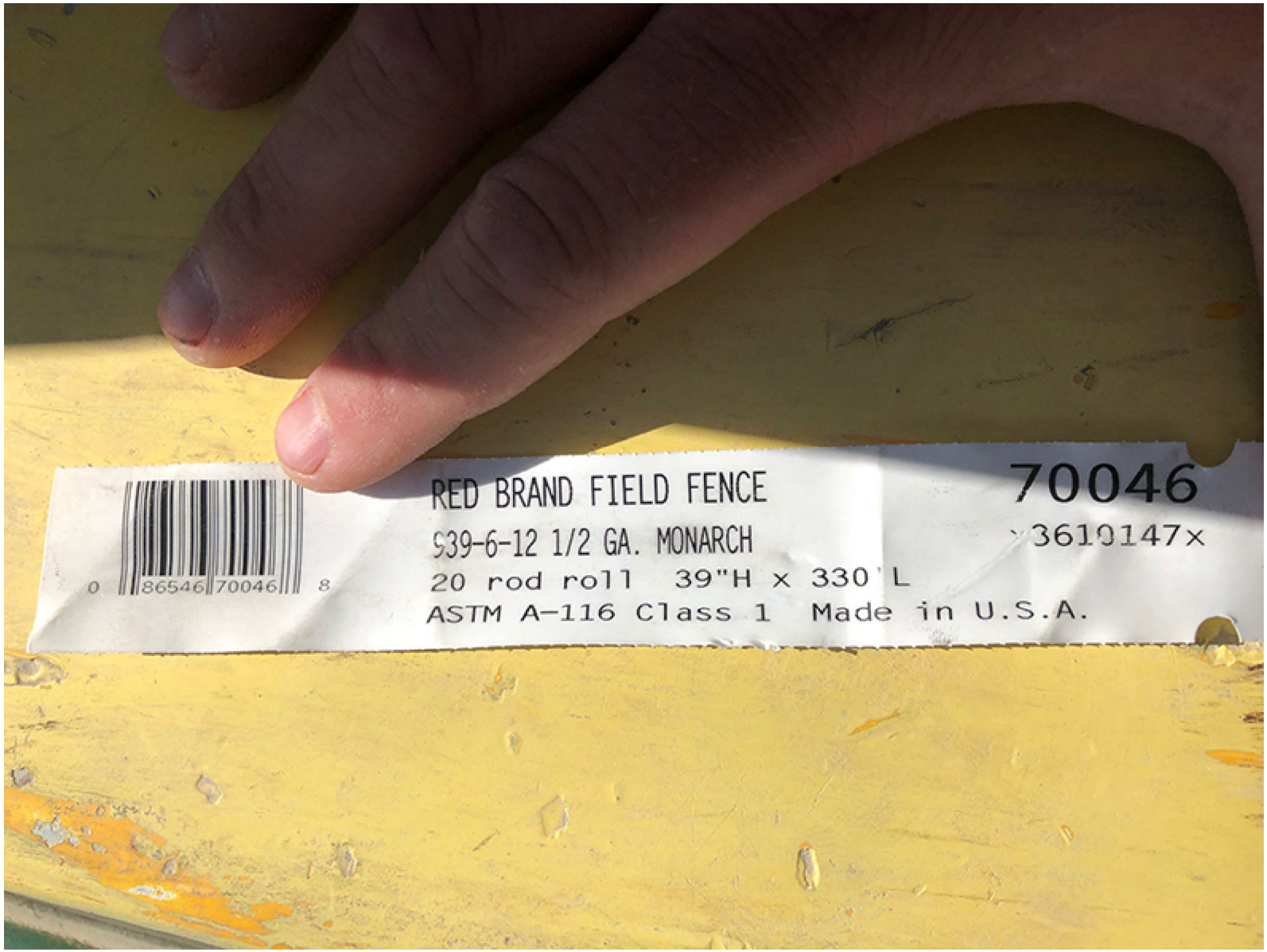
PROPERTY	Typical English	Typical Metric
Roll Dimensions	36 in x 330 ft 36 in x 2250 ft	.914 x 914.4 m .914 x 100.58 m

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Willacoochee Industrial Fabrics, Inc.
PO Box 599 • 769 West Main Street • Willacoochee, GA 31650
Ph: (912) 534-5757 • Fax: (912) 534-5533

GMA Geosynthetic Materials Association


RED BRAND FIELD FENCE
70046
939-6-12 1/2 GA. MONARCH
3610147x
20 rod roll 39"H x 330'L
ASTM A-116 Class 1 Made in U.S.A.
0 86546 70046 8



Borrow Soil Sample

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

July 14, 2020

REPORT NUMBER
20-195-4236

REPORT DATE
Jul 13, 2020

SEND TO
56090

RECEIVED DATE
Jul 08, 2020

Midwest Laboratories®
13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

ISSUE DATE
Jul 13, 2020

Young Gun Construction LLC
Beth Kalisiak
10609 S Cave Rd
Ludlow SD 57755-5039

REPORT OF ANALYSIS

For: (56090) Young Gun Construction LLC
Riley Pass Bluff A

Analysis	Level Found As Received	Units	Reporting Limit	Method	Analyst-Date	Verified-Date
Sample ID: **Borrow #1** Lab Number: **8776964**						
Arsenic (total)	24.5	mg/kg	10.0	EPA 6010	ery3-2020/07/12	trh1-2020/07/13
Chromium (total)	15.2	mg/kg	1.00	EPA 6010	ery3-2020/07/12	trh1-2020/07/13
Cadmium (total)	< 0.50	mg/kg	0.50	EPA 6010	ery3-2020/07/12	trh1-2020/07/13
Lead (total)	9.2	mg/kg	5.0	EPA 6010	ery3-2020/07/12	trh1-2020/07/13
Zinc (total)	37.6	mg/kg	2.0	EPA 6010	ery3-2020/07/12	trh1-2020/07/13

All results are reported on an AS RECEIVED basis., ppm = parts per million, ppm = mg/kg

For questions please contact:

Stefanie Rath
Account Manager
srath@midwestlabs.com (402)829-9881

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.
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Borrow Soil Sample

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

July 15, 2020

REPORT NUMBER
20-190-0241
COMPLETED DATE
Jul 15, 2020
ACCOUNT
56090
RECEIVED DATE
Jul 8, 2020

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www.midwestlabs.com

TODAY'S DATE
Jul 15, 2020

Young Gun Construction LLC
Beth Kalisiak
10609 S Cave Rd
Ludlow SD 57755-5039

IDENTIFICATION
RILEY PASS BLUFF A

SOIL ANALYSIS REPORT

INFO SHEET: 1249858

LAB NUMBER *363*	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I. percent	RATE	PHOSPHORUS P_1 (WEAK BRAY) 1:7 ppm	RATE	PHOSPHORUS P_2 (STRONG BRAY) 1:7 ppm	RATE	OLSEN BICARBONATE P ppm	RATE	NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE) POTASSIUM K ppm	RATE	MAGNESIUM Mg ppm	RATE	CALCIUM Ca ppm	RATE	SODIUM Na ppm	RATE	pH SOIL pH 1:1	BUFFER INDEX	CATION EXCHANGE CAPACITY C.E.C. meq/100g	PERCENT BASE SATURATION (COMPUTED) % K	% Mg	% Ca	% H	% Na
10419	Borrow #1	1.7	L	3	VL	32	M	3	VL	46	VL	936	VH	2269	M	226	VH	8.8		20.2	0.6	38.6	55.9	0.0	4.9

LAB NUMBER *363*	NITRATE-N (FIA) SURFACE ppm	SURFACE lbs/A	SURFACE depth (in)	SUBSOIL 1 ppm	SUBSOIL 1 lbs/A	SUBSOIL 1 depth (in)	SUBSOIL 2 ppm	SUBSOIL 2 lbs/A	SUBSOIL 2 depth (in)	Total lbs/A	SULFUR S ICAP ppm	RATE	ZINC Zn DTPA ppm	RATE	MANGANESE Mn DTPA ppm	RATE	IRON Fe DTPA ppm	RATE	COPPER Cu DTPA ppm	RATE	BORON B SORB. DTPA ppm	RATE	EXCESS LIME RATE	SOLUBLE SALTS 1:1 mmhos/cm	RATE	
10419			0-8																				M	0.2	L	

REV.10/17

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
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REPORT NUMBER
20-190-0241
COMPLETED DATE
Jul 15, 2020
ACCOUNT
56090
RECEIVED DATE
Jul 8, 2020

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www.midwestlabs.com

TODAY'S DATE
Jul 15, 2020

Young Gun Construction LLC
Beth Kalisiak
10609 S Cave Rd
Ludlow SD 57755-5039

IDENTIFICATION
RILEY PASS BLUFF A

SODIUM ADSORPTION RATIO REPORT

Method Lab Number	Sample Id	CALCULATED Sodium Adsorption Ratio	SATURATED PASTE EXTRACTION Sodium (Water Soluble) mg/L	Magnesium (Water Soluble) mg/L	Calcium (Water Soluble) mg/L
Units					
36310419	Borrow #1	1.0	24	15	16

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
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Borrow Soil Sample

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

July 16, 2020

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Sample Site: Borrow Area
Project Name: Bluff A
Sampled: 06/30/20 at 04:00 PM by Beth Kalisiak
Sample Matrix: Soil

Lab ID#: 20200708581
Received: 07/08/20 at 09:50 AM by Eric Fuehrer
Account: w1762 - Young Gun Construction

BETH KALISIAK
YOUNG GUN CONSTRUCTION
10609 S. CAVE HILLS ROAD
LUDLOW, SD 57755

Parameter	Result	Units	DF	Method	Analyst/Date
Radiological					
Radium-226	3.149	pCi/g	1	EPA 901.1m	SYS 07/16/20
Precision Data					
Radium-226 precision	± 1.67	pCi/g	1	SC-Radium 226 precision	SYS 07/16/20
MDA Data					
Radium-226 MDA	1.69	pCi/g	1	SC - Radium 226 MDA	SYS 07/16/20

Report Approved By:

Eric Fuehrer

Report Approved On: 7/16/2020 1:52:41 PM

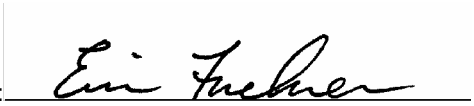
MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

Lab Numbers: 20200708581 - 20200708581

QC Sample Report

Parameter	Lab#	QC Value	Smp Value	Spike	DF	Result	Limits	Method
Lab Reagent Blank								
Radium-226		0.000	0.000		1	0	(-0.4996) - (0.6827)	EPA 901.1m

Approved By: 

Approved On: 07/16/2020 01:52 PM



Compost Testing

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

July 21, 2020

Product Description

Rapid City Municipal Solid waste Compost (Co-compost)

Net weight: Approx. 750 lbs per cubic yard

Composition of municipal solid waste compost (co-compost):
Paper products, organics, and biosolids.

Analysis: Only natural processes (no chemical additives) are used in the composting. Municipal solid waste compost processing includes waste screening, size reduction, addition of a blend of Class B anaerobic and Sub-class B aerobic biosolids (sewage sludge), temperature and moisture control, aeration, watering, final screening and testing for compliance with EPA "Class A Compost 503 Regulations for Biosolids and Municipal Solid Waste Composting."

Compost regulations, all laboratory and test results and related information are on file and available at the Solid Waste office or by calling (605) 355-3496.

Since plastic does not degrade and is so very hard to remove entirely from the waste stream, the co-compost will have small fragments of harmless plastic in it. (This is another excellent reason to carry canvas reusable bags and avoid using plastic bags.)

Application: Co-compost is to be applied in accordance with the soil conditions of the site to which the co-compost is being applied and within standard practices of the industry. (See suggested use guidelines in Compost from Waste).

Recommended application:

Because co-compost is neither a fertilizer nor a soil but is incorporated into the existing soil to improve its structure and moisture retention, it is recommended that co-compost be mixed at a ratio of one part co-compost to three to four parts soil and incorporated into the soil in the fall to prepare the bed for spring planting.

It is not suggested that this material be used as the primary growing medium or as a top dressing or mulch. It should be incorporated into the soil and watered well.

Many gardeners get a load of co-compost and stockpile it for a season before using it. This reduces any residual odor and allows the material more time to season.

Compiled by Cathie Draine, edited and printed by the Solid Waste Division, Department of Public Works, City of Rapid City, March 2009.

RAPID CITY MUNCIPAL SOLID WASTE COMPOST
(CO-COMOST /MSW)
Net weight: Approx. 750 lbs per CY

Analysis: No chemical additives are included in processing co-compost. Only natural ingredients are used in the composting process. Municipal solid waste compost processing includes waste screening, size, reduction, addition of a blend of Class B anaerobic and Sub-class B aerobic biosolids (sewage sludge), temperature and moisture control, aeration, watering, final screening and testing for compliance with EPA "Class A Compost 503 Regulations for Biosolids and Municipal Solid Waste Composting". Compost regulations, test results and related information are on file and available at the Solid Waste office or by calling (605) 355-3496.

Application: Co-compost is to be applied under the direction of a competent soil scientist, contractor or site operator in accordance with the soil conditions of the site to which the co-compost is being applied and within standard practices of the industry.

Recommended application: One part Co-compost well blended into three or four parts soil (depending upon soil characteristics and final use of soil/co-compost blend).

Produced and marketed by:
City of Rapid City
Department of Public Works
Solid Waste Division
300 Sixth Street
Rapid City, SD 57701
(605) 355-3496

Jeffery R. Barber, Superintendent
City of Rapid City
Solid Waste Operations
(605)-355-3496

RAPID CITY MUNICIPAL SOLID WASTE COMPOST
(CO-COMPOST / MSW)

Net weight: Approx. 750 lbs per CY

Analysis: No chemical additives are included in processing co-compost. Only natural ingredients are used in the composting process. Municipal solid waste compost processing includes waste screening size reduction, addition of a blend of Class B anaerobic and Sub-class B aerobic biosolids (sewage sludge), temperature and moisture control, aeration, watering, final screening and testing for compliance with EPA "Class A Compost 503 Regulations for Biosolids and Municipal Solid Waste Composting". Compost regulations, test results and related information are on file and available at the Solid Waste office or by calling (605) 355-3496.

Approximate composition:

Municipal Solid Waste	
Paper products	22%
Other organics	15%
Rejects	37%
Biosolids	26%
Total	100%

Application: Co-compost is to be applied under the direction of a competent soil scientist, contractor or site operator in accordance with the soil conditions of the site to which the co-compost is being applied and within standard practices of the industry.

Recommended application: One part co-compost well blended into three or four parts soil (depending upon soil characteristics and final use of soil/co-compost blend).

Produced and marketed by:
City of Rapid City
Department of Public Works
Solid Waste Division
300 Sixth Street
Rapid City, SD 57701
(605) 355-3496

3/8" Co. Compost

COMPOST

Compost is not a fertilizer- it is a soil amendment used to add organic matter to the soil. Increasing organic matter in the soil improves soil structure so plant (grass, flowers, shrubs, rains, trees, vegetables) will have a healthier growing media, which allows the proper use of good compost will reduce water fertilizer and pesticide/herbicide needs.

When compost products are used as a soil amendment, the compost should be well blended into the root zone, which is approximately six to eight inches deep. Approximate amount of compost to use per 1000 square feet is as follows:

DEPTH OF COMPOST	CUBIC YARDS	POUNDS	TONS
1/4 –INCH LAYER	0.75	560	0.25
1/2 –INCH LAYER	1.5	1.125	.05
1-INCH LAYER	3.0	2,250	1.00
2-INCH LAYER	6.0	4,500	2.00

In addition to completely incorporating the compost into the soil, adequate time must be allowed for the microbial colonies in the soil to accumulate before planting. A starter fertilizer should be applied when planting takes place. The compost, soil microbial activity and overall soil structure will improve with time. An ideal schedule for optimum results would be to apply and incorporate compost onto a planting area in the fall, followed by planting in the spring.

If you have any questions, please contact your local extension agent, landscape contractor of the Rapid City Solid Waste Operations office. Comments on your results in using our product are most appreciated.

Jeffery R. Barber, Superintendent
City of Rapid City
Solid Waste Operations
(605)-355-3496

COMPOST

Compost is not a fertilizer - it is a soil amendment used to add organic matter to the soil. Increasing organic matter in the soil improves soil structure so plants (grass, flowers, shrubs, grains, trees, vegetables) will have a healthier growing media, which allows the root system better access to available water and nutrients. Experience has shown that the proper use of good compost will reduce water, fertilizer and pesticide/herbicide needs.

When compost products are used as a soil amendment, the compost should be well blended into the root zone, which is approximately six to eight inches deep. Approximate amount of compost to use per 1000 square feet is as follows:

DEPTH OF COMPOST	CUBIC YARDS	POUNDS	TONS
1/4-inch layer	0.75	560	0.25
1/2-inch layer	1.5	1.125	.05
1-inch layer	3.0	2,250	1.00
2-inch layer	6.0	4,500	2.00

In addition to completely incorporating the compost into the soil, adequate time must be allowed for the microbial colonies in the soil to accumulate before planting. A starter fertilizer should be applied when planting takes place. The compost, soil microbial activity and overall soil structure will improve with time. An ideal schedule for optimum results would be to apply and incorporate compost onto a planting area in the fall, followed by planting in the spring.

If you have any questions, please contact your local extension agent, landscape contractor or the Rapid City Solid Waste Operations office. Comments on your results in using our product are most appreciated.

Karl Merbach, Superintendent
City of Rapid City
Solid Waste Operations
(605) 355-3496

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188
www.compostlab.com

Account #: 4010816-1/1-381
Group: Jan.14 E #37
Reporting Date: February 14, 2014

AGRONOMIC CHEMISTRY
MSW/BIOSOLIDS COCOMPOST
REFINED IN DEC, 2013
Sampled 01-30-2014
Received e-Report 02-14-2014
Reviewed 02-17-2014
Robert C. Druckrey
Environmental Process Supervisor

City of Rapid City - WRF
7903 Southside Dr
Rapid City, SD 57703
Attn: Robert C. Druckrey

Date Received: 31 Jan. 14
Sample Identification: #0170 A,B,C MSW/BS COCOMPOST DEC 2013 STOCKPILES
Sample ID #: 4010816 - 1/1

Nutrients	Dry wt.	As Rcvd.	units
Total Nitrogen:	1.3	0.99	%
Ammonia (NH_4-N):	240	180	mg/kg
Nitrate (NO_3-N):	18	14	mg/kg
Org. Nitrogen (Org.-N):	1.3	0.99	%
Phosphorus (as P_2O_5):	0.52	0.40	%
Phosphorus (P):	2300	1700	mg/kg
Potassium (as K_2O):	0.50	0.38	%
Potassium (K):	4100	3100	mg/kg
Calcium (Ca):	3.2	2.4	%
Magnesium (Mg):	0.25	0.19	%
Sulfate (SO_4-S):	2000	1500	mg/kg
Boron (Total B):	51	39	mg/kg
Moisture:	0	23.9	%
Sodium (Na):	0.64	0.49	%
Chloride (Cl):	0.6	0.45	%
pH Value:	NA	7.95	unit
Bulk Density :	17	22	lb/cu ft
Carbonates ($CaCO_3$):	59	45	lb/ton
Conductivity (EC5):	8.1	NA	mmhos/cm
Organic Matter:	71.3	54.2	%
Organic Carbon:	36.0	27.0	%
Ash:	28.7	21.8	%
C/N Ratio	27	27	ratio
AgIndex	2	2	ratio

Stability Indicator: CO2 Evolution	Respirometery	Biologically Available C
mg CO_2-C/g OM/day	8.1	8.2
mg CO_2-C/g TS/day	5.8	5.9
Stability Rating	*unstable*	*unstable*

Maturity Indicator: Cucumber Bioassay		
Compost:Vermiculite(v:v)	1:1	1:3
Emergence (%)	100	100
Seedling Vigor (%)	0	0
Description of Plants	*mushroom*	*mushroom*

Pathogens	Results	Units	Rating
Fecal Coliform	150	MPN/g	*pass*
Salmonella	< 3	MPN/4g	*pass*

Date Tested: 31 Jan. 14

Inerts	% by weight
Plastic	1.1
Glass	< 0.5
Metal	< 0.5
Sharps	ND

Metals	Dry wt.	EPA Limit	units
Aluminum (Al)	4700	-	mg/kg
Arsenic (As):	5.2	41	mg/kg
Cadmium (Cd):	1.1	39	mg/kg
Chromium (Cr):	15	1200	mg/kg
Cobalt (Co)	2.2	-	mg/kg
Copper (Cu):	100	1500	mg/kg
Iron (Fe):	4700	-	mg/kg
Lead (Pb):	100	300	mg/kg
Manganese (Mn):	160	-	mg/kg
Mercury (Hg):	< 1.0	17	mg/kg
Molybdenum (Mo):	3.3	75	mg/kg
Nickel (Ni):	17	420	mg/kg
Selenium (Se):	< 1.0	36	mg/kg
Zinc (Zn):	320	2800	mg/kg

Size & Volume Distribution

MM	% by weight	% by volume	BD g/cc
> 50	0.0	0.0	0.00
25 to 50	0.0	0.0	0.00
16 to 25	0.0	0.0	0.00
9.5 to 16	0.0	0.0	0.00
6.3 to 9.5	3.7	3.2	0.33
4.0 to 6.3	11.8	14.3	0.23
2.0 to 4.0	28.4	31.7	0.25
< 2.0	56.2	50.8	0.31

Bulk Density Description:<.35 Light Materials, .35-.60 medium weight materials, >.60 Heavy Materials

Analyst: Assaf Sadeh

*Sample was received and handled in accordance with TMECC procedures.



Compost Testing

12035520C0001

Riley Pass Uranium Mine Project
Bluff A Reclamation
Custer-Gallatin National Forest
Harding County, South Dakota

Prepared by:
Young Gun Construction LLC
10609 South Cave Road
Ludlow, SD 57755

August 17, 2020

ANALYTICAL CHEMISTS
and
BACTERIOLOGISTS
Approved by State of California

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

TEL: 831-724-5422
FAX: 831-724-3188
www.controllabs.com

Account #: 70793-2/2-381
Group: Jul20E #14
Reporting Date: August 11, 2020

City of Rapid City - WRF
7903 Southside Dr
Rapid City, SD 57703
Attn: Robert C. Druckrey

Date Received: 29 Jul. 20
Sample Identification: #1395 B Yard Waste Compost 3/4 inch
Sample ID #: 70793 - 2/2

Nutrients	Dry wt.	As Rcvd.	units
Total Nitrogen:	1.4	0.89	%
Ammonia (NH_4-N):	95	62	mg/kg
Nitrate (NO_3-N):	60	39	mg/kg
Org. Nitrogen (Org.-N):	1.4	0.91	%
Phosphorus (as P_2O_5):	0.37	0.24	%
Phosphorus (P):	1600	1100	mg/kg
Potassium (as K_2O):	1.1	0.73	%
Potassium (K):	9300	6000	mg/kg
Calcium (Ca):	4.0	2.6	%
Magnesium (Mg):	0.28	0.18	%
Sulfate (SO_4-S):	150	95	mg/kg
Boron (Total B):	18	11	mg/kg
Moisture:	0	35.0	%
Sodium (Na):	0.049	0.032	%
Chloride (Cl):	0.17	0.11	%
pH Value:	NA	8.30	unit
Bulk Density :	19	29	lb/cu ft
Carbonates ($CaCO_3$):	180	120	lb/ton
Conductivity (EC5):	2.9	NA	mmhos/cm
Organic Matter:	57.6	37.4	%
Organic Carbon:	33.0	22.0	%
Ash:	42.4	27.6	%
C/N Ratio	24	24	ratio
AgIndex	> 10	> 10	ratio

Stability Indicator:

CO2 Evolution	Respirometery
mg CO_2-C/g OM/day	3.6
mg CO_2-C/g TS/day	2.1
Stability Rating	*stable*

Maturity Indicator: Cucumber Bioassay

Compost:Vermiculite (v:v)	1:2
Emergence (%)	93
Seedling Vigor (%)	100
Description of Plants	*healthy*

Pathogens	Results	Units	Rating
Fecal Coliform	17	MPN/g	*pass*
Salmonella	< 3	MPN/4g	*pass*

Date Tested: 29 Jul. 20

Physical Contaminants**	% by dry wt
Total Plastic	< 0.1
Film Plastic	< 0.1
Glass	< 0.1
Metal	< 0.1
Sharps	ND
Total	< 0.5

Metals	Dry wt.	EPA Limit	units
Aluminum (Al):	2000	-	mg/kg
Arsenic (As):	5.1	41	mg/kg
Cadmium (Cd):	< 1.0	39	mg/kg
Chromium (Cr):	13	-	mg/kg
Cobalt (Co)	1.9	-	mg/kg
Copper (Cu):	18	1500	mg/kg
Iron (Fe):	4300	-	mg/kg
Lead (Pb):	6.2	300	mg/kg
Manganese (Mn):	150	-	mg/kg
Mercury (Hg):	< 1.0	17	mg/kg
Molybdenum (Mo):	2.4	75	mg/kg
Nickel (Ni):	8.2	420	mg/kg
Selenium (Se):	< 1.0	100	mg/kg
Zinc (Zn):	59	2800	mg/kg

Size Distribution

MM	% by weight
> 50	0.0
25 to 50	0.0
16 to 25	0.0
9.5 to 16	4.8
6.3 to 9.5	9.5
4.0 to 6.3	12.5
2.0 to 4.0	17.7
< 2.0	55.6

**Greater than 4mm in size (Sharps greater than 2mm)

Analyst: Assaf Sadeh

*Sample was received and handled in accordance with TMECC procedures.

Account No.: 70793 - 2/2 - 381
Group: Jul20E No. 14

Date Received 29 Jul. 20
Sample i.d. #1395 B Yard Waste Compost 3/4 inch
Sample I.d. No. 2/2 70793

INTERPRETATION:

Is Your Compost Stable?

Respiration Rate
3.6 mg CO2-C/ g OM/day

Biodegradation Rate of Your Pile

++++++++++++++
< Stable >|<Moderately Unstable>|< Unstable >|< High For Mulch

Is Your Compost Mature?

AmmoniaN/NitrateN ratio
1.6 Ratio

++++++++++++++++++++++++++++++++
VeryMature>|< Mature >|< Immature

Ammonia N ppm
95 mg/kg dry wt.

++++++++++
VeryMature>|< Mature >|< Immature

Nitrate N ppm
60 mg/kg dry wt.

++
< Immature >|< Mature

pH value
8.30 units

++
< Immature >|< Mature >|< Immature

Cucumber Emergence
93.3 percent

++
< Immature >|< Mature

Is Your Compost Safe Regarding Health?

Fecal Coliform
< 1000 MPN/g dry wt.

+++++++
< Safe >|< High Fecal Coliform

Salmonella
Less than 3 /4g dry wt.

+++++++
<Safe (none detected) >|< High Salmonella Count(> 3 per 4 grams)

Metals US EPA 503
Pass dry wt.

+++++++++
<All Metals Pass >|< One or more Metals Fail

Does Your Compost Provide Nutrients or Organic Matter?

Nutrients (N+P2O5+K2O)
2.9 Percent dry wt.

++++++++++++++++++++++
<Low >|< Average >|< High Nutrient Content

AgIndex (Nutrients / Sodium and Chloride Salts) ((N+P2O5+K2O) / (Na + Cl))
13 Ratio

++
Na & Cl >|< Nutrient and Sodium and Chloride Provider >|< Nutrient Provider

Plant Available Nitrogen (PAN) Estimated release for first season
2 lbs/ton wet wt.

+++++++
Low Nitrogen Provider>|< Average Nitrogen Provider >|<High Nitrogen Provider

C/N Ratio
24 Ratio

++
< Nitrogen Release >|< N-Neutral >|< N-Demand>|< High Nitrogen Demand

Soluble Available Nutrients & Salts (EC5 w/w dw)
2.9 mmhos/cm dry wt.

++++++++++++++++
SloRelease>|< Average Nutrient Release Rate >|<High Available Nutrients

Lime Content (CaCO3)
180 Lbs/ton dry wt.

++
< Low >|< Average >|< High Lime Content (as CaCO3)

What are the physical properties of your compost?

Percent Ash
42.4 Percent dry wt.

++++++++++++++++++++++++++++++++
< High Organic Matter >|< Average >|< High Ash Content

Sieve Size % > 6.3 MM (0.25")
14.3 Percent dry wt.

++
All Uses >|< Size May Restrict Uses for Potting mix and Golf Courses

Account No.:		Date Received	29 Jul. 20
70793 - 2/2 - 381		Sample i.d.	#1395 B Yard Waste Compost 3/4 inch
Group:	Jul20E No. 14	Sample I.d. No.	2/2 70793

INTERPRETATION:

Is Your Compost Stable?

Respiration Rate

3.6 Low: Good for all uses mg CO2-C/g OM/day

The respiration rate is a measurement of the biodegradation rate of the organic matter in the sample (as received). The respiration rate is determined by measuring the rate at which CO2 is released under optimized moisture and temperature conditions.

Is Your Compost Mature?

AmmoniaN:NitrateN ratio

1.6 mature

Ammonia N ppm	
95	very mature
Nitrate N ppm	
60	mature
pH value	
8.30	immature

Composting to stabilize carbon can occur at such a rapid rate that sometimes phytotoxins remain in the compost and must be neutralized before using in high concentrations or in high-end uses. This step is called curing. Typically ammonia is in excess with the break-down of organic materials resulting in an increase in pH. This combination results in a loss of volatile ammonia (it smells). Once this toxic ammonia has been reduced and the pH drops, the microbes convert the ammonia to nitrates. A low ammonia + high nitrate score is indicative of a mature compost, however there are many exceptions. For example, a compost with a low pH (<7) will retain ammonia, while a compost with high lime content can lose ammonia before the organic fraction becomes stable. Composts must first be stable before curing indicators apply.

Cucumber Bioassay

93.3 Percent

Cucumbers are chosen for this test because they are salt tolerant and very sensitive to ammonia and organic acid toxicity. Therefore, we can germinate seeds in high concentrations of compost to measure phytotoxic effects without soluble salts being the limiting factor. Values above 80% for both percent emergence and vigor are indicative of a well-cured compost. Exceptions include very high salts that affect the cucumbers, excessive concentrations of nitrates and other nutrients that will be in range when formulated to make a growing media.

Is Your Compost Safe Regarding Health?

Fecal Coliform

< 1000 / g dry wt.

Fecal coliforms can survive in both aerobic and anaerobic conditions and is common in all initial compost piles. Most human pathogens occur from fecal matter and all fecal matter is loaded in fecal coliforms. Therefore fecal coliforms are used as an indicator to determine if the chosen method for pathogen reduction (heat for compost) has met the requirements of sufficient temperature, time and mixing. If the fecal coliforms are reduced to below 1000 per gram dry wt. it is assumed all others pathogens are eliminated. Potential problems are that fecal coliform can regrow during the curing phase or during shipping. This is because the conditions are now more favorable for growth than during the composting process.

Salmonella Bacteria

Less than 3 3 / 4g dry wt.

Salmonella is not only another indicator organism but also a toxic microbe. It has been used in the case of biosolids industry to determine adequate pathogen reduction.

Metals

Pass

The ten heavy metals listed in the EPA 503 regulations are chosen to determine if compost can be applied to ag land and handled without toxic effects. Most high concentrations of heavy metals are derived from woodwaste feedstock such as chrome-arsenic treated or lead painted demolition wood. Biosolids are rarely a problem.

Does Your Compost Provide Nutrients or Organic Matter?

Nutrients (N+P2O5+K2O)

2.9 Average nutrient content

This value is the sum of the primary nutrients Nitrogen, Phosphorus and Potassium. Reported units are consistent with those found on fertilizer formulations. A sum greater than 5 is indicative of a compost with high nutrient content, and best used to supply nutrients to a receiving soil. A sum below 2 indicates low nutrient content, and is best-used to improve soil structure via the addition of organic matter. Most compost falls between 2 and 5.

Account No.:		Date Received	29 Jul. 20
70793 - 2/2 - 381		Sample i.d.	#1395 B Yard Waste Compost 3/4 inch
Group:	Jul20E No. 14	Sample I.d. No.	2/2 70793

INTERPRETATION:

AgIndex (Nutrients/Na+Cl)

13 High nutrient ratio Composts with low AgIndex values have high concentrations of sodium and/or chloride compared to nutrients. Repeated use of a compost with a low AgIndex (< 2) may result in sodium and/or chloride acting as the limiting factor compared to nutrients, governing application rates. These composts may be used on well-draining soils and/or with salt-tolerant plants. Additional nutrients form another source may be needed if the application rate is limited by sodium or chloride. If the AgIndex is above 10, nutrients optimal for plant growth will be available without concern of sodium and/or chloride toxicity. Composts with an AgIndex of above 10 are good for increasing nutrient levels for all soils. Most composts score between 2 and 10. Concentrations of nutrients, sodium, and chloride in the receiving soil should be considered when determining compost application rates. The AgIndex is a product of feedstock quality. Feedstock from dairy manure, marine waste, industrial wastes, and halophytic plants are likely to produce a finished compost with a low AgIndex.

Plant Available Nitrogen (lbs/ton)

2 Low N Provider Plant Available Nitrogen (PAN) is calculated by estimating the release rate of Nitrogen from the organic fraction of the compost. This estimate is based on the respiration rate, ammonia, and nitrate values. Despite the PAN value of the compost, additional sources of Nitrogen may be needed during the growing season to offset the Nitrogen demand of the microbes present in the compost. With ample nutrients these microbes can further breakdown organic matter in the compost and release bound Nitrogen. Nitrogen demand based on a high C/N ratio is not considered in the PAN calculation because additional Nitrogen should always be supplemented to the receiving soil when composts with a high C/N ratio are applied.

C/N Ratio

24 Indicates immaturity As a guiding principal, a C/N ratio below 14 indicates maturity and above 14 indicates immaturity, however, there are many exceptions. Large woodchips (>6.3mm), bark, and redwood are slow to breakdown and therefore can result in a relatively stable product while the C/N ratio value is high. Additionally, some composts with chicken manure and/or green grass feedstocks can start with a C/N ratio below 15 and are very unstable. A C/N ratio below 10 supplies Nitrogen, while a ratio above 20 can deplete Nitrogen from the soil. The rate at which Nitrogen will be released or used by the microbes is indicated by the respiration rate. If the respiration rate is too high the transfer of Nitrogen will not be controlable.

Soluble Nutrients & Salts (EC5 w/w dw - mmhos/cm)

2.9 Average salts This value refers to all soluble ions including nutrients, sodium, chloride and some soluble organic compounds. The concentration of salts will change due to the release of salts from the organic matter as it degrades, volatilization of ammonia, decomposition of soluble organics, and conversion of molecular structure. High salts + high AgIndex is indicative of a compost high in readily available nutrients. The application rate of these composts should be limited by the optimum nutrient value based on soil analysis of the receiving soil. High Salts + low AgIndex is indicative of a compost low in nutrients with high concentrations of sodium and/or chloride. Limit the application rate according to the toxicity level of thesodium and/or chloride. Low salts indicates that the compost can be applied without risking salt toxicity, is likely a good source of organic matter, and that nutrients will release slowly over time.

Lime Content (lbs. per ton)

180 High lime content Compost high in lime or carbonates are often those produced from chicken manure (layers) ash materials, and lime products. These are excellent products to use on a receiving soil where lime has been recommended by soil analysis to raise the pH. Composts with a high lime content should be closely considered for pH requirements when formulating potting mixes.

Physical Properties

Percent Ash

42.4 Average ash content Ash is the non-organic fraction of a compost. Most composts contain approximately 50% ash (dry weight basis). Compost can be high in ash content for many reasons including: excess minerilzation(old compost), contamination with soil base material during turning, poor quality feedstock, and soil or mineral products added. Finding the source and reducing high ash content is often the fastest means to increasing nutrient quality of a compost.

Particle Size % > 6.3 MM (0.25")

14.3 May restrict use Large particles may restrict use for potting soils, golf course topdressings, seed-starter mixes, and where a fine size distribution is required. Composts with large particles can still be used as excellent additions to field soils, shrub mixes and mulches.

Appendix:

Plant Available Nitrogen (PAN) calculations:

PAN = (X * (organic N)) + ((NH4-N) + (NO3-N))

X value = If RR < 2 then X = 0.1

If RR =2.1 to 5 then X = 0.2

If RR =5.1 to 10 then X = 0.3

If RR > 10 then X = 0.4

Note: If C/N ratio > 15 additional N should be applied.

RR = Respiration rate

Estimated available nutrients for use when calculating application rates

	lbs/ton (As Rcvd.)
Plant Available Nitrogen (PAN)	2.0
Ammonia (NH4-N)	0.12
Nitrate (NO3-N)	0.08
Available Phosphorus (P2O5*0.64)	3.2
Available Potassium (K2O)	14.4

CUSTOMER NAME: Young Guns Const.
LOT NUMBER: 54654
PROJECT NAME: Riley Pass Bluff A

ACRES: 9

SEEDING RATE/ACRE: 21.69

SPECIES	LOT NUMBER	% MIX	ACTUAL PURITY	GERM	HARD/ DORMANT	TOTAL VIABLE	ORIGIN	BULK LBS	PLS LBS
MN Native Lead Plant	AMOCAN120B	5.18	99.54	40	49	89	MN	10.16	9.000
Medicine Creek Maximilian Sunflower	HMAX0319	5.12	98.92	45	45	90	NE	10.11	9.000
Stillwater Prairie Coneflower	J1619VR28	2.88	92.67	57	23	80	MT	6.07	4.500
WY Native Prairie Sage	ARLU2017	0.54	96.25	58	27	85	WY	1.10	0.900
Variety Not Stated Purple Coneflower	ECPU2019	9.81	97.27	74	20	94	IA	19.69	18.001
Anatone Bluebunch Wheatgrass	8DH50124	9.92	98.72	71	22	93	WA	19.61	18.000
Mandan Canada Wildrye	BTS1840	6.99	96.91	97	2	99	WY	14.07	13.500
Lodorm Green Needlegrass	H8601	9.61	99.97	2	94	96	ND	18.76	18.000
Badlands Little Bluestem	G4558	5.56	62.86	57	26	83	MN	17.25	9.001
Certified Goshen Prairie Sandreed	19025	4.80	99.23	87	9	96	MT	9.45	9.000
Pierre Sideoats Grama	G4514	9.92	91.39	92	1	93	MN	21.18	18.001
Certified First Strike Slender Wheatgrass	BTS1914	4.75	96.05	87	10	97	WY	9.66	9.000
Rosana Western Wheatgrass	457131925A	19.21	98.42	93	3	96	WA	38.10	36.001

OTHER CROP:	0.04			
INERT MATTER:	5.65		195.20	171.903
WEED SEED:	0.03			
TEST DATE:	11/14/19			
NOXIOUS WEED SEEDS:	NONE FOUND		PLS FACTOR:	0.8807
NET WEIGHT:	195.20	BULK POUNDS		
TOTAL PLS:	171.90	PURE LIVE SEED POUNDS		

Millborn Seeds, Inc. - 2132 32nd Ave. - Brookings, SD 57006 - AMS #704

THE SELLER DISCLAIMS ANY AND ALL WARRANTIES ASSOCIATED WITH ITS SEED INCLUDING, BUT NOT LIMITED TO, EXPRESS OR IMPLIED WARRANTIES, WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. LIABILITY FOR DAMAGES IS LIMITED TO THE PURCHASE PRICE OF THE SEED. THIS IS AN EXCLUSIVE REMEDY AND THE SELLER WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Young Guns Const.
Riley Pass Bluff A
9 Acres - Lot # 54654

MIDCONTINENT
TESTING LABORATORIES, INC.

2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

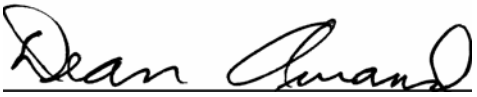
Sample Site: Feist West
Project Name: Bluff A
Sampled: 07/30/20 at 08:00 AM by Hunter Kalosiak
Sample Matrix: Soil

BETH KALISIAK
YOUNG GUN CONSTRUCTION
10609 S. CAVE HILLS ROAD
LUDLOW, SD 57755

Lab ID#: 20200730701
Received: 07/30/20 at 12:40 PM by Greg McDougall
Account: w1762 - Young Gun Construction

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Physical Properties								
Electrical Conductivity	0.730	dS/m	1			ASA 2, 10-3.3	JNM	07/31/20
Moisture	8.32	%	1			EPA 160.3	TMN	08/04/20
pH	9.27	S.U.	1			EPA SW846 9045C	TMN	07/31/20
Non-Metallics								
Sodium Adsorption Ratio	3.30	Ratio	1			Calculation	DVA	08/07/20
Metals - Dissolved								
Calcium (Ca)	461	mg/L	40	3.94	40.0	SM 3111 B	TMS	08/07/20
Magnesium (Mg)	816	mg/L	40	3.98	20.0	SM 3111 B	TMS	08/07/20
Sodium (Na)	509	mg/L	40	5.47	20.0	SM 3111 B	TMS	08/07/20
Metals - Total								
Arsenic (As)	26.8	mg/kg	2000	0.146	1.00	EPA SW846 6020	TNA	08/06/20
Cadmium (Cd)	0.676	mg/kg	2000	0.038	0.200	EPA SW846 6020	TNA	08/06/20
Copper (Cu)	7.29	mg/kg	2000	0.022	1.00	EPA SW846 6020	TNA	08/06/20
Lead (Pb)	9.82	mg/kg	2000	0.032	0.200	EPA SW846 6020	TNA	08/06/20
Zinc (Zn)	42.9	mg/kg	2000	1.19	10.0	EPA SW846 6020	TNA	08/06/20
Radiological								
Radium-226	8.010	pCi/g	1			EPA 901.1m	SYS	08/04/20
Precision Data								
Radium-226 precision	± 2.21	pCi/g	1			SC-Radium 226 precision	SYS	08/04/20
MDA Data								
Radium-226 MDA	1.79	pCi/g	1			SC - Radium 226 MDA	SYS	08/04/20

Report Approved By:



Report Approved On: 8/7/2020 8:54:15 AM

Mid Continent Testing Labs, Inc

Date:	8/3/2020
Technician Name:	Dean Aurand
Sample Name:	Fiest West
Lab Number:	20200730701
Material:	Soil
Shaker:	CSC 18480
Run Time:	15 minutes
Sample Size (g):	532.7

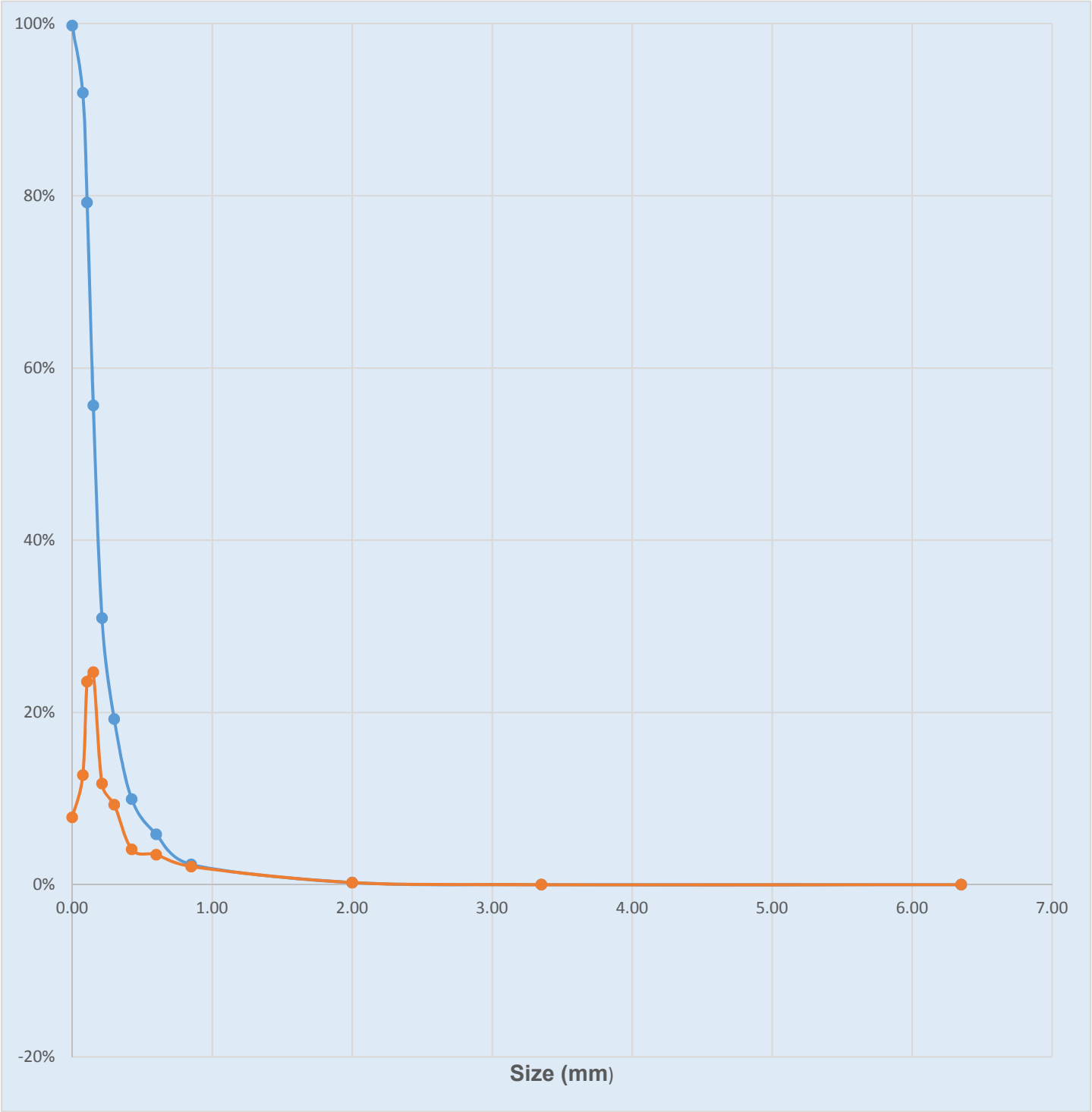
Signature:	

TEST SIEVE ANALYSIS RESULTS

Sieve Designation	Opening Size (mm)	Retained Weight (g)	Cumulative Weight (g)	Percent Retained	Cumulative Percent
1/4 in	6.35	0.00	0.00	0.0%	0.0%
6	3.35	0.00	0.00	0.0%	0.0%
10	2.00	1.30	1.30	0.2%	0.2%
20	0.850	11.20	12.50	2.1%	2.3%
30	0.600	18.60	31.10	3.5%	5.8%
40	0.425	21.80	52.90	4.1%	9.9%
50	0.300	49.50	102.40	9.3%	19.2%
70	0.212	62.50	164.90	11.7%	31.0%
100	0.150	131.50	296.40	24.7%	55.6%
140	0.106	125.60	422.00	23.6%	79.2%
200	0.075	67.80	489.80	12.7%	91.9%
Pan	0.00	41.60	531.40	7.8%	99.8%
	TOTALS:	531.40			
	QC: percent loss =	0.24%			

Mid Continent Testing Labs, Inc

TEST SIEVE ANALYSIS GRAPH



MIDCONTINENT
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2381 South Plaza Drive P.O. Box 3388 Rapid City, SD 57709
(605) 348-0111 -- www.thechemistrylab.com

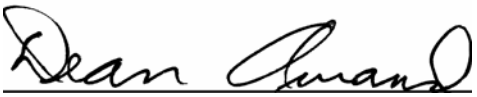
Sample Site: Feist Middle
Project Name: Bluff A
Sampled: 07/30/20 at 08:00 AM by Hunter Kalosiak
Sample Matrix: Soil

BETH KALISIAK
YOUNG GUN CONSTRUCTION
10609 S. CAVE HILLS ROAD
LUDLOW, SD 57755

Lab ID#: 20200730702
Received: 07/30/20 at 12:40 PM by Greg McDougall
Account: w1762 - Young Gun Construction

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Physical Properties								
Electrical Conductivity	1.80	dS/m	1			ASA 2, 10-3.3	JNM	07/31/20
Moisture	12.1	%	1			EPA 160.3	TMN	08/04/20
pH	9.36	S.U.	1			EPA SW846 9045C	TMN	07/31/20
Non-Metallics								
Sodium Adsorption Ratio	8.33	Ratio	1			Calculation	DVA	08/07/20
Metals - Dissolved								
Calcium (Ca)	69.4	mg/L	20	1.97	20.0	SM 3111 B	TMS	08/07/20
Magnesium (Mg)	107	mg/L	20	1.99	10.0	SM 3111 B	TMS	08/07/20
Sodium (Na)	474	mg/L	20	2.73	10.0	SM 3111 B	TMS	08/07/20
Metals - Total								
Arsenic (As)	32.9	mg/kg	2000	0.146	1.00	EPA SW846 6020	TNA	08/06/20
Cadmium (Cd)	0.881	mg/kg	2000	0.038	0.200	EPA SW846 6020	TNA	08/06/20
Copper (Cu)	10.4	mg/kg	2000	0.022	1.00	EPA SW846 6020	TNA	08/06/20
Lead (Pb)	12.3	mg/kg	2000	0.032	0.200	EPA SW846 6020	TNA	08/06/20
Zinc (Zn)	54.4	mg/kg	2000	1.19	10.0	EPA SW846 6020	TNA	08/06/20
Radiological								
Radium-226	8.943	pCi/g	1			EPA 901.1m	SYS	08/04/20
Precision Data								
Radium-226 precision	± 2.72	pCi/g	1			SC-Radium 226 precision	SYS	08/04/20
MDA Data								
Radium-226 MDA	2.23	pCi/g	1			SC - Radium 226 MDA	SYS	08/04/20

Report Approved By:



Report Approved On: 8/7/2020 8:54:15 AM

Mid Continent Testing Labs, Inc

Date:	8/3/2020
Technician Name:	Dean Aurand
Sample Name:	Fiest Middle
Lab Number:	20200730702
Material:	Soil
Shaker:	CSC 18480
Run Time:	15 minutes
Sample Size (g):	678.2

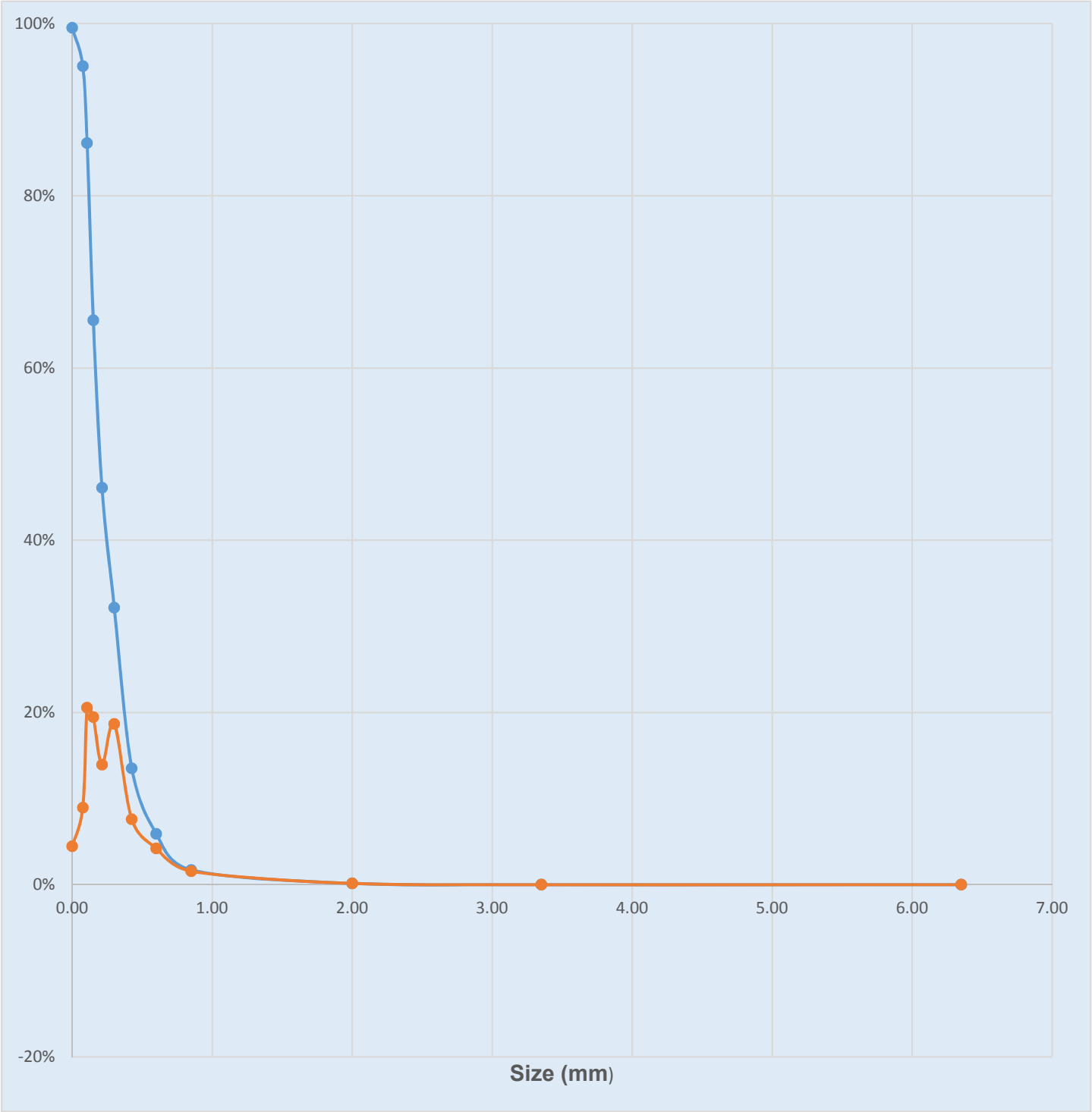
Signature:	

TEST SIEVE ANALYSIS RESULTS

Sieve Designation	Opening Size (mm)	Retained Weight (g)	Cumulative Weight (g)	Percent Retained	Cumulative Percent
1/4 in	6.35	0.00	0.00	0.0%	0.0%
6	3.35	0.00	0.00	0.0%	0.0%
10	2.00	1.00	1.00	0.1%	0.1%
20	0.850	10.60	11.60	1.6%	1.7%
30	0.600	28.50	40.10	4.2%	5.9%
40	0.425	51.50	91.60	7.6%	13.5%
50	0.300	126.60	218.20	18.7%	32.2%
70	0.212	94.50	312.70	13.9%	46.1%
100	0.150	131.90	444.60	19.4%	65.6%
140	0.106	139.50	584.10	20.6%	86.1%
200	0.075	60.60	644.70	8.9%	95.1%
Pan	0.00	30.20	674.90	4.5%	99.5%
	TOTALS:	674.90			
	QC: percent loss =	0.49%			

Mid Continent Testing Labs, Inc

TEST SIEVE ANALYSIS GRAPH



MIDCONTINENT
TESTING LABORATORIES, INC.

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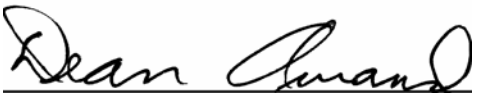
Sample Site: Feist East
Project Name: Bluff A
Sampled: 07/30/20 at 08:00 AM by Hunter Kalosiak
Sample Matrix: Soil

BETH KALISIAK
YOUNG GUN CONSTRUCTION
10609 S. CAVE HILLS ROAD
LUDLOW, SD 57755

Lab ID#: 20200730703
Received: 07/30/20 at 12:40 PM by Greg McDougall
Account: w1762 - Young Gun Construction

Parameter	Result	Units	DF	MDL	PQL	Method	Analyst	Date
Physical Properties								
Electrical Conductivity	0.309	dS/m	1			ASA 2, 10-3.3	JNM	07/31/20
Moisture	5.46	%	1			EPA 160.3	TMN	08/04/20
pH	8.44	S.U.	1			EPA SW846 9045C	TMN	07/31/20
Non-Metallics								
Sodium Adsorption Ratio	0.732	Ratio	1			Calculation	DVA	08/07/20
Metals - Dissolved								
Calcium (Ca)	34.1	mg/L	10	0.985	10.0	SM 3111 B	TMS	08/07/20
Magnesium (Mg)	17.7	mg/L	10	0.994	5.00	SM 3111 B	TMS	08/07/20
Sodium (Na)	21.2	mg/L	10	1.37	5.00	SM 3111 B	TMS	08/07/20
Metals - Total								
Arsenic (As)	25.0	mg/kg	2000	0.146	1.00	EPA SW846 6020	TNA	08/06/20
Cadmium (Cd)	0.683	mg/kg	2000	0.038	0.200	EPA SW846 6020	TNA	08/06/20
Copper (Cu)	6.61	mg/kg	2000	0.022	1.00	EPA SW846 6020	TNA	08/06/20
Lead (Pb)	9.70	mg/kg	2000	0.032	0.200	EPA SW846 6020	TNA	08/06/20
Zinc (Zn)	40.7	mg/kg	2000	1.19	10.0	EPA SW846 6020	TNA	08/06/20
Radiological								
Radium-226	6.750	pCi/g	1			EPA 901.1m	SYS	08/04/20
Precision Data								
Radium-226 precision	± 2.26	pCi/g	1			SC-Radium 226 precision	SYS	08/04/20
MDA Data								
Radium-226 MDA	1.88	pCi/g	1			SC - Radium 226 MDA	SYS	08/04/20

Report Approved By:



Report Approved On: 8/7/2020 8:54:15 AM

Mid Continent Testing Labs, Inc

Date:	8/3/2020
Technician Name:	Dean Aurand
Sample Name:	Fiest East
Lab Number:	20200730703
Material:	Soil
Shaker:	CSC 18480
Run Time:	15 minutes
Sample Size (g):	519.6

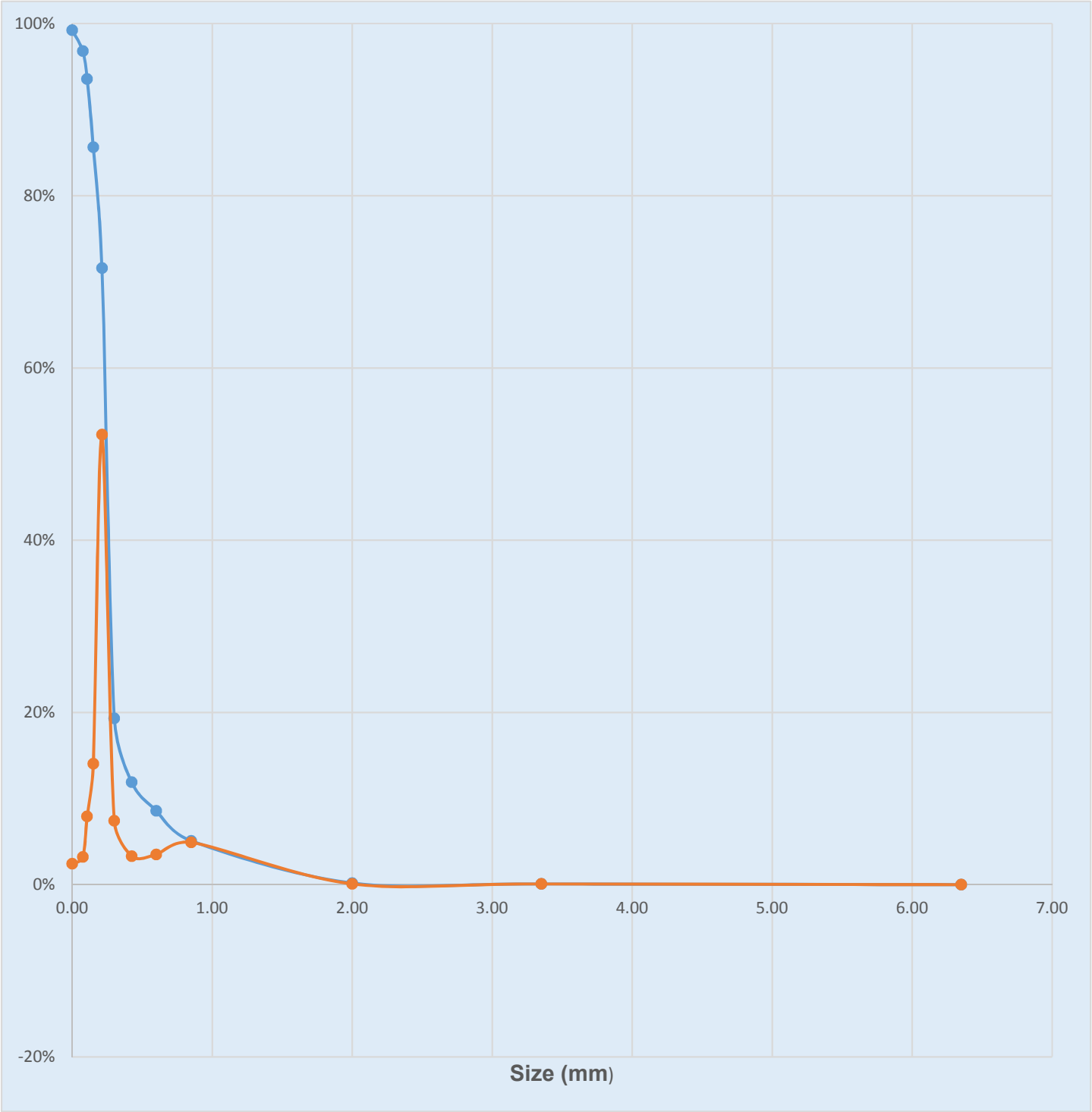
Signature:	

TEST SIEVE ANALYSIS RESULTS

Sieve Designation	Opening Size (mm)	Retained Weight (g)	Cumulative Weight (g)	Percent Retained	Cumulative Percent
1/4 in	6.35	0.00	0.00	0.0%	0.0%
6	3.35	0.45	0.45	0.1%	0.1%
10	2.00	0.48	0.93	0.1%	0.2%
20	0.850	25.50	26.43	4.9%	5.1%
30	0.600	18.20	44.63	3.5%	8.6%
40	0.425	17.20	61.83	3.3%	11.9%
50	0.300	38.60	100.43	7.4%	19.3%
70	0.212	271.60	372.03	52.3%	71.6%
100	0.150	73.00	445.03	14.0%	85.6%
140	0.106	41.20	486.23	7.9%	93.6%
200	0.075	16.70	502.93	3.2%	96.8%
Pan	0.00	12.60	515.53	2.4%	99.2%
	TOTALS:	515.53			
	QC: percent loss =	0.78%			

Mid Continent Testing Labs, Inc

TEST SIEVE ANALYSIS GRAPH



PROPOINT COOPERATIVE
FARMERS UNION OIL COMPANY
PO BOX 138
BOWMAN, ND 58623
P: (701) 523-3268
F: (701) 523-3269

Charge Invoice

SOLD TO: 999112

YOUNG GUN CONSTRUCTION LLC
10544 TUFTE ROAD
LUDLOW, SD 57755

SHIP TO: 999112

YOUNG GUN CONSTRUCTION LLC
10544 TUFTE ROAD
LUDLOW, SD 57755

TICKET #	: 130641	SALES REP	: 30
TICKET DATE	: 09/23/2020	TERMS	:
SHIP DATE	:	SHIP METHOD	:
ORDER #	:	P.O. #	:

Reference	Description	Quantity Shipped	Price	Total
124	AMS 21-0-0-24	361		
122	POTASH 0-0-60	120		
110	MAP 11-52-0	751		
100	UREA 46-0-0	288		

Sub-Total

TOTAL :

1520# 19-25.68-4.76-5.70
CASH DISCOUNT OF $15.20 (CODE 4100) IF PAID WITHIN 10 DAYS.

Thank you for choosing ProPoint Cooperative.

APPENDIX C – CONTRACT DAY CALENDAR, DAILY & WEEKLY FIELD LOGS

CONSTRUCTION CALENDAR

RILEY PASS URANIUM MINE
BLUFF A RECLAMATION PROJECT

CONTRACT DAY CALENDAR

JUNE 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 CONTRACT DAY	2 WORK DAY	3 HOLIDAY	4 WEATHER DAY	5 WORK SUSPENDED	6 CONTRACT END DATE
7 CONTRACT COMPLETE	8	9	10	11	12	13
14	15	16	17	18	19	20
21	1 OF 156 22 NOTICE TO PROCEED	2 OF 156 23 WORK DAY	3 OF 156 24 WORK DAY	4 OF 156 25 WORK DAY	5 OF 156 26 WORK DAY	6 OF 156 27 CONTRACT DAY
7 OF 156 28 CONTRACT DAY	8 OF 156 29 WORK DAY	9 OF 156 30 WORK DAY Rain in AM				

JULY 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			10 OF 156 1 WORK DAY	11 OF 156 2 WORK DAY	12 OF 156 3 HOLIDAY	13 OF 156 4 HOLIDAY
14 OF 156 5 CONTRACT DAY	15 OF 156 6 WORK DAY Weekend Rain	16 OF 156 7 WORK DAY Overnight Rain	17 OF 156 8 WORK DAY Overnight Rain	18 OF 156 9 WORK DAY	19 OF 156 10 WORK DAY Overnight Rain	20 OF 156 11 CONTRACT DAY
21 OF 156 12 CONTRACT DAY	22 OF 156 13 WORK DAY	23 OF 156 14 WORK DAY	24 OF 156 15 WORK DAY	25 OF 156 16 WORK DAY	26 OF 156 17 WORK DAY	27 OF 156 18 CONTRACT DAY
28 OF 156 19 CONTRACT DAY	29 OF 156 20 WORK DAY Morning Rain	30 OF 156 21 WORK DAY	31 OF 156 22 WORK DAY	32 OF 156 23 WORK DAY PM T-Storm	33 OF 156 24 WORK DAY	34 OF 156 25 CONTRACT DAY
35 OF 156 26 CONTRACT DAY	36 OF 156 27 WORK DAY	37 OF 156 28 WORK DAY	38 OF 156 29 WORK DAY	39 OF 156 30 WORK DAY PM T-Storm	40 OF 156 31 WORK DAY PM T-Storm	

ID of Work Days, Weather Days, Contract Days and Holidays

TETRA TECH, INC.

RILEY PASS URANIUM MINE
BLUFF A RECLAMATION PROJECT

CONTRACT DAY CALENDAR

AUGUST 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						41 OF 156 **1** CONTRACT DAY
42 OF 156 **2** CONTRACT DAY	43 OF 156 **3** WORK DAY	44 OF 156 **4** WORK DAY	45 OF 156 **5** WORK DAY	46 OF 156 **6** WORK DAY	47 OF 156 **7** WORK DAY Overnight Rain	48 OF 156 **8** CONTRACT DAY
49 OF 156 **9** CONTRACT DAY	50 OF 156 **10** WORK SUSPENDED	51 OF 156 **11** WORK SUSPENDED	52 OF 156 **12** WORK SUSPENDED	53 OF 156 **13** WORK SUSPENDED	54 OF 156 **14** WORK SUSP Overnight Rain	55 OF 156 **15** WORK SUSPENDED
56 OF 156 **16** WORK SUSPENDED	57 OF 156 **17** WORK SUSPENDED	58 OF 156 **18** WORK DAY	59 OF 156 **19** WORK DAY	60 OF 156 **20** WORK DAY	61 OF 156 **21** WORK DAY	62 OF 156 **22** CONTRACT DAY
63 OF 156 **23** CONTRACT DAY	64 OF 156 **24** WORK DAY	65 OF 156 **25** WORK DAY	66 OF 156 **26** WORK DAY	67 OF 156 **27** WORK DAY Rain in AM	68 OF 156 **28** WORK DAY Wet in AM	69 OF 156 **29** CONTRACT DAY

SEPTEMBER 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
70 OF 156 **30** CONTRACT DAY	71 OF 156 **31** WORK DAY	72 OF 156 **1** WORK DAY	73 OF 156 **2** WORK DAY	74 OF 156 **3** WORK DAY	75 OF 156 **4** WORK DAY	76 OF 156 **5** CONTRACT DAY
77 OF 156 **6** CONTRACT DAY	78 OF 156 **7** HOLIDAY Rain all Day	79 OF 156 **8** WORK DAY	80 OF 156 **9** WORK DAY	81 OF 156 **10** WORK DAY	82 OF 156 **11** WORK DAY	83 OF 156 **12** CONTRACT DAY
84 OF 156 **13** CONTRACT DAY	85 OF 156 **14** WORK DAY	86 OF 156 **15** WORK DAY	87 OF 156 **16** WORK DAY	88 OF 156 **17** WORK DAY	89 OF 156 **18** WORK DAY	90 OF 156 **19** CONTRACT DAY
91 OF 156 **20** CONTRACT DAY	92 OF 156 **21** WORK DAY	93 OF 156 **22** WORK DAY	94 OF 156 **23** WORK DAY	95 OF 156 **24** WORK DAY	96 OF 156 **25** CONTRACT DAY	97 OF 156 **26** CONTRACT DAY
98 OF 156 **27** CONTRACT DAY	99 OF 156 **28** WORK DAY	100 OF 156 **29** WORK DAY	101 OF 156 **30** WORK DAY			

RILEY PASS URANIUM MINE
BLUFF A RECLAMATION PROJECT

CONTRACT DAY CALENDAR

OCTOBER 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				102 OF 156 **1** WORK DAY	103 OF 156 **2** WORK DAY	104 OF 156 **3** CONTRACT DAY
105 OF 156 **4** CONTRACT DAY	106 OF 156 **5** WORK DAY	107 OF 156 **6** FINAL INSPECTION	108 OF 156 **7** WORK DAY	109 OF 156 **8** WORK DAY	110 OF 156 **9** CONTRACT COMPLETE	111 OF 156 **10**
112 OF 156 **11**	113 OF 156 **12**	114 OF 156 **13**	115 OF 156 **14**	116 OF 156 **15**	117 OF 156 **16**	118 OF 156 **17**
119 OF 156 **18**	120 OF 156 **19**	121 OF 156 **20**	122 OF 156 **21**	123 OF 156 **22**	124 OF 156 **23**	125 OF 156 **24**
126 OF 156 **25**	127 OF 156 **26**	128 OF 156 **27**	129 OF 156 **28**	130 OF 156 **29**	131 OF 156 **30**	132 OF 156 **31**

NOVEMBER 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
133 OF 156 **1**	134 OF 156 **2**	135 OF 156 **3**	136 OF 156 **4**	137 OF 156 **5**	138 OF 156 **6**	139 OF 156 **7**
140 OF 156 **8**	141 OF 156 **9**	142 OF 156 **10**	143 OF 156 **11**	144 OF 156 **12**	145 OF 156 **13**	146 OF 156 **14**
147 OF 156 **15**	148 OF 156 **16**	149 OF 156 **17**	150 OF 156 **18**	151 OF 156 **19**	152 OF 156 **20**	153 OF 156 **21**
154 OF 156 **22**	155 OF 156 **23**	156 OF 156 **24** CONTRACT END DATE	**25**	**26** HOLIDAY	**27** HOLIDAY	**28**
29	**30**					

ID of Work Days, Weather Days, Contract Days and Holidays

TETRA TECH, INC.

WEEKLY CONSTRUCTION SUMMARIES

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name:	Riley Pass Bluff A Reclamation Project	
	Custer-Gallatin National Forest	
Work Week:	Monday, June 22 through Sunday June 28, 2020	
FS Contract Number:	12035520C0001	
TT Project Number:	117-8343004	
Distribution List:	David Shimek, USFS	Mike Hatten, Tetra Tech
	Peter Werner, USFS	Larry Cawlfield, Tetra Tech
	Chad Santone, USFS	Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday June 22, 2020	• Pre-Work Meeting on Microsoft Teams • Tetra Tech inspector travel from Helena to Bowman
Tuesday June 23, 2020	• Equipment inspection on Bobcat T190, Komatsu PC 160 and John Deere 750 LPG • Improve upper end of access road into Bluff A • Disturbance limit staking on Removal Areas A1 through A8 • Begin installation of silt fencing below Removal Area 1
Wednesday June 24, 2020	• Disturbance limit staking on Removal Areas A9 through A19 • Disturbance limit staking on Cover Soil Borrow Area • Installation of Survey Control Points for Machine Control Base Stations • Continue installation of silt fencing below Removal Areas A2 through A19 • Equipment inspection on Komatsu PC 290LCi excavator
Thursday June 25, 2020	• Complete installation of silt fencing below all Removal Areas • Breakdown of Komatsu PC 160LC • Equipment inspection on Komatsu D51PXi dozer • Equipment inspection on Komatsu PC 210LC excavator • Begin clearing and grubbing on Removal Areas A2 and A3
Friday June 26, 2020	• Delivery of weed-free straw wattles • Complete clearing and grubbing on Removal Areas A2 and A3 • Begin clearing and grubbing on Removal Area A1 • Begin construction of truck access to Removal Area A1 to haul vegetation debris
Saturday June 27, 2020	• Crew not working on weekends • No work completed
Sunday June 28, 2020	• Crew not working weekends • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, June 29 through Sunday July 5, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday June 29, 2020	• Inspection and acceptance of road grader for use on project road maintenance • Continuation of clearing and grubbing in Removal Areas • Discussion on placement of large piles of brush at bottom of A1 when work is complete
Tuesday June 30, 2020	• Road maintenance work with grader to improve access roads • Rain overnight and during the day turned exposed dirt to areas of mud within the project site • Continuation of clearing and grubbing in Removal Areas • Beginning of clearing and grubbing in the Consolidation Area
Wednesday July 1, 2020	• Straw wattles installed along the edge of the rimrock along Removal Area A19 • Komatsu 210 excavator ruptured a hose and shut down until repaired • Continuation of clearing and grubbing when all equipment was operational • Komatsu representative on site for training on machine control software
Thursday July 2, 2020	• Clarification of requirements to meet clearing and grubbing specifications • Discussion on potential survey errors or busts for post-Clearing and Grubbing topography • Discussion on where to put piles of dirt, grass and small brush • Discussion on volume of cover soil in proposed borrow area • Continuation of clearing and grubbing in all Removal Areas
Friday July 3, 2020	• 4th of July Holiday Weekend • No Work Completed
Saturday July 4, 2020	• 4th of July Weekend • No Work Completed
Sunday July 5, 2020	• 4th of July Weekend • No Work Completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, July 6 through Sunday July 12, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday July 6, 2020	• Discussion and decision on how the dirt, grass and twigs will be incorporated into the Consolidation Area fill and compacted • Excavation of test pits in the Borrow Area to determine soil location and quantities • Final clearing and grubbing on all Removal Areas prior to bare ground survey
Tuesday July 7, 2020	• Brosz Engineering on site to survey Removal Areas A2, /a3, A4, A5, A10, A19 and the Consolidation Area • Excavation of 9 additional test pits in the Borrow Area to determine volume of soil material in Borrow Area • Discovery of coal seam below clay layer in Borrow Area test pits that needs testing • Discussion on when verification testing should be completed and the site conditions on which the testing will be completed
Wednesday July 8, 2020	• Brosz Engineering on site to survey Removal Areas A6, A7, A8 and A1 • Testing of material in Borrow Area test pits for radioactivity and arsenic • Evaluation of Borrow Site by Contractor to determine soil location and quantity • Photos of Borrow Area test pits to show soil conditions in borrow area and test pits
Thursday July 9, 2020	• Brosz Engineering on site to survey Removal Areas A11 through A18 • Review of survey data from Removal Areas A2, A3, A4, A5, A10 and A19 by Tetra Tech design team verify LiDAR surface and bare ground surface • Authorization by Forest Service for Young Guns Construction to begin mine waste excavation work on Removal Areas A2, A3, A4, A5, A10 and A19 • Excavation of mine waste begun in Removal Areas A4, A5 and A19 • Begin placement of mine waste in Consolidation Area
Friday July 10, 2020	• Equipment inspections on 2 dump trucks, 1 water truck and 1 compactor • Completed excavation on Removal Sites A3, A19 and A10 • Began compaction of mine waste material in Consolidation Area • Began use of water truck to water condition mine waste prior to compaction
Saturday July 11, 2020	• Contractor not on site during the day • No work completed
Sunday July 12, 2020	• Contractor not on site during the day • No work completed

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, July 13 through Sunday July 19, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday July 13, 2020	• Review of survey data from Removal Areas A1, A6, A7, A8, A9, A11, A12/13, A14, A15, A16, A17 and A18 by the Tetra Tech design team to verify LiDAR surface and bare ground survey were close • Authorization by Forest Service for Young Guns Construction to begin mine waste excavation work on Removal Areas A1, A6, A7, A8, A9, A11, A12/13, A14, A15, A16, A17 and A18 • Excavation of mine waste material in Removal Areas A2, A9, A11, A12/13 and A17 • Grading and compaction of mine waste material in Consolidation Area • Excavation of 3 additional test pits in Borrow Site to collect soil samples • Collection of soil samples from test pits to analyze black soil layer beneath clay layer
Tuesday July 14, 2020	• Excavation of material in Removal Areas A1, A9, A14, A15, A17 and A18 • Grading and compaction of mine waste material in Consolidation Area • Use of water truck to water condition mine waste material and for dust control on access roads • Borrow site soil samples turned over to Michele Weidner for delivery to Billings • Delivery of Komatsu HM 400 articulated haul truck to job site
Wednesday July 15, 2020	• Excavation of mine waste material in Removal Areas A1, A12/13, A17 and A16 • Grading and compaction of mine waste material in Consolidation Area • Use of water truck to water condition mine waste material and for dust control on access roads
Thursday July 16, 2020	• Excavation of mine waste material in Removal Areas A1, A9, A8, and A7 • Grading and compaction of mine waste material in Consolidation Area • Replacement of machine control GPS sensor on Komatsu 290 excavator • Use of water truck to water condition mine waste material and for dust control on access roads
Friday July 17, 2020	• Excavation of mine waste material in Removal Areas A1 and A6 • Grading and compaction of mine waste material in Consolidation Area • Maintenance check and repairs on installed BMP's • Clearing and grubbing in Cover Soil Borrow Site • Use of water truck to water condition mine waste material and for dust control on access roads

Saturday July 18, 2020	• Contractor not on site during the day • No work completed
Sunday July 19, 2020	• Contractor not on site during the day • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name:	Riley Pass Bluff A Reclamation Project	
	Custer-Gallatin National Forest	
Work Week:	Monday, July 20 through Sunday July 26, 2020	
FS Contract Number:	12035520C0001	
TT Project Number:	117-8343004	
Distribution List:	David Shimek, USFS	Mike Hatten, Tetra Tech
	Peter Werner, USFS	Larry Cawlfield, Tetra Tech
	Chad Santone, USFS	Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday July 20, 2020	• Morning thunderstorm at job site causing slick roads • Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Application of water on mine waste for moisture conditioning and on roads for dust control • Excavation, loading and hauling of cover soil from Borrow Site to stockpile near Removal Area A12/13
Tuesday July 21, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Application of water on mine waste for moisture conditioning and on roads for dust control • Final excavation of mine waste material from Removal Area A12/13 and replacement with cover soil to maintain access road after excavation grade survey • Survey of excavation grade on Removal Areas A2 through A19
Wednesday July 22, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Application of water on mine waste for moisture conditioning and on roads for dust control • Review of grading and compaction specifications for Consolidation Area with contractor to ensure compliance with project specifications • Application of water on haul road for dust control
Thursday July 23, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Application of water on mine waste for moisture conditioning and on roads for dust control • Afternoon thunderstorm at job site that shut down work for the day • Receipt of excavation grade survey data from Brosz Engineering

Friday July 24, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Application of water on mine waste for moisture conditioning and on roads for dust control
Saturday July 25, 2020	• Contractor not on site during the day • No work completed
Sunday July 26, 2020	• Contractor not on site during the day • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, July 27 through Sunday August 2, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday July 27, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Water on mine waste for moisture conditioning and on roads for dust control • Mining and stockpiling cover soil in southern area of Borrow Site • Loading and hauling cover soil and placement in stockpile •
Tuesday July 28, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Water on mine waste for moisture conditioning and on roads for dust control • Mining and stockpiling cover soil in southern area of Borrow Site • Loading and hauling cover soil and placement in stockpile • Forest Service COR onsite during the day to review project progress •
Wednesday July 29, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Water on mine waste for moisture conditioning and on roads for dust control • Mining and stockpiling cover soil in southern area of Borrow Site • Loading and hauling cover soil and placement in stockpile •
Thursday July 30, 2020	• Excavation of mine waste material in Removal Area • Hauling mine waste material from Removal Area A1 to Consolidation • Grading and compaction of mine waste material in Consolidation • Application of water on mine waste for moisture conditioning and on roads for dust • Mining and stockpiling cover soil in northern area of Borrow Site • Loading and hauling cover soil and placement in stockpile • Afternoon thunderstorm around work area but no work stoppage

Friday July 31, 2020	• Excavation of mine waste material in Removal Area A1 • Hauling mine waste material from Removal Area A1 to Consolidation Area • Grading and compaction of mine waste material in Consolidation Area • Water on mine waste for moisture conditioning and on roads for dust control • Mining and stockpiling cover soil in northern area of Borrow Area • Loading and hauling cover soil and placement in stockpile • Excavation grade survey on Removal Area A1 • Receipt of excavation grade survey on RA A1 from Brosz Engineering • Regrade excavation on Removal Areas A2 and A3 • Afternoon thunderstorm around work area but no work stoppage
Saturday August 1, 2020	• Contractor not on site during the day • No work completed
Sunday August 2, 2020	• Contractor not on site during the day • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

United States Department of Agriculture **Forest Service** **Northern Region Acquisition Management** **24 Fort Missoula Rd. Missoula, MT 59804**

Date: August 10, 2020

To: Young Gun Construction, LLC
10609 South Cave Road
Ludlow, SD 57755

Subject: Contract 12035520C0001, Riley Pass Bluff A Reclamation; Suspension of Work

Due to varying site conditions and issues discovered within the design package, contract work cannot continue as designed.

In accordance with FAR 52.242-14, as of the date of this letter, Young Gun Construction, LLC is hereby directed to suspend all work associated with the subject contract.

This suspension shall remain in effect until rescinded. Once the suspension is rescinded Young Gun Contraction, LLC shall resume all work no later than 10 days from the date the suspension is rescinded.

Please feel free to contact me with any questions, chad.santone@usda.gov or 406-329-3745.

Chad B. Santone
Contracting Officer

From: Santone, Chad - FS
Sent: Tuesday, August 18, 2020 11:33 AM
To: Beth Kalisiak <younggunconstructionllc@gmail.com>
Cc: Shimek, David R -FS <david.shimek@usda.gov>; Werner, Peter G -FS <peter.werner@usda.gov>
Subject: RE: 12035520C0001, Riley Pass Bluff A Reclamation -- Modification Request for Proposal
Importance: High

Hello Beth,

The attached proposal is hereby accepted. Funding has been secured in the amount of $324,100.00 for this change. In accordance with FAR 52.243-4, Young Gun Construction is hereby directed to proceed with these changes.

A modification incorporating these changes into the contract is forthcoming.

Consider this email your notification that the suspension of work issued on August 10, 2020 is hereby rescinded. Young Guns Construction is authorized to continue any and all project work in accordance with the contract documents. Ensure you coordinate work with the COR.

Let me know if you have any questions.

Thanks,

Chad Santone
Contracting Officer
Forest Service
Region 1 AQM
p: 406-329-3745
c: 406-396-0216
chad.santone@usda.gov
24 Fort Missoula Rd
Missoula, MT 59804
www.fs.fed.us

Caring for the land and serving people

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, August 17 through Sunday August 23, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday August 17, 2020	• Forest Service Contracting Officer Issued Suspension of Work Order on 8/10/2020 • Contractor not on site during the day • No work completed •
Tuesday August 18, 2020	• Forest Service Contracting Officer Rescinded Suspension of Work Order at noon • Began redistributing material in Consolidation Area to redesigned surface provided by Tetra Tech • Began field fitting slope and channels in Removal Area A1
Wednesday August 19, 2020	• Continued redistributing material in Consolidation Area to redesigned surface provided by Tetra Tech • Began field fitting slope and channels in Removal Area A1 • Began loading and hauling cover soil from Randy Feist property to stockpile near A11 • Began watering haul roads for dust control
Thursday August 20, 2020	• Loaded and hauled material in Consolidation Area with excavator and haul trucks to assist dozers • Continued redistributing material in Consolidation Area to redesigned surface provided by Tetra Tech • Continued loading and hauling cover soil from Randy Feist property to stockpile near A11 • Continued watering haul roads for dust control
Friday August 21, 2020	• Continued loading and hauling cover soil from Randy Feist property to Removal Areas A7, A8 and A16 • Placed cover soil in Removal Areas A7, A8 and A16 • Continued watering haul roads for dust control
Saturday August 22, 2020	• Contractor not on site during the day • No work completed
Sunday August 23, 2020	• Contractor not on site during the day • No work completed

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, August 24 through Sunday August 30, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday August 24, 2020	• Loading and hauling cover soil from Randy Feist borrow site to Removal Areas A6, A16 and A17 and the Consolidation Area • Placement of cover soil in Removal Areas A6, A16 and A17 • Spreading of cover soil over Consolidation Area • Final grading of cover soil in Removal Areas A16 and A17 and Consolidation Area • Application of water on haul roads for dust control
Tuesday August 25, 2020	• Loading and hauling cover soil from Randy Feist borrow site to Removal Areas A4, A5 and A6 and the Consolidation Area • Placement of cover soil in Removal Areas A4, A5 and A6 • Spreading of cover soil over Consolidation Area • Final grading of cover soil in Removal Area A6 and Consolidation Area • Application of water on haul roads for dust control
Wednesday August 26, 2020	• Loading and hauling cover soil from Randy Feist borrow site to Removal Areas A4 and the Consolidation Area • Placement of cover soil in Removal Areas A4, A5 and A11 • Spreading of cover soil over Consolidation Area • Final grading of cover soil in Removal Area A5 and Consolidation Area • Application of water on haul roads for dust control
Thursday August 27, 2020	• Rain showers all morning resulting in 0.3 inches of rain at job trailer • Lightning around work area shut job site down in the morning • Muddy conditions on access road into job site shut job down until afternoon • Loading and hauling cover soil from Randy Feist borrow site to the Consolidation Area • Placement, spreading and grading of cover soil in Consolidation Area • No application of water on access roads due to rain
Friday August 28, 2020	• Slow start to work day due to wet conditions and muddy roads • Short haul of cover soil from stockpile to Consolidation Area • Loading and hauling cover soil from Randy Feist borrow site to the Consolidation Area in afternoon • Placement, spreading and grading of cover soil in Consolidation Area all day • Application of water on haul roads for dust control later in the day

Saturday August 29, 2020	• Contractor not on site during the day • No work completed
Sunday August 30, 2020	• Contractor not on site during the day • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, August 31 through Sunday, September 6, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday August 31, 2020	• Loading and hauling cover soil from Randy Feist borrow site in morning and Tom Kalisiak borrow site in the afternoon to Removal Areas A1 and A4 • Placement of cover soil in Removal Areas A1 and A4 • Spreading of cover soil over Removal Areas A1 and A4 • Application of water on haul roads for dust control •
Tuesday September 1, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Areas A1 and A12/13 • Placement of cover soil in Removal Areas A1 and A12/13 • Spreading of cover soil over Removal Areas A1 and A12/13 • Final grading of cover soil in Removal Area A2, A3 and A12/13 • Application of water on haul roads for dust control • First day of verification testing •
Wednesday September 2, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Application of water on haul roads for dust control • Second day of verification testing •
Thursday September 3, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Application of water on haul roads for dust control •
Friday September 4, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Application of water on haul roads for dust control •

Saturday September 5, 2020	• Contractor not on site during the day • No work completed • Eric Atkins, Young Guns Construction, Project Superintendent, killed in motorcycle accident
Sunday September 6, 2020	• Contractor not on site during the day • No work completed
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name: Riley Pass Bluff A Reclamation Project
Custer-Gallatin National Forest
Work Week: Monday, September 7 through Sunday, September 13, 2020
FS Contract Number: 12035520C0001
TT Project Number: 117-8343004
Distribution List: David Shimek, USFS; Peter Werner, USFS; Chad Santone, USFS; Mike Hatten, Tetra Tech; Larry Cawlfield, Tetra Tech; Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday September 7, 2020	• Labor Day Holiday • No work completed •
Tuesday September 8, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Final grading topographic survey on Removal Areas A2 through A19 and the Consolidation Area
Wednesday September 9, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Application of water on haul roads for dust control
Thursday September 10, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Loading and hauling compost from stockpile site to Consolidation Area • Application of water on haul roads for dust control • Review of cover soil erosion after Monday rain storm in Removal Areas A7, A8, A17 and A18
Friday September 11, 2020	• Loading and hauling cover soil from Tom Kalisiak borrow site to Removal Area A1 • Placement of cover soil in Removal Area A1 • Spreading of cover soil over Removal Area A1 • Loading and hauling compost from stockpile site to Consolidation Area and Removal Areas A14 and A15
Saturday September 12, 2020	• Contractor not on site during the day • No work completed •
Sunday September 13, 2020	• Contractor not on site during the day • No work completed •

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name:	Riley Pass Bluff A Reclamation Project	
	Custer-Gallatin National Forest	
Work Week:	Monday, September 14 through Sunday, September 20, 2020	
FS Contract Number:	12035520C0001	
TT Project Number:	117-8343004	
Distribution List:	David Shimek, USFS	Mike Hatten, Tetra Tech
	Peter Werner, USFS	Larry Cawlfield, Tetra Tech
	Chad Santone, USFS	Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday September 14, 2020	• Final grading of cover soil over Removal Area A1 • Hauling of tree trunks from work areas to junction of site access road • Begin burying stumps along eastern edge of the lower lobe of Removal Area A1 • Spreading of compost over the Consolidation Area • Dragging of compost over the Consolidation Area with JD550 and a drag mat
Tuesday September 15, 2020	• Loading and hauling slash from all work sites to the on-site borrow site • Spreading of compost over Removal Areas A9, A10, A17, A18 and A19 • Dragging of compost over the Consolidation Area with 4-wheeler and small drag mat
Wednesday September 16, 2020	• Spreading of slash over disturbed area of on-site borrow site • Delivery and spreading of compost over Removal Areas A7, A8, A9, A16, and A18 • Verification sampling completed on Removal Area A1 • Covering of hot spots identified during verification sampling with cover soil in Removal Areas A1 and A4
Thursday September 17, 2020	• Delivery and spreading of compost over Removal Areas A2, A3, A4, A5, A11 and portions of A1 • Delivery of 300 cubic yards of compost to work areas during the day • Spreading of cover soil and top soil at stockpile site • Site reclamation on Randy Feist borrow site
Friday September 18, 2020	• Delivery and spreading of compost over Removal Area A1 • Delivery of 165 cubic yards of compost to Removal Area A1 during the day • Completed site reclamation on Randy Feist borrow site • Began reclamation of temporary haul road through the Bluff B mine site then up to the stockpile and then between the borrow site and site access road
Saturday September 19, 2020	• Contractor not on site during the day • No work completed •
Sunday September 20, 2020	• Contractor not on site during the day • No work completed •

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name:	Riley Pass Bluff A Reclamation Project	
	Custer-Gallatin National Forest	
Work Week:	Monday, September 21 through Sunday, September 27, 2020	
FS Contract Number:	12035520C0001	
TT Project Number:	117-8343004	
Distribution List:	David Shimek, USFS	Mike Hatten, Tetra Tech
	Peter Werner, USFS	Larry Cawlfield, Tetra Tech
	Chad Santone, USFS	Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday September 21, 2020	• Final spreading of compost over Removal Area A1 • Boulder placement in Consolidation Area • Reclamation of temporary haul road through Bluff B mine site • Regrading of Tufte Road from stockpile site to Lex Burghduff corner
Tuesday September 22, 2020	• Final grading of cover soil over Removal Area A10 • Final placement and spreading of compost over Removal Area A10 and A1 • Boulder placement in Consolidation Area and Removal Area A1 • Reclamation of temporary access road from Removal Area A10 to A6 • Reclamation of temporary access road between Removal Area A2 and A1
Wednesday September 23, 2020	• Final boulder placement in and Removal Area A1 • Final spreading and smoothing of compost in the Consolidation Area and Removal Area A1 • Delivery of materials and preparations for hydroseeding • Mix and spray hydroseed on Removal Areas A10, A11, A14 and A15
Thursday September 24, 2020	• Discussion with contractor on application rate of hydroseed slurry over entire project site • Development of application strategy to ensure proper coverage over the Consolidation Area and all Removal Areas • Mix and spray first layer of slurry on Removal Areas A2, A3, A4, A5, A7 and A8 • Mix and spray first layer of slurry on parts of western basin in Removal Areas A1
Friday September 25, 2020	• Contractor not on site during the day • No project work completed • Tetra Tech Inspector at job trailer all day working on project administration
Saturday September 26, 2020	• Contractor not on site during the day • No project work completed • Tetra Tech Inspector at job trailer part of the day working on project administration
Sunday September 27, 2020	• Contractor not on site during the day • No project work completed • Tetra Tech Inspector at job trailer part of the day working on project administration

	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

WEEKLY CONSTRUCTION SUMMARY REPORT

Project Name:	Riley Pass Bluff A Reclamation Project	
	Custer-Gallatin National Forest	
Work Week:	Monday, September 28 through Sunday, October 4, 2020	
FS Contract Number:	12035520C0001	
TT Project Number:	117-8343004	
Distribution List:	David Shimek, USFS	Mike Hatten, Tetra Tech
	Peter Werner, USFS	Larry Cawlfield, Tetra Tech
	Chad Santone, USFS	Tom Bumstead, Tetra Tech

The following presents a summary of work activities, problems encountered, and other pertinent details related to on-going construction work at the site. Additional details are provided in the attached Weekly Meeting Notes and Construction Daily Logs, including photographs of key work observed.

Date	Activity Summary
Monday September 28, 2020	• Discussion with contractor on spraying calibration plot for hydroseed slurry • Reclaim access road to Removal Areas A14 and A15 • Mix and spray hydroseed slurry on Removal Areas A9, A17, A18 and A19 • Mix and spray hydroseed slurry on southern and eastern portions of Consolidation Area
Tuesday September 29, 2020	• Determination of BFM bales delivered to project site • Preparation of Hydroseeding Application Rate QC spreadsheet and discussions with the contractor and Forest Service COR • Mix and finish spraying hydroseed slurry on Consolidation Area • Mix and spray hydroseed slurry on middle portion of Removal Area A1 and lower portion of A12/13
Wednesday September 30, 2020	• Reclamation of access road along top of Consolidation Area and into Removal Area A1 • Reclamation of access road and stockpile area near Removal Area A11 • Reclamation of access road from the top of the bluff to the stockpile area • Reclamation of the access road between the top of the bluff to FSR 31231 • Revisions to the Hydroseeding Application Rates QC spreadsheet • Mix and spray hydroseed slurry on upper portion of A12/13
Thursday October 1, 2020	• Mix and spray hydroseed slurry on Removal Area A6 • Mix and spray hydroseed slurry on Removal Area A16 • Mix and spray hydroseed slurry to lower portions of Removal Area A1 • Final reclamation of access roads around upper staging areas • Demobilization of equipment from the upper staging area to the top of the bluff
Friday October 2, 2020	• Hand seeding of reclaimed access road along top of Consolidation Area and into Removal Area A1 • Hand seeding of reclaimed access road and stockpile area near Removal Area A11 • Hand seeding of reclaimed access road from the top of the bluff to the stockpile area • Hand seeding of reclaimed access road between the top of the bluff to FSR 31231 • Demobilization of equipment from the work areas to the contractor's shop

Saturday October 3, 2020	• Contractor not on site during the day • No project work completed •
Sunday October 4, 2020	• Contractor not on site during the day • No project work completed •
	Additional Information
Problems Encountered	None noted.
Changes Discussed	None noted.

DAILY CONSTRUCTION REPORTS

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520R0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 23, 2020	Tuesday	0700	1800	Mostly Sunny and Breezy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 59 Max. 84	Dry with sun and breeze	114	2	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
2%	1%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Welded wire fencing for silt fence – 6 rolls @ 330 ft ea	
Young Guns Construction, Ludlow, SD	
Silt fence fabric – 3 rolls @ 1000 ft ea	
Young Guns Construction, Ludlow, SD	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Bobcat T190 Skid Steer Loader w/Attach			5	C
John Deere 750 Dozer			1	C
Komatsu 160 Excavator			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak		
Eric Atkins		
Dave Nagle		
Shayde Brengle		

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520R0001	June 23, 2020

28. NARRATIVE REPORT

Equipment inspections were completed on 3 pieces of equipment at the Young Guns shop on Tuesday morning. Included in the inspection were a Bobcat T190 skid steer loader with attachments, a Komatsu PC 160 excavator and a John Deere 750 dozer. All pieces of equipment were examined for accumulated dirt that may contain noxious weed seeds and any obvious engine oil or hydraulic oil leaks. All machines had been cleaned up and were ready to begin work. Upon completion of the inspection, the equipment was tracked to the project site, i.e. excavator and dozer or hauled to the project site, i.e. skid steer loader.

Once the dozer got to the top of the access road into the project site, it was used to open up the existing road a little more so that pickups could drive down the road and get access to the flat areas adjacent to the southern removal areas and the area adjacent to the consolidation area. This road is still very rough and great care needs to be taken when driving a vehicle into the work area. Best method of transportation into the work area is by UTV until the road gets improved.

One of the key work tasks for the day was the stakeout of the disturbance limits around the identified work areas. This stakeout was to be completed using a GPS surveying instrument and is dependent on the use of established control points around the project area. On Sheet C-101, three control points were identified, CP06, CP07 and CP19. When Brosz Engineering went out to check the base station setup, CP06 was destroyed during the construction work on Bluff I, CP07 was found and is still good and CP19 was found but the easting point was found to be 5 feet off. While CP07 was still in good shape, the point is at least a couple of miles away from the project site. Having good control points close to the project site saves time and makes the stakeout and backchecking progress much quicker.

The base station used for the disturbance boundary staking is located at the junction of the FSR 3123 and 31231 which is the road to the aggregate pile. This point is only a spike driven into the ground, so it is not permanent, but it tied back to CP07 and was therefore used as the base station. Disturbance limits were staked for the removal areas beginning at A1 and worked east through A8. The hill slope is very steep and is covered with very dense vegetation making the installation of the disturbance limit stakes difficult. All of the areas can be found when walking on the hill slope and moving from stake to stake.

Once the disturbance limit stakes had been installed, the silt fence below the removal areas could be installed. The contractor used a trenching attachment on the skid steer loader to dig a trench to install the bottom of the welded wire fence and the bottom of the silt fence fabric. Once the fence and fabric had been installed in the trench, fence posts were installed to hold up the wire fence and fabric. After the fence and fabric had been clipped to the fence posts, the surplus dirt from the trenching work was backfilled into the trench. Due to the late start from waiting for the staking to be completed, only one section of fence was installed below Area A1 before the end of the day. Once the installation system was figured out, the overall installation of the silt fence went fairly quickly. Plan is to have all the silt fencing completed by the end of the week.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 23, 2020



Bobcat T190 Skid Steer equipment inspection



Komatsu PC 160 Excavator inspection



John Deere 750 Dozer inspection



Removal Area A 1 disturbance limits staking



Trench and silt fence below Removal Area A 1



Silt fence installation down slope from Removal Area A 1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 24, 2020	Wednesday	0730	1800	Mostly Sunny and Hot

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 90	Dry with sun and breeze	114	3	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
2.5%	1%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Bobcat T190 Skid Steer Loader w/Attach		10	C	
John Deere 750 Dozer		0	C	
Komatsu 160 Excavator		1	C	
Komatsu 290 Excavator		0	C	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	
Shayde Brengle	X	
Beth Kalisiak	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	June 24, 2020

28. NARRATIVE REPORT

After a slow start on Tuesday to get the control point set for the GPS base station, the surveyor from Brosz Engineering was on site early and got to work setting the remaining Disturbance Limits. Disturbance Limits were staked for Removal Areas A10 through A19 with painted lath and flagging used to identify the boundary of each removal area. Also include in the stakeout was the stakeout of the Disturbance Limit around the cover soil borrow area. Young Guns Construction asked the surveyor to locate 6 additional control points around the work area to setup the base station for the GPS machine control system. These points were set up out of the active work areas around the work site so the base station could be set up close to the active work areas to minimize the radio distance between the machines and base station.

Silt fence installation continued through the day as the crew got used to the procedure developed with the trencher and fence installation. The trencher was used in all areas below the Removal Sites except A10 where the excavator crawled down the bank to dig the trench in the upper portion of the steep hill slope. One of the methods developed was to assemble 100 to 150-foot sections of the welded wire fencing and silt fence fabric on a somewhat level section of ground and then crimp the fabric to the wire. These sections were then loose rolled back up and transported to the installation sites and could then be directly installed into the trench. Once the fence and fabric were installed in the trench, steel fence posts were pounded into the ground and the top strand of the fence was clipped to the post to secure the fence in place.

Equipment inspection on the GPS excavator was completed when it was delivered to the project area. Due to the size and weight of the Komatsu 290i excavator, the machine was unloaded at the 90-degree bend in Tufte Road near Lex Burghduff's field. This location has ben used in the past to load and unload equipment as the truck and trailer can use the field access to get turned around. The Komatsu 290i was delivered clean with no dirt or mud in the pads, chain or undercarriage. Total machine hours were 67.8 when delivered with the latest machine maintenance completed at 12 hours as indicated on the filter cartridges. The machine was walked up Tufte Road and then up the steep down ramp and across the flats up to the aggregate pile and then into the Bluff A work site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 24, 2020



Silt fence installation below Removal Sites A3 and A4



Silt fence installation below Removal Site A1



Disturbance Limit stakeout around Removal Site A14



Silt fence installation below Removal Site A11



Disturbance Limit stakeout around Removal Site A17



Silt fence installation below Removal Site A10

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 25, 2020	Thursday	0730	1800	Mostly Sunny and Breezy

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 75	Dry with sun and breeze	114	4	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
3.5%	1%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Bobcat T190 Skid Steer Loader w/Attach		5	C
John Deere 750C LGP Dozer		0	C
Komatsu PC160LC Excavator		1	C
Komatsu PC290LCi Excavator		4	C
Komatsu PC210LC Excavator		4	C
Komatsu D51PXi Dozer		4	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	
Shayde Brengle	X	
Beth Kalisiak	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	June 25, 2020

28. NARRATIVE REPORT

Near the end of the day on Wednesday, the Komatsu PC 160 excavator was tracked down the slope above Removal Areas A10 and A17 to dig a trench to install the silt fence. Location of the silt fence was in a steep section of the hill slope that was very rocky and the skid steer with the trencher attachment could not get to it. As the excavator began to dig the trench, the engine began to billow black smoke and the power to the hydraulic controls decreased. After sensing something was wrong, the operator tracked the machine back up the hill to the consolidation area and shut the machine off. Preliminary prognosis was that the turbo had failed and caused the power decrease. The machine was tracked out of the work area up to the staging area for transport to the repair facility.

Equipment inspections were completed on a Komatsu PC 210 LC excavator and a Komatsu D51PXi dozer for work on the project. The excavator was brought in to replace the 160 excavator that had broken down. Both the excavator and dozer were delivered clean with no dirt or mud on the tracks, pads or under carriage. Total machine hours on the excavator were 425.5 with the latest service having completed at 424 hours. Total machine hours on the dozer were 19.9 and the machine looked like it was new with very little wear on the blade, pads or under carriage. Both machines were delivered to the intersection of FSR 3123 and 31231 and walked directly into the work area. Both machines were light enough that the transport trucks could pull the load up the hill leading to Picnic Springs campground and deliver to the road junction.

Silt fence installation continued to the last of the Removal Areas at A14 and A15. A majority of the installation was at the toe of the slope to reduce the amount of disturbance on the steep hill slopes near the top of the slope. Most of the silt fence was installed in the trenches dug with the trencher using the technique developed on Wednesday. Installation of the silt fence above Removal Area A19 and around the Consolidation Area in the area of Sites A7, A19, A9 and A18 is planned to be along the edge of the sandstone bluff to prevent material washing over the edge of the bluff. Instead of using the standard silt fence and fabric at these sites, straw wattles will be attached to the sandstone to prevent storm water from washing over the sandstone and washing over the edge of the bluff. Installation of the straw wattles will begin on Friday,

With all of the proposed machines to complete the project on site, the excavators and dozer tracked to Removal Sites A2 and A3. Most of the A2 site was relatively clear so it did not take much time to get it cleared off. Removal Site A3 was right next to A2 so as soon as A2 had been completed, work began on A3. The hill slope is very steep in this location, so the machine tracked down the slope and began work on clearing the trees first and then the brush. The 290 machine was used to clear the slope with the 210 being used to pull the material off the slope and place it in the area above the temporary access road. Volume of material being removed quickly increased and the contractor will likely need to start hauling the trees and brush out of the work area to maintain workspace at each of the removal areas. As the excavators were removing the trees and brush off the slope, the dozer was blading a road from the work area back to the junction of the consolidation area with the access road down the south draw. This road will likely be used to bring trucks into the work area to haul away brush, move contaminated material to the consolidation area and bring cover soil back into the excavation sites.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 25, 2020



Clearing and grubbing in Removal Area A3



Clearing and grubbing in Removal Area A3



Silt fence installation below Removal Areas A10 and A17



Silt fence installation below Removal Area A16



Silt fence installation below Removal Area A12 -13



Silt fence installation below Removal Areas A15, A14 & A12-13

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 26, 2020	Friday	0700	1700	Mostly Sunny and Hot

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 90	Dry with sun and breeze	114	5	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
4%	2%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23.		24. Type	Contract Item Number and Location of Use	Hours Used	
Weed Free Straw Wattles – 3 pallets @ 7 ea = 21 wattles	C	John Deere 750C LGP Dozer		0	C
Baker Metals, Baker, MT		Komatsu PC290LCi Excavator		10	C
		Komatsu PC210LC Excavator		10	C
		Komatsu D51PXi Dozer		5	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	June 26, 2020

28. NARRATIVE REPORT

With the silt fence installation completed that required the use of the trencher, it was returned to the rental store in Baker, MT on Friday morning. On the return trip, weed-free straw wattles were picked up at Baker Metals and brought back to the project site. These wattles are to be used on the sandstone bluffs above the remaining Removal Areas to prevent storm water washing over the sandstone and onto the cleared Removal Areas. Installation will be completed prior to beginning clearing and grubbing below the bluffs.

Clearing and grubbing continued on Removal Area 1 with one excavator working down the west edge and the other excavator working down the east edge. The hill slope is very steep, and the excavators work with the tracks up and down the slope to maintain stability of the machine. The machines are powerful enough to track up and down the steep slopes, but all handling of material is done when the machine is stationary on the slope. The large trees are pushed over and then moved up the hill to stockpile above the disturbance limits. Some of the trees require several handlings to get them to the top of the slope due to location on the slope and due to the size of the tree.

As the clearing and grubbing is completed, a large volume of material is being generated that must be stockpiled out of the disturbance limits before waste removal can begin. Several large stockpiles up slope of the Removal Area have been established and continue to increase in size as more of the area is cleared. A lot of material is still located on the steep slope and must be eventually moved prior to the existing topographic survey and waste removal work. Working this material on the slope up to the top of the Removal Area will take time.

Area above the disturbance limit at Removal Area 1 to stockpile vegetation material is quickly filling up. It is anticipated that a majority of the vegetative material will have to be hauled somewhere prior to completing the existing topographic survey. A temporary access road from the point of the bluff has been roughed in to facilitate the movement of haul trucks to the top edge of Removal Area 1 to load and haul the material to another storage area. Once the clearing and grubbing has been completed, the decision to haul the material and where the haul the material to will be made by the contractor.

In the special provisions of the project specifications, the stumps from the trees removed from the Removal Areas are to be ground up with the chips spread back on the finish grade along with the slash generated during the clearing and grubbing. The contractor mentioned that they could haul the stumps away and bury them in an old scoria pit and reclaim the pasture above the pit. Contaminants contained in the dirt and plant material must stay on the project site to prevent dispersal onto clean areas surrounding the former mine sites. No landfilling or burial of any materials from the project site will be allowed.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 26, 2020



Weed-free straw wattles delivered to the work area



Construction of truck access to Removal Area 1



Soil in root wads that cannot be taken off site



Clearing and grubbing along west edge of Removal Area 1



Knocking large tree down along east edge of Removal Area 1



Placing large tree in debris pile at top of Removal Area 1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 29, 2020	Monday	0700	1630	Sunny and Hot with a Slight Breeze

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min.65 Max.93	Dry with sun and breeze	114	8	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
7%	4%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
John Deere 750C LGP Dozer			0	C
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			10	C
Komatsu D51PXi Dozer			10	C
CAT 143H Road Grader			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	June 29, 2020

28. NARRATIVE REPORT

Over the weekend, several storms passed through Bowman and the Cave Hills and dropped rain over the entire area. Rain intensity at times was very hard and resulted in the gravel roads in the Cave Hills getting well soaked. Rain total over the weekend recorded in the rain gage behind the Forest Service job trailer equaled 0.2 inches.

Young Guns Construction mobilized their grader back to their shop over the weekend and began to clean it prior to inspection and use on the project. Overall, the machine cleaned up well but needed some additional cleaning in specific locations that had accumulated mud and did not get cleaned during the first pass. Once these areas were cleaned, the machine was inspected and passed inspection and is ready for use on the project.

Clearing and grubbing work continued on Removal Area A1 with the vegetation debris removed from the edges of the work area and piling the material in the open center. Once the vegetation material is removed, the steepness of the slope becomes very apparent and reveals the difficulty of working on such steep slopes. Numerous large rocks from the mining operation can be seen on the slope as these were pushed off the upper edge during the operation of the mine site. With the work being done on the slope removing the vegetation, it is likely that the existing topography may be quite different than that shown in the LiDAR survey due to the equipment moving the debris and dirt on the slope during the clearing activities.

All of the vegetative material except for the stumps and larger tree trunks will be placed on the finished surface of the cover soil and cover soil mixed with mulch. During the clearing and grubbing operation by the contractor, the large piles of vegetative debris are being pushed to the bottom of the slope to get it off the slope and out of the way. The decision on where to store the material is up to the contractor and they are responsible to get the material back up on the slope after the cover soil is placed. Disturbance to the vegetation along the toe of the slope during the silt fence installation was minimal and will require very little repair to reclaim the access route. If large hauling equipment is used along this same route to move the vegetative debris, the reclamation and revegetation work of this access route will be substantial. This will be a contractor decision but it will be made with the understanding that all access routes will have to be reclaimed and revegetated as part of the existing contract.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 29, 2020



Road grader inspected for use on project



Hour meter for road grader to be used on project



Felling a large tree on the steep slope of Removal Area A1



Clearing vegetative material from Removal Area A1



Vegetative debris piles at the bottom of Removal Area A1



Excavators working together to clear vegetation in Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
June 30, 2020	Tuesday	0730	1730	Overcast & Rain Showers AM Partly Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 70	Dry with sun and breeze	114	9	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
8%	5%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
John Deere 750C LGP Dozer		0	C
Komatsu PC290LCi Excavator		8	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		10	C
CAT 143H Road Grader		2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	June 30, 2020

28. NARRATIVE REPORT

Thunderstorms moved into the region overnight and generated rainfall in both Bowman and at the project site. These storms were followed by a weather system that brought general overcast and rain showers for most of the morning. Total rainfall for the overnight rain and showers during the day equaled 0.4 inches.

After the grader was inspected and approved on Monday, the grader was mobilized to the work site. The first work done was to blade the access road from FSR 31231 to the top of the Bluff and then down into the work area. All the grader did was knock off the high spots on the two-track across the terrace to smooth out the road. At the top of the road into the work area, the grader moved a lot of rock from the exposed rock cliff and moved it across the road and smoothed the road out to make access down this section easier. The remainder of the road was graded and smoothed out to remove the holes and divots created by the dozer during the original road opening. All of the road work was done at a very minimal level to just improve the access now with no long-term plan for future improvements.

As a result of just removing the grass and vegetation from the road surface to smooth out the road, large areas of dirt were exposed on the road surface. With the rain overnight and during the morning, all of these areas became very muddy with trucks slipping sideways in the roadway and spinning tires when trying to go up the steeper sections. The road remained passable but if a larger storm dumps more rain on the project site later in the summer, access into the site may become an issue and shut the job down for a day or so. This level of road development is the contractor's choice.

Clearing and grubbing continued on Removal Area A1 and enough vegetation has been removed to get a better sense of how steep the hill slope is and how big the removal area is. In the locations where all the vegetation has been cleared, the soil is bare with very few twigs and brush remaining on the surface. The work now is focused on finishing all of the remaining area of Removal Area A1 to look similar to this so the existing topographic survey can be completed. It is anticipated that this work will be completed on Wednesday or by mid-day on Thursday.

Clearing and grubbing began on the Consolidation Area by stripping the sod and brush off the level areas on top with the dozer. This material will be pushed up into a pile and stored until all the contaminated soil is removed and placed in the Consolidation Area. After all the contaminated material has been placed, this material will be placed on top of the contaminated soil and revegetated.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JUNE 30, 2020



Final cleanup in southeast corner of Removal Area A1



Completed work at bottom of Removal Area A1



Final cleanup in southeast corner of Removal Area A1



Final cleanup in southeast corner of Removal Area A1



Muddy access road after rain overnight and during morning



Clearing and grubbing on consolidation area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 1, 2020	Wednesday	0900	17300	Mostly Sunny and Hot

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 85	Dry with sun and breeze	114	10	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
9%	8%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23.		24. Type	Contract Item Number and Location of Use	Hours Used	
	C	John Deere 750C LGP Dozer		0	C
		Komatsu PC290LCi Excavator		6	C
		Komatsu PC210LC Excavator		6	C
		Komatsu D51PXi Dozer		8	C
		CAT 143H Road Grader		2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycha Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 1, 2020

28. NARRATIVE REPORT

Straw wattles that meet Contract Specification 713.12 were installed along the edge of the rimrock beyond Removal Area A19 during the day. The COR approved the installation at this location as installation of silt fence would be impossible in the solid sandstone and would be ineffective if installed at the base of the bluff. During any summer thunderstorm events that create runoff from the removal area, the wattles will be checked to ensure thy are keeping the water from running off the bluff.

It is anticipated that the clearing and grubbing will be completed on Thursday based on discussions with the contractor. On Monday of next week, additional road improvements will be made to the access road into the work area and on Tuesday the existing ground survey will be completed. No discussions on work next week beyond Tuesday have been completed.

Around midday when the Komatsu 210 excavator was working on Removal Area A7, one of the hoses to the thumb on the bucket broke and disabled the machine. A replacement hose was finally brought to the site around 4 PM and the Komatsu sales rep installed the hose on the machine and got the bucket thumb operational again. The machine got back to work again around 5 PM and finished out the day.

Also, on site during the afternoon was the Komatsu representative to provide information and training on the integrated machine control system on the 290 excavator and the D51 dozer. Erick Atkins worked with the rep on the operation of the excavator and Dave Nagle worked with the rep on the operation of the dozer. Both operators and machines are ready to begin work using the machine control capabilities in the excavation and placement of the contaminated waste.

Clearing and grubbing continued during the day when the machines were not broke down or the operators were not learning the use of the machine control capabilities of the excavator and dozer. Work was completed on Removal Areas A4, A5, A6, A7, A10 and A14. Clearing and grubbing work on the Removal Areas must meet the provisions listed in Section 201 of FP 14.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 1, 2020



Clearing and grubbing on Removal Area A3



Clearing and grubbing on Removal Area A6



Existing vegetation on Removal Area A5



Clearing and grubbing on Removal Area A10



Straw wattles along rimrock below Removal Area A19



Clearing and grubbing on Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 2, 2020	Thursday	0700	1600	Mostly Sunny and Hot

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max.88	Dry with sun and breeze	114	11	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
10%	10%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23.		24. Type	Contract Item Number and Location of Use		Hours Used	
	C	John Deere 750C LGP Dozer			0	C
		Komatsu PC290LCi Excavator			10	C
		Komatsu PC210LC Excavator			10	C
		Komatsu D51PXi Dozer			5	C
		CAT 143H Road Grader			2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nagle	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycha Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 2, 2020

28. NARRATIVE REPORT

A question came up on the need to remove the sagebrush and grass from the Removal Areas and how much clearing and grubbing must be completed. Emails were exchanged between Larry C and Tom B on this and it became clear that all of the native vegetation needs to be removed to bare dirt to meet the contract specifications. These specifications are listed in FP 14 in Sections 210.04 and 201.05. The specifications clarification to get the native vegetation to bare ground was relayed on to the contractor and he will get all Removal Areas cleared and grubbed to the bare soil.

The contractor mentioned that they are planning to have the clearing and grubbing completed by the end of this week and were scheduling to have the surveyor out next week to survey the existing topography at each of the Removal Areas. One specification issue that may come up is how will the surveys be compared and who will make the call on if the surveys are significantly different to create a bust in the survey. Larry C and Tom B exchanged emails on this and did not get it resolved during the day.

A second issue that will come up will be what to do with the grass, small brush and dirt removed from the Removal Areas during the clearing and grubbing process. This material is all contaminated as the dirt is from contaminated areas and the grass and brush grew in contaminated soil so the material cannot leave the project site. After several emails between Larry C and Tom B, it was resolved that the grass, small brush and dirt would be incorporated into the lifts in the consolidation area with the other contaminated material. Care will have to be taken to not put a lot of material in one lift or over a large area as these conditions could lead to compaction problems in the lifts.

The contractor asked about the volume of fill available in the cover soil borrow area and wanted to know if enough material was available in the site to meet the fill requirements after the contaminated soil had ben removed from the Removal Areas. Larry C forwarded the borrow soil report and the report concluded that the volume of material that is needed is contained in the borrow area. This report was reviewed, and the conclusions presented were accepted.

Clearing and grubbing at all of the Removal Areas is getting very close to being completed. Based on the clarification on the extent of clearing and grubbing required, the contractor was going back through the work areas and getting all of the remaining work completed.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 2, 2020



Dirt, grass and small brush to be included in Consolidation Area



Clearing and grubbing progress on Removal Area A8



Clearing and grubbing progress on Removal Area A19



Clearing and grubbing progress on Removal Area A10



Clearing and grubbing progress on Removal Area A14



Clearing and grubbing progress on Removal Area A12-13

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 6, 2020	Monday	0900	1800	Mostly Sunny AM; Overcast and Showers PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 70 Max.75	Dry with sun and breeze	114	15	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
13%	10%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23.		24. Type	Contract Item Number and Location of Use		Hours Used	
	C	John Deere 750C LGP Dozer			0	C
		Komatsu PC290LCi Excavator			10	C
		Komatsu PC210LC Excavator			8	C
		Komatsu D51PXi Dozer			10	C
		CAT 143H Road Grader			2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 6, 2020

28. NARRATIVE REPORT

Over the weekend, several storms passed through Bowman and the Cave Hills and dropped rain over the entire area. Rain intensity at times was very hard and resulted in the gravel roads in the Cave Hills getting well soaked. Rain total over the weekend recorded in the rain gage behind the Forest Service job trailer equaled 0.2 inches.

Topographic survey of the bare ground at each of the Removal Areas will be completed on Tuesday. This data will be used to evaluate how close the LiDAR data used to develop the design package is to the actual ground surface. Specification Section 152.05 (c) states that if the LiDAR data and the actual data are plus or minus 0.5 feet different from each other the drawings may need to be redone to ensure the excavation gets all the contaminated soil removed from each of the Removal Areas. Assessment of the collected survey data with the LiDAR surface will be completed by the surveyor before any excavation work can begin.

During the clearing and grubbing of the Removal Areas, several large piles of dirt, grass and small brush were generated. This material is contaminated and cannot leave the project site. To get rid of this material, it will be incorporated into the compacted lifts in the Consolidation Area. To minimize the impact to the material compaction, the material will be added to lifts in small amounts so the material from the Removal Areas is the largest percentage of the lift and can be compacted as described in Section 204.05 (a).

Test pits were excavated in the cover soil borrow area to get an idea of how much cover soil is actually available in the proposed borrow area. Two test pits were dug in the northern part of the proposed borrow area with one pit dug in the southern part of the borrow area. The two pits in the northern part encountered a very large percentage of rock and layered sandstone before the digging was stopped. The pit in the southern part was good soil but contained numerous large rock that were distributed throughout the soil column. Based on the information determined from the cover soil test pits, the contractor had questions on whether there was enough material in the borrow area to get the volume necessary to backfill the excavation in each of the Removal Areas. When the COR is on site on Tuesday, this will be one of the main areas of discussion to get resolved during the day.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 6, 2020



Test pit in borrow area with large percentage of rocks



Test pit in borrow area with large percentage of rocks



Final clearing and grubbing in Removal Area A1



Final clearing and grubbing at Removal Area A3



Final clearing and grubbing at Removal Area A4



Final clearing and grubbing at Removal Area A5

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Dave Shimek and Kurt Hansen

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 7, 2020	Tuesday	0700	1700	Mostly Sunny AM; Mostly Cloudy & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 80	Dry with sun and breeze	114	16	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
14%	10%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
John Deere 750C LGP Dozer		0	C
Komatsu PC290LCi Excavator		5	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		7	C
CAT 143H Road Grader		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 7, 2020

28. NARRATIVE REPORT

Thunderstorms moved into the region overnight and generated rainfall in both Bowman and at the project site. These storms included strong winds and rain. Total rainfall for the overnight rain and showers during the day equaled 0.3 inches.

Included in the contract is the verification testing of the site in Section 204.08. The first part of the specification states that the testing will be completed after the mine waste is removed, any regrading is completed, and the cover soil has been installed. This clause implies that the cover soil will bury any remaining contaminated soil so that the contamination will not penetrate through the cover soil. If, the contamination is strong enough, the threshold values may be exceeded at the surface of the cover soil. If this happens, then additional cover soil would be added to the hot spots until the contamination levels are below the threshold levels. At this point, the cover soil and compost can then be placed over the entire excavation area.

In the second paragraph of this Section, it states that the Contracting Officer may also have testing done after mine waste excavation is completed and before regrading is begun. This testing would be done to verify that all the mine waste with high levels of contaminants have been removed and that the remaining soil is below the threshold level prior to the installation of the first lift of cover soil.

With the mine waste excavation scheduled to begin this week, the preferred method of verification testing needs to be determined soon so the personnel scheduled to complete the testing can be scheduled to be on site in a timely manner and not cause any construction delays.

During the day, the surveyor from Brosz Engineering was on site and began completing the existing ground survey after clearing and grubbing had been completed as specified in Section 152.05 (m). Areas surveyed during the day included A2, A3, A4, A5, A9, A10 and the Consolidation Area. On the ground survey work was finished around 3 PM so the surveyor could get back to town and begin the data processing to compare the bare ground data with the LiDAR data used to develop the design sheets. Comparison of the data sets will be completed to determine if the difference between the bare ground and LiDAR surfaces meets the 0.5-foot tolerance specified in Section 152.05 (c).

Excavation of 3 test pits in the cover soil borrow area on Monday showed a large amount of rock in the area that had been included in the designated borrow area. A total of 9 additional test pits were dug on Tuesday to get a better understanding of the actual volume of material that will be available in the identified borrow area. Within the designated borrow area, several bands of exposed rock could be identified running parallel to the rimrocks on the bluff above the site. Test pits dug within or near these bands of rock outcrops contained a very high percentage of rock including fractured and layered sandstone. As the pits moved away from the bands of rock outcrops, the percentage of rock decreased, and the deeper layers became silty clays and deeper they became dense clays. The upper horizon of decomposed sandstone and the silty clays that would break apart when handled would be suitable for use as cover soil in the excavated mine waste areas.

Deeper excavation in the test pits exposed a coal layer that could potentially contain high levels of radiation. To verify the level of contamination in the coal layer and in other areas of the borrow site, testing would be completed on Wednesday morning to determine the levels of radiation and arsenic in areas around the excavated test pits. Results of these tests will determine how much usable material is available in the delineated borrow area and if an additional borrow area will be needed.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 7, 2020



Coal layer in test pit in northern portion of Borrow Area



Large clay clumps from test pit in northern portion of Borrow Area



Decomposed sandstone and large rocks from test pit in southern portion of Borrow Area



Final clearing and grubbing of the Consolidation Area



Final clearing and grubbing of Removal Area A19



Final clearing and grubbing of Removal Area A10

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Dave Shimek and Meghan Reedy

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 8, 2020	Wednesday	0700	1700	Mostly Sunny and Warm

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 55 Max. 75	Dry with sun and breeze	114	17	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
15%	10%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
John Deere 750C LGP Dozer			0	C
Komatsu PC290LCi Excavator			0	C
Komatsu PC210LC Excavator			0	C
Komatsu D51PXi Dozer			0	C
CAT 143H Road Grader			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 8, 2020

28. NARRATIVE REPORT

Thunderstorms moved into the region overnight and generated rainfall in both Bowman and at the project site. These storms included strong winds and rain along with hail in some locations. Total rainfall for the overnight rain equaled 0.7 inches.

During the day, the surveyor from Brosz Engineering was on site and began completing the existing ground survey after clearing and grubbing had been completed as specified in Section 152.05 (m). Areas surveyed during the day included A6, A7, A8 and A1. On the ground survey work lasted until the end of the workday so the surveyor did not get back to town and begin the data processing to compare the bare ground data with the LiDAR data used to develop the design sheets. Comparison of the data sets will be completed to determine if the difference between the bare ground surface after clearing and grubbing and LiDAR surfaces meets the 0.5-foot tolerance specified in Section 152.05 (c).

An issue that came up during the excavation of the test pits in the borrow area was whether or not the coal seam was radioactive or if the arsenic levels in the cover soil exceeded the cleanup levels defined in Section 204.02 (a). A geiger counter and XRF analyzer were brought to the site on Wednesday morning by Meghan Reedy from the Sioux Ranger District to test the soils exposed during the excavation of the test pits. For the radioactive testing, the background level equals 0.015 millirems per hour with the standard being 0.045 or 3 times the background level. This is the cleanup level established by the Forest for the Riley Pass site. The black coal seam measured 0.027 millirems per hour however on an exposed cut face just downhill from the test pit where the seam was identified, the reading was 0.05 millirems per hour. These readings suggest that any borrow soil removed from the borrow area must be from above the clay and coal seam. The XRF instrument was used to test the soil for arsenic and these tests were completed on several of the piles where the soil had a rusty iron oxide color. Arsenic readings on the soil piles ranged between 17 and 33 ppm with the standard being less than 142 ppm. Arsenic levels will not be a problem if cover soil is used from this location.

As discussed in the daily report from yesterday, a lot of rock was included in the dirt that was removed from the test pits. In areas closer to the rim rocks, the entire test pits were rock whereas the test pits further down the slope consisted of decomposed sandstone soil that overlaid a clay layer. Photos of all 12 test pits and the piles of the excavated material were taken and will be assembled into a Site Investigation Report to document the conditions found at the borrow site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 8, 2020



Testing coal seam in borrow site test pit for radiation



Testing test pit soil for radiation



Large volume of rock in a small test pit near base of rim rocks



Area toward top of cut had highest levels of radiation in borrow site



Chunks of clay from lower levels of test pits



Large rocks along right edge of photo were common in test pits below base of rim rocks

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 9, 2020	Thursday	0800	1800	Mostly Sunny and Warm

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 84	Dry with sun and breeze	114	18	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
16%	11%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
John Deere 750C LGP Dozer			6	C
Komatsu PC290LCi Excavator			8	C
Komatsu PC210LC Excavator			0	C
Komatsu D51PXi Dozer			8	C
CAT 143H Road Grader			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 9, 2020

28. NARRATIVE REPORT

During the day, the surveyor from Brosz Engineering was on site to complete the existing ground survey after clearing and grubbing had been completed as specified in Section 152.05 (m). Areas surveyed during the day included A10, A11, A12/13, A14, A15, A16, A17 and A18. On the ground survey work was completed around 4 PM so the surveyor headed back to town and began the data processing to compare the bare ground data with the LiDAR data used to develop the design sheets. Comparison of the data sets will be completed to determine if the difference between the bare ground surface after clearing and grubbing and LiDAR surfaces meets the 0.5-foot tolerance specified in Section 152.05 (c).

Using the survey data collected on Tuesday for Removal Areas A2, A3, A4, A5, A10 and A19, the Tetra Tech design team reviewed the survey data and compared the cleared and grubbed surface with the LiDAR surface used to design the project. After their analysis was completed, the Tetra Tech design team verified that the cleared and grubbed surface was comparable to the LiDAR surface and that the excavation in those Removal Areas could proceed.

Upon confirmation of the survey data from the Tetra Tech design team, the Forest Service COR authorized Young Guns Construction to proceed with the excavation of the mine waste in Removal Areas A2, A3, A4, A5, A10 and A19.

After receiving the authorization to proceed with the excavation of the mine waste in Removal Areas A2, A3, A4, A5, A10 and A19, Young Guns Construction began removal work around 11 AM. The PC 290 excavator began work on Removal Area A5, moved to A4 and then finished the day working to finalize the edges around A19. The D51 dozer with the machine control GPS worked in A19 to remove the center material to grade and then moved down to A10 and began pushing the mine waste up to the top of the slope. Material removed from A5, A4 and A19 was pushed into the Consolidation Area with the JD 750 dozer. The JD 750 has no GPS machine control so its sole purposed is to bulk move material into the Consolidation Area. The material from A5, A4 and A19 was close enough to the Consolidation Area that loading it into a truck and hauling it to the Consolidation Area was not justified. All of the excavation of the mine is being completed with machine control GPS machines and meets the specifications in Section 204.04 (a). Placement of the material in the Consolidation Area must meet the specifications in Section 204.04 (b) and will be completed using machines without machine control GPS. Two criteria that will have to be watched carefully will be the placement of material in layers less than 12-inches and the moisture content of the mine waste to get good compaction.

Near the end of the day, a BOMAG sheepsfoot compactor was delivered to the project site to complete the compaction of the mine waste in the Consolidation Area. This machine will be inspected on Friday morning prior to beginning work in the Consolidation Area.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 9, 2020



Moving material from RA A5 into the Consolidation Area



Final excavated surface at Removal Area A5



Grading the slope below the rim rocks at RA A4



Grading mine waste out of Removal Area A19



Spreading mine waste material in Consolidation Area



Final grading of excavation surface in Removal Area A4

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 10, 2020	Friday	0730	1730	Sunny AM; Overcast/Thunderstorms PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 80	Dry with sun and breeze	114	19	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
17%	12%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
John Deere 750C LGP Dozer		4	C
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		4	C
Komatsu D51PXi Dozer		10	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		8	C
Freightliner 4700-gal Water Truck		2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 10, 2020

28. NARRATIVE REPORT

Thunderstorms moved into the region overnight that resulted in rainfall at the project site. Total rainfall for the overnight rain equaled 0.2 inches. Toward midafternoon, another thunderstorm moved into the project area and resulted in lightening, thunder and rain. Total rainfall for the afternoon rain equaled 0.1 inches.

Equipment inspections were completed on 2 dump trucks, a water truck and a compactor during the day. The trucks were inspected in the Young Guns Construction shop parking lot and the compactor was inspected prior to beginning work in the Consolidation Area. All trucks were clean and free of mud on the frame, axles, fenders and wheel wells. The compactor was delivered clean from the equipment dealer and has only 72 hours on the hour meter so the machine is almost brand new.

Excavation continued on the authorized Removal Areas during the day.

At Removal Area site A19, sandstone bedrock was encountered just above and just at the excavation grade shown on the excavation surface. All of the edges were cut to the limit of the excavation surface with the material being pushed into the Consolidation Area with the dozer.

At Removal Area site A3, the cleared and grubbed surface was excavated to the bottom of the excavation surface with the material being placed on the access road above the work site. Material at the bottom of the work site was cut and placed on the slope above the excavator and then the material was moved onto the access road when the excavator moved around the material and got beside or above it to handle it a second time. In the work area, the slope is so steep and the excavation surface is right down to the underlying bedrock that several time the excavator would track up the slope to begin moving the material onto the access road and slide down the hill as the tracks had no dirt to grab onto and hold the machine on the steep slope.

At Removal Area site A10, a majority of the material was pushed up the hill with the dozer to the Consolidation Area. With the GPS machine control in the machine, the dozer operator knew where the bottom of the excavation surface was located so extra material was not removed when pushing the material up the hill. With a majority of the material pushed up the hill, the GPS machine-controlled excavator came in and cleaned up the edges and checked the bottom elevation to make sure it matched the design surface.

As the volume of material being placed in the Consolidation Area increased, the compactor began working full time to get the material compacted according to Section 204.05 (a). These are the specifications for Compaction Method A that describe how the mine waste must be placed and compacted in the Consolidation Area. One of the issues that came up after the work on Thursday was the need for water conditioning the material before the material is compacted. Young Guns Construction brought a water truck to the Consolidation Area and began watering each lift of material after it was placed and prior to it being compacted. With the water conditioning of the mine waste material, all conditions included in Section 204.05 (a) were being met.

After a conference call between the Tetra Tech design team and the Forest Service, a request was made to collect samples from the test pits that showed the black granular material in the layers below the clay. These samples would be sent to a soils lab for analysis to determine what contaminants are present in this layer Unfortunately, late in the day on Thursday, Young Guns Construction went back into the site and backfilled all of the test pits to prevent any humans or animals from falling into the holes. An email was sent to the Tetra Tech design team that the samples could not be collected without digging a new set of test pits.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 10, 2020



Final excavation in southwest corner of Removal Area A19



Compaction of mine waste in the Consolidation Area



Water conditioning of mine waste in Consolidation Area



Pushing material from Removal Area A10 to Consolidation Area



Final excavation of Removal Area A3



Final grading of excavation surface in Removal Area A10

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 13, 2020	Monday	0800	1800	Sunny AM; High Overcast and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max.78	Dry with sun and breeze	114	22	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
19%	15%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		5	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		10	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 13, 2020

28. NARRATIVE REPORT

Using the survey data collected on Wednesday and Thursday for Removal Areas A1, A6, A7, A8, A9, A11, A12/13, A14, A15, A16, A17 and A18, the Tetra Tech design team reviewed the survey data and compared the cleared and grubbed surface with the LiDAR surface used to design the project. After their analysis was completed, the Tetra Tech design team verified that the cleared and grubbed surface was comparable to the LiDAR surface and that the excavation in the remaining Removal Areas could proceed.

Upon confirmation of the survey data from the Tetra Tech design team, the Forest Service COR authorized Young Guns Construction to proceed with the excavation of the mine waste in Removal Areas A1, A6, A7, A8, A9, A11, A12/13, A14, A15, A16, A17 and A18.

Excavation begun, continued or started at several Removal Areas during the day.

At Removal Area site A2, mine waste was removed from the hillslope and loaded into the dump truck to haul the material to the Consolidation Area. This site is fairly small, so all of the material was removed to the excavation surface in a couple of hours with the PC 290 excavator.

At Removal Area site A9, mine waste was removed from the upper portion of the site immediately below the exposed sandstone bluff with the Komatsu 290 excavator sitting on the bedrock bluff. All material was loaded into the dump truck and hauled around the point to the Consolidation Area.

At Removal Area site A17, mine waste was removed from the upper portion of the site below the crest of the slope with the Komatsu 290 excavator sitting on the top of the slope. All material was loaded into the dump truck and hauled to the Consolidation Area where it was dumped and spread out.

At Removal Area site A11, all mine waste was removed from the site with the Komatsu 290 excavator and loaded into the Freightliner dump truck for hauling to the Consolidation Area. This site is also fairly small, and all of the material was located on top of the bluff, so all of the material was removed to the excavation surface in a short period of time.

At Removal Area site A12/13, removal of the mine waste was begun mid afternoon and was not completed by the end of the day. The volume of material to be removed from this site will be less than originally estimated due to the presence of the sandstone bluff that is present at the site a few feet under the surface at the upper end of the site. Mine waste removal will follow the excavation surface on the upper portion of the site and then jump below the bluff and resume the excavation surface at a point where the vertical sandstone meets the design surface.

Compaction of the mine waste material in the Consolidation Area continued all day as the material was delivered. Each lift of mine waste is being spread out in depths less that the 12-inch specification with water being added to each lift to ensure the material is water conditioned for good compaction. The compactor runs continuously to keep up with the material be dumped, spread out and water conditioned at several locations within the Consolidation Area.

The Tetra Tech design team and the Forest Service OSC and COR had a conference call to discuss the presence of the black layer below the clay layer in the Borrow Site and how to determine its contamination level. A request was made to Young Guns Construction to dig a couple of additional test pits and collect samples of the black layer and send into a lab for analysis. The first test pit dug was just south of the test pit where the black layer was found on last Tuesday. No black layer was found in this test pit, so another test pit was dug closer to the original pit. A black layer was found at this location and two samples were collected and placed in plastic bags. Both samples were composed of smaller pieces of clay with the black material attached to the clay particles. A third test pit was dug just above the lower edge of the borrow area immediately above the test pit scraped in the face of the steep slope below the lower edge where the high level of radiation was observed on Wednesday. A prominent black layer was found at this location immediately below the clay layer in the test pit. Both samples were composed of larger pieces of clay with the black layer attached to the clay. Two chunks of clay were placed in each of the 2 samples plastic bags. All four sample bags will be transported to Billings by Michelle Weidman when she has completed her plant surveys on Bluffs F, G and I on Thursday of this week.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 13, 2020



Granular black material attached to clay clump from test pit in Borrow Site



Final grading at Removal Area A11 using GPS machine control excavator



Final excavation surface at Removal Area A2



Stockpiling mine waste at Removal Area A14



Spreading, water conditioning and compacting mine waste in Consolidation Area



Final excavation grade in Removal Area A12/13 using GPS machine control excavator.

USDA - Forest Service

CONTRACT DAILY LOG
(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Megan Reedy, USFS; Michele Weidner, TT; Heather Gardner, TT; Sean Kite, TT

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 14, 2020	Tuesday	0730	1800	Sunny AM; Partly Cloudy/Overcast PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 56 *Max.* 76	Dry with sun and breeze	114	23	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
20%	16%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		10	C
Komatsu HM400 Articulated Truck		6	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		2	C
Freightliner 10 cu yd Dump Truck		4	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 14, 2020

28. NARRATIVE REPORT

After a sunny and cool morning, clouds moved into the region and produced a short duration rain showers just after noon. Rainfall total in the rain gage at the job trailer was approximately 0.05 inches.

Excavation began, continued or started at several Removal Areas during the day.

At Removal Area site A1, the dozer began trimming the contaminated material off the area above the access road and stockpiled it in a wide spot in the road for hauling to the Consolidation Area at a later time.

At Removal Area site A9, the Komatsu 290 walked into the bottom of the work area and removed the contaminated material to the excavation grade. The sandstone bluff was too high so the material was left in a pile at the toe of the bluff. Later in the day, the Komatsu 210 excavator and the Freightliner dump truck moved a majority of the material in the pile into the Consolidation Area. A small amount of material remains below the bluff as the smaller excavator could not reach down and completely clean up the entire pile.

At Removal Area site A14, the Komatsu 290 excavator and Komatsu HM 400 haul truck were used to remove all of the mine waste from the site and haul it to the Consolidation Area. Prior to completing the site, all mine waste was removed from Removal Area A15 as the access to A15 was through A14 and would not have been feasible if the work in A14 was completed first. Use of the haul truck greatly sped up the removal process as 30 cubic yards of material could be hauled with the haul truck compared with 10 cubic yards of material in the regular dump truck.

At Removal Area site A15, the mine waste was removed using the Komatsu 290 excavator and the Komatsu HM 400 haul truck. An old access road located below the site was used as the access route to the site but had to be widened to accommodate the width of the haul truck. When backing up the box of the haul truck leaned away from the work area as the outside tires got off the edge of the old access road.

At Removal Area site A17, the mine waste was removed to the excavation grade with the Komatsu 290 excavator from the upper half of the work site was and loaded into the Freightliner dump truck for hauling to the Consolidation Area. Completion of the excavation at the site will be completed at a later time when the 290 excavator tracks down to the bottom of the site and removes the contaminated material along the bottom edge. Getting the contaminated material into the haul truck will require the material to be handled 2 or 3 times to get it up the slope so it can be loaded.

At Removal Area site A18, the contaminated mine waste was removed using the Komatsu 290 excavator and hauled to the Consolidation Area in the Freightliner dump truck. All of the contaminated material was located in a small area on the south side of the knob located along the southern edge of the Consolidation Area. The distance between the work area and the Consolidation Area boundary was too far to directly place the mine waste in the Consolidation Area so the dump truck was used to get the material in the correct location.

Similar to Monday, compaction of the mine waste material in the Consolidation Area continued during the entire day. Each lift of mine waste was spread out to depths less that the 12-inch specification with water being added to each lift to ensure the material is water conditioned for good compaction. Due to the time delay between the loads of contaminated mine waste material being delivered to the Consolidation Area, the dozers spent a lot of time idling between spreading the material out over the Consolidation Area. At times, the mine waste material in each lift is not spread out with a uniform level surface. Windrows of material or grooves in the lift occur before the compactor works on the site. Section 204.05 (a) specifies that the material placed to the specified depth but does not mention how uniform the surface needs to be prior to compaction.

Just before noon, Diesel Machine Incorporated delivered the Komatsu HM 400 Articulated Haul Truck to the Young Guns shop and unloaded it off the lowboy trailer. A quick inspection of the machine showed that the machine had been thoroughly cleaned with no mud or potential noxious weed seeds on the machine. This machine is almost new with only 700 hours on the hour meter. It appears that a complete service of the machine was performed in April prior to it being rented out on a different project.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 14, 2020



Partial mine waste removal from Removal Area A17



Excavation grade after waste removal at Removal Area A18



Spreading mine waste material in Consolidation Area



Excavation and loading mine waste from Removal Area A15



Preliminary mine waster removal at Removal A1



Excavation grade after waste removal at Removal Area A14

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Kurt Hansen, USFS; Michele Weidner, TT; Heather Gardner, TT; Sean Kite, TT

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 15, 2020	Wednesday	0730	1730	Sunny AM; Scattered Clouds PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 78	Dry with sun and breeze	114	24	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
21%	17%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		9	C
Komatsu HM400 Articulated Truck		10	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		1	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 15, 2020

28. NARRATIVE REPORT

Excavation began, continued or started at several Removal Areas during the day.

At Removal Area site A1, the area above the primary access road contains a large volume of material that needs to be removed for both in the contaminated material removal and the regrading of the site. This material is being pushed to a loading site with the dozer and then loaded into the haul truck with the Komatsu 210 excavator. The 210 excavator does not have the machine control GPS so the grading is being done with the dozer that is equipped with the machine control GPS. Final grading of the site will be completed with the Komatsu 290 excavator when it moves into the A1 removal area.

At Removal Area site A12/13, the Komatsu 290 excavator tracked down around the sandstone bluff to get to the contaminated material located directly below the exposed sandstone bluff. A majority of the travel route is outside the Removal Area boundaries so will have to be restored after the cover soil and cover soil and mulch has been added to the excavation area. The area below the sandstone bluff is very steep and required the excavator to excavate the contaminated material and stockpile the material and then climb back on top of the bluff to get the material loaded into the haul truck or place it in a second stockpile until the haul truck became available. The access road into the site goes through Removal Area A12/13 and the final excavation of the contaminated waste will not be completed until immediately before the excavation surface survey to maintain the access road profile in its current condition.

At Removal Area site A17, the Komatsu 290 excavator had to crawl down the steep slope and excavate the contaminated material from the bottom of the slope and stockpile the material midway up the slope. The excavator moved up the slope and continued the excavation of the contaminated material and stockpiled the material further up the slope. When all of the material could be reached from the top of the site, the excavator moved to the top of the site and loaded the material into the haul truck.

At Removal Area site A16, the Komatsu 290 excavator accessed the site by tracking down the access road used to install the silt fencing for Removal Areas A1 through A6. Where the access road veered out of the historic location, the excavator tracked directly down slope toward the Removal Area making a right turn near the middle of the work area and tracking into the site. For the haul truck to get to the site, it had to travel directly down the steep slope to the bottom and then turn around and back up the slope to the bottom of the Removal Area so the excavator could load the truck. To haul the contaminated material to the Consolidation Area, the haul truck drove directly downhill to the bottom made a 180 degree turn on the toe of the hill slope and then drove directly up the hill to the access road and then into the Consolidation Area. Two partial loads and two full loads of contaminated material were excavated and hauled out of this site.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day. During an afternoon visit to the site, the inspector noticed that the surface being compacted was very rough and that the compactor was swaying side to side as it moved over the rough graded surface. Also noticed was the very steep edge of the lift that went from the top of the lift to the lift below on almost a vertical slope. The inspector asked the project superintendent if the rough surface and steep edges was standard construction practice and he said that they were not. He then called the main dozer operator to get on the fill and smooth out the surface and taper the edges so the material could be compacted easier and get a more uniform compaction of the entire surface. Compaction of the smoother graded surface meets the intent of specifications Section 204.05 (a) and will allow a better blending together of the lifts on top of and adjacent to the current work area.

Water conditioning of mine waste material was completed on each lift of the mine waste material after the material had been spread out over the southeastern corner of the Consolidation Area. By adjusting the spray volume and the speed of the truck over the site, the volume of water was sufficient to get the mine waste wet and allow good compaction. The sheepsfoot drum on the roller has vertical cleaners on the drum and the wetted material clogs the horizontal spacing between the protrusions on the drum showing the clay material is getting enough moisture to get it wet and condition it for compaction.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 15, 2020



Final excavation surface at Removal Area A14



Excavation surface below exposed sandstone bluff at RA 12/13



Spreading and grading mine waste in Consolidation Area



Loading mine waste from upper section of Removal Area A1



Final excavation surface at Removal Area A17



Final excavation surface at Removal Area A16

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Meghan Reedy, USFS; Lydia Williams, USFS; Michele Weidner, TT; Heather Gardner, TT; Sean Kite, TT

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 16, 2020	Thursday	0730	1730	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min.65 Max.88	Dry with sun and breeze	114	25	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
22%	18%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		10	C
Komatsu HM400 Articulated Truck		10	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		2	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 16, 2020

28. NARRATIVE REPORT

Excavation began, continued or started at several Removal Areas during the day. Work included:

At Removal Area site Upper A1, the Komatsu 210 excavator and Komatsu haul truck finished the removal of the material above the access road that had been pushed down from the upper disturbance limit to the access road. All of the material was hauled to the Consolidation Area, graded, water conditioned and compacted.

At Removal Area site Lower A1, a large pile of material was located approximately halfway down the slope that had to be removed prior to the removal of material down to the design excavation grade. The Komatsu 210 excavator and Komatsu HM 400 haul truck were used to begin hauling this material out of the Removal Area. This work was the first test to see if the loaded haul truck could make it up the steep haul road from the bottom of the site to the access road to the Consolidation Area. Volume of material placed in the truck filled the box and the truck was able to drive up the haul road with the last steep section in the lowest gear in the truck. Moving the material out of the bottom of the work site with the haul truck will expedite the project by not having to handle the material multiple times to get it to the top of the work area.

At Removal Area site A9, the Komatsu 290 excavator was able to sit on the sandstone bluff and reach over and finish trimming the work area down to the excavation surface and load the material into the Komatsu haul truck. Not a lot of time was required to finish trimming the work site and hauling the material to the Consolidation Area but sharing the haul truck with the work being done in RA A1 forced the excavator to wait multiple time for the truck to alternate loads between work sites.

At Removal Area site A8, the Komatsu 290 excavator went down into the work area and removed the material down to the excavation grade on the design drawings. All material removed from A8 was placed in Removal Area A7 as the haul truck could not travel down the narrow access road cut into the edge of the sandstone bluff to get the excavator into the A8 work area. Due to the location of the work area, there was no alternative to handling the material from A8 to A7 multiple times.

At Removal Area site A7, the Komatsu 290 excavator worked its way back up the access road past the contaminated material from A8 and began removing contaminated material from A7. The excavator was close enough to the top of the access road into A7 and A8 that the excavated material from both A8 and A7 could be placed on the sandstone bluff above the excavator due to the reach of the boom and stick. All of the material from both sites was placed on the bluff and then placed in the Consolidation Area when the excavator got back on top of the bluff.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from all current work areas. Over the last couple of days, all of the material has been dumped in an area along the southern edge of the Consolidation Area. By placing the material in this one location, a mound has begun to be formed and the surrounding areas of the Consolidation Area are still at the elevation after clearing and grubbing was completed. It is the responsibility of Young Guns Construction to plan and implement the construction plan. This observation is being documented now in the event that any future issues or problems that arise due to restricted access to Removal Areas A19, A9, A18, A10 or A17 due to the installed material is the contractor's responsibility.

Earlier in the week, the Komatsu 290 experienced an issue with the machine control GPS providing intermittent data to the in-cab screen resulting in excavation in some areas not being completed to the excavation surface. The machine operator was able to cycle the boom and stick and get the GPS recalibrated to get the work completed but the issue would come back intermittently. The Diesel Machinery, Inc representative was out on site on Wednesday to troubleshoot the problem and isolated the intermittent operation to a sensor on the main boom hydraulic cylinder. This sensor was ordered and shipped overnight to the dealership in Rapid City, SD. The sales rep and a repair technician were on site shortly after lunch to install the sensor and fix the problem. No delays or other issues with the work schedule were caused by this minor repair and the excavator went right back to work after the technician was finished.

As work on the smaller sites is completed and work begins on Removal Area A1, the access road along the edge of the steep slope will have a lot of haul truck traffic during the day. Just past Removal Area A2, the road makes a sharp S-curve that restricts the water truck from getting closer to the top of the access road coming up the slope out of A1. Haul truck traffic is currently making the sand and clay material into a fine powder on the access road which creates a large dust cloud when the haul truck goes by. If the water truck cannot get past the S-curve, this section of road will be extremely dusty during the material haul out of Removal Area A1.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 16, 2020



Final trimming to excavation surface in Removal Area A9



Grading and compaction in Consolidation Area



Loading material from the upper part of Removal Area A1



Removal of contaminated material from Removal Area A8



Hauling material up steep haul road in Removal Area A1



Loading material from the lower part of Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 17, 2020	Friday	0730	1730	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 72 Max.94	Dry with sun and breeze	114	26	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
23%	20%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu D51PXi Dozer		8	C
Komatsu HM400 Articulated Truck		10	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		2	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 17, 2020

28. NARRATIVE REPORT

Excavation began, continued or started at several Removal Areas during the day. Work included:

At Removal Area site Lower A1, removal of the surplus material at the base of the haul road continued through the day. When the machine control GPS excavator finished work on A6, it resumed work in A1 below the Komatsu 210 and began digging the surface to the excavation grade below the 210 and placing the material in a pile so the 210 could load the material into the haul truck. At this time the plan to complete the exaction in A1 will be to begin at the bottom of the site and then work up the slope. This scenario is different from all the other sites as they were excavated downslope and then loaded out the bottom or baled back up to the top. It is anticipated that both methods will be used at the site to determine which one is the most efficient.

At Removal Area site A6, all material excavated from the site was graded toward the bottom of the site where it was loaded into the haul truck. Access to the site by the haul truck was down the haul road in A1 and then along the terrace above the ephemeral stream bottom to the Removal Area. The haul truck backed up the slope to the bottom of the work area where the Komatsu 290 excavator would load the material into the haul truck. Once the majority of the material was removed from the site, excavator had to place one track on the opposite bank to trim the bank to the grade shown on the excavation surface due to the work site being so narrow. To trim the other bank, the process had to be repeated with the track on the recently trimmed bank to work on the other bank. These bigger machines needed to excavate larger volumes of material need room to work and some of the work areas just did not have enough room to operate efficiently.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Areas A1 and A6. Placement of the material expanded into the southwest corner of the Consolidation Area to prevent the further buildup of the hump in the southeast portion of the Consolidation Area. The mine waste is also being spread and graded toward the western slope of the CA where the access road comes over the hump and drops into the CA. With the mine waste material being graded and compacted into the southwest corner of the CA, the issue of access to Removal Areas A1, A16 and A17 for installation of Cover Soil needs to be documented.

BMP maintenance check and repairs were completed on all of the silt fence sections as the wind has been blowing in several directions and has caused the top of the fabric to come loose in some places. Additional staples were placed along the top of the fabric along the entire length of the silt fence sections to secure the fabric to the welded wire fencing so when the wind changes direction on the future, the fabric will be securely attached to the fencing.

Excavation survey on all of the completed excavation areas is currently scheduled for Monday, July 20. This survey will be completed on all of the Removal Areas except A1 as this is the last area to be started. Topographic data from this as excavated survey will be compared with the cleared and grubbed survey data to better identify the volume of material excavated form the site in each of these Removal Areas. Results of the survey are anticipated by the end of next week and estimates of excavated volumes shortly after that.

At Removal Area A12/13, the access road into the work site passes through the upper edge of the RA and part of the contaminated material has been left in place to maintain the current road alignment. Just prior to the completion of the excavated surface survey scheduled for Monday, this remaining portion of contaminated material will be removed for the completion of the survey. Once the survey is completed, material will have to be replaced to restore the access road. Cover soil from the Borrow site will be used to restore the access road and to use that material an area in the southern portion of the identified Borrow Site was cleared and grubbed late in the day on Friday. It is anticipated that less than 100 cubic yards of material will be used from the borrow site to restore the road.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 17, 2020



Loading mine waste material from Removal Area A6



Moisture conditioning mine waste in Consolidation Area



Equipment working in Removal Area A1



Preliminary grading along lower edge in Removal Area A1



Completed excavation in Removal Area A6



Clearing and grubbing in Cover Soil Borrow Site

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 20, 2020	Monday	0730	1730	Rain AM; Mostly Cloudy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max.75	Muddy and slick in places	114	29	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
25%	20%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		7	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		3	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Kevin Ploszaj	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 20, 2020

28. NARRATIVE REPORT

Driving into the Cave Hills in the morning, a large, dark cloud sat directly over the north end of the North Cave Hills. As the morning progressed, the lightning began and a thunderstorm stated soon afterward. A high intensity, short duration rain storm started around 9:30 and resulted in 0.3-inches of rain at the Forest Service job trailer in just under 30 minutes.

Excavation of contaminated mine waste material is now confined to Removal Area A1 since the excavation work has been completed in all the other sites. Work completed during the day included:

At Removal Area site Lower A1, the area between the eastern disturbance limit and the haul road to the lower work areas was excavated due to the slick roads created by the morning thunderstorm. In this location, the bedrock bluff has been buried by the mine waste material requiring the excavation to work back to the edge of the bluff and then work down to the grade shown on the excavation surface. This original work got down the slope as far as the Komatsu 290 could reach with the material being stockpiled to the east of the excavation. At this location, the Komatsu 210 excavator loaded the haul truck for hauling the material to the Consolidation Area. Once the top area was excavated, the 290 excavator dropped over the edge and began working on the steep slope below the initial cut. This excavation work extended down the slope to a point where the 290 could excavate the material, stockpile it on the slope, then crawl up the slope and then handle it a second time to get it to where the 210 could reach it and load the haul truck. Approximately half of the eastern lobe of the Removal Area was excavated during the day using this technique. It is anticipated another day will be required to expand the excavation to the eastern edge and bottom of the lobe and get the material up to the loading area on the access road.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Area A1. Several issues began to appear as the short haul from Removal Area A1 put a lot of material into the Consolidation Area in a very short amount of time.

The first issue was the truck dumped the material in one general location so the dozers could not get the material graded quick enough. This methodology concentrated the material into one region and did not spread out the material over the entire Consolidation Area.

The second issue was the dozer did not have enough time to adequately spread out the material into the required 12-inch lifts and prepare the area for water conditioning and compaction.

The third issue was that no or very little water was sprayed on the spread-out material to adequately water condition the soil prior to compaction.

The fourth issue was that the compactor was used very little and did not get the some lifts compacted even with a single pass.

To remedy these deficiencies, the contractor may need to develop a dumping, grading and compaction plan. The Consolidation Area could to be divided into regions so the material is dumped in a specific area and then graded, watered and compacted without additional material being placed on the area until all work activities are completed. Additional equipment and operators may be required to get this work completed to meet the specifications in Sections 204.04 (b) and 204.05 (a).

Survey of the excavation sites was originally scheduled for Monday, July 20 but the surveyor called in sick and did not make it out to the site during the day. Completion of the survey work was rescheduled for Tuesday, July 21.

To maintain the access road into the work site after the excavation survey at Removal Area A12/13, cover soil from the Borrow Site would be needed to backfill the slope into and out of the Removal Area after the excavation survey had been completed. This material was excavated from the Borrow Site and hauled to the area just east of A12/13 and stockpiled. Six loads of soil were delivered to the stockpile for use after the excavation survey is completed.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 20, 2020



Soil depth above grey clay layer in Borrow Site



Excavation below bluff rimrock in Removal Area A1



Grading and compaction of material in Consolidation Area



Excavation coordination in Removal A1



Excavation coordination in Removal A1



Excavation in lower portion of eastern lobe in Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 21, 2020	Tuesday	0730	1730	Sunny AM; Scattered Clouds PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 80	Dry with sun and breeze	114	30	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
26%	22%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		6	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		8	C
John Deere 750C LGP Dozer		4	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		5	C
Freightliner 10 cu yd Dump Truck		3	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Kevin Ploszaj	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 21, 2020

28. NARRATIVE REPORT

Excavation of contaminated mine waste material is now confined to Removal Area A1 since the excavation work has been completed in all the other sites. Work completed during the day included:

At Removal Area A1, the bottom portion of the area between the eastern disturbance limit and the haul road to the lower work areas was excavated during the day. With the upper portion of this area excavated and loaded from the access road above the site on Monday, handling the material multiple times to get it up to the top of the site was not practical. The remaining material was excavated and dozed down the slope to the center of the area and loaded into the haul truck after it had backed up to the site through the timber. Additional clearing had to be completed to open up a temporary access road at this location and will have to be restored at the end of the project. Full loads of material in the haul truck are approaching the capacity of the truck but the truck is still able to drive up the haul road up to the access road and into the Consolidation Area. Completion of the preliminary excavation in this part of the Removal Area resulted in the presence of a drainage depression down the center of the slope and several high spots on the slope beside the depression. Clarification on the presence of these features in the design surface was requested from the Tetra Tech design team to verify they are included in the design.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Area A1. During the first part of the day, the compaction of the mine waster material was not meeting the compaction specifications in Section 204.05 (a) due to the large volume of material dumped in one location and getting spread out, no water placed on the graded material and no compaction on the graded surface. During the afternoon visits, the grading and compaction technique improved significantly and the process began to approach compliance with the compaction specifications. The big difference that occurred was that one of the senior operators began to operate the primary dozer used to spread the material out on the Consolidation Area. This improved skill level got the material spread out over the Consolidation Area faster and allowed the water truck to get the water on the soil and the compactor on the wetted material. Also contributing to the improved compliance was the time between haul truck loads arriving at the Consolidation Area. With the truck hauling from the top of Removal Area A1, the round-trip time was less than 10 minutes so a lot of material was delivered to the Consolidation Area very quickly and overwhelmed the apprentice equipment operator. With the material coming from the bottom of A1, the round-trip time was just over 15 minutes allowing the operators and equipment in the Consolidation Area to keep up better with the grading and compaction. Additional observations will be made on Wednesday to ensure the grading and compaction is complying with the contract specifications.

Survey of the excavation sites was rescheduled for Tuesday, July 21 due to the surveyor from Brosz Engineering being sick on Monday. The surveyor was on site all day on Tuesday and got all the Removal Areas surveyed except A1. It is anticipated that the surveyor will be in the office for the remainder of the week and get the survey data processed and submitted to the Tetra Tech design team to determine the volume of material excavated from each site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 21, 2020



Preliminary excavation in Removal Area A1 – upslope view



Preliminary excavation in Removal Area A1 – downslope view



Grading mine waste material in Consolidation Area



Loading material at bottom of east section in Removal Area A1



Loading material at bottom of east section in Removal Area A1



Dumping material from Removal Area A1 in Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 22, 2020	Wednesday	0730	1730	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 92	Dry with sun and breeze	114	31	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
27%	23%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		10	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		10	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		0	C
John Deere UTV w/water spray bar		10	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Kevin Ploszaj	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 22, 2020

28. NARRATIVE REPORT

Excavation of contaminated mine waste material is now confined to Removal Area A1 since the excavation work has been completed in all the other sites. Work completed during the day included:

At Removal Area A1, work resumed at the bottom of the work area and began to get the lower portions of the Removal Area to the preliminary grade level. Work began near the northeast corner of the site and continued along the northern edge of the Removal Area just above the ephemeral draw that runs down the bottom of the canyon. All material was hauled out of the work area by the haul truck up the haul road to the access road and into the Consolidation Area.

Grading and compaction work in the Consolidation Area over the past few days had gotten to the point where the completed work was non-compliant with the contract specifications. Due to the rate of material being delivered to the Consolidation Area from Removal Area A1 on Monday due to the haul road being unusable, a lot of material was delivered to the Consolidation Area very quickly. Under these conditions, the dozer operator was barely able to get the material spread out before the next loads of material were delivered and dumped in the same location as previous loads. By putting a lot of material in one location and having a very inexperienced dozer operator working in the dozer, no water conditioning or compaction of the lifts was completed. These concerns were relayed to the contractor and project superintendent notifying them that significant improvements in the grading and compaction were needed to bring the work back into compliance with the specifications.

One of the issues that may arise in discussions with the contractor might be the use of track packing the mine waste material during the grading of the material after dumping. Clarification on the compaction specifications was requested from Larry Cawlfield, Tetra Tech and Dave Shimek, Forest Service COR. Both agreed that the specification requires 3 compaction passes with the sheepsfoot or smooth drum roller after the material has been graded with the dozer. Tracking across the graded material with the dozer tracks does not count as a compaction pass.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Area A1. Improvements to the grading and compaction methodologies were incorporated into the work during the day resulting in the work complying with the contract specifications. Material from Removal Area A1 was dumped in several locations to allow the dozer to get the material spread out and tracked smooth followed by the water truck water conditioning the material followed by the compactor making at least 2 passes over the material to get compaction. Visual appearance and walking around on the finished surface confirmed that the material had been placed correctly and was well compacted.

Skill level and experience of the equipment operators working for the contractor may become an issue on the job as the work moves through the different phases. Young Guns Construction has two operators that are very good, two that are average and the rest are basically at the apprentice level with very little equipment knowledge or skill. When the work spreads out into multiple areas, the skill level in each area can range from very strong to very weak. In this situation, the very weak skill level becomes the bottleneck in the operation. This situation was the reason for the Consolidation Area grading and compaction work becoming non-compliant with the project specifications. If the contractor begins work in more than two areas at the same time, the skill level issue may cause work slow downs or out of compliant work being completed. Construction oversight will have to recognize these situations and communicate with the contractor to make sure the staffing does not negatively impact the work being completed.

As the haul truck continues to haul the material out of the lower portions of Removal Area A1 up the Haul Road, dust control on the haul road will become an important part of the project. The contractor addressed this problem by putting a small water tank in the box of a utility vehicle and then pumping water out of the tank onto the road using a spray bar out the back of the utility vehicle. The initial spray bar used was for spraying chemicals on agriculture crops and did not put a lot of water on the road surface to keep the dust level down. Effectiveness of this setup will be evaluated over the next few days as it did not appear to be putting much water on the road surface to keep the dust level down.

Excavation work in Removal area A1 on Tuesday afternoon in the eastern lobe of the site resulted in the presence of a deep depression and a spine down the slope toward the bottom of the Removal Area. A call to the Tetra Tech design team was made to verify the presence of these features in the excavation design surface to make sure the machine control surface was the same as the prepared design surface.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 22, 2020



Downslope view of depression & spine in A1 preliminary grade



Upslope view of depression & spine in A1 preliminary grade



Excavation and loading of material in bottom of RA A1



Excavation and loading of material in bottom of RA A1



Dust control on haul road from Access Road to bottom of A1



Grading and compaction of material in Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 23, 2020	Thursday	0730	1730	Sunny AM; Thunderstorm PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 75 Max. 90	Dry with sun and breeze AM; Wet & Slick PM	114	32	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
28%	24%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			5	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			0	C
John Deere 750C LGP Dozer			5	C
CAT 143H Road Grader			0	C
BOMAG BW 145 PDH Compactor			10	C
Freightliner 4700-gal Water Truck			4	C
Freightliner 10 cu yd Dump Truck			1	C
John Deere UTV w/water spray bar			10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Kevin Ploszaj	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 23, 2020

28. NARRATIVE REPORT

When getting ready for work in the morning, the National Weather Service issued a severe thunderstorm warning for the afternoon and early evening for western North Dakota and northwestern South Dakota. Around 3:30 PM at the job site, you could see the lightning in the distance and hear the thunder as the storm moved closer. By 4 PM the storm was right over the job site with heavy rain and wind. Young Guns Construction stopped work around 4 PM when the storm was right over the job site. The high intensity, short duration rain storm resulted in 0.2-inches of rain at the Forest Service job trailer in approximately 45 minutes.

After the thunderstorm was over, the haul road down into Removal Area A1 became very slick and unsafe to continue working. As a result, the crew quit for the day to come back on Friday after the road had dried out and was safe for the haul truck to travel up and down.

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the western edge of the western lobe of the removal area. Due the steepness of the slope above this area, all material was excavated and pulled downslope and loaded into the haul truck on a flatter slope spur road from the base of the primary haul road. In the morning, the Komatsu 290 excavator was removing the contaminated material to the prescribed excavation grade and then loading the haul truck. In the afternoon, the Komatsu 210 excavator was loading the haul truck with the 290 excavator working on the removal of the contaminated material. This allowed the 290 excavator to excavate more area to the preliminary grade but did not speed up the removal as the rate of material removal is dictated by the round trip time of the haul truck from the excavation site to the Consolidation Area and back to the excavation site.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Area A1. Improvements to the grading and compaction methodologies implemented on Wednesday were continued on Thursday resulting in the work complying with the contract specifications. Material from Removal Area A1 was dumped in several locations to allow the dozer to get the material spread out and tracked smooth followed by the water truck water conditioning the material followed by the compactor making at least 2 passes over the material to get compaction. Visual appearance and walking around on the finished surface confirmed that the material had been placed correctly and was well compacted

Effectiveness of the utility vehicle road spraying through the day was questionable as the volume of water being sprayed out the spray bar was essentially just a very slow stream of water out individual holes in the bar with no dispersion of the water over the road surface. The utility vehicle made one trip up and down the haul road after each trip of the haul truck. The concept of getting water on the haul road using this method is good but the volume of water put on the road each trip does not appear to be sufficient to reduce the dust. Soil type on the haul road is such that too much water will make the road slick as seen during and after the thunderstorm but the volume of water being applied to the haul road does not appear to be getting close to that amount.

Toward the end of the day after the thunderstorm, an email from Young Guns Construction was received with the results of the excavation survey completed by Brosz Engineering. Without much analysis on the data, the volume of the material excavated by Young Guns was approximately 78% of the estimated design volume. Assuming the volume of material removed from Removal Area A1 follows the same trend, the final surface of the Consolidation Area may need to be revised so all of the material is not placed near the center of the site but spread out to the other areas. Alternatives for different volumes of material placed in the Consolidation Area may need to be developed to reflect this reduced volume of excavated material coming out of Removal Area A1.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 23, 2020



Grading and compaction in Consolidation Area



Loading contaminated material from Removal Area A1



Graded and compacted surface in Consolidation Area



Preliminary grading and loading in Removal Area A1



Dust control on haul road in Removal Area A1



Preliminary grading and loading in Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 24, 2020	Friday	0700	1500	Sunny AM; High Overcast PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 70 Max. 90	Dry with sun and breeze	114	33	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
29%	25%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			0	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			10	C
John Deere 750C LGP Dozer			2	C
CAT 143H Road Grader			2	C
BOMAG BW 145 PDH Compactor			10	C
Freightliner 4700-gal Water Truck			6	C
Freightliner 10 cu yd Dump Truck			0	C
John Deere UTV w/water spray bar			10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Kevin Ploszaj	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 24, 2020

28. NARRATIVE REPORT

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the western edge of the western lobe and the lower boundary of the removal area. Due the steepness of the slope above this area, all material was excavated and pulled downslope and loaded into the haul truck on a flatter slope spur road from the base of the primary haul road. In the morning, the Komatsu 290 excavator was removing the contaminated material to the prescribed excavation grade and then loading the haul truck. In the afternoon, the Komatsu 290 excavator was removing the contaminated material from along the lower boundary of the removal area and then loading the material into the haul truck.

Grading and compaction of the mine waste material in the Consolidation Area continued during the entire day as material was delivered from Removal Area A1. Improvements to the grading and compaction methodologies implemented on Wednesday were continued on Friday resulting in the work complying with the contract specifications. Material from Removal Area A1 was dumped in several locations to allow the dozer to get the material spread out and tracked smooth followed by the water truck water conditioning the material followed by the compactor making at least 2 passes over the material to get compaction. Visual appearance and walking around on the finished surface confirmed that the material had been placed correctly and was well compacted

Removal of the contaminated mine waste material from the area above the access road in Removal Area A1 revealed the presence of a bedrock sandstone bluff along the outer edge of the access road. Since the end of the active mining period up to the current work activity, this sandstone bluff has been covered with a large volume of dirt and hid its presence. Grading in the excavation surface for this area shows a uniform grade from the top of the Removal Area down slope to the bottom. With the sandstone bluff present, the uniform grade will be interrupted with the final grading exposing the sandstone bluff and the uniform grading resuming on the slope below the bluff. From the outer edge of the bluff, the final grading will include a vertical section from the edge of the bluff down to where the vertical section intersects with the uniform grade of the excavation surface. As the work in this area is completed, on-site adjustments to the excavation grade will have to be made to blend the sandstone bluff into the overall site grading. This work will be coordinated between the Tetra Tech design team, the Forest Service Contracting Officer and Young Guns Construction to ensure the work meets all contract requirements.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 24, 2020



Preliminary excavation of material in Removal Area A1



Preliminary excavation of material in Removal Area A1



Preliminary excavation of material in Removal Area A1



Grading and compaction of mine waste in Consolidation Area



Grading and compaction of mine waste in Consolidation Area



Preliminary excavation of material in Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 27, 2020	Monday	0800	1800	Sunny AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 72 Max. 90	Dry with sun and breeze	114	36	October 14, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
32%	25%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		2	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		5	C
John Deere UTV w/water spray bar		5	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 27, 2020

28. NARRATIVE REPORT

A schedule update was provided by the contractor indicated that the majority of the material had been removed from Removal Area A1 and that they would be scheduling the surveyor to be on site later in the week to survey the excavation grade in A1. The Komatsu 290 excavator continued to work in A1 while the Komatsu 160 excavator began work in the borrow area to stockpile cover soil.

In the morning, the haul truck and the Freightliner dump truck hauled cover soil to the terrace on Bluff A4 between A12/13 and A17. Approximately 750 cubic yards of cover soil was hauled into the stockpile during the morning. Hauling stopped around noon as the haul truck was called to Removal Area A1 to haul the accumulated piles of material to the Consolidation Area.

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the western edge of the western lobe and the lower boundary of the removal area. The morning was spent collecting the contaminated material into piles for loading into the haul truck later in the day. In the afternoon, the haul truck was used to haul all the collected material up to the Consolidation Area as the excavator continued to clean up the edges and bottom of the excavation surface.

Grading and compaction of the mine waste material in the Consolidation Area continued in the afternoon when the haul truck resumed hauling material from Removal Area A1. Material from Removal Area A1 was dumped in several locations as the dozer was not immediately available to spread out the material. Once the dozer got to the Consolidation Area, the material was spread out and tracked smooth followed by water conditioning of the material and the compactor making at least 2 passes over the material to get compaction. Visual appearance and walking around on the finished surface confirmed that the material had been placed correctly and was well compacted.

Numerous large rocks have been placed on the excavation face of A1 to get them out of the way as work continued in other areas of the Removal Area. The contractor contacted the COR about bringing in a rock hammer on an excavator to break up the larger rocks so they could be moved and positioned. The COR called the Inspector and requested that several photos of the rocks be taken and sent to him to review the location of the rocks and evaluate the best alternative on what to do with the rocks. These photos were taken and sent to the COR for review.

As the excavation of the cover soil progressed in the Borrow Site, numerous large rocks were encountered and required the excavator to sort the rocks out of the material placed in the trucks. In the afternoon with the haul truck working in Removal Area A1, the Komatsu 160 excavator probed the edges of the southern area of the identified borrow area to see how far the good dirt spread out toward the edges of the defined area. To the south, the rocks got thick approximately 100 feet from the disturbance area stakes and to the east, the rocks got thick as the ground surface dropped off the terrace and day lighted. With this area defined, it is estimated that all the cover soil in the southern area will be removed this week and total less than 3000 cubic yards.

Young Guns Construction has prioritized keeping the access road and haul roads in the job site watered for dust control. It is estimated that over 15,000 gallons of water a day are being sprayed on the roads daily to keep the dust under control and make the work area cleaner to work in by the crew especially in the Consolidation Area. Continuation of the dust control will have to continue through the end of the job as the hot summer days are drying the soil all day long.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 27, 2020



Compacted surface in CA that meets contract specifications



“Excavation grading along lower edge of Removal Area A1



Loading cover soil at Borrow Site



Stockpiling cover soil on terrace near Removal Area A11



Excavation grading in Removal Area A1



Dust control on access road above Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Dave Shimek, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 28, 2020	Tuesday	0730	1830	Sunny AM; Sunny w/ Thin Clouds and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 66 Max. 88	Dry with sun and breeze	135	37	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
27%	26%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		4	C
Freightliner 4700-gal Water Truck		6	C
Freightliner 10 cu yd Dump Truck		6	C
John Deere UTV w/water spray bar		4	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 28, 2020

28. NARRATIVE REPORT

During periods of time when the haul truck and dump truck were not hauling cover soil, the excavator continued to explore around the edges of the southern area of the Borrow Site for pockets of cover soil. Some isolated pockets of soil were found but the eastern edge of the borrow site consisted mostly of rock with a small amount of soil around the rocks. All of the soil cannot be taken as some of it must be retained to create the finish topography of the area prior to replacement of the topsoil and then revegetation.

Loading and hauling of cover soil haul in in the morning and afternoon resulted in a total of 750 cubic yards being delivered to the stockpile. This volume combined with the yardage hauled on Monday resulted in approximately 1500 cubic yards being in the stockpile near Removal Area A11 at the end of the day. Total volume listed in the contract documents equals 15,100 cubic yards.

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the western edge of the western lobe and the lower boundary of the removal area. The morning was spent collecting the contaminated material into piles for loading into the haul truck later in the day. Work in the upper portion of the western edge became difficult as the slope got very steep and with the material removed down to a hard clay layer, the tracks of the excavator had a very difficult time staying on the steep slope. A couple of times during the afternoon, the excavator slid down to the bottom of the steep draw formed by water flowing off the exposed bedrock bluff. To get back out of the steep draw, the excavator had to stick the teeth of the bucket in the ground and use the boom and stick to pull itself out up to where it could sit on the slope.

Grading and compaction of the mine waste material in the Consolidation Area continued whenever the haul truck resumed hauling material from Removal Area A1. Material from Removal Area A1 was dumped in several locations as the dozer was not immediately available to spread out the material. Once the dozer got to the Consolidation Area, the material was spread out and tracked smooth followed by water conditioning of the material and the compactor making at least 2 passes over the material to get compaction.

Numerous large rocks have been found during the excavation of A1 and were stockpiled on the face to get them out of the way as work continued in other areas of the Removal Area. During the site visit by the COR, these rocks need to be saved and then spread out on the finished face of the Removal Area to recreate a natural landscape. Some of the rocks are very large and difficult to move with the excavator and will be placed near the bottom of the slope. The smaller rocks will be placed on the finished face up the slope near the base of the exposed bluff rocks and scattered on the face between the bluff rock and large rock at the toe of the slope. Placement of the rock will be dependent on the ability of the excavators to move up and down the steep finished face.

During the site visit by the COR, a lot of time was spent walking around the Borrow Site and discussing the projected volume of material that can be removed from the site. Based on the information provided by the contractor after digging in the southern part of the staked perimeter of the Borrow Site, the estimated volume of material out of the southern area will be in the 2500 to 3000 cubic yard range. Estimated volume of material out of the northern area will also be in the 2500 to 3000 cubic yard range. Presence of a large number of rocks in both areas quickly reduces the volume of material available as sorting rock out of the cover soil was not included in the contract price. Total volume of material out of the defined Borrow Site will be in the 5000 to 6000 cubic yard range which will be only a third of the volume identified in the contract documents.

Part of the discussion with the COR was where would the additional borrow material come from and how much would it cost to get it to the project work area. Further discussions will be completed between the Cor and Peter Werner to develop a plan on where the material will come from, how to get it to the work area and how much will the material cost.

As excavation work continued in Removal Area A1 during the day, the crew decided that the surveyor from Brosz Engineering will be scheduled to be on site on Friday, July 31. This time slot will allow the work in A1 to get finished and not have the surveyor waiting for the excavation to get finished before starting the survey.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 28, 2020



Loading cover soil from southern area of Borrow Site



Final grading on eastern lobe of Removal Area A1



Compaction of mine waste material in Consolidation Area



Final grading along western edge of Removal Area A1



Topographic features in excavation surface in Removal Area A1



Large rocks present in southern area of Borrow Site

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 29, 2020	Wednesday	0900	1800	Overcast AM; Overcast w/T-storms south PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 66 Max. 80	Dry with a breeze	135	38	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
28%	27%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			5	C
Komatsu PC160LC Excavator			10	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			10	C
John Deere 750C LGP Dozer			5	C
CAT 143H Road Grader			0	C
BOMAG BW 145 PDH Compactor			4	C
Freightliner 4700-gal Water Truck			0	C
Freightliner 10 cu yd Dump Truck			6	C
John Deere UTV w/water spray bar			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 29, 2020

28. NARRATIVE REPORT

Loading and hauling of cover soil during the day resulted in a total of 800 cubic yards being delivered to the stockpile. This volume combined with the yardage hauled on Monday and Tuesday resulted in approximately 2300 cubic yards of cover soil being in the stockpile near Removal Area A11 at the end of the day. All of the available cover soil has been removed from the southern area in the defined limits of the Borrow Site as shown on the project drawings.

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the western edge of the western lobe and the lower boundary of the removal area. As the work progressed during the day, there were periods of grading and collecting material into stockpiles alternating with periods of loading the haul truck for hauling the material to the Consolidation Area. As the work progresses to finishing the mine waste removal to the excavation grade, the work must become more strategic to get all the work completed in the bottom and margins of the work area to maintain the haul road to get the material up the haul road. The last work to be completed to finalize the excavation grade will be the removal of the haul road beginning at the bottom and working up the slope to the top. To complete this task, the haul truck will back down the haul road to the excavator and then the excavator will load the haul truck making 180-degree swings moving the material in the haul road downslope of the excavator into the haul truck on the road upslope of the excavator.

Grading and compaction of the mine waste material in the Consolidation Area continued whenever the haul truck resumed hauling material from Removal Area A1. Material from Removal Area A1 was dumped in several locations as the dozer was not immediately available to spread out the material. Placement of the mine waste material was completed with at least 20 feet of space between the base of adjacent piles. Once the dozer got to the Consolidation Area, the material was spread out and tracked smooth followed by water conditioning of the material and the compactor making at least 2 passes over the material to get compaction.

As excavation work continued in Removal Area A1 during the day, the crew is still estimating that all the excavation work in A1 will be completed by Thursday, July 30 and that the surveyor from Brosz Engineering is still scheduled to be on site on Friday, July 31 to complete the excavation grade survey.

As the cover soil material was being loaded and hauled out of the southern area of the Borrow Site, the north area was being cleared and grubbed to begin removal of material once all the material had been removed from the southern area. The upslope edge of the clearing and grubbing was along the last line of exposed large boulders and extended down slope to the flat area where a historic access road was located. During a previous visit by the COR to the site, this flat area is where the higher levels of radioactive material were found when the test pits were dug in the borrow site. A test pit dug near the upslope edge of the cleared and grubbed area contained a roughly 50:50 mixture of rock and soil. The contractor classified the material as pretty bony and not very good soil.

At about 4 PM, a thunderstorm developed to the south of the work area and thunder could be heard occasionally. No lightning was observed resulting in no work shut downs during the afternoon. A few raindrops were observed on the Forest Service job trailer windows but no measurable amount of precipitation fell.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 29, 2020



Large rocks in cover soil from southern area of Borrow Site



Overview of clearing and grubbing northern area of Borrow Site



Final excavation grading in Removal Area A1



Final excavation grading in Removal Area A1



Cover soil material from test pit in northern area of Borrow Site



Final excavation grading in Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 30, 2020	Thursday	0730	1800	Sunny AM; Scattered Clouds & T-Storms PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 66 Max. 86	Dry with sun and breeze	135	39	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
29%	28%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		5	C
Komatsu PC160LC Excavator		5	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		10	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		5	C
John Deere UTV w/water spray bar		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Ryan Foust	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 30, 2020

28. NARRATIVE REPORT

By the end of the day on Wednesday, all of the cover soil in the southern area of the Borrow Site had been removed and the total volume of material in the stockpile near Removal Area A11 remained at 2300 cubic yards of material. All of the soil remaining in the southern area will be used to bury the sorted rocks and regrade the surface of the area to create a free draining surface that can be revegetated.

With all of the cover soil removed from the southern area of the Borrow Site, the next potential source of material is located in the northern area on the Borrow Site. Clearing and grubbing began at the site and concentrated on the slope between the edge of the terrace and the toe of the slope on the old access road along the toe. One test pit was dug near the top of the slope and the material was a mixture of soil and rock less than 8 inches. The amount of rock present in the excavated material resulted in the material being classified as very bony (a contractor term used to describe material with a lot of rock). With the large quantity of rock in the soil, it meets the contract specification included in Section 713.01 (a) (1).

A second test pit was started at the toe of the slope but was stopped immediately and the first scoop of the excavator exposed the grey clay layer and the black organic or coal layer below the clay. Presence of the clay layer and black potential radioactive layer was documented and covered back up. With this combination of soil layers present along the toe of the slope, the volume of material in the hillslope will be restricted to the horizon above the clay to the surface and from the toe of slope to the rock outcrop at the top of the slope.

During the day, work at Removal Area A1 was focused on the removal of contaminated material from along the bottom edge of the work area, the lower portion of the eastern lobe and the haul road from the bottom of the site to the access road to the Consolidation Area. For the removal work along the bottom edge and from the bottom edge of the eastern lobe, the haul truck was able to drive down to the bottom of the haul road , turn around, get loaded and then drive up the haul road, Once these tasks were completed, the haul truck began backing down the haul road so the excavator could load material into the truck while removing the material under the haul road. AS the haul road was removed, the distance the haul truck had to back down the haul road decreased. At the end of the day, approximately 80% of the haul road material had been removed with the remaining volume to be removed in the morning prior to the excavation survey moving into this region of the Removal Area.

Grading and compaction of the mine waste material in the Consolidation Area continued whenever the haul truck resumed hauling material from Removal Area A1. Material from Removal Area A1 was dumped in several locations as the dozer was not immediately available to spread out the material. Placement of the mine waste material was completed with at least 20 feet of space between the base of adjacent piles. Once the dozer got to the Consolidation Area, the material was spread out and tracked smooth followed by water conditioning of the material and the compactor making at least 3 passes over the material to get compaction.

Progress on the removal of contaminated material in Removal Area A1 during the day confirmed that the excavation work will be completed so the excavation survey by Brosz Engineering can be completed on Friday, July 31.

Around 3 PM, a thunderstorm began to develop to the south of the Forest Service job trailer with the storm tacking from the west to the east. Between 4:30 and 5 PM, the storm turned north and began to parallel the North Cave Hills with the rain concentrated out in the pastureland east of the Forest boundary. As the storm moved, the rain began out on the pastures but never got close to the work area. The contractor turned on the lightning alert app on the mobile phone and monitored the lightning within the 5-mile radius stated in their Health and Safety Plan. No lightning was observed within the 5-mile radius resulting in no work shut downs during the afternoon. Only a light shower hit the work area and just a trace of rain was observed in the rain gage at the Forest Service job trailer.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
JULY 30, 2020



Contaminated layer near surface in north area of Borrow Site



Boulders removed from soil in southern area of Borrow Site



Clearing and grubbing in northern area of Borrow Site



Final excavation grading near bottom of Removal Area A1



Final excavation near middle of haul road in Removal Area A1



Final excavation near top of haul road in Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
July 31, 2020	Friday	0730	1800	Sunny AM; Scattered Clouds & T-Storms PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 66 Max. 86	Dry with sun and breeze	135	40	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
30%	30%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		5	C
Komatsu PC160LC Excavator		5	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		5	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		5	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		5	C
John Deere UTV w/water spray bar		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Mick Welch	X	
Jason Yearout	X	
Ryan Foust	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	
	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	July 31, 2020

28. NARRATIVE REPORT

During the early part of the day, work at Removal Area A1 was focused on the removal of contaminated material from the top section of the haul road just below the access road. This was the last bit of material that had to be removed prior to the completion of the excavation surface survey. The excavator was positioned on the haul road slope and the haul truck backed down to the loading site where the excavator loaded the material into the bed. Near the top of the haul road, the excavator encountered a large amount of large rock including bedrock that had to be worked around as the work progressed up the road.

Grading and compaction of the mine waste material in the Consolidation Area continued as the haul truck hauled material from the top of the haul road in Removal Area A1. This material was dumped in several locations as the dozer was not immediately available to spread out the material. Placement of the mine waste material in the Consolidation Area was completed with at least 20 feet of space between the base of adjacent piles. Once the dozer got to the Consolidation Area, the material was spread out and tracked smooth followed by water conditioning of the material and the compactor making at least 3 passes over the material to get compaction.

Once the remaining material from the haul road was removed, the excavator moved into Removal Area A2 and began the regrade work shown on Sheets C-104 and C-105 of the design package. While some areas did not need much additional cutting, the machine went into the Removal and checked the excavation grade excavation using the Regrade surface to see if additional excavation was required. No additional excavation work was required in RA A2 but when the excavator moved to RA A3, an area toward the bottom of the site required additional excavation that was completed by the excavator during the afternoon.

Based on the test pits dug on Thursday in the Borrow Site, additional cover soil was excavated and stockpiled in the north area during the morning when the haul truck was working at RA A1. Once the haul road was removed, the haul truck shifted to hauling cover soil from the Borrow site. With the stockpile site near RA A11 filing up, the haul truck began dumping cover soil in RA A14. Approximately 150 cubic yards of material was hauled and dumped at this site during the afternoon.

When first starting on the excavation and stockpiling of the cover soil in the Borrow Site in the morning, a clay layer appeared near the lower edge of the borrow area and rock outcrops and rock seams along the top edge of the site shrunk the area where cover soil could be excavated. Based on these boundaries, the contractor estimated that the maximum volume of cover soil that could be removed from the Borrow Site would be a total of less than 4000 cubic yards. This volume is less than a third of the volume identified in the estimated quantities and bid list and an additional source of material will be required.

As scheduled, the surveyor from Brosz Engineering was on site to survey the excavation grade of Removal Area A1 in the morning. Survey work began along the bottom edge and worked around the east edge to avoid being directly downhill below the excavator as the last part of the haul road was being removed. All survey data was collected and the surveyor headed back to the office to process the data and compare the actual excavated surface with the design surface.

Late in the afternoon on Friday, Young Guns Construction forwarded the calculated data from the excavation surface for Removal Area A1. Total volume of material removed from the area equaled approximately 12,350 cubic yards of contaminated material. Volume of contaminated material removed on the design drawings equaled 14,730 cubic yards. Difference between actual and design volumes is approximately 2,400 cubic yards.

Similar to Thursday, a thunderstorm began to develop to the south of the job site and the Forest Service job trailer. Clouds darkened and the wind picked up but very little lightning was seen or thunder was heard. A light shower of rain was produced by the clouds but did not last long with very little total rain coming out of the storm.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett		

RILEY PASS PHOTOGRAPH LOG
JULY 31, 2020



Bedrock and large rocks under haul road in Removal Area A1



Excavation surface survey in Removal Area A1



Clay layer just below surface in northern area of Borrow Site



Mining of cover soil from northern area of Borrow Site



Placement of cover soil in Removal Area A14



Regrade of excavation surface in Removal Area A3

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 3, 2020	Monday	0730	1730	Sunny & Breezy AM; Sunny & Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 84	Dry with sun and breeze	135	43	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
32%	31%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		10	C
John Deere UTV w/water spray bar		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Ryan Foust	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 3, 2020

28. NARRATIVE REPORT

With all of the mine waste material removed from Removal Area A1 completed on Friday, the next phase of the work will be the regrading of the Removal Areas as shown on Sheets C-105 and C-105. At the present time, the design team is discussing the need for redesign work on Removal Area A1 due to the presence of the rock outcrops and soil conditions. Until that decision is made, the contractor moved ahead with the regrade in A2 and A3 last Friday and A4 and A10 today to keep the project moving ahead. Removal Areas A4 and A10 had just small areas needing and this work was completed quickly. The regrade area shown on Removal Area A12/13 is a large rock bluff and will not be excavated to the elevation shown on the design drawing. Regrading/final grading of all the remaining sites will be completed using cover soil from the borrow site to generate the final topographic features at each site.

Mining of cover soil in the Borrow Site continued during the day to generate as much material out of the site as possible. As the material was being removed, the volume of material available was dictated by the presence of the bedrock and clay layers present within the site. In the far north end of the site, the clay layer mounded up and got very close to the surface restricting the daylighting of the cut out the north end. The bedrock/large rock seams prevented expansion to the west and the clay layer limited the depth of the mining to less than 5 feet. With these conditions, the dozer pushed material to the excavator to load material into the trucks and scraped material until it hit the rock or started peeling up the clay. With this method, the maximum amount of material was removed from the site for use in the Removal Areas and Consolidation Area.

As the cover soil was removed from the Borrow Site, the haul truck and dump truck hauled the material to the stockpile and to Removal Area A14. The dump truck placed the material in the stockpile due to its space requirements needed to turn around. The haul truck was able to back into RA A14 on the low access road and then pull back onto the main access road up the steep access into the site.

With the regrading completed fairly quickly on Sites A4 and A10, the Komatsu 290 excavator moved to RA A15 and began placing material in the excavation site to bring the site up to the final topography. Due to the location of A15 beyond A14, no truck access was available to dump material directly into A15 requiring the 290 excavator to place the material in A15 3 cubic yards at a time in each bucket load. Not an efficient methodology to get the work accomplished but required due to the location. By the end of the day, all of the material had been placed in A15 and the final grading had begun in A14.

When the surveyor was on site last Friday, the focus was on getting the excavation survey completed on Removal Area A1. Concurrent to the excavation survey on A1 was a survey of the Consolidation Area to determine how much material had been placed and compacted. Since the processing of the survey data for A1 was a priority, the survey of the Consolidation Area was not completed on Friday. The surveyor from Brosz Engineering was onsite during the day to complete the survey of the compacted surface on the Consolidation Area. Topographic survey data was collected for the surface of the Consolidation Area and the regraded surface in Removal Areas A3, A4 and A10. All data was collected using a Trimble GPS survey system.

By the end of the day, the results of the survey had been returned to the contractor. Total volume of material placed in the Consolidation Area equaled approximately 12,850 cubic yards. Total volume of material excavated out of all the Removal Areas equaled approximately 16,780 cubic yards resulting in a compaction rate of approximately 24 percent.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bunstead	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 3, 2020



Regrading in Removal A4



Mining, loading and hauling cover soil from Borrow Site



Large rocks sorted out of northern area of Borrow Site



Large rocks sorted out of northern area of Borrow Site



Northern portion of Borrow Site after initial reclamation



Final grading on RA A15 and delivery of cover soil to RA A14

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 4, 2020	Tuesday	0730	1730	Overcast & Lt Rain AM; Sunny & a few Clouds PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 84	Dry with sun and breeze	135	44	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
32%	32%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		5	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		5	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Ryan Foust	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 4, 2020

28. NARRATIVE REPORT

Around mid-day, the last load of cover soil from the Borrow Site was hauled to the stockpile. With no material left to load from the Borrow Site, the excavator tracked around to the stockpile near Removal Area A11 and began to load material into the haul truck at that location.

As the cover soil was mined and loaded in the Borrow Site, the haul truck and dump truck hauled the material to the stockpile, Removal Area A14 and Removal Area A19. The dump truck placed the material in the stockpile due to its space requirements needed to turn around. The haul truck was able to back into RA A14 on the low access road and then pull back onto the main access road up the steep access into the site. When the volume of material dumped at RA A14 was thought to be enough, the haul truck took the covers soil to RA A19 and dumped in at that location.

With all of the material placed in Removal Area A15 on Monday, the only work left to complete was the final grading and compaction of the cover soil. This was completed with the excavator as the area is so small and steep that the dozer would tear up the finished surface at each end when turning to either grade the surface or track the surface for compaction. Moving into Removal Area A14, the excavator placed the material over the entire site and then the dozer followed behind and completed the grading and track compaction of the material. As the excavator worked toward the east end of RA A14, the volume of material placed in the area was greater than the amount needed. As the work got to the far eastern end of the site, the haul truck was brought in and loaded with the excess material which was hauled to RA A19.

Upon completion of the final grading of the cover soil in Removal Area A14. the dozer was used to compact the material using track compaction as specified in Section 204.04 (c). This work was completed in two directions with the first pass across the slope to make any last-minute adjustments to the grade and the second pass up and down the slope to create a series of ridges to prevent direct downslope water flow and soil erosion.

With the delivery of all the cover soil to Removal Areas A14 and A15 completed, the next site to receive cover soil was Removal Area A19. The Komatsu 160 excavator was used to load the haul truck which then made to short trip across the Consolidation Area to A19. First loads of material were placed in the southern arm of the site with subsequent loads stacked to the north and around the corner to the Consolidation Area. Once the area was full of soil, hauling was stopped until the delivered material was graded and the volume of additional material could be better determined. After the delivery to A19 was completed, the haul truck began to deliver material to Area A18. The route used to get the material to A18 was to back over the natural hump from the Consolidation Area and dump the material at the upper end of A18.

In area A19, the excavator was used to knock down the material piles created when the material was dumped out of the haul truck. Total volume of material in each load in the haul truck approaches 30 cubic yards and the dozer must make several passes through the pile to get it knocked down to begin grading the material. The excavator can easily drag the bucket through the piles and spread the material out quickly to the edges of the Removal Area that allowed the dozer to come in and quickly begin grading the material to the finish grade.

As the crew works quickly to get the cover soil delivered to the Removal Areas close to the Consolidation Area, the volume of material in the stockpile declines steadily. As material is removed from the stockpile, a second dozer is used to push material from the fringes of the stockpile to the loading site and reduce the time the excavator has to spend keeping the pile in a small footprint. At the current rate of material delivery, the volume of material in the stockpile will be used up late in the day on Wednesday or by mid-day on Thursday. An additional source of cover soil needs to be identified soon to keep the contractor busy while the evaluations and redesign of Removal Area A1 and the Consolidation Area continue.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 4, 2020



Last loads of cover soil from Borrow Site



Cover soil delivery to Removal Area A14



Placement of cover soil in Removal Area A14



Placement of cover soil in Removal Area A14



Reclaimed road into Borrow Site after cover soil removal



Preliminary reclamation on northern area of Borrow Site

RILEY PASS PHOTOGRAPH LOG
AUGUST 4, 2020



Grading of cover soil in Removal Area A14



Loading and hauling excess material from Removal Area A14



Finished surface in Removal Area A15



Final grading of cover soil in Removal Area A14



Placement of cover soil in Removal Area A19



Grading of cover soil in Removal Area A19

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 5, 2020	Wednesday	0700	1700	Sunny and Breezy AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 68 Max. 86	Dry with sun and breeze	135	45	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
33%	33%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		10	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Ryan Foust	X	
Shayde Brengle	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 5, 2020

28. NARRATIVE REPORT

Young Guns Construction had been in contact with DMI about the rental of a second haul truck and was notified late last week that a second truck would be available around the first of August. The second haul truck would be a duplicate of the first haul truck, a Komatsu HM 400, was scheduled for delivery on Tuesday evening. Inspection of the truck was completed on Wednesday morning and the machine was found to be very clean with no lingering mud or dirt on the machine that might bring unwanted vegetation seeds onto the National Forest. Service on the truck was completed prior to delivery of the machine so all maintenance has been completed on the machine.

Hauling of cover soil from the stockpile was completed to the following sites during the day:
A10 with the material placed along the upper edge for placement by the dozer or excavator
A9 with the material placed in A19 to be ladled into the site with the excavator
A2 with the material placed along the western edge along the road to be pushed into the site with the dozer

Grading of cover soil was completed to the following sites during the day:
A19 with the final grading and track packing completed with the dozer
A18 with the final grading and track packing completed with the excavator
A9 with the final grading and track packing completed with the excavator
A2 with the preliminary grading completed with the dozer

Material loading from the stockpile began at the east end of the stockpile in the morning and worked westward during the day. As the material was loaded and delivered to the sites during the day, the volume of material remaining in the stockpile continued to decrease. By the end of the day, all of the cover soil hauled to the stockpile from the Borrow Site had been delivered to the removal areas for placement and grading. Once all of the material had been loaded and delivered to the installation sites, the stockpile site was graded with the dozer in anticipation of using the area again when cover soil hauling resumes from the new Borrow Site.

The Tetra Tech design team sent worksheets F-1 and F-2 with their analysis of the as-constructed data from Removal Area A1 and the Consolidation Area. These worksheets were reviewed and taken up to the site for comparison with the surfaces loaded into the excavator for excavation and grading. In the Consolidation Area, the worksheet showed that the finished surface near the center of the site needed to be cut 6 feet. When the excavator moved to the site, the surface loaded into the machine using files provided by Tetra Tech showed the site still required 6 feet of compacted fill to get to the finish graded surface. Other areas in the Consolidation Area shown on the worksheet did not correlate with what was actually on the ground requiring some additional analysis of what was causing the discrepancies. Further comparison of the worksheet with the actual surface suggested that the worksheet was a comparison of the as-built surface and the cleared and grubbed surface and not the finished grade surface. One of the strongest pieces of data that suggested that this was the case was that the excavation surface in each of the Removal Area completed by the excavator was very accurate when it was compared with the as-constructed surface. Preliminary grading of the cover soil in a few of the completed Removal Areas was also observed to be very close to the expected surface. This information was conveyed back to the Tetra Tech design team for consideration.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 5, 2020



Grading cover soil in Removal Area A19



Track packing cover soil in Removal Area A18



Loading cover soil from stockpile in morning



Placement of cover soil in Removal Area A9



Grading and track packing cover soil in Removal Area A10



Loading cover soil from stockpile in afternoon

RILEY PASS PHOTOGRAPH LOG
AUGUST 5, 2020



Cover soil placement in Removal Area A11



Loading cover soil from stockpile in afternoon



Dumping cover soil in Removal Area A2



Grading cover soil in Removal Area A2



Using 2 excavators to deliver and place cover soil in RA A9



Track packing cover soil in Removal Area A9

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 6, 2020	Thursday	0800	1800	Sunny AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max.93	Dry with sun and breeze	135	46	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
34%	33%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		0	C
Komatsu PC210LC Excavator		10	C
Komatsu PC160LC Excavator		6	C
Komatsu HM400 Articulated Truck		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		6	C
John Deere 750C LGP Dozer		6	C
CAT 143H Road Grader		0	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Beth Kalisiak	X	
Mycah Atkins	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 6, 2020

28. NARRATIVE REPORT

At the end of the day on Wednesday, all of the material in the stockpile had been loaded and hauled to the Removal Areas around the Consolidation Area. These sites were chosen to be first as they were the easiest ones to get to and it took a very short haul to get to each one. With no cover soil left in the stockpile, that project task ended and other work had to be found to keep the crew busy until a new borrow site could be identified or the revisions to the excavation grade at A1 or the surface of the Consolidation Area could be completed.

During the day, the contractor had been contacted by the Forest Service and given the option of getting additional cover soil from the private land adjacent to the Forest or from Brown's Pond. The contractor will provide a price to haul the material from both sources and then a decision will be made on which source will be used.

With all of the cover soil placed in the Removal Areas, the contractor had to find other work to keep the crews busy. Two tasks were identified by the contractor; one was the processing of the slash piles to separate the stumps, logs and branches and the second was the reclamation of the Borrow Site.

Processing of slash piles was completed using the excavator to separate out the trees from the pile and then using a chain saw to cut the limbs off the trunks and then cutting the stumps off the trunks. Once this was completed, the pieces were stacked in into similar piles for future use. The trunks will be hauled to a location along Forest Road 3123 for public firewood. The stumps will be ground up with the chips spread out over the different Removal Areas and the limbs and branches will be spread out over the installed cover soil after the compost has been added to the upper layer.

Reclamation of Borrow Site was completed using he excavator to first bury the large rocks that had been separated out of the cover soil as it was being loaded into the trucks. These were placed along the toe of the steep slopes and then covered with soil purposely left in the Borrow Site for this purpose. With the rocks buried, the remaining soil was graded out over the site to recontour the site so the water would be free draining off the surface. Once these tasks were completed, the excavator was used to pull the piles of dirt and grass that had been cleared and grubbed off the site and stacked along the margins prior to beginning the removal of the cover soil onto the preliminary graded surface. Once the dozer could get behind the soil and grass piles, the material was spread out over the preliminary surface and the final topography could be established.

One of the issues that needs to be addressed is the level of regrading needed in Removal Area A1. Near the center of the removal area, a large volume of material is in place that creates a very steep slope and is currently very difficult for the excavator and dozer to work on due to the very fine-grained soil present on the slope. To get a better idea of how the entire are should be regraded, the Tetra Tech design team requested a series of photos be taken to evaluate the site to determine the extend of the regrade. Photos were taken of the entire site and basically divided into 4 primary area labeled as the western draw, the haul road draw, the outcrop draw and the eastern draw. The western and haul road draws are fairly well defined and are likely not to need much additional regrading as any additional excavation from the channels will make them steeper than they already are. The eastern draw needs some additional grading and shaping in the lower end but is also in pretty good condition. Near the middle of the site, the outcrop draw is to be constructed in an area that is very steep at the present time. A bedrock bluff is present along the top edge of the area and part way down a shale outcrop cuts across the entire area. The fine-grained material and very steep slope make the area very difficult to work on with machinery. One idea to reduce the slope, is to create a couple of stair steps below the top bluff outcrop and below the shale outcrop to reduce the elevation at the top of the slope under outcrop. With the reduced slope, the drainage channel can be constructed and the machines can work on the slope to build the channel plus get the cover soil, rocks and slash placed on the finished surface.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 6, 2020



Stockpile area after all cover soil hauled to Removal Areas



Additional cover soil grading in Removal Area A14



Initial placement of cover soil in Removal Area A10



Installed and compacted cover soil in Removal Area A9



Initial placement of cover soil in Removal Area A4



Cutting trees to specification length from slash piles

RILEY PASS PHOTOGRAPH LOG
AUGUST 6, 2020



Initial reclamation grading in south area of Borrow Site



Finished piles of logs, stumps and limbs above RA A1



Piles of logs, stumps and limbs at top of access road



Reclamation grading in south area of Borrow Site



Reclamation grading in south area of Borrow Site



Reclamation grading in north area of Borrow Site

WORK SUSPENDED BY CO ON MONDAY, AUGUST 10, 2020
WORK SUSPENSION RESCINDED BY CO ON TUESDAY, AUGUST 18, 2020

United States Department of Agriculture **Forest Service** **Northern Region Acquisition Management** **24 Fort Missoula Rd. Missoula, MT 59804**

Date: August 10, 2020

To: Young Gun Construction, LLC
10609 South Cave Road
Ludlow, SD 57755

Subject: Contract 12035520C0001, Riley Pass Bluff A Reclamation; Suspension of Work

Due to varying site conditions and issues discovered within the design package, contract work cannot continue as designed.

In accordance with FAR 52.242-14, as of the date of this letter, Young Gun Construction, LLC is hereby directed to suspend all work associated with the subject contract.

This suspension shall remain in effect until rescinded. Once the suspension is rescinded Young Gun Contraction, LLC shall resume all work no later than 10 days from the date the suspension is rescinded.

Please feel free to contact me with any questions, chad.santone@usda.gov or 406-329-3745.

Chad B. Santone
Contracting Officer

From: Santone, Chad - FS
Sent: Tuesday, August 18, 2020 11:33 AM
To: Beth Kalisiak <younggunconstructionllc@gmail.com>
Cc: Shimek, David R -FS <david.shimek@usda.gov>; Werner, Peter G -FS <peter.werner@usda.gov>
Subject: RE: 12035520C0001, Riley Pass Bluff A Reclamation -- Modification Request for Proposal
Importance: High

Hello Beth,

The attached proposal is hereby accepted. Funding has been secured in the amount of $324,100.00 for this change. In accordance with FAR 52.243-4, Young Gun Construction is hereby directed to proceed with these changes.

A modification incorporating these changes into the contract is forthcoming.

Consider this email your notification that the suspension of work issued on August 10, 2020 is hereby rescinded. Young Guns Construction is authorized to continue any and all project work in accordance with the contract documents. Ensure you coordinate work with the COR.

Let me know if you have any questions.

Thanks,

Chad Santone
Contracting Officer
Forest Service
Region 1 AQM
p: 406-329-3745
c: 406-396-0216
chad.santone@usda.gov
24 Fort Missoula Rd
Missoula, MT 59804
www.fs.fed.us

Caring for the land and serving people

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 18, 2020	Tuesday	0730	1900	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 68 Max. 96	Dry with sun and breeze	135	58	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
43%	34%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		7	C
Komatsu PC210LC Excavator		0	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		7	C
Komatsu D65WX Dozer		7	C
John Deere 750C LGP Dozer		7	C
CAT 143H Road Grader		7	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Beth Kalisiak	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 18, 2020

28. NARRATIVE REPORT

Warm weather is forecast for the week at the job site with temperatures reaching the high 90's each day with a good chance of 100+ on a few days. Equipment operators will be working in air-conditioned cabs so they will be able to continue work during the hot weather. Walking around the job site on the steep slopes in the afternoon is not recommended.

Shortly before lunch, the Contracting Officer sent an email to the contractor notifying him that the Work Suspension Order had been rescinded and that all work activities on the project could resume. The contractor came by the Forest Service job trailer and notified the inspector that work could resume on the job and that the crew would be heading up to the job site to get equipment started and begin work on the Consolidation Area and Removal Area A1 regrade tasks.

On August 14, 2020, Tetra Tech provided a revised grading plan for the surface of the Consolidation Area to the Forest Service. This information was then passed on to the contractor who in turn passed it on to the equipment dealer for input into the GPS controlled equipment working on the job. These files were loaded into the machines on Monday, August 17 and were ready to use when the Work Suspension Order was rescinded. Once work resumed, the GPS dozer lead the work on the regrade of the Consolidation Area and was assisted by the Komatsu D65 and the John Deere 750 dozers and the CAT 143 road grader regrading the surface of the Consolidation Area.

Based on information developed during a site visit on Tuesday, August 11 and a conference call on August 12, the face of the slope below the lower rock outcrop would be regraded so the slope would be reduced and the channel, ridges and subridges could be constructed. When the inspector and equipment got to the site, the entire face of Removal Area A1 had bee rilled by the runoff from the 1.8 inches of rain last Thursday night. The plan developed by Tetra Tech was to cut the face below the upper outcrop and lower out crop vertical and create a shallow slope to the edge of the lower outcrop. When this area was inspected after the rain storm, it was observed that there really was no soil build up between the exposed rock. A solid sloping rock surface existed between the rock outcrops so no excavation was completed in this area. Below the lower outcrop, the soil was excavated vertically approximately 8 feet below the rim of the outcrop to begin the regrading of this slope below the outcrop. All of the material excavated from this upper portion of the slope was moved down slope and placed in a section of the slope that had a low spot or belly. This material was used to create a uniform slope through the belly and connect the upper and lower portions of the slope to assist with the construction of the channels to be installed on the slope. As the material was being excavated and moved down the slope, the dividing ridges between the different faces of the Removal Area were identified and the material was graded away from the ridges to direct flow into the planned channels. As the channels were being constructed, the boundaries that created the sub watersheds draining into the channels were also identified and enhanced to prevent uncontrolled flow down the slope. In areas adjacent to the main channel that could generate runoff, a secondary channel was created that lead into the main channel to capture as much runoff from the face and direct it into the main channel. As the channel worked its way down the slope, large rocks were installed at locations where channels joined so the water flowing from one channel flowed into the solid rock and will be forced to turn without eroding the bank. The main channel enters the channel in the bottom of the existing draw at the bottom of the Removal Area. All work done in the channels and slope incorporated the knowledge that 18 inches of cover soil would be installed over the entire surface and then revegetated. It is anticipated that the features installed on the slope will be reflected in the final topography of the site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 18, 2020



Surface erosion on eastern lobe after last Thursday night rain



Surface erosion on outcrop face after last Thursday night rain



Surface erosion on divide between haul road and outcrop draws



Beginning of work on Consolidation Area regrading



Vertical cut below lower rock outcrop



Moving excavated material down slope to fill in belly

RILEY PASS PHOTOGRAPH LOG
AUGUST 18, 2020



Upper western channel on reshaped outcrop slope



Junction of upper western and eastern channels on reshaped outcrop slope



Installation of channel armoring where channel turns on slope



Excavation of channel on lower portion of outcrop slope



Finished configuration of lower channel sections on outcrop slope



Excavation of channel outlet into existing channel n bottom of draw.

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 19, 2020	Wednesday	0730	1800	Sunny AM; Sunny with Light Breeze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 68 Max. 98	Dry with sun and breeze	135	59	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
44%	35%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		10	C
Komatsu PC210LC Excavator		10	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		10	C
Komatsu HM400 Articulated Truck		10	C
Komatsu D51PXi Dozer		10	C
Komatsu D65WX Dozer		10	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		10	C
BOMAG BW 145 PDH Compactor		0	C
Freightliner 4700-gal Water Truck		10	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Jae Stenerson	X	
Shayde Brengle	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 19, 2020

28. NARRATIVE REPORT

Very warm weather continued during the day on Wednesday with a high temperature of 98 observed at the Forest Service job trailer around 3 PM. A slight breeze could be felt when out at the job site to provide some relief to the hot temperatures.

Regrading of the Consolidation Area continued through the day and the contractor used the revised design surface provided by Tetra Tech last Thursday. A big issue from the contractor was why did the material that had already been installed to the specifications defined in the contract have to get ripped up and placed somewhere else. All of the fill placed prior to the regrade had been water conditioned and compacted following those specifications and the material after the regrade would just be tracked packed with the dozers and haul trucks. Based on the compacted volume of material in the Consolidation Area that was surveyed by Brosz Engineering to be approximately 12,000 cubic yards, at least half of that volume had to be moved to place it in the new design surface. The contractor is not getting paid for any of this work so he is having to absorb a significant amount of cost to get the regrade completed. As the work on the regraded surface continued, one issue that came up was how will the haul trucks haul cover soil to Removal Areas A1 through A8 with the access blocked by the regraded surface. The contractor will likely have to rebuild the access, get the hauling completed and then rebuild the slopes of the regrade surface for no additional compensation to get the work completed.

Based on information developed during a site visit on Tuesday, August 11 and a conference call on August 12, the channel in the eastern lobe of Removal Area A1 would utilize the roughed in channel created during the mine waste excavation. At the downstream end of the rough channel and end of a sub ridge running down slope, the channel would turn to convey runoff water to the northwest corner in the lower part of the lobe. Rain runoff from last Thursday night created a series of rills over the entire face of the slope and the channel work began at the downslope end of the rough channel and then worked toward the outlet site. The excavator toothed through the rills to smooth out the surface of the slope to begin construction of the channel and generated material to build the downstream bank of the channel. At the bend in the channel, a large rock was installed in the bank to force the water downstream toward the outlet. All of the material excavated out of the channel was used to build up the downslope bank of the channel to increase the bank height and prevent the flow from jumping out of the channel. Just upstream of the outlet, the runoff from the area between the edge of the work area and the ridge that forms the center channel will enter the channel. Along the bank where this water will enter the channel, several large rocks were installed in the bank to prevent the runoff from breaking through the bank. An outlet section at the end of the channel was constructed into the native ground to ensure the water did not pond n the channel before it spilled out onto the existing topography.

With the hot weather and haul trucks driving over the dirt roads, a lot of dust was being generated through the day. To keep the dust down, Young Guns Construction operated their water truck to spray the roads the entire day. Over the course of the day, 30,000 gallons of water were applied to the road surfaces. With the hot temperatures, the water quickly evaporated but still provided short term relief to the amount of dust generated by the haul trucks on each to and from the stockpile site.

One of the pay items included in Modification No. 2 was the regrade of the slope in Removal Area A1 where the channels were constructed in the outcrop and eastern lobe sections. This survey is scheduled to be completed on Thursday by Brosz Engineering.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 19, 2020



Outlet of eastern lobe channel in Removal Area A1



Channel construction in eastern lobe of Removal Area A1



Outlet section of eastern lobe channel in Removal Area A1



Original middle section of channel in eastern lobe of A1



Downslope view of channel in eastern lobe of A1



Relocating material for new Consolidation Area Surface

RILEY PASS PHOTOGRAPH LOG
AUGUST 19, 2020



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Cover Soil stockpile near RA A11



Loading cover soil from private ground off Forest Service land

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 20, 2020	Thursday	0730	1730	Sunny w/thin clouds AM; Sunny w/thin clouds PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 66 Max. 96	Dry with sun and breeze	135	60	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
44%	36%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Cover soil delivered to project site from Randy Feist site	
500 cubic yards	
Dust control water applied to haul roads	
35,000 gallons	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			5	C
Komatsu PC160LC Excavator			0	C
Komatsu HM400 Articulated Truck			10	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			10	C
Komatsu D65WX Dozer			10	C
John Deere 750C LGP Dozer			0	C
CAT 143H Road Grader			10	C
BOMAG BW 145 PDH Compactor			0	C
Freightliner 4700-gal Water Truck			10	C
Freightliner 10 cu yd Dump Truck			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Jae Stenerson	X	
Shayde Brengle	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 20, 2020

28. NARRATIVE REPORT

Another very warm day on Wednesday with a high temperature of 96 observed at the Forest Service job trailer around 3 PM. A thin layer of high clouds provided some relief from the direct sun all day. A slight breeze could be felt when out at the job site during the day and it also provided some relief from the hot temperatures.

Regrading of the Consolidation Area continued through the day and the contractor used the revised design surface provided by Tetra Tech last Thursday. Similar to Wednesday, the Komatsu D65 and D51 dozers worked all day moving material around the site to get it in the locations specified in the new surface. Joining the dozers first thing in the morning were the Komatsu 290 excavator and both of the Komatsu HM 400 haul trucks to move material from the edges of the original fill that were not included in the new surface. The excavator loaded trucks for 6 hours moving material to new locations in the new surface and moved approximately 2000 cubic yards of material during that time. Total machine hours to complete the regrading of the Consolidation Area equaled approximately 110 hours.

One of the issues that the contractor struggled with was the lack of data along the edges of the new surface that did not tell the operators what to do with the material. When the equipment followed the new design surface, areas of the original fill surface were left as is and not touched. The contractor contacted the COR and asked what to do with these areas and was instructed to field fit and blend the areas into the new surface. When this information was passed on to the design team and they did not understand why the operators did not know what to do. When this was discussed, the design team described that the new surface was built from the original cleared and grubbed surface and where nothing was placed on the cleared and grubbed surface there were no contour lines developed. As a result, the surface installed on the GPS machines left those areas as is with not direction on what to do with the existing material. It was resolved that the design team needed to include the cleared and grubbed surface along the edges of the new surface so the surface downloaded into the machine showed what to do in these areas and not just leave them alone.

Hauling of cover soil from the private borrow site on Randy Feist's property began around 2 PM after the hauling of material in the Consolidation Area was completed. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes. In the shortened work period hauling cover soil during the day, approximately 500 cubic yards of cover soil was hauled from the borrow site to the stockpile near Removal Area A11.

The haul trucks spent the first 7 hours of the day moving material in the Consolidation Area and were not traveling on the haul roads to and from the private cover soil borrow source and required no dust control water to be applied to the haul roads. Beginning around 2 PM, the haul trucks began hauling the cover soil from the private borrow site and the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 35,000 gallons of water were applied to the haul roads for dust control.

Survey of the regraded area in Removal Area A1 was completed during the day by Brosz Engineering. After that work was completed, the surveyor was asked to remain on site to get the revised surface of the Consolidation Area surveyed when the crew got the work completed. This work on the Consolidation Area was also completed by the end of the work day.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 20, 2020



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface

RILEY PASS PHOTOGRAPH LOG
AUGUST 20, 2020



Relocating material for new Consolidation Area Surface



Relocating material for new Consolidation Area Surface



Completed surface survey on new Consolidation AREa



Loading cover soil from private ground off Forest Service land

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 21, 2020	Friday	0730	1730	Sunny with smoke haze AM; Sunny with haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 88	Dry with sun and breeze	156	61	November 3, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
39%	37%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials Furnished to Job Site		24. Equipment Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Randy Feist site	C	Komatsu PC290LCi Excavator		10	C
1,000 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
30,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Shayde Brengle	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 21, 2020

28. NARRATIVE REPORT

Driving from Bowman in the morning, the sides of the road were wet with the rumble strips full of water from an overnight shower. Total rainfall measured in the rain gage at the job trailer equaled 0.05 inches but most of the roads into the job trailer appeared to have gotten more rain than at the job trailer. The sun was out most of the day but the temperature was held to 88 with the smoke and light haze in the sky.

With the regrade in A1 and the Consolidation Area completed, the crew could resume work on installing cover soil in each of the excavated Removal Areas. The first site where the cover soil was installed was RA A7 and A8. The cover soil was dumped over the bluff edge down into A7 and then scooped and placed in the margins around the edges of the site. Once this was completed, the cover soil was dumped over the bluff edge in the same spot but then the material had to be handled a couple of times to get the material into RA A8. While the extra handling of the material was not the most efficient method to complete the work, it was the only way to get the work completed given the physical configuration of the site. Later in the day, cover soil was delivered to RA A16 that is located down the slope off the southeast corner of the project work area. The route taken by the haul truck to deliver the cover soil to the site was the same that the haul truck used to haul contaminated material up to the Consolidation Area. The material was dumped at the bottom of the RA and then the Komatsu D51 dozer pushed the material into the upper areas of the site. It appears that all of the required material has been delivered to the site but some additional work is needed to finish grade the material into the edges of the site. This will be completed as time becomes available for the excavator.

Hauling of cover soil from the private borrow site on Randy Feist's property began around 7:30 AM and continued through the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes with a few trips taking longer due to additional time for the trucks to get down the access road into Removal Area A16. During the day, approximately 1,000 cubic yards of cover soil was hauled from the borrow site to Removal Areas A7, A8 and A16.

With the haul trucks beginning to haul cover soil at the start of the work day, the haul roads had to be watered all day long. With the brief rain storm overnight, the haul roads were somewhat damp but after 1 or 2 loads of material over the haul road, all roads needed water to control the dust. As the haul trucks began hauling the cover soil from the private borrow site to the installation sites, the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 30,000 gallons of water were applied to the haul roads for dust control.

Results of the survey completed on the Consolidation Area were received on Friday morning by Young Guns Construction. In the summary report, the data provided by Brosz Engineering showed that the volume of material cut equaled 4,809 cubic yards and the volume filled equaled 4,739 cubic yards. The comparison surfaces were the Excavated and Grubbed surfaces merged together and the redesigned surface provided by Tetra Tech. Making the assumption that 4,800 cubic yards were moved by Young Guns Construction to change the existing Consolidation Area surface into the redesigned surface appears to be a lot less than the actual amount of material moved. For example, the haul trucks and the Komatsu 290 excavator moved 65 loads at 30 cubic yards per load on Thursday morning or approximately 2000 cubic yards. This implies that the dozers worked for 32 hours and only pushed 2800 cubic yards over 3 days or just under 90 cubic yards per hour. Industry standard production rates for these machines is in the 200 to 300 cubic yards per hour and they appeared to be working at that rate. Additional analysis on the survey data should be completed to determine just how much material was moved to get the initial CA surface converted to the redesigned surface provided by Tetra Tech.

After the contaminated mine waste had been removed from Removal Area A1, the regrade surface showed an area that required a large volume of material to be cut and moved off the hill slope. To complete this work, Young Guns brought in a Komatsu D65 dozer to do some of the deep cuts and push the material to the bottom of the hill for loading and hauling. Since this work was completed, the dozer was taken off rent and returned to the dealer. The dozer was hauled off job site late in the afternoon on Friday and will not likely return to the job site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bruestad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 21, 2020



Loading cover soil from private ground for project use



Completed grading on redesigned Consolidation Area surface



Completed grading on redesigned Consolidation Area surface



Completed grading on redesigned Consolidation Area surface



Cover soil delivery to Removal Area A7



Placement of cover soil in Removal Area A7

RILEY PASS PHOTOGRAPH LOG
AUGUST 21, 2020



Placement of cover soil in Removal Area A7



Placement of cover soil in Removal Area A16



Delivery of cover soil to Removal Area A8



Delivery of cover soil to Removal Area A8



Moving cover soil into Removal Area A8



Moving cover soil into Removal Area A8

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Meghan Reedy, USFS and Gary Coats, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 24, 2020	Monday	0700	1700	Fog then Sunny AM; Sunny with Haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 58 Max. 91	Dry with sun and breeze	156	64	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
41%	38%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Cover soil delivered to project site from Randy Feist site	
1,200 cubic yards	
Dust control water applied to haul roads	
40,000 gallons	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			10	C
Komatsu PC160LC Excavator			0	C
Komatsu HM400 Articulated Truck			10	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			10	C
John Deere 750C LGP Dozer			0	C
CAT 143H Road Grader			10	C
BOMAG BW 145 PDH Compactor			0	C
Freightliner 4700-gal Water Truck			10	C
Freightliner 10 cu yd Dump Truck			0	C
			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Shayde Brengle	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 24, 2020

28. NARRATIVE REPORT

Visibility on the highway between Bowman and Ludlow ranged between very poor to pretty good due to the fog that formed overnight. The fog remained at the job trailer until 9 AM when the sun generated enough heat to burn off the fog layer that had set in around the job trailer. For the remainder of the day, the sun was out but a high layer of haze was present in the sky.

During the day, cover soil was placed in several locations within the work area. A summary of work done in the individual work areas is provided below:

In Removal Area A6 – Cover soil for this site had to be delivered by the haul trucks driving around the slope at A10 and the working around the point of the bluff to get to the bottom of A6. Cover soil was dumped in the lower portion of the site and then pushed up the hill with the Komatsu D51 dozer. A majority of the soil was placed within the removal area but the edges need some additional work to blend them into the surrounding topography.

In Removal Area A16 – Cover soil had been placed by the dozer but did not get blended into the surrounding topography. The Komatsu 290 excavator went into the site and finished the final grading and blending into the surrounding topography.

In Removal Area A17 – Cover soil was delivered to the top end of the site and dumped over the edge and slid most of the way to the bottom due to the steep slope. The Komatsu 290 excavator sat at the top of the site and placed the cover soil as it was delivered to the site and then worked its way down the slope to finish grading the bottom portion of the site.

In the Consolidation Area – Several loads of cover soil were dumped in the Consolidation Area to begin the placement of the material in this area. When a dozer had time, it would work on the piles and spread them out over the Consolidation Area. Several piles ere left overnight as the dozer did not have enough time to all the piles spread out.

Hauling of cover soil from Randy Feist's borrow site began around 7:30 AM and continued through the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes with a few trips taking longer due to additional time for the trucks to get down the access road into Removal Area A16. During the day, approximately 1,200 cubic yards of cover soil was hauled from the borrow site to Removal Areas A6, A16 and A17 and into the Consolidation Area.

Total volume of cover soil hauled from the borrow site to the installation site equals 160 loads at 30 cubic yards or 4800 cubic yards. The contractor estimates that if he can continue hauling 20 loads per day per truck, the hauling should be completed in approximately 10 days.

With the haul trucks hauling cover soil at the start of the work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 40,000 gallons of water were applied to the haul roads for dust control.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 24, 2020



Excavation of cover soil from borrow site in AM



Hauling and dumping cover soil in Removal Area A6



Spreading and placement of cover soil in Removal Area A6



Finished surface on cover soil in Removal Area A8



Finished surface on cover soil in Removal Area A7



Cover soil placement progress in Removal Area A16

RILEY PASS PHOTOGRAPH LOG
AUGUST 24, 2020



Placement and grading of cover soil in Removal Area A17



Dumping cover soil in Consolidation Area



Finished surface on cover soil in Removal Area A17



Final grading of cover soil in Removal Area A16



Spreading and placement of cover soil in Removal Area A6



Excavation of cover soil from borrow site in PM

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Dave Shimek, USFS & Gary Coats, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 25, 2020	Tuesday	0730	1800	Fog then Sunny AM; Sunny & Breezy w/Haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 68 Max. 96	Dry with sun and breeze	156	65	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
42%	40%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Cover soil delivered to project site from Randy Feist site	
1,400 cubic yards	
Dust control water applied to haul roads	
40,000 gallons	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			10	C
Komatsu PC210LC Excavator			10	C
Komatsu PC160LC Excavator			0	C
Komatsu HM400 Articulated Truck			10	C
Komatsu HM400 Articulated Truck			10	C
Komatsu D51PXi Dozer			10	C
John Deere 750C LGP Dozer			0	C
CAT 143H Road Grader			10	C
BOMAG BW 145 PDH Compactor			0	C
Freightliner 4700-gal Water Truck			10	C
Freightliner 10 cu yd Dump Truck			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Nathan Wagner	X	
Jae Stenerson	X	
Shayde Brengle	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 25, 2020

28. NARRATIVE REPORT

Visibility on the highway between Bowman and Ludlow pretty poor the whole way due to the fog that formed overnight. The fog remained at the job trailer until 9 AM when the sun generated enough heat to burn off the fog layer. For the remainder of the day, the sun was out but a high layer of haze was present in the sky.

During the day, cover soil was placed in several locations within the work area. A summary of work done in the individual work areas is provided below:

In Removal Area A6 – With all of the cover soil in place on Monday, the only work left to complete was the final grading around the edges of the Removal Area. The Komatsu 290 excavator tracked down the slope into the work area and began to spread the cover soil out onto the edges of the site and bring the soil up t the final grade. Work began at the bottom of the site and proceeded up the slope with the excavator climbing the slope to the top of the rimrock when the work was completed.

In Removal Area A5 – Cover soil was dumped directly into the site from the haul trucks that had backed down the steep slope of the redesigned Consolidation Area. The haul trucks are equipped with an engine retarder that restricts the speed of the engine to prevent the truck from picking up speed when going up or down hills. Without using the retarder, the loaded trucks skidded down the slope and picked up speed while with the retarder, the engine controlled the speed of the trucks going down the hill. All loads were dumped into the site at the same location with the Komatsu 290 placing the material in the locations needed within the work site.

In Removal Area A4 – Cover soil was dumped directly into the site from the haul trucks similar to A5 that had backed down the steep slope of the redesigned Consolidation Area. The hill slope below the rimrocks was so steep that a majority of the material slid down the slope to the bottom. When the excavator worked down the slope to the bottom to grade the material that had slid to the bottom, the finished grade became very steep as the machine worked its way out of the work site. When standing on the rimrock at the top of the site along the eastern edge, the slope appeared to be almost vertical and had become very difficult for the excavator to work on that steep of a slope.

In the Consolidation Area – Cover soil was delivered and stockpiled in several places during the day so the dozer could work on the piles when time allowed. As the material got spread out over the day, the final surface of the Consolidation Area was better defined to show the channels and drainage off the Consolidation Area.

Hauling of cover soil from Randy Feist's borrow site began around 7:30 AM and continued through the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes with a few trips taking longer. During the day, approximately 1,400 cubic yards of cover soil was hauled from the borrow site to Removal Areas A4 and A5 and into the Consolidation Area.

With the haul trucks hauling cover soil at the start of the work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 40,000 gallons of water were applied to the haul roads for dust control.

Over the first 4 days of hauling cover soil from the Randy Feist borrow site, approximately 135,000 gallons of water have been used for dust control on the haul roads. Total contract volume for water to be used for dust control and moisture conditioning of the mine waste prior to compaction equaled 320,000 gallons. Volume of water used for the moisture conditioning and dust control prior to beginning the cover soil haul from Randy Feist borrow site equaled 200,000 gallons leaving 120,000 gallons in the original contract amount. This volume has been used in the first 4 days of hauling from the Randy Feist borrow site with an anticipated 10 to 12 additional days needed to get all the cover soil delivered to the installation sites. Estimated additional volume of water needed will likely be in the 400,000 to 500,000-gallon range.

Near the end of the day on Monday, the Komatsu D51 dozer started experiencing a vibration in the nose just ahead of the engine. A call to DMI service department suggested that the operator remove the protection panels in front of and below the nose to see if dust and dirt had accumulated around the front motor mounts. When the panels were removed, a large amount of caked dirt had built up in the area around the front motor mounts. The solid dirt essentially prevented the rubber motor mounts from absorbing the vibration from the motor and transmitted it to the entire machine. All of the panels were removed and the caked dirt around the motor mounts was removed. Once the dirt was removed, the machine operated like normal.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 25, 2020



Backing down steep slope to dump cover soil in A5



Placement of cover soil in Removal Area A5



Final grading of cover soil in Removal Area A16



Cleanout of accumulated dirt around front motor mount of dozer



Haul truck sliding down steep to deliver cover soil to A5



Excavation of cover soil from borrow site in AM

RILEY PASS PHOTOGRAPH LOG
AUGUST 25, 2020



Grading of cover soil in Consolidation Area



Installed cover soil in Consolidation Area



Installed cover soil in Consolidation Area



Cover soil placement progress in Removal Area A5



Excavation of cover soil from borrow site in PM



Excavation of cover soil from borrow site in PM

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 26, 2020	Wednesday	0730	1730	Sunny w/Breeze AM; Sunny w/ Smoke Hazy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 68 *Max.* 92	Dry with sun and breeze	156	66	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
42%	41%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials		24. Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Randy Feist site	C	Komatsu PC290LCi Excavator		10	C
1,500 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
40,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Shayde Brengle	X	
Ryan Foust	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 26, 2020

28. NARRATIVE REPORT

During the drive between Bowman and the job site in the morning, there were several sections of the highway that were wet with water in puddles along the edge and the rumble strips full of water. Yet in between these sections, the highway was bare and dry. No sign of these showers was apparent on the road into or at the job trailer or within the work areas.

During the day, cover soil was placed in several locations within the work area. A summary of work done in the individual work areas is provided below:

In Removal Area A4 – With all of the cover soil placed in the Removal Area just after noon, the Komatsu 290 excavator began final grading of the surface within the site. Along the eastern edge of the Removal Area, the slope of the surface got extremely steep, i.e. 1 V:0.75H, estimated by the equipment operator. Equipment use on this steep of a slope is impossible so the operator worked on these areas from below and then tracked around and finished the work from above. While the excavator can work around these steep areas, installation and integrating the compost into the cover soil will be very difficult.

In Removal Area A5 – With all of the cover soil in place on Tuesday, the only work left to complete was the final grading within the Removal Area. The Komatsu 290 excavator tracked down the slope into the work area and began to spread the cover soil out onto the edges of the site and bring the soil up to the final grade. Work began at the bottom of the site and proceeded up the slope with the excavator climbing the slope to the top of the rimrock when the work was completed

In Removal Area A11 – During the initial round of cover soil placement with material from the Bluff A borrow site only a part of the total volume of cover soil had been placed in the Removal Area. Near the end of the day, the remaining cover soil was placed in the Removal Area from the stockpile adjacent to the site. All of the remaining soil volume was placed in the site and then final graded to the elevation in the final grade surface.

In the Consolidation Area – Cover soil was delivered and placed in several locations during the day so the dozer could work on the piles as work was completed in the individual sites. As the material got spread out over the different areas, the final surface of the Consolidation Area was better defined to show the channels and drainage in the new design surface.

Hauling of cover soil from Randy Feist's borrow site began around 7:30 AM and continued through the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes with a few trips taking longer. During the day, approximately 1,500 cubic yards of cover soil was hauled from the borrow site to Removal Areas A4 and A5 and into the Consolidation Area.

With the haul trucks hauling cover soil at the start of the work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 40,000 gallons of water were applied to the haul roads for dust control.

For the last several weeks, the compactor has sat idle at the Consolidation Area after the material from the Removal Areas had been delivered and compacted. To prevent further rent on the machine, the contractor sent the compactor back to the dealer around noon on Wednesday.

At several locations, the finish grade of the cover soil is 6 to 12 inches above the surrounding native ground surface. When talking about this with the equipment operators, the surface in their machines is telling them that the elevated surface is the finish grade so they are leaving the edge as shown on the surface. Blending of the edge with the surrounding native surface cannot be completed until after the cover soil grading is surveyed so the correct installed cover soil volume can be calculated.

An issue that came up during the site visit of the COR was the water conditioning of the cover soil before or after placement and before compaction. While the intent of water conditioning the cover soil has sound reasoning, the ability of getting the water onto the cover soil at the borrow site or after installation becomes the issue. Additional conversations with the contractor will be pursued to determine if there are reasonable ways to get the water onto the cover soil either in the borrow site or at the installation site.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 26, 2020



Final grading of cover soil in Removal Area A6



Difference in elevation between cover soil and native ground



Final grading of cover soil in Removal Area A6



Final grading of cover soil in Removal Area A5



Delivery of cover soil to Removal Area A4



Final grading of cover soil in Consolidation Area

RILEY PASS PHOTOGRAPH LOG
AUGUST 26, 2020



Excavation of cover soil from borrow site in late AM



Final grading of cover soil in Consolidation Area



Delivery of cover soil to Consolidation Area



Placement of cover soil in Removal Area A11



Excavation of cover soil from borrow site in PM



Excavation of cover soil from borrow site in PM

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 27, 2020	Thursday	0730	1730	Overcast & Rain AM; Partly Cloudy w/ Sun PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 72	Wet, Muddy and Slick	156	67	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
43%	41%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials		24. Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Randy Feist site	C	Komatsu PC290LCi Excavator		0	C
300 cubic yards		Komatsu PC210LC Excavator		2	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		3	C
0 gallons due to rain		Komatsu HM400 Articulated Truck		5	C
		Komatsu HM400 Articulated Truck		5	C
		Komatsu D51PXi Dozer		2	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		2	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		0	C
		Freightliner 10 cu yd Dump Truck		3	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 27, 2020

28. NARRATIVE REPORT

On the drive from Bowman to the job site in the morning, the sky was overcast with the forecast calling for thunderstorms during the day. After arriving at the job trailer, the storm cell continued to develop and around 7:30 AM, the first thunder was heard. Around 8 AM the rain began and it was a steady drizzle and not a short duration high intensity storm. The rain continued for an hour and then quit around 9 AM. Around 10 AM, the second rain storm began and lasted for half an hour with the intensity harder that the first storm. This was followed by the third rain storm at 11AM and it also lasted for half an hour and it was a typical thunderstorm with the high intensity rain for a short period. A fourth shower hit around 11:40 but was much shorter than any of the previous storms. Over the four storms in the morning, 0.3 inches of rain were measured in the rain gage at the job trailer.

Along with the rain, the storms also had several strikes of lightning that occurred within the 5-mile radius of the job site and caused the work crew to shut down work for the 30-minute period specified in the Health and Safety Plan. After the first and second storms had passed, the work crew got all of the pickups out of the work area to prevent getting the trucks stuck in the work area due to the muddy and slick access road. At this point, the crew shut down the work site and let the rain and lightning pass.

After the rain and lightning passed, the crew went back out to the site to assess the work conditions and determined that the rain had made the surface of the installed cover soil on the Consolidation Area very slick and unsafe to deliver cover soil to the remaining work sites on the north side of Bluff A. A skeleton crew then worked the remainder of the day delivering cover soil to the Consolidation Area from the stockpile and from the borrow site.

During the day, cover soil was placed only in the Consolidation Area. A summary of work completed is provided below:
In the Consolidation Area – Cover soil was delivered and placed primarily along the center dividing ridge and then pushed into place with the Komatsu D51 dozer. Cover soil was delivered to this site by the Freightliner dump truck being loaded by the Komatsu 160 excavator and short hauled to the unloading site. Cover soil was also delivered to the site by the haul trucks delivering material from the borrow site on Randy Feist's property. The volume of material delivered to the Consolidation Area was small when compared to a normal day and this was caused by the lightning, rain and slick roads.

Hauling of cover soil from Randy Feist's borrow site began around 1 PM after the rain had quit and continued up to around 5:30 PM when the next storm cell moved over the work area. Due to the slick and muddy roads caused by the morning rain, the haul trucks ran on Tufte Road through Riley Pass and then turned onto FSR 3123 to go up the hill and across the mesa and then turn onto the spur road to the aggregate pile. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 45 minutes with a few trips taking longer. During the day, approximately 1,500 cubic yards of cover soil was hauled from the borrow site into the Consolidation Area.

With the morning rain making the haul truck route muddy and slick, the haul trucks had to run on the main Forest Service roads to get from the borrow site to the access road into the work site. No additional water was placed on the haul route or on the Forest Service road during the day to help them to dry out and get the haul trucks back on the haul road.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 27, 2020



Installed cover soil in Consolidation Area after morning rain



Condition of borrow site after morning rain showers



Unloading cover soil from borrow site after morning rain quit



Unloading cover soil before afternoon rain began



Loading cover soil from stockpile for hauling to CA



Dumping cover soil in Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Meghan Reedy, USFS, Gary Coats, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 28, 2020	Friday	0730	1730	Partly Cloudy AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 56 Max. 74	Drying with sun and breeze	156	68	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
44%	42%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Randy Feist site	C	Komatsu PC290LCi Excavator		5	C
600 cubic yards		Komatsu PC210LC Excavator		5	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
20,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		5	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		0	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		5	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Ryan Foust	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 28, 2020

28. NARRATIVE REPORT

Work activities were slow to begin in the morning due to the saturated ground conditions and very wet roadways. The first activity to be completed was the grading of the access road into the job site to get the mud off the roadway and get the pickups into the job site. Work in the morning focused on moving material from the stockpile to the Consolidation Area and working on the haul road to get it dried out and usable. As the day progressed, the sun and wind dried out the haul road and the borrow site so the loading and hauling could resume from the borrow site on Randy Feist's property in the afternoon.

During the day, cover soil was placed only in the Consolidation Area. A summary of work completed is provided below:
In the Consolidation Area – Cover soil was delivered and placed primarily along the center dividing ridge and then pushed into place with the Komatsu D51 dozer. Cover soil was delivered to the site in the morning from the stockpile near Removal Area A11 and in the afternoon from the borrow site on Randy Feist's property. The volume of material delivered to the Consolidation Area from both sites was small when compared to a normal day due to the wet conditions at the job site and equipment service calls..

Hauling of cover soil to the Consolidation Area was completed from the stockpile near Removal Area A11 in the morning and from Randy Feist's borrow site began in the afternoon. In the morning, the Komatsu 290 excavator loaded a single haul truck as the other haul truck was undergoing its 1000-hour service. Both haul trucks were available in the afternoon and the haul road had dried out enough so that the trucks could haul over Bluff B and stay off the main Forest Service road. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes with a few trips taking longer. During the afternoon, approximately 600 cubic yards of cover soil was hauled from the borrow site into the Consolidation Area.

With the haul trucks beginning to haul cover soil in the early afternoon, the haul roads had become dry enough to require water for dust control by the middle of the afternoon. During the afternoon after the roads had finally dried out, approximately 20,000 gallons of water were applied to the haul roads for dust control.

Part of the rental agreement on all of the equipment is that the dealer will come out and service the equipment at specified intervals to ensure the equipment is performing as designed. Hours on the original haul truck brought to the site reached 1000 hours during the week and a major service evaluation is completed at that time. The dealer scheduled Friday morning and part of the afternoon to complete this service so the truck was not available until the work was completed in the early afternoon. The mechanic also looked at the 290 excavator and D51 dozer while on site to address a few minor issues on each of those machines.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennstead	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 28, 2020



Wet conditions in morning at Randy Feist borrow site



Loading soil from stockpile for short haul to Consolidation Area



Grading cover soil near middle portion of Consolidation Area



Loading cover soil at Randy Feist borrow site in the afternoon



Unloading soil in the northwest corner of the Consolidation Area



Grading soil in the northwest corner of the Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, USFS; Aaron Orechwa, Tetra Tech; Shane Matolyak, Tera Tech; Austin Maphis, Tetra Tech

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
August 31, 2020	Monday	0730	1730	Sunny w/ High Overcast AM; High Clouds PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 50 Max. 72	Dry with sun and breeze	156	71	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
46%	44%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Randy Feist site	C	Komatsu PC290LCi Excavator		10	C
800 cubic yards		Komatsu PC210LC Excavator		10	C
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC160LC Excavator		0	C
400 cubic yards		Komatsu HM400 Articulated Truck		10	C
Dust control water applied to haul roads	C	Komatsu HM400 Articulated Truck		10	C
30,000 gallons		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C
				0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	August 31, 2020

28. NARRATIVE REPORT

After the rain last Thursday, temperatures have cooled down 20+ degrees over the weekend and on Monday. In the first part of last week, high temperatures were in the mid nineties but high temperatures on Friday and over the weekend were only in the seventies. That trend continued on Monday with the high temperature in the low seventies.

During the day, cover soil was placed in Removal Areas A1 and A4. A summary of work completed is provided below:

In Removal Area A4 – Cover soil was delivered and placed over the entire Removal Area after the material was dumped in the southwest corner of the site. Once the material was unloaded over the top edge, the excavator climbed down onto the slope and moved the material into the specified locations. Due to the steep slope, the material along the bottom edge had to be installed and track compacted and then used as a foundation to support the material above on the slope. In places, the slope got so steep that the excavator could not track up the slope to get the material placed from below. In these locations, the machine had to track out of the site and work on the area from above. A small amount of final grading will be completed on Tuesday morning to finish installation.

In Removal Area A1 – Cover soil was delivered and unloaded on the former access road along the top of the exposed sandstone bluff. From this point, the dozer pushed the material over the former access road along the top of the bluff. As the cover soil was installed, the haul trucks were able to place the material closer to the installation sites so the dozer could continue rebuilding the road. Overall plan for installation of cover soil in Removal Area A1 is to rebuild the haul road down the center of the work area and then unload and spread the cover soil to all sections of the Removal Area. A majority of the material will be brought in using the haul road but some will have to be brought in from the bottom to establish the foundation along the base of the Removal Area.

Hauling of cover soil to the Removal Areas was completed from Randy Feist's borrow site in the morning and from Tom Kalisiak's borrow site in the afternoon. This change was made to facilitate the rehabilitation of the borrow site on Randy Feist's property so the ground would drain and it could be returned to hay production for next year.

Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 30 minutes from Randy Feist's borrow site and approximately 40 minutes from Tom Kalisiak's borrow site. During the day, approximately 800 cubic yards of cover soil was hauled from the Randy Feist's borrow site and approximately 400 cubic yards of cover soil was hauled from Tom Kalisiak's borrow site to Removal Areas A1 and A3.

With the haul trucks hauling cover soil at the start of the work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads. Over the entire day, approximately 30,000 gallons of water were applied to the haul roads for dust control.

Near midafternoon, the Tetra Tech crew to complete the verification testing arrived on site and began to organize and setup for the completion of the verification testing at each of the Removal Areas and within the Consolidation Area. Around 4 PM, the crew went out to the work site and began preliminary work setting out pin flags locating the sampling sites to be tested in the morning. All instruments were tested and appeared to be ready to begin work on Tuesday morning. Only equipment forgotten were safety vests and hard hats.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
AUGUST 31, 2020



Excavation of cover soil from Randy Feist borrow site in AM



Unloading of cover soil at Removal Area A1



Placement of cover soil in Removal Area A1



Unloading of cover soil at Removal Area A3



Placement of cover soil in Removal Area A3



Excavation of cover soil from Tom Kalisiak borrow site in PM

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, USFS; Aaron Orechwa, TT; Shane Matolyak, TT; Austin Maphis, TT; Kurt Hansen, Forest Service

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 1, 2020	Tuesday	0700	1730	Sunny and Breezy AM; Sunny and Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 Max. 76	Dry with sun and breeze	156	72	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
46%	45%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		10	C
1,100 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
50,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Jason Yearout	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 1, 2020

28. NARRATIVE REPORT

Cooler temperatures continued on Tuesday at the job site but the big weather feature of the day was the 30 to 40 mph winds that picked up around mid-morning and continued through most of the day. The wind calmed down toward the end of the day but the steady wind through the day blew the fine-grained cover soil off the installation surfaces, dried travel surfaces on the haul roads and created a lot of dust on Tufte Road due to the haul trucks.

During the day, cover soil was placed in Removal Areas A1, A2, A3 and A12/13. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered to the top of the former haul road and then pushed down the road location to rebuild the road for getting material to the bottom of the Removal Area. Progress on the haul road rebuild progressed slowly as the trucks delivered material to the site every 15 to 20 minutes due to the travel time between the borrow site and A1.

In Removal Area A2 – Cover soil had been delivered to the site a week or so ago but never final graded because the finished surface protruded into the haul road that lead into A1. With the haul road relocated, the final grading could be completed and the site finished.

In Removal Area A3 – Cover soil was delivered and placed over the last couple of days but getting the material located in the correct locations to match the finish grade surface had been difficult due to the steep slopes and getting the material to stay on the slope. The material that had been delivered to the site was finally able to be placed in the needed locations to match the finish grade surface.

In Removal Area A12/13 – Cover soil was delivered and placed on the Removal Area below the bedrock bluffs and between the bluffs at the base. Similar to several of the other sites, the slope around and below the bluffs was very steep and required careful planning to get the material installed and then get the excavator out of the site. This work was completed so the verification testing could be completed in this area on Wednesday or Thursday and get these sites finished and ready for compost placement.

Hauling of cover soil to the Removal Areas was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 40 minutes from Tom Kalisiak's borrow site. During the day, approximately 1,100 cubic yards of cover soil was hauled from Tom Kalisiak's borrow site to Removal Areas A1 and A12/13.

With the haul trucks hauling cover soil over the entire work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the steady wind throughout the day, more water was needed to control the dust on all of the haul roads. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road had to be watered to keep the dust under control. Over the entire day, approximately 50,000 gallons of water were applied to the haul roads for dust control.

Initial discussions with the verification team identified that the primary sites to be sampled during this trip were included in 2 primary sampling areas, SU-3 and SU-4. SU-3 contained Removal Areas: A5, A6, A7, A8, A9, A19, A18 and the eastern half of the Consolidation Area. SU-4 contained Removal Areas A10, A16, and A17. This was the work plan that the crew began their work day with and felt it would be able to complete this amount of work over the next two work days. When discussing this plan with the contractor, this plan was not acceptable as they needed all of the finished removal areas tested so additional soil could be added to any hot spots and allow future work to begin before the verification team was back on site to test Removal Area A1. After discussing the concerns of the contractor with the verification testing team, they agreed to get all of the finished sites tested while they were on site this trip. As soon as the testing is complete and trucks become available, compost can be hauled into the finished work sites.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennstead	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 1, 2020



Excavation of cover soil from Tom Kalisiak borrow site in AM



Final grading of cover soil in Removal Area A2



Final grading of cover soil in Removal Area A3



Reconstruction of haul road into Removal Area A1



Excavation of cover soil from Tom Kalisiak borrow site in PM



Dust control on Tufte Road near Forest boundary

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 1, 2020

	
Final grading of cover soil in Removal Area A12/13	Final grading of cover soil in Removal Area A2

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, Dave Shimek, Kurt Hansen, USFS; Aaron Orechwa, Shane Matolyak, Austin Maphis, Tetra Tech

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 2, 2020	Wednesday	0700	1730	Sunny and Breezy AM; Sunny and Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 65 Max. 90	Dry with sun and breeze	156	73	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
47%	46%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		2	C
1,200 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
40,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		BOMAG BW 145 PDH Compactor		0	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 2, 2020

28. NARRATIVE REPORT

Increases in both temperature and wind speed occurred during the day as temperatures rose into the 90's and the wind speed increased to over 40 mph gusts. With the warm temperatures and strong winds, a lot of dust was created all over the job site and at times reducing visibility across the open areas.

During the day, cover soil was placed in Removal Areas A1. A summary of work completed is provided below:
In Removal Area A1 – Cover soil was delivered to the top of the former haul road and then pushed down the road to the bottom of the Removal Area. Progress on getting cover soil to the bottom of the haul road progressed slowly as the trucks delivered material to the site every 15 to 20 minutes due to the travel time between the borrow site and A1. Once the material was at the bottom of the Removal Area, it was moved into the southeast corner to begin bringing the excavated surface up to the finished grade.

Hauling of cover soil to the Removal Areas was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 40 minutes from Tom Kalisiak's borrow site. During the day, approximately 1,200 cubic yards of cover soil was hauled from Tom Kalisiak's borrow site to Removal Area A1.

With the haul trucks hauling cover soil over the entire work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the strong wind throughout the day, more water was needed to control the dust on all of the haul roads. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road had to be watered to keep the dust under control. Over the entire day, approximately 40,000 gallons of water were applied to the haul roads for dust control.

By mid-afternoon, all of the radiation verification testing had been completed and the hot spots had been identified. Within the boundaries of Removal Areas A4 through A19 and all areas of the Consolidation Area except the far northwestern portion, only 5 areas were identified to exceed the allowable levels. Arrangements were made with Young Guns Construction to have an excavator and a load of cover soil available around 4 PM to place additional cover soil on these 5 sites.

Placement of the additional cover soil on the hot spots began along the southeastern edge of Removal Area A19. Two sites were located in this area and approximately 12 to 18 inches of cover soil was placed over each of the identified hot spots. Once the installation was complete, a monitoring pass was made across the sites to confirm that the cover soil masked the radiation being emitted from the exposed soil. Both of the A19 sites passed after the initial placement of the cover soil. The next two sites were located on the sandstone bluff above Removal Area A7. Similar to A19, approximately 12 to 18 inches of cover soil was placed over each of the identified hot spots. Once the installation was complete, a monitoring pass was made across the sites to confirm that the cover soil masked the radiation being emitted from the exposed soil. Both of the A7 sites passed after the initial placement of the cover soil. The last site was located along the sandstone bluff above Removal Area A4. Approximately 12 to 18 inches of cover soil was placed over the identified hot spot. Once the installation was complete, a monitoring pass was made across the site to confirm that the cover soil masked the radiation being emitted from the exposed soil. The A3 site passed after the initial placement of the cover soil.

David Shimek, Forest Service COR, was on site during the day to review progress on the Bluff A project and on the fencing and waterline project that started last week. Primary areas looked at during the site visit were the cover soil placement, verification testing, and general contract administration issues.

One of the main issues that needs to be addressed is the compaction of the cover soil as it is installed on the excavated mine waste areas. Specification 204.05 (c) requires the cover soil to be moisture conditioned and then track compacting the material after it has been placed. Getting water onto the cover soil is extremely difficult on the steep slopes with no truck access along the top edge of the site and the steep slopes make track packing very difficult to complete. The combination of the steep slopes and sandy soil do not provide traction for the dozer resulting in the dozer sliding down the slope and pulling all of the cover soil with the machine. In Removal Area A1, the cover soil is being delivered with good moisture content and it was suggested to the contractor that a second dozer working with the delivery dozer would meet the contract specification. The contractor agreed to get a second dozer to help with this task.

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 2, 2020

As part of the clearing and grubbing specification on disposal, Section 201.06, tree stumps were to be chipped with the chops spread over a site identified by the CO. Due to the fact that the tree stumps are full of dirt and rocks in the roots and in the trunks, grinding would destroy any chipper rented for the project. As an alternative, the COR and contractor discussed the burial of the stumps along the upper disturbance limit boundary of adjacent Removal Areas to dispose of the stumps. The contractor agreed with this alternative and will incorporate it into the final cleanup of the project work areas.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 2, 2020



Moving cover soil down haul road in Removal Area A1



Delivery of cover soil to top of haul road at Removal Area A1



Excavation of cover soil from Tom Kalisiak borrow site in AM



Delivery of cover soil at top of haul road at Removal Area A1



Placing additional cover soil over hot spot near RA 19



Testing radiation through placed cover soil near RA A19

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 2, 2020



Testing radiation through placed cover soil near RA A19



Placing additional cover soil over hot spot near RA 7



Testing radiation through placed cover soil near RA A7



Placing additional cover soil over hot spot near RA 7



Placing additional cover soil over hot spot near RA 4



Installed cover soil along bottom edge of Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 3, 2020	Thursday	0730	1800	Sunny w/ Lt Breeze AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 Max. 76	Dry with sun and breeze	156	74	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
47%	46%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		10	C
1,300 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
35,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 3, 2020

28. NARRATIVE REPORT

From the weather forecast, a cold front moved into the area overnight and cooled the temperature down and caused the wind to decrease substantially. High temperature for the day only got to the mid 70's and the winds were less than 15 mph all day.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered to the top of the former haul road and was then either pushed down the road to the bottom of the Removal Area or placed on the slope above the access road along the top of the sandstone bluff. Moving the cover soil to the bottom of the haul road progressed slowly as the trucks delivered material to the site every 15 to 20 minutes due to the travel time between the borrow site and A1. Once the material was at the bottom of the Removal Area, it was moved into the northeast corner to begin bringing the excavated surface up to the finished grade. Placement of the cover soil on the slope above the access road was completed with the excavator and brought up to the finish grade surface.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. Cycle times for each round trip are getting quicker as the truck drivers have become very familiar with the route and have determined the speed the trucks can travel at all locations along the route. During the day, approximately 1,300 cubic yards of cover soil was hauled from the borrow site to Removal Area A1.

With the haul trucks hauling cover soil over the entire work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road continues to be watered to keep the dust under control. Over the entire day, approximately 35,000 gallons of water were applied to the haul roads for dust control.

Near the end of the work day, the water truck broke down due to a U-joint on the main drive line rupturing resulting in the spline yoke falling off the driveline and tearing up several electrical lines and an airline. The truck was immobilized as the 3123-road topped out onto the mesa near the south end of the new road section. The crew got replacement parts ordered before they got the truck back to the shop and was able to get it put back together before heading home later in the evening.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 3, 2020



Placement of cover soil on areas above access road in RA A1



Moving cover soil down haul road in Removal Area A1



Installed cover soil in northeast corner of Removal Area A1



Additional cover soil being placed in northeast corner of RA A1



Working on end of strip 2 at Tom Kalisiak borrow site in AM



Placement of cover soil in drainage channels in RA A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 3, 2020

	
Begin work on strip 3 at Tom Kalisiak borrow site in PM	Loading cover soil from Tom Kalisiak borrow site in PM

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Eric Atkins

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 4, 2020	Friday	0730	1430	Sunny AM; Partly Cloudy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 58 Max. 84	Dry with sun and breeze	156	75	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
48%	47%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials Furnished to Job Site		24. Equipment Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		0	C
1100 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
30,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		10	C
		CAT 143H Road Grader		10	C
		Freightliner 4700-gal Water Truck		10	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Eric Atkins	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 4, 2020

28. NARRATIVE REPORT

After the cool temperatures on Thursday, the temperature on Friday began to warm back up with a forecast temperature for Saturday to be back into the 90's. Forecast for next week is for highs in the 50's on Tuesday and Wednesday and climbing up into the 60's and 70's by the end of the week.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered to the top of the former haul road and was then pushed partially down the haul road and then pushed across into the western basin. Moving the cover soil into the western basin progressed slowly as the trucks delivered material to the site every 15 to 20 minutes due to the travel time between the borrow site and A1. As the material was being pushed toward the western basin, a temporary work road was constructed to get the material to the edges of the area. Once enough material had been moved into the basin, it was placed on top of the excavated surface to a depth of 18 inches.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. Cycle times for each round trip are getting quicker as the truck drivers have become very familiar with the route and have determined the speed the trucks can travel at all locations along the route. During the day, approximately 1,100 cubic yards of cover soil was hauled from the borrow site to Removal Area A1.

With the haul trucks hauling cover soil over the entire work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road continues to be watered to keep the dust under control. Over the entire day, approximately 30,000 gallons of water were applied to the haul roads for dust control.

On Wednesday and Thursday, Young Guns Construction submitted Invoices Nos. 43 and 5 for work completed on the Bluff A project. Modification No. 4 was officially executed on Friday adding in additional funds for hauling topsoil from a private source. The COR requested that the quantities included on both invoices be checked against records being kept by the Tetra Tech Inspector. This verification was completed and confirmed that the quantities included in both invoices were the quantities installed during project activities. Quantities and costs included in the modification were also checked and confirmed. All of the invoice and modification data were added to the budget tracking spreadsheet and showed that the work quantities and invoice dollars match the contract quantities and dollars.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 4, 2020



Track packing of northeast corner of Removal Area A1



Material handling operation to get cover soil into western basin



Material handling operation to get cover soil into western basin



Material handling operation to get cover soil into western basin



Material handling operation to get cover soil into western basin



Track packing of slope above access road in Removal Area A1

NO WORK, MONDAY SEPTEMBER 7, 2020: LABOR DAY HOLIDAY

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 8, 2020	Tuesday	0X00	1X00	Sunny AM; Sunny PM

12. TEMPERATURE °F. Min. / Max.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
	Dry with sun and breeze	156	79	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
51%	48%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials Furnished to Job Site		24. Equipment Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		5	C
1,100 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
0 gallons (due to wet roads from weekend rain)		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		5	C
		CAT 143H Road Grader		10	C
		Freightliner 4700-gal Water Truck		0	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 8, 2020

28. NARRATIVE REPORT

After a warm day on Saturday, temperatures began to cool on Sunday due to a cold front moving into the region. This front produced a steady rain on Monday which deposited approximately 1 inch of rain in the rain gage at the Forest Service job trailer.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered to the top of the former haul road and was then pushed partially down the haul road and then pushed across into the regraded section below the rock outcrop. Cover soil was also dumped along the far eastern edge of the eastern basin to begin placement of material in this area. Cover soil was dumped off the edge of the sandstone outcrop and then pushed down the slope in the depression created between the main channel ridge and edge of the removal area. Due to the rain on Monday, all of the cover soil placed in A1 during the day was water conditioned and was track packed as the dozer was pushing material down the slope and tracking back up the slope.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. Cycle times for each round trip are getting quicker as the truck drivers have become very familiar with the route and have determined the speed the trucks can travel at all locations along the route. During the day, approximately 1,100 cubic yards of cover soil was hauled from the borrow site to Removal Area A1.

Due to the rain on Monday, no dust control water was needed on the haul roads during the day. However, a significant effort was needed to keep the roads passable for the haul trucks due to the wet road conditions. The grader worked all day blading the mud off the running surface on all the haul roads to keep the trucks from rutting the road and tearing it up further.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 8, 2020



Cover soil pushed across the middle area of the outcrop basin



Cover soil pushed down the eastern edge of the eastern basin



Cover soil pushed down the eastern edge of the eastern basin

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 9, 2020	Wednesday	0730	1730	Sunny w/ Lt Breeze AM; Sunny w/ Lt Breeze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 38 Max. 60	Drying with sun and breeze	156	80	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
51%	50%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		10	C
1,300 cubic yards		Komatsu PC210LC Excavator		10	C
Dust control water applied to haul roads	C	Komatsu PC160LC Excavator		0	C
35,000 gallons		Komatsu HM400 Articulated Truck		10	C
		Komatsu HM400 Articulated Truck		10	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		0	C
		CAT 143H Road Grader		10	C
		Freightliner 4700-gal Water Truck		0	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 9, 2020

28. NARRATIVE REPORT

Remnants of the cold front that brought the rain on Monday were still in the region and kept the temperatures cool for another day. Vehicle windows had a thick layer of frost on them in Bowman on Wednesday morning but the temperature had moderated by the time the crew arrived at the job site into the upper 30's. While the daytime temperature got into the 60's, there was still a chill in the air in the afternoon.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was dumped along the edge of the access road and the pushed down the face of the eastern basin to complete the placement of material in this area. Cover soil was pushed down the slope in the depression created between the main channel ridge and edge of the removal area. Cover soil was also pushed down the slope into the main drainage channel cut into the middle of the basin. All of the material needed in the basin was installed but was not track packed to the final surface due to an operator not being available to operate the John Deere 750 dozer. Due to the rain on Monday, all of the cover soil placed in A1 during the day was still water conditioned and was track packed as the dozer was pushing material down the slope and tracking back up the slope.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site during the entire day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. Cycle times for each round trip are getting quicker as the truck drivers have become very familiar with the route and have determined the speed the trucks can travel at all locations along the route. During the day, approximately 1,300 cubic yards of cover soil was hauled from the borrow site to Removal Area A1.

With the haul trucks hauling cover soil over the entire work day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road continues to be watered to keep the dust under control. Over the entire day, approximately 35,000 gallons of water were applied to the haul roads for dust control.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 9, 2020



Placing cover soil on top edge of outcrop basin



Placing cover soil on top edge of outcrop basin



Placing cover soil on central area of eastern basin



Cover soil placed in central portion of eastern basin



Cover soil placed in central portion of eastern basin in A1



Cover soil placed in central portion of eastern basin in A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 9, 2020

	
Cover soil placed in central portion of eastern basin in A1	Cover soil placed in central portion of eastern basin in A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 10, 2020	Thursday	0730	1730	Sunny AM; Sunny and Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 45 Max. 70	Dry with sun and breeze	156	81	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
52%	52%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		10	C
600 cubic yards		Komatsu PC210LC Excavator		7	C
Compost delivered to project site from Young Guns stockpile	C	Komatsu PC160LC Excavator		0	C
300 cubic yards		Komatsu HM400 Articulated Truck		10	C
Dust control water applied to haul roads		Komatsu HM400 Articulated Truck		10	C
25,000 gallons		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		3	C
		CAT 143H Road Grader		10	C
		Komatsu WA350 Front End Loader		3	C
		Freightliner 4700-gal Water Truck		7	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	
Jason Yearout	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 10, 2020

28. NARRATIVE REPORT

Morning and afternoon temperatures at the job site during the day were 10 degrees warmer today than yesterday making the day much more pleasant to be outside. Forecast for the next week is for high temperatures to be in the high 70's to low 80's and low temperatures to be in the mid to high 40's.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered primarily to the haul road and western basins during the day to get the majority of the material needed in these areas on site. After delivery, the material was pushed down the slope and put in place or stockpiled in a temporary pile until placed at a later time during the day. During the break in cover soil hauling to haul compost, the equipment operator loading trucks ran the John Deere 750 dozer to final track pack the installed cover soil. The Komatsu 290 excavator and Komatsu D51 dozer worked all day in Removal Area A1 placing cover soil.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site for a majority of the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. Cycle times for each round trip are getting quicker as the truck drivers have become very familiar with the route and have determined the speed the trucks can travel at all locations along the route. During the day, approximately 1,300 cubic yards of cover soil was hauled from the borrow site to Removal Area A1.

With the haul trucks hauling cover soil for a majority of the day, the haul roads had to be watered all day long. As the haul trucks began hauling the cover soil from the borrow site to the installation sites, the water truck began a continuous application of water to the haul roads and to Tufte Road. Due to the location of the borrow site on Tom Kalisiak's property, an additional mile of Tufte Road continues to be watered to keep the dust under control. Over the entire day, approximately 25,000 gallons of water were applied to the haul roads for dust control.

Hauling of cover soil into Removal Area A1 was suspended around 11 AM to allow the dozer and excavator to get the delivered material moved into the areas where it will be placed and to get an idea of how much additional material will be needed in each location. During this 3-hour period of time, the haul trucks were used to haul compost from the stockpile near the water tank to the Consolidation Area. Ten piles of compost were dumped in scattered locations around the Consolidation Area to be spread out at a later time when that phase of the project begins.

With the inch of rain received on Monday at the project site, a quick review of the cover soil installed at several of the other Removal Areas was completed to determine if the runoff created numerous rills similar to the runoff from the rainstorm on August 14, 2020. Review of the cover soil placed in Removal Areas A7, A8, A18, and A17 showed no deep rills in the surface. It appears that the rainstorm was a long duration, low intensity storm that delivered the inch of rain and allowed the moisture to soak into the ground and not runoff and erode the surface. Similar long duration, low intensity rainstorms into the fall would be very beneficial to the cover soil to help settle the material and not erode the surface layers especially after the compost is integrated and the revegetation has been completed.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 10, 2020



Looking down drainage channel in eastern basin of A1



Looking up drainage channel in eastern basin of A1



Looking up drainage channel in eastern basin of A1



Loading compost for delivery to Consolidation Area



Loads of compost delivered to Consolidation Area



Looking down drainage channel in eastern basin of A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 10, 2020



Placing cover soil in western basin of A1



Cover soil delivery to western basin of A1



Placed cover soil in upper end of haul road basin in A1



Placed cover soil in lower end of haul road basin in A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 11, 2020	Friday	0730	1730	High Overcast AM; Mostly Cloudy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 45 Max. 66	Dry with sun and breeze	156	82	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
53%	60%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*		24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)* Type	Contract Item Number and Location of Use	Hours Used	
Cover soil delivered to project site from Tom Kalisiak site	C	Komatsu PC290LCi Excavator		5	C
600 cubic yards		Komatsu PC210LC Excavator		0	C
Compost delivered to project site from Young Guns stockpile	C	Komatsu PC160LC Excavator		0	C
120 cubic yards		Komatsu HM400 Articulated Truck		9	C
Dust control water applied to haul roads	C	Komatsu HM400 Articulated Truck		9	C
0 gallons		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		5	C
		CAT 143H Road Grader		10	C
		Komatsu WA350 Front End Loader		2	C
		Freightliner 4700-gal Water Truck		0	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC. Item	Prep	Submit

26. WORKERS ON SITE Classification	Number PRIME	SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 11, 2020

28. NARRATIVE REPORT

Temperatures for the day were similar to those on Thursday but the high overcast in the morning and mostly cloudy conditions in the afternoon kept the high temperature a little lower than yesterday. Forecast for next week beginning to show fall temperatures variations ranging from high 80's to mid-60's during the week.

During the day, cover soil was placed in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – Cover soil was delivered to Removal Area A1 was placed primarily in the haul road and western basins during the day to get the final quantities of the material needed in these areas on site. After delivery, the material was pushed down the slope and put in place or stockpiled in a temporary pile until placed at a later time during the day. The Komatsu 290 excavator and Komatsu D51 dozer worked all day in Removal Area A1 placing cover soil. To provide a backup plan for any shortage of cover soil, a stockpile of 120 cubic yards of material was created near Removal Area A11. This material will be used if any additional material is needed to finish the grading in A1.

Hauling of cover soil to the Removal Area was from Tom Kalisiak's borrow site during the day. Each load of cover soil in the haul trucks contained approximately 30 cubic yards and each round trip took approximately 35 to 40 minutes from the borrow site. During the day, approximately 600 cubic yards of cover soil was hauled from the borrow site to Removal Area A1. This volume of material is approximately half of a normal day of hauling and was this low as the dozer and excavator worked to get material into the correct locations and did not need the volume of material typically hauled in a normal day to get this work accomplished. One of the factors contributing to this reduced volume of material hauling was the haul truck drivers were required to self-load their trucks as the equipment operator who normally loads the trucks was not working on Friday as he was attending his monthly National Guard training over the weekend.

Similar to Thursday, hauling of cover soil to Removal Area A1 was suspended around 11 AM to allow the dozer and excavator to get the delivered material moved into the areas where it will be placed and to get an idea of how much additional material will be needed in each location. During this 3-hour period of time, the haul trucks were used to haul compost from the stockpile near the water tank to the Consolidation Area. Two additional piles of compost were dumped in locations around the Consolidation Area and two piles of compost were dumped in Removal Areas A14 and A15 to be spread out at a later time when that phase of the project begins.

The contractor has been hauling compost from Rapid City for the last few weeks and storing it in a stockpile near the water tanks used to water the haul roads for dust control. This material was unloaded out of the trailer using a moving floor system in the trailer resulting in a series of piles on the ground as the truck pulled forward during the unloading process. After each load, a Komatsu WA 350 loader would move these small piles into a large stockpile to maintain enough room around the stockpile to unload the next load and load trucks when needed. One factor not considered was the height of the bed on the haul trucks and the bucket height of the front-end loader when unloading material into the truck bed. Due to the size of the machine, the size of the loads put in each truck was less than the capacity of the box because the bucket could not get high enough. To solve this problem. The grader operator dug a slot in the ground for the haul trucks to drive into and lower the box of the haul truck so the front-end loader could get a full load of compost into the box. A clever solution to one of those issues that always seem to come up on a construction site.

With the haul trucks hauling a very reduced volume of material during the day, the volume of dust created by the haul truck on the haul roads was very low. As a result, there was no need for dust control watering during the day resulting in 0 gallons of water applied to the road surfaces.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennstead	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 11, 2020



Moving material into upper section of western basin of A1



Track packed areas above access road to A1



Stockpiled material for lower sections of outcrop and haul road basins



Looking across mid-section of haul road basin toward western basin



Looking up main drainage channel in eastern basin of A1



Loading compost from stockpile

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 11, 2020



Looking upslope at mid-section of haul road drainage basin



Looking upslope at top of western basin of A1



Looking down slope to outlet of western basin of A1



Delivered compost to Removal Areas A14 and A15

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 14, 2020	Monday	0730	1730	Fog / Sunny & Breezy AM; Sunny & Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 48 Max. 86	Dry with sun and breeze	156	85	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
54%	66%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

23. Materials Furnished		24. Type	Contract Item Number and Location of Use	Hours Used	
Compost delivered to project site from Young Guns stockpile	C	Komatsu PC290LCi Excavator		6	C
30 cubic yards		Komatsu PC210LC Excavator		10	C
		Komatsu PC160LC Excavator		0	C
		Komatsu HM400 Articulated Truck		7	C
		Komatsu HM400 Articulated Truck		0	C
		Komatsu D51PXi Dozer		10	C
		John Deere 750C LGP Dozer		10	C
		CAT 143H Road Grader		10	C
		Komatsu WA350 Front End Loader		1	C
		Freightliner 4700-gal Water Truck		0	C
		Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 14, 2020

28. NARRATIVE REPORT

After a fairly nice weekend, widespread fog covered the region from Bowman southward to the project area. In some places, the visibility was less than a quarter mile and in other locations it increased to over a mile. With the temperatures in the mid 40's the fog remained until mid-morning when it warmed up enough to burn off the fog layer. High temperatures climbed into the mid 80's in the afternoon.

During the day, cover soil was final graded in Removal Area A1. A summary of work completed is provided below:

In Removal Area A1 – All of the estimated cover soil needed in Removal Area A1 had been delivered by the end of work on Friday so the remaining work was getting the material in the needed locations and final graded. The primary areas still to be final graded included the middle section of the haul road basin and the middle and upper sections of the outcrop basin. This work was completed by the end of the day in preparation for the verification testing to begin on Wednesday.

As part of the Clearing and Grubbing specifications contained in Section 201.06 Disposal, all tree trunks larger than 6-inches in diameter would be stacked at a location determined by the Forest Service for public use. This location was identified to be near the intersection of FS Road 3123 and the spur road to the aggregate stockpile. All of the tree trunks from Removal Areas A1, A7, A8, the Consolidation Area and the Access Road were loaded into the haul truck and transported to the stockpile site and dumped on the ground.

An issue that has been discussed for the last few weeks was the ultimate disposal of the stumps cut off the tree trunks collected during the clearing and grubbing work. The contractor had reservations about chipping or grinding them as the dirt and rocks contained in the roots would likely destroy a chipper or grinder. An alternative to chipping and grinding was to bury the stumps along the top edge of the disturbance limit near the top of Removal Area A1. When thinking about this, the contractor realized that this area likely contained contaminated soils below the surface and digging a hole at this location would spread more contaminated material onto the surface surrounding the hole which would then need to be covered. To avoid this, the hole for the stumps would be located along the eastern edge of the lower basin of Removal Area A1 in an area with a low chance of contaminated material. Stumps were hauled in from all sites to this area and then buried. Once the final grading over the stumps is completed, the area will be included in the verification testing to confirm no contaminated material is exposed.

During the later part of last week, compost was delivered to the Consolidation Area in preparation of spreading and integrating the material into the cover soil. In the morning on Monday, the John Deere 750 dozer was used to spread out the piles on the Consolidation Area. This machine is typically used to spread out large volumes of material and placing an inch of compost over the uneven surface of the Consolidation Area did not meet the intent of the contract specifications. The result was numerous ridges of material left along the edge of the blade and numerous bare spots under the blade where it was set too close to the ground. A better methodology of spreading the compost was needed.

To get a better distribution of the compost over the Consolidation Area, a drag mat was fabricated from steel parts found in the contractor's bone yard. This drag mat was towed behind the John Deere 750 dozer and worked both parallel and perpendicular to the original spreading done with the JD 750 to smooth out the compost. A large rock and a couple of railroad ties were added to the drag mat to weight it down to keep the mat from rolling over the mounds of compost. After several passes of the drag mat over the compost, the distribution of the compost became much more uniform over the surface of the Consolidation Area. Before the final spreading could be completed, the dozer operator had to leave to attend his son's junior high school football game. Additional time will be spent on Tuesday to finish the spreading of the compost.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 14, 2020



Loading tree trunks to haul up to 3123 Road for public use



Looking down slope at outlet to haul road basin



Grading progress on middle section of outlet basin channel



Grading progress on middle section of outlet basin channel



Preliminary spreading of compost on Consolidation Area



Digging hole to bury stumps along lower east edge of A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 14, 2020



Stumps buried in hole along lower east edge of A1



Final grading in outcrop basin of A1



Second pass on compost spreading on Consolidation Area



Dozer pulling drag to spread compost on Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, USFS; Aaron Orechwa, TT

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 15, 2020	Tuesday	0730	1730	Smoke and Haze AM; Smoke and Haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 58 Max. 80	Dry with sun and breeze	156	86	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
55%	70%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Compost delivered to project site from Young Guns stockpile	C
0 cubic yards	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			5	C
Komatsu PC210LC Excavator			10	C
Komatsu PC160LC Excavator			0	C
Komatsu HM400 Articulated Truck			10	C
Komatsu HM400 Articulated Truck			0	C
Komatsu D51PXi Dozer			10	C
John Deere 750C LGP Dozer			2	C
CAT 143H Road Grader			10	C
Komatsu WA350 Front End Loader			0	C
Freightliner 4700-gal Water Truck			0	C
Freightliner 10 cu yd Dump Truck			0	C
Honda Foreman 4-Wheeler w/ drag mat			8	

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 15, 2020

28. NARRATIVE REPORT

Smoke from the wildfires spread into the Dakotas on Tuesday and brought hazy skies to Bowman and the Riley Pass job site. In the morning only the haze was present but later in the afternoon you could begin to smell the smoke as the jet stream pushed the smoke across the northern part of the US.

Another issue that was discussed last week was the placement of the slash on the cover soil finished surface. Factors that prompted this discussion were how to get the material placed on the finished surface without tearing up the surface with the excavator tracks moving over the area and how would the slash impact the revegetation work. In Modification No. 3, bonded fiber matrix was added to replace the straw in the hydraulic mulch to be applied to the finished surface. If the slash was installed after the seeding and hydraulic mulch had been applied, the equipment would destroy the surface coating on the cover soil created by the bonded fiber mulch. If the slash was installed first, getting the seed onto the finish cover soil surface would be very difficult through the branches, needles and leaves included in the slash. To eliminate the issues created by the placement of the slash on the finished surface and the revegetation work, the COR and contractor agreed to place all of the slash in the on-site borrow site and then hand seed over and through the spread-out slash.

For a majority of the day, the Komatsu 210 excavator with the bucket thumb and a Komatsu 400 haul truck moved the slash from Removal Area A1 to the borrow site. During the day, approximately 15 loads of slash were moved from the stockpiles located along the lower and upper boundaries of Removal Area A1. Additional slash piles are located near the lower edge of RA A6, the top edge of RA A7 and the upper edge of the Consolidation Area. All remaining slash piles will be hauled to the borrow site on Wednesday.

In the morning, the Komatsu D51 dozer was used to spread compost in RA A19 and A10. The Komatsu 290 excavator was also used to spread compost on RA A9, A18 and A17. Using the surface areas on Sheets C-104 and C-105, the volume of compost needed to place 1-inch over the surface area was calculated. The bucket on the 290 has a volume of 3 cubic yards so the compost volume required was divided by 3 to determine the number of bucket loads to be dumped on the site. Once the material was dumped on the site, the excavator spread out the material the best that could be done with the large bucket. Additional hand work will be required to get the material evenly spread out across the site.

To get the compost spread out over the Consolidation Area more uniformly than by using the drag behind the JD 550 dozer, a Honda 4-wheler was brought on site with a smaller drag and run over the Consolidation Area. This smaller drag behind the 4-wheeler was pulled in an oval pattern up and down the slope to spread out the compost. The entire surface of the Consolidation Area was treated with the smaller drag and got the compost spread out as uniformly as possible. Compost placed on Removal Area A14 was also spread out with the small drag.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 15, 2020



Spreading compost in Consolidation Area with small drag



Preliminary spreading of compost on Removal Area A19



Loading slash near bottom of Removal Area A1



Unloading of slash in borrow area



Loading slash near top of Removal Area A1



Final distribution of compost on Consolidation Area

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 15, 2020



Final distribution of compost on Consolidation Area



Final distribution of compost on Removal Area A14



Distribution of compost on Removal Area A15

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Gary Coats, USFS; Aaron Orechwa, TT; Shane Matolyak, TT; Natalie Morrow, TT

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 16, 2020	Wednesday	0730	1730	Sunny w/ Haze AM; Sunny w/ Haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 45 Max. 76	Dry with sun and breeze	156	87	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
56%	72%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Compost delivered to project site from Young Guns stockpile	C
0 cubic yards	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use		Hours Used	
Komatsu PC290LCi Excavator			0	C
Komatsu PC210LC Excavator			8	C
Komatsu PC160LC Excavator			10	C
Komatsu HM400 Articulated Truck			2	C
Komatsu HM400 Articulated Truck			0	C
Komatsu D51PXi Dozer			5	C
John Deere 750C LGP Dozer			0	C
CAT 143H Road Grader			10	C
Komatsu WA350 Front End Loader			0	C
Freightliner 4700-gal Water Truck			0	C
Freightliner 10 cu yd Dump Truck			0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 16, 2020

28. NARRATIVE REPORT

Smoke from the west coast wildfires continued to create a haze in the skies in southwestern North Dakota and northwestern South Dakota on Wednesday. Intensity of the haze varied throughout the day depending on how much smoke was being brought into the area by the jet stream.

After the slash was removed from all of the Removal Areas on Tuesday, the Komatsu 210 excavator spent most of the day today spreading out the slash in the northern and southern areas of the borrow site. Volume of material delivered to the northern area was correct as when the material was spread out, it covered the ground with a loose layer of material over the entire area. Volume of material delivered to the southern area was too much resulting in a stockpile of material being built near the center of the site for burning at a later date. Around the slash stockpile, the slash was distributed at a density similar to the northern area with the excess put into the stockpile. Construction of the stockpile was authorized by the Forest Service COR.

Throughout the day, installation of compost continued at the smaller site surrounding the Consolidation Area. In most of these smaller sites, the compost was delivered to the site and placed along the top edge of the removal area with the excavator and then raked by hand down the slope to cover the entire area. In a couple of locations, the compost had to be delivered down the slope in the bed of a side by side utility vehicle and the distributed over the site with a plastic sled. These smaller sites were so small that using a large piece of equipment on the site would tear up the finished surface while installing the compost requiring a significant amount of work the get the surface back to the design surface. Volume of the compost placed in each removal area was calculated using the surface area shown on design sheets C-104 and C-105 and multiplying by the 1-inch depth specified in the contract documents. Volumes of the excavator buckets were known and the number of bucket loads needed to get the required volume of compost was calculated and then placed on the removal areas.

Compost was delivered and installed on Removal Areas A7, A8, A9, A16, A17 and A18 during the day.

The entire verification team was on site on Wednesday to complete the sampling in Removal Areas A1, A2 and A3. After getting the instruments calibrated in the job trailer first thing in the morning, the crew headed up to the site and began sampling for radiation and using the XRF meter. Soil samples were also collected for additional analysis by a soils lab to get a more complete analysis of the soil placed at the site. One minor problem occurred around 3 PM as the XRF instrument quit working. A work around the problem was developed and allowed the crew to finish the sampling by the end of the day.

Results of the radiation sampling found four locations that exceeded the allowable level of radiation. Two were located south of the upper disturbance limit of Removal Area A1 above the eastern lobe basin, on was located east of the disturbance area limit near the upper edge of Removal Area A1 and one was found at the intersection of the Consolidation Area and Removal Area A4. The first 3 sites listed were outside the disturbance limits identified for this project but were covered by additional cover soil to prevent any further exposure to radiation. The last site mentioned was located on the exposed rimrock bluff between the Consolidation Area and Removal Area A4. This site was identified during the first verification testing sampling period and was covered with cover soil. In the 2 weeks since the first verification testing sampling period, the radiation bleed through the cover soil and was again emitting radiation from the source. One of the questions that must be answered about this site is that the radiation is originating from an area that is primarily an exposed sandstone bluff. Is the sandstone rock emitting the radiation or did some radioactive material get spilled onto the sandstone that is now creating the radiation? The exposed sandstone bluffs are a common topographic feature of the area and an investigation into whether or not the sandstone is a source of radioactivity is needed if the exposed sandstone bluff is to be a feature to be incorporated into the final design of future reclamation work.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 16, 2020



Spreading compost in Removal Area A8



Location of buried stumps along eastern edge of RA A1



Placement of slash piles in northern parcel of borrow site



Spreading out of slash pile in southern parcel of borrow site



Compost spread out on Removal Area A6



Compost spread out on Removal Area A8

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 16, 2020



Compost spread out on Removal Area A7



Compost spread out on Removal Area A9



Compost spread out on Removal Area A18



Compost spread out on Removal Area A17



Spreading compost in Removal Area A16

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 17, 2020	Thursday	0730	1730	Sunny w/ Haze AM; Sunny w/ Haze PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 44 Max. 72	Dry with sun and breeze	156	88	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
56%	74%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Compost delivered to project site from Young Guns stockpile	C
300 cubic yards	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		0	C
Komatsu PC210LC Excavator		6	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		8	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		10	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		10	C
Komatsu WA350 Front End Loader		2	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 17, 2020

28. NARRATIVE REPORT

Smoke from the west coast wildfires continued to produce a haze in the skies in southwestern North Dakota and northwestern South Dakota on Thursday. Intensity of the haze varied throughout the day depending on the strength of the wind at different times of the day.

Throughout the day, installation of compost continued at the smaller site surrounding the Consolidation Area. In most of these smaller sites, the compost was delivered to the site and placed along the top edge of the removal area with the excavator and then raked by hand down the slope to cover the entire area. In a couple of locations, the compost was dumped directly out of the haul truck onto the top of the slope to be hand raked. These smaller sites were so small and so steep that using a large piece of equipment on the site would tear up the finished surface while installing the compost requiring a significant amount of work the get the surface back to the design surface. Volume of the compost placed in each removal area was calculated using the surface area shown on design sheets C-104 and C-105 and multiplying by the 1-inch depth specified in the contract documents. Volumes of the excavator buckets were known and the number of bucket loads needed to get the required volume of compost was calculated and then placed on the removal areas.

Compost was delivered and installed on Removal Areas A2, A3, A4, A5, A11 and portions of A1 during the day.

Volume of compost delivered to the different installation sites during the day equaled 300 cubic yards of material. The haul truck driver self-loaded the truck as the other equipment operators were busy spreading compost which reduced the number of loads delivered to the site during the day to 10. This rate of delivery was acceptable as the crew was able to match the spreading rate with this volume of material delivery.

Since the last day of hauling cover soil from the private borrow sites on September 11, 2020, the road grader has been busy everyday reclaiming the borrow sites on Tom Kalisiak's and Randy Feist's property. Prior to beginning soil removal, the top soil was removed and pushed to the edges of the sites to uncover the material that was to be removed. After the cover soil material had been removed, the ground at the bottom of the excavation had to be recontoured so the water would run off the surface followed by the replacement of the topsoil. For the last week, the grader has been completing this work and has gotten the Kalisiak site reclaimed and is currently working on the Feist site. It is anticipated that this work will be completed by the middle of next week.

Two of the pictures below refer to a 'hot zone'. These are areas where verification testing located exceedances for radiation. See the discussion in the daily report from yesterday (September 16, 2020).

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 17, 2020



Slash spread out over the southern parcel of the borrow area



Slash spread out over the central section of the borrow area



Slash spread out over the northern parcel of the borrow area



Spreading of compost in Removal Area A2



Placement of compost in Removal Area A3



Cover soil over hot zone beyond disturbance limit at A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 17, 2020



Cover soil over hot zone beyond disturbance limit at A1



Cover soil over hot zone beyond disturbance limit at A1



Cover soil over hot zone between Consolidation Area & A4



Spreading of cover soil and topsoil at stockpile site



Placement of compost in lower section of Removal Area A1



Placement of compost in lower section of Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Meghan Reedy, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 18, 2020	Friday	0700	1730	Sunny w/ Haze & Breeze All Day

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 44 *Max.* 76	Dry with sun and breeze	156	89	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
57%	75%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

Compost delivered to project site from Young Guns stockpile	C
165 cubic yards	

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC290LCi Excavator		0	C
Komatsu PC210LC Excavator		6	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		8	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		4	C
John Deere 750C LGP Dozer		4	C
CAT 143H Road Grader		10	C
Komatsu WA350 Front End Loader		2	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 18, 2020

28. NARRATIVE REPORT

Smoke from the west coast wildfires continued to produce a haze in the skies in southwestern North Dakota and northwestern South Dakota on Friday. Intensity of the haze decreased during the day as a continuous breeze from the west was present at the job site all day. This breeze was caused by a cold front moving into the Pacific Northwest that brought rain and snow to Portland, Oregon on Thursday.

Only a small work crew on site today as Hunter Kalisiak, Beth Kalisiak, Jae Stenerson, Jason Yearout and Cody Holmes were traveling to Mullan, Idaho for the funeral of Eric Atkins on Saturday.

Compost was delivered and installed on Removal Area A1 during the day. During the morning, the Komatsu 210 excavator placed material along the top edge of Removal Area A1 for hand spreading later in the day. A majority of the compost delivered to A1 during the day was into the lower portion where the dozer could push it into place and then have the dozer or 4-wheeler pull the drag over the material and spread it out evenly over the site. Young Guns Construction is planning to bring a wide track skid steer loader on site on Monday to help with the delivery and spreading of the compost on the steeper sections of A1.

Volume of compost delivered to the Removal Area A1 installation site during the day equaled 165 cubic yards of material. The haul truck driver self-loaded the truck as the other equipment operators were busy spreading compost which reduced the number of loads delivered to the site during the day to 5.5. This rate of delivery was acceptable as the crew was able to match the spreading rate with this volume of material delivery. All of the compost in the stockpile along Tufte Road has been delivered to the project site.

Reclamation of the private borrow site on Randy Feist's property continued today with the John Deere 750 dozer being tracked down to the site to help move the top soil piles into the soil removal areas. The CAT 143 grader was doing most of the moving and grading of the topsoil but some of the piles were placed with a scraper which compacted the material making it difficult for the grader to move the soil out of the pile. The dozer was used primarily to push the topsoil out of the piles so the grader could get the material and place it where it was needed. By late afternoon, the grader had completed the reclamation work on Randy Feist's borrow site.

After finishing the work on the borrow site, the grader moved up on to the main mesa and began working on the temporary spur road from the aggregate pile spur to the access road int Bluff A. This is the road the haul trucks used to bring the topsoil and compost from the top soil borrow sites and compost stockpiles along Tufte Road. Due to the weight that was being hauled in the trucks when hauling topsoil, approximately 160,000 pounds, the temporary spur road was very hard due to the truck compaction. In addition to bringing berms back into the roadbed, the grader had to use its rippers to break up the compacted driving tracks so vegetation could reestablish on the roadway. Final grading and reclamation will be completed on Monday.

Similar to the Komatsu 290 excavator a few weeks ago, the Komatsu D51 dozer reached the 1000-hour service interval this past week. The rental equipment mechanic was out on site during the morning to complete all of the necessary service tasks required by the factory on all new machines. This work was completed by approximately 1 PM and the dozer went back to workspreading out compost in Removal Area A1.

With the project work activities requiring the Komatsu 290 excavator completed, the excavator was tracked off the work area and parked in the contractor lot along Tufte Road. DMI, the equipment rental company, will be out next week to pick up the excavator.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bunstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 18, 2020



Spreading of compost on upper areas of Removal Area A1



Spreading of compost on upper areas of Removal Area A1



Placement of compost in lower section of Removal Area A1



Placement of compost in lower section of Removal Area A1



Placement of compost in lower section of Removal Area A1



Compost installed on Removal Area A11

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 18, 2020



Compost installed on Removal Area A3



Compost installed on Removal Area A4



Compost installed on Removal Area A5



Compost installed and drug on Removal Area A2



Using excavator to place compost in Removal Area A1



Reclamation of temporary haul road into Bluff A

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 21, 2020	Monday	0700	1800	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 Max. 84	Dry with sun and breeze	156	92	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
59%	78%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC210LC Excavator		10	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		4	C
John Deere 750C LGP Dozer		10	C
CAT 143H Road Grader		10	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C
Case TV380 Skid Steer Loader		6	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 21, 2020

28. NARRATIVE REPORT

A majority of the smoke from the west coast wildfires was moved out by a front that passed through the region over the weekend. Skies were much clearer but the haze was still present on the horizon at sun rise and sun set converting the sun into bright orange balls. Warm temperatures returned to the job site with high temperatures in the afternoon getting into the low 80's. Forecast is for similar temperatures through Thursday with a front moving into the region on Friday bringing a chance of showers over the weekend.

Compost was installed on Removal Area A1 during the entire day. In the morning, the Komatsu 210 excavator was used to spread the material and later in the day the Case skid steer was used to spread the material on the steeper sections of A1. Plans to spread out the compost left in the distributed piles on the slopes have not been mentioned by the contractor.

All of the compost delivered to the stockpile over the last several weeks has been delivered to the job site. A total of 915 cubic yards of topsoil has been delivered to all the job sites since September 11, 2020.

During the earlier part of the day, the road grader was used to reclaim the haul road that was constructed through the mine site on Bluff B. The berms that were built up along both edges of the road were brought back into the roadway and blended into the surrounding topography.

Work on Tufte Road was also completed during the later part of the day to pull the roadbed material back into the roadway at the Lex Burghduff corner and to remove the chatter board on the roadway from the corner to Young Gun's shop. With the haul trucks running over this section of the road for 5 weeks, the road surface had become very hard and compact. Several loads of water were placed on the roadway to soften the surface before the grader started to resurface the road. When complete, the road material had been placed back into the bottom of the corner and the chatter board had been removed from the straight section of road. The ride across the restored road surface is very smooth.

Project activities are finishing up so not a lot of work happening at the job site during the day. Most of the work is focused on getting all of the Removal Areas and Consolidation Area prepared for spraying the revegetation mixture on these sites. The contractor is anticipating beginning the application of the revegetation mixture by the end of this week or the beginning of next week.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 21, 2020



Spreading compost in the haul road basin of A1 with the skid steer



Spreading compost in the haul road basin of A1 with the skid steer



Compost spread in the eastern basin of A1 with the skid steer



Compost spread in the eastern basin of A1 with the skid steer



Stockpiled boulders spread out in the Consolidation Area



Stockpiled boulders spread out in the Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 22, 2020	Tuesday	0700	1730	Sunny w/ Lt Breeze AM; Sunny & Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 Max. 88	Dry with sun and breeze	156	93	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
60%	80%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC210LC Excavator		10	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		5	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		5	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C
Case TV380 Skid Steer Loader		5	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Nathan Wagner	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 22, 2020

28. NARRATIVE REPORT

Clear skies above with smoke on the horizon wwere present during the entire day at the job site. Warm temperatures from yesterday continued into the day with the high temperature getting close to 90 in the middle of the afternoon. Forecast for the remainder of the week is calling for haze and warm temperatures with highs in the 80's. Temperature on Friday is expected to get into the low 70's.

Final grading on Removal Area A1 was completed late in the day on Tuesday as all of the work tasks using the lower access road have now been completed. All of the cover soil required to complete the final grading has been completed within the last 2 weeks and has been stockpiled awaiting the final grading after the use of the road was completed.

In Removal Area A1, the large piles of rocks that had been stockpiled during the mine waste excavation were spread out using the Komatsu 210 excavator with the bucket thumb. Several of the rocks were placed in the constructed waterways to impede the runoff water from increasing velocity and eroding the topsoil off the site. Rocks were also placed in depressions to create microhabitats for young plants to become established on the new slopes. Several of the rocks were too large to pick up or move with the smaller excavator so they were left in place.

During the day, the skid steer loader was used to move compost to places where it was needed. This included areas on the steep slopes of Removal Area A1 and on the entire face of Removal Area A10 after the final grading had been completed. The larger drag mat will be attached to the JD 750 dozer to help distribute the compost over the steeper areas in the Removal Areas. Where the slopes are too steep, the Komatsu D51 dozer will work the slope with the blade to smooth out the tracks and the compost on the surface.

Toward the end of the day, the grader was brought in to reclaim more sections of the access roads. Work was completed on the access road begin at the Consolidation Area and worked its way down through Removal Area A10 then across the slope and around the slope to get to the bottom of Removal Area A16, A6 and A1. Also reclaimed during the day was the section of access road from the end of the Consolidation Area to the eastern edge of the upper area of Removal Area A1 along the sandstone bluff. Reclamation included ripping up the driving surface with the rear rippers on the grader and then pulling any berms into the roadway followed by leaving a roughened surface to facilitate revegetation.

Project activities are being completed each day so not a lot of work happening at the job site during the day. Most of the work is focused on getting all of the Removal Areas and Consolidation Area prepared for spraying the revegetation mixture on these sites. With the completion progress over the last couple of days, the contractor is anticipating beginning the application of the revegetation mixture by the end of this week.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 22, 2020



Installing rocks in waterway near bottom of Removal Area A1



Placing rocks in haul road basin in Removal Area A2



Large rock rolling to bottom of haul road basin in A1



Installed rocks on middle area of Removal Area A1



Final grading on Removal Area A10



Spreading compost on Removal Area A10

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 22, 2020



Spreading compost on Removal Area A10



Looking down haul road at installed rock in bottom section of A1



Looking down slope at installed rock on bottom section of A1



Looking down slope at installed rocks in eastern basin of A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 23, 2020	Wednesday	0700	1800	Sunny AM; Sunny PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 Max. 82	Dry with sun and breeze	156	94	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
61%	82%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC210LC Excavator		5	C
Komatsu PC160LC Excavator		0	C
Komatsu HM400 Articulated Truck		0	C
Komatsu D51PXi Dozer		5	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		5	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		3	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 23, 2020

28. NARRATIVE REPORT

Clear skies were again present during the entire day at the job site. Warm temperatures continued from yesterday with high temperatures reaching the low 80's during the afternoon. Weather forecast for tomorrow is for temperatures back into the 80's but with a wind creating red flag fire conditions in Harding County.

In Removal Area A1, the last of the large rock piles were placed during the morning. Placement of the rocks in A1 was severely hampered by the steep slopes in the upper half of the work area. These step slopes made it difficult for the excavator to move around and get the rocks placed in multiple locations to make them appear as they would if they had rolled down the hill slope naturally. When the excavator could get to a single location near the rock pile, the placement of the rocks was limited by the reach of the boom and stick of the excavator. Moving off this location would place the excavator on a steeper slope with sandy soil that provided no grip for the tracks when the machine wanted to move back up the slope. In addition to the lack of traction, the final graded hill slope would get torn up by the machine spinning it tracks and using the bucket to pull itself up the slope. More time would be spent repairing the final grade than placing a few more rocks.

When the Komatsu 210 excavator was finished placing the boulder in A1, it was tracked off the job site and parked near the former compost stockpile for pickup by the equipment rental company. Once the excavator was parked at the stockpile site, it went off rent and the contractor is now finished using the machine on this project.

During several of the work site touch up projects, many areas of the spread compost were disturbed creating a very uneven surface for the hydroseeding to be applied. To smooth these areas out, the dozer pulled the drag mat over all the disturbed areas to take out the bumps and get the compost redistributed. A majority of this work was done on the Consolidation Area as many of the touch up projects were done on Removal Areas that surrounded the Consolidation Area. Another area requiring the drag mat was the lower areas of Removal Area A1 after the rocks had been placed on the finished grade. The track marks were smoothed out and the compost was redistributed and the surface was prepared for revegetation.

In areas were the drag mat could not be used due to the very steep slopes, the Komatsu D51 dozer was used to track up and down the slopes and back drag the track marks and mounds created when the excavator and dozer were working on the slope. Many of the areas in the western basin, haul road basin, upper end of the outcrop basin and the upper end of the eastern basin required the dozer to back blade the surface in preparation for revegetation. Once this was completed, all of the work sites were ready for revegetation.

Beginning in the morning, final preparations for the hydroseeding were completed with the last parts needed for the sprayer delivered to the shop and installed on the truck and tank. Around noon, the water truck used for dust control on the access roads was filled with water and driven up to the former stockpile site near Removal Area A11. Around the same time, the truck and gooseneck trailer with the Bonded Fiber Matrix was also driven up to the designated loading site. This was followed by the truck loaded with a super sack filled with the fertilizer. Bags of seed mixture were weighed out at the shop to ease the preparation of the BFM slurry to be sprayed over the work areas.

Tank size of the hydro seeder equaled 800 gallons so a plan was formulated to mix the slurry in batches to cover 1/8 of an acre to meet the contract requirements for BFM, fertilizer and seed. Each tank of mixture contained:

- 800 gallons of water
- 400 lbs of BFM
- 20 lbs of fertilizer
- 2.5 lbs of seed mixture

Application of the slurry was controlled by the square footage of each Removal Area and grouped into 1/8-acre portions. An 1/8 of an acre equals 5445 square feet so the final grade surface areas of each work site were evaluated to determine how many tank loads would be required to cover each site at the contract specifications.

After getting started and working out the start up bugs, the crew got Removal Areas A10, A11, A14 and A15 hydroseeded in the afternoon.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 23, 2020



Final placement of compost in the Consolidation Area



Final rock placement in eastern basin of Removal Area A1



Final rock placement in lower section of Removal Area A1



Final rock placement in lower section of Removal Area A1



Final rock placement in lower section of Removal Area A1



Final rock placement in haul road section of Removal Area A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 23, 2020



Final rock placement in Removal Area A3



Hydroseeding Removal Area A15



Hydroseeding Removal Area A14 and A15



Hydroseeding Removal Area A14



Hydroseeding Removal Area A11



Hydroseeding Removal Area A10

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 24, 2020	Thursday	0900	1800	Sunny & Breezy AM; High Overcast & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 60 Max. 84	Dry with sun and breeze	156	95	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
61%	83%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		0	C
Komatsu D51PXi Dozer		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Shayde Brengle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 24, 2020

28. NARRATIVE REPORT

Clear skies and a steady breeze were present at the job site in the morning with a high overcast and a moderate wind in the afternoon. With the increase in wind speed and temperatures in the mid 80's, red flag fire conditions were present in Harding County for most of the day. Another front is forecast to move into the region over the weekend bringing high winds.

Hydroseeding began first thing in the morning and continued through the entire day. Crew for the work included a truck driver to position the old WWII surplus truck into position, the hydroseed motor tender, a lead sprayer and a backup sprayer. The gasoline engine that was run to power the mixer tank was finicky at times so a tender was needed to keep the motor running so the agitator kept turning and the pump kept operating during spraying operations. The equipment has been well used but is still capable of doing the work required for this contract.

As mentioned previously, the area of coverage for each tank of the BFM, fertilizer, seed and water slurry equals 1/8 of an acre. Using the square footage of each Removal Area calculated during the as-built survey, the number of tank loads or partial tank loads was calculated prior to beginning the spraying operation at each site. When spraying the slurry onto the sites, gauging the coverage became very difficult to judge as the sites became a homogenous green layer over the entire surface. To ensure the correct density of coverage over the site, the contractor proposed to spray on a first layer using the best judgement of the spray crew. Once completed, the crew would move on to the next site and spray the first layer on that site. During the day, when the sites that were sprayed first had dried, the thin spots could be identified due to the color of the cover soil showing through the slurry. Once these thin spots were identified, a second layer would be installed to fill in the thin spots and bring the coverage density up to the contract specifications. This plan was discussed with the COR and he was in agreement with the proposal presented by the contractor. A 1/8-acre test plot will be marked out and an entire tank of slurry will be sprayed on the test plot to demonstrate the required coverage density for all of the crew members to observe and reference during the remaining spraying operations.

Mixing plan for each tank of slurry was the same as yesterday:

- 800 gallons of water
- 400 lbs of BFM
- 20 lbs of fertilizer
- 2.5 lbs of seed mixture

During the day, the crew applied the first layer of slurry to Removal Areas A2, A3, A4, A5, A7 and A8. Also sprayed was the western basin of Removal Area A1.

The second layer of slurry will be applied to all of the areas surrounding the Consolidation Area before any spraying on the Consolidation Area is begun. This will prevent the mixer truck from running over the applied slurry and destroying the cap that it is creating over the cover soil.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 24, 2020



Hydroseeding truck set up at Removal Area A4



Hydroseeding truck applying slurry at Removal Area A4



Hydroseeding truck applying slurry at Removal Area A4



Hydroseeding truck applying slurry at Removal Area A1



Hydroseeding truck applying slurry at Removal Area A1



First layer of slurry application at Removal Area A1

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 24, 2020



First layer of slurry application at Removal Area A1



First layer of slurry application at Removal Area A1



First layer of slurry application at Removal Area A5



First layer of slurry application at Removal Area A8



First layer of slurry application at Removal Area A7



First layer of slurry application at Removal Areas A7 & A8

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 28, 2020	Monday	0700	1700	Sunny & Windy AM; Sunny & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 40 Max. 66	Dry with sun and breeze	156	99	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
63%	85%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		2	C
Komatsu D51PXi Dozer		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 28, 2020

28. NARRATIVE REPORT

Clear skies and a steady wind were present at the job site all day requiring the spray crew to position the truck so the spray was not directed into the wind. With the cooler temperatures, the red flag fire warning has been discontinued for the northwestern corner of South Dakota. No rain is in the forecast for the next week so the dry windy conditions will continue.

Hydroseeding began first thing in the morning and continued through the entire day. Crew for the work included a truck driver to position the old WWII surplus truck into position, the hydroseed motor tender, a lead sprayer and a backup sprayer. A new gas tank has been added to the truck for the motor powering the hydroseed unit to improve the operation of the motor during mixing and spraying operations.

During one of the aerator filing breaks, the Tetra Tech inspector asked the project superintendent if a calibration plot was going to be sprayed to demonstrate how much material needed to be sprayed on the ground using a tank full of mixture. The superintendent said no plans had been discussed to set up and spray a calibration plot. For most of the crew, this was the first experience any of them have had applying hydromulch on a project site so very little knowledge on how much area each tank of slurry should cover.

Due to the progress during the day, it is anticipated that the Consolidation Area will be completed tomorrow. At that time, there will be a known amount of square footage covered and the number of BFM bales used to cover that area. Using this information, a QC check on the amount of slurry being applied can be completed to determine if the application is too thin or too thick. Square footage for the areas will be the as-built surveyed areas calculated from the final topographic survey.

While the crew was filling the aerator tank or spraying the slurry, the project superintendent used the Komatsu 160 excavator to reclaim the access road into Removal Areas A14 and A15. The material cut out of the bank for the inner half of the road that was placed on the slope to create the outer half of the road was pulled back up and placed in the cut to reshape the hillslope. A roughened surface was left on the reclaimed hill slope to facilitate revegetation and to prevent sheet erosion across the former roadway. It is anticipated that this area will be hand seeded similar to the other reclaimed roadways.

Mixing plan for each tank of slurry was the same as the previous 2 days:

- 800 gallons of water
- 400 lbs of BFM
- 20 lbs of fertilizer
- 2.5 lbs of seed mixture

During the day, the crew applied the revegetation slurry to Removal Areas A9, A17, A18 and A19. Also sprayed was the southern region of the Consolidation Area.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 28, 2020



Application of hydroseed in SE corner of Consolidation Area



Hydroseed slurry applied to Removal Area A18



Hydroseed slurry applied to Removal Area A9



Hydroseed slurry applied to Removal Area A19



Hydroseed slurry applied to Removal Area A19



Hydroseed slurry applied to Consolidation Area

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 28, 2020



Application of hydroseed in SW corner of Consolidation Area



Application of hydroseed in southern part of Consolidation Area



Hydroseed slurry applied to Consolidation Area



Application of hydroseed along NE edge of Consolidation Area



Application of hydroseed along NE edge of Consolidation Area



Application of hydroseed along NE edge of Consolidation Area

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 29, 2020	Tuesday	0700	1800	Sunny & Windy AM; Sunny & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 50 Max. 76	Dry with sun and breeze	156	100	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
64%	87%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		0	C
Komatsu D51PXi Dozer		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Nathan Wagner	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 29, 2020

28. NARRATIVE REPORT

Clear skies and a steady wind were present at the job site all day requiring the spray crew to position the truck so the spray was not directed into the wind. After a cooler day on Monday, the temperature climbed back into the mid-70's in the afternoon. With no rain for the past couple of weeks, the gravel roads and dirt access roads have become very dusty and the wind moves the dust quickly away after traveling on a road.

Hydroseeding began first thing in the morning and continued through the entire day. Crew for the work included a truck driver to position the old WWII surplus truck into position, the hydroseed motor tender, a lead sprayer and a backup sprayer. The aerator motor continued to operate in an unpredictable manner. A new fuel pump has been ordered for the motor as most of the problems seem to be associated with not enough fuel getting to the carburetor. The new fuel pump will be delivered on Friday just before the hydroseeding is finished.

In preparation for the QC check on the hydroseed application, the number of BFM bales was determined to be 160 delivered on the first trailer and 140 on the second trailer. Applying 3200 lbs per acre of BFM over the 6.2 acres of revegetation area will require a total of just under 400 bales.

Near the middle of the day, the remaining area in the Consolidation Area had been sprayed and a know amount of area could be determined along with a known amount of BFM used. Surface area of each Removal Area was determined from the as-built survey completed by Brosz Engineering. Surface area of Removal Areas A2 – A5, A7 – A11, A14 – A15 and A17 – A19 were added together along with the surface area of the Consolidation Area to get the total square footage sprayed which equaled 3.42 acres. The number of BFM bales used to spray this area equaled 168. Application rate of the slurry mixed for each load shown below equals 64 bales of the BFM per acre. Number of acres sprayed at the design mixing rate of 64 bales per acre using 168 bales of BFM equals 2.62 acres. Percent coverage is calculated by dividing the design acres sprayed by the surface area sprayed and multiplying by 100. The coverage percentage equals 76.66 percent. Application of the hydroseed mixture at this rate is applying only 76% of the material specified in the contract specifications.

The information on the application rate has been sent to the contractor and to the Forest Service COR to verify the numbers and to identify ways to remedy the low application rate. Going back over the area once the BFM has set up on the bare dirt is not a good idea as traffic over the crusted surface breaks up the surface and creates opportunity for surface water flow to get under the crust and start surface erosion pathways.

Mixing plan for each tank of slurry was the same as the previous 3 days:

- 800 gallons of water
- 400 lbs of BFM
- 20 lbs of fertilizer
- 2.5 lbs of seed mixture

During the day, the crew applied the revegetation slurry to Removal Areas A1 and A12/13. Also sprayed was the remaining area of the Consolidation Area along the upper access road.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Brosz	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 29, 2020



Hydroseed application along access road in Consolidation Area



Hydroseed application along access road in Consolidation Area



Hydroseed application along access road in Consolidation Area



Hydroseed slurry applied to Consolidation Area



Hydroseed slurry applied to Consolidation Area



Hydroseed slurry applied to Consolidation Area

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 29, 2020



Hydroseed slurry applied to Removal Area A1



Hydroseed slurry applied to Removal Area A1



Hydroseed application on upper face of Removal Area A1



Hydroseed application on upper face of Removal Area A1



Hydroseed application on access road in Removal Area A1



Reclamation of access road into Removal Areas A14 and A15

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
September 30, 2020	Wednesday	0700	1730	Ptly Cloudy & Windy AM; Sunny & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 44 Max. 62	Dry with sun and breeze	156	101	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
65%	89%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		10	C
Komatsu D51PXi Dozer		6	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		6	C
Freightliner 4700-gal Water Truck		1	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		2	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	September 30, 2020

28. NARRATIVE REPORT

Partly cloudy skies in the morning followed by clear skies in the afternoon were coupled with a strong wind were present at the job site all day. Wind speed was in the 30 to 40 mph range most of the day with some gusts getting higher. Lots of dust in the air generated by traffic on the roads and the high winds picking the fine-grained material off the exposed ground surfaces.

Due to the high winds and changing the location of the revegetation staging area, most of the work completed during the day was reclamation of access roads and getting the equipment relocated to the lower staging area. The lower staging area will be located at the old Feist homestead near the Forest Service boundary on the southern drainage off Bluff A and the northeastern corner of Bluff B. Access across the private land has been granted by the landowner to get to the existing gate on the boundary fence.

Road reclamation work was completed on the following road section during the day:

Access road along the top of the Consolidation Area and into the top areas of Removal Area A1. The compacted roadway was scarified with the Komatsu 160 excavator bucket teeth to break up the compacted soil and make it suitable for revegetation. At several places, slash was placed in the roadway to prevent 4-wheelers from accessing the work areas and driving on the revegetated surfaces

The access road through the staging area and stockpile area near Removal Area A11 was ripped with ripper shanks on the grader to loosen the compacted soil. Once the entire area was ripped, the dozer pulled the drag mat around the entire area the smooth out the high spots and break down the clumps in preparation for revegetation.

Access road from the top of the bluff to the staging area was reclaimed with the Komatsu 160 excavator similar to the access road along the top of the Consolidation Area. The road way was scarified with the bucket teeth but no slash was placed in the former roadway as none was available. One of the criteria for the reclamation of this section of the road was that the grazing permitees needed to be able to get down the road to access this area and move cattle out of the area when needed.

Access road from FSR 31231 to bluff was the main access road to the project work area. This section of road had been graded several times after rainstorms had created mudholes in several locations. As a result, tall berms lined both sides of the roadway and these needed to be brought back into the roadway. Prior to bringing the material from the berms back into the roadway, the grader ripped the compacted base of the road with the rippers on the grader. Once this was completed, the berms were brough back into the roadway and the material was graded to match the existing topography on both sides of the former road.

Shortly after lunch, the contractor provided updated information on the number of BFM bales delivered to the job site on the two trips to Rapid City, SD to pick up the material. With the updated material information, the QC spreadsheet was updated to determine if the amount of material being sprayed on the mine waste removal sites and Consolidation Area were meeting the contract specifications. With the revised number of BFM bales included into the spreadsheet, the amount of material sprayed onto the sites was just under 90% of the design mixture described below.

Contract specifications for the revegetation components are:

BFM – 3000 lbs per acre
Fertilizer – 150 lbs per acre
Seed – 19.1 lbs per acre

Design mixture quantities for the applied revegetation slurry are:

BFM – 3200 lbs per acre
Fertilizer – 160 lbs per acre
Seed – 20 lbs per acre

Based on the comparison of the contract specifications and the design mixture recipe, the Forest Service COR determined the revegetation slurry being applied by the contractor meets the contract specifications.

During the day, the crew applied the revegetation slurry to the upper area of Removal Areas A12/13 after the access road had been reclaimed. This completed the work on A12/13 that was begun on Tuesday.

	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
SEPTEMBER 30, 2020



Lower portion of Removal Area A12/13 sprayed on Tuesday



Reclamation of stockpile and staging area near RA A11



Reclamation of access road along top of Consolidation Area



Reclamation of access road into project site from FSR 31231



Application of slurry to upper portion of RA A12/13



Reclamation of access road from bluff into work site

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
October 1, 2020	Thursday	0700	1700	Sunny AM; High Overcast PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 32 Max. 54	Dry with sun and breeze	156	102	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
66%	92%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		4	C
Komatsu D51PXi Dozer		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		4	C
Freightliner 4700-gal Water Truck		4	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Jae Stenerson	X	
Shayde Brengle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	October 1, 2020

28. NARRATIVE REPORT

Clear skies and just a slight wind allowed the hydroseed spraying resume on Thursday. Morning temperature was much cooler than the past couple of days with 32^0 F at the job trailer in the morning. Sunny skies in the morning allowed the temperature to get into the mid 50's by the afternoon. Later in the afternoon, a high layer of clouds moved over the job site to create mostly cloudy conditions at the end of the work day.

Hydroseeding began first thing in the morning and continued through the entire day. Crew for the work included a truck driver to position the old WWII surplus truck into position, the hydroseed motor tender, a lead sprayer and a backup sprayer. During the very windy conditions on Wednesday, the crew moved the sprayer staging area to the old Feist homestead near the Forest Service boundary on the southern drainage off Bluff A and the northeastern corner of Bluff B. The trailer with the BFM bales, the skid steer loader and the Freightliner water truck were moved into the new staging area.

All of the remaining sites to be sprayed were accessed from the lower staging area. An existing gate was present in the Forest boundary fence requiring the gate simply be opened to allow the spray truck access onto the work site. Driving the spray truck over the grass on the hillside up to the existing access roads created a path of compressed grass but did not compact the soil similar to the access roads used by the haul trucks on the upper access roads. Reclamation of these roads will likely be the application of the seed mixture used in the revegetation slurry mixture.

Mixing plan for each tank of slurry was the same as the previous days:

- 800 gallons of water
- 400 lbs of BFM
- 20 lbs of fertilizer
- 2.5 lbs of seed mixture

During the day, the crew applied the revegetation slurry to Removal Areas A6, A16 and the lower portions of A1. Upon completion of the hydroseed application on the lower portions of Removal Area A1, the hydroseeding application was completed.

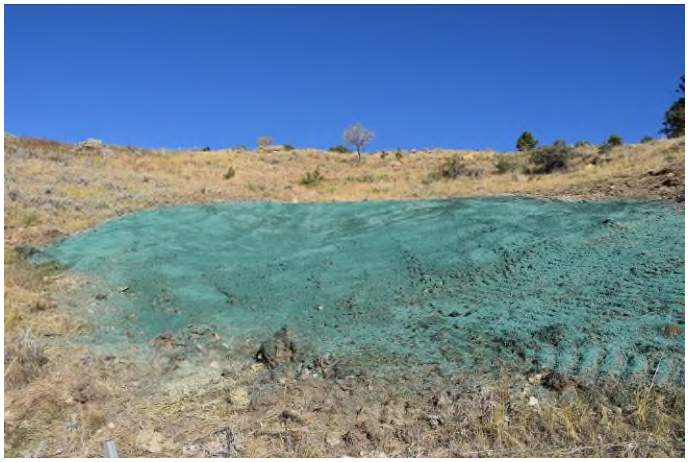
After the hydroseeding spraying was completed around mid-afternoon, the crew used the remainder of the day to move all the equipment and materials out of the lower staging area and got it back to the contractor's shop. Tasks remaining to be completed are the hand seeding of the reclaimed access roads and the movement of the last pieces of equipment from the work area to the contractor's shop. Clarification on the removal of the removal of the erosion control fencing at the end of project activities or after the vegetation has established on the work sites is still being discussed with the Forest Service COR.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Bennett	Senior Civil Engineer	See photograph log below.

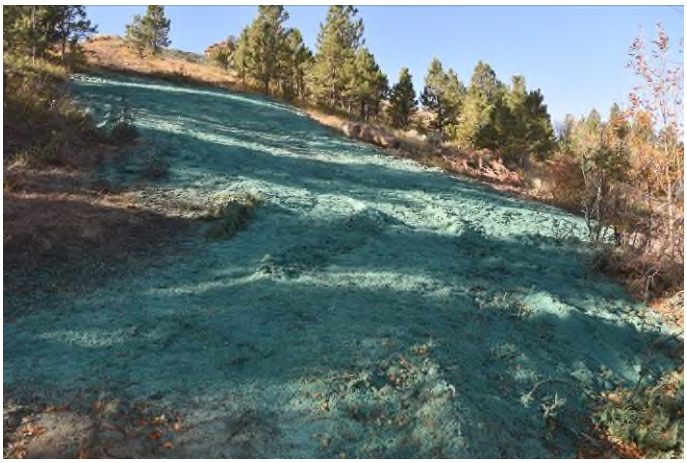
RILEY PASS PHOTOGRAPH LOG
OCTOBER 1, 2020



Hydroseed application on Removal Area A6



Hydroseed slurry applied to Removal Area A16



Hydroseed slurry applied to Removal Area A6



Hydroseed application on lower portion of Removal Area A1



Hydroseed slurry applied to eastern basin of Removal Area A1



Hydroseed slurry applied to outcrop basin of Removal Area A1

RILEY PASS PHOTOGRAPH LOG
OCTOBER 1, 2020



Hydroseed slurry applied to outcrop basin of Removal Area A1



Hydroseed application on lower portion of Removal Area A1



Hydroseed application on lower portion of Removal Area A1



Hydroseed application on lower portion of Removal Area A1



Hydroseed application on lower portion of Removal Area A1



Hydroseed application on lower portion of Removal Area A1

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors:

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
October 2, 2020	Friday	0700	1530	High Overcast AM; Sunny & Windy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 42 Max. 58	Dry with sun and breeze	156	103	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
67%	95%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C
Hydroseed Sprayer		0	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Dave Nash	X	
Mick Welch	X	
Shayde Brengle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	October 2, 2020

28. NARRATIVE REPORT

Overcast skies with a slight breeze were present at the job site on Friday morning as the crew got started on the revegetation of the reclaimed road sections. Morning temperatures were in the low 40's but did not impact the work planned for the day. Around noon, a rain shower at the job trailer dropped 0.01 inches of rain in the rain gage. After the shower finished, the clouds broke up and the sun came out for the rest of the afternoon. Up until the rain shower, the temperature had climbed into the high 40's but after the sun came out, the temperature climbed into the high 50's later in the afternoon.

After the spraying was completed on Thursday, the last of the road reclamation on the access roads into the project work areas was completed. This work was completed to prepare the former access roads for the hand seeding specified in the contract.

Hand seeding of the reclaimed access road sections was completed using a small fertilizer spreader mounted on the front rack of a 4-wheeler. A battery-operated drill was used to turn the impeller under the hopper and the opening between the hopper and the impeller was controlled by the guide that originally came on the spreader. As the 4-wheeler traveled along each section of reclaimed access road, the drill was turned on, the hoper opening was set and the 4-wheeler was driven down the reclaimed roads. Volume of seed being spread on the road sections met the contract specifications and was verified by walking down the road sections after seeding was complete and the observing the applied seeds on the reclaimed dirt surface.

Application of the revegetation seed mixture on the reclaimed road surfaces was completed fairly quickly during the morning and early afternoon. Once the seeding was completed, the crew quit for the day and went home around 3 PM.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
OCTOBER 2, 2020



Reclaimed access road section above Removal Area A1



Reclaimed access road section above Removal Area A1



Reclaimed access road section above Consolidation Area



Reclaimed access road section above Consolidation Area

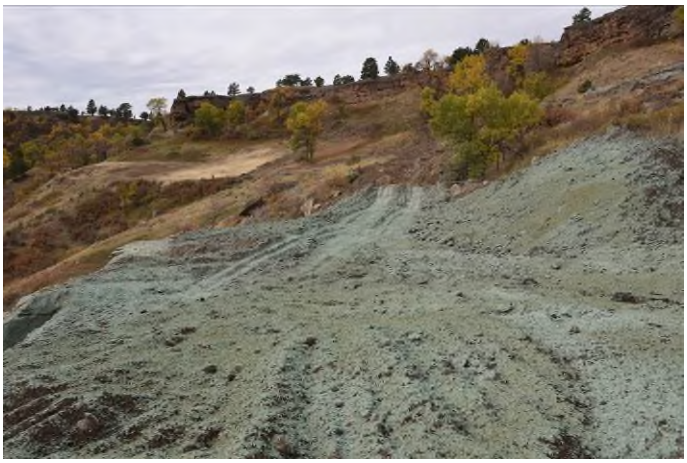


Reclaimed area around former stockpile



Reclaimed access road section near Removal Area A12/13

RILEY PASS PHOTOGRAPH LOG
OCTOBER 2, 2020



Reclaimed access road section near Removal Area A12/13



Reclaimed access road section near Removal Area A14/15



Reclaimed access road section near top of bluff



Reclaimed access road section at top of bluff



Reclaimed access road between top of bluff and FSR 31231



Reclaimed access road between top of bluff and FSR 31231

USDA - Forest Service

CONTRACT DAILY LOG

(reference FSH 6309.11)

1. FOREST: Custer-Gallatin National Forest

2. CONTRACT NO.: 12035520C0001

3. PROJECT: Riley Pass Bluff A Reclamation Project

4. CONTRACTOR: Young Guns Construction

5. CONTRACTOR REPRESENTATIVE ON SITE: Hunter Kalisiak & Dave Nash

6. GOVERNMENT OFFICIALS ON SITE: Visitors: Brian Haas, USFS

7. DATE	18. DAY OF WEEK	9. TIME ARRIVED	10. TIME DEPARTED	11. WEATHER
October 5, 2020	Monday	0700	1700	Overcast & Breezy AM; Sunny & Breezy PM

12. TEMPERATURE °F.	13. GROUND CONDITION	14. 2020 CONTRACT TIME	15. DAYS USED	16. PROJECT COMPLETION DATE
Min. 54 *Max. 68*	Dry with sun and breeze	156	106	November 24, 2020

17. TIME USED *(%)*	18. WORK COMPLETED *(%)*	19. WORK ON SCHEDULE	20. CONTRACTOR'S WORK - *(X Appropriate Box)*
68%	98%	☒YES ☐NO	☒Acceptable ☐Unacceptable - *Explain in narrative*

21. CHANGE ORDERS/AMENDMENTS ISSUED: None

22. WORK ORDERS ISSUED *(Include SUSPEND/RESUME)*: None

23. MATERIALS FURNISHED TO JOB SITE *(Furnished By: G-Govt.; C-Cont.; S-Subcont.)*

24. LIST EQUIPMENT ON SITE *(Furnished by G-Govt.; C-Cont.; S-Subcont.)*

Type	Contract Item Number and Location of Use	Hours Used	
Komatsu PC160LC Excavator		0	C
John Deere 750C LGP Dozer		0	C
CAT 143H Road Grader		0	C
Freightliner 4700-gal Water Truck		0	C
Freightliner 10 cu yd Dump Truck		0	C
Case TV380 Skid Steer Loader		10	C

25. LIST CONTRACT PAYMENTS, REPORTS, CORRESPONDENCE, ETC.

Item	Prep	Submit

26. WORKERS ON SITE

Classification	Number PRIME	Number SUB
Hunter Kalisiak	X	
Mick Welch	X	
Jae Stenerson	X	
Shayde Brengle	X	

27. GOVERNMENT PROVIDED SERVICES ADEQUATELY AND TIMELY

☐YES ☐NO - Explain in narrative

PROJECT NAME	CONTRACT NO.	DATE
Riley Pass Bluff A Reclamation Project	12035520C0001	October 5, 2020

28. NARRATIVE REPORT

After a sunny but windy weekend in southwestern North Dakota, Monday morning started as overcast and windy. As the morning progressed, the clouds dissipated and the sun was out for the remainder of the day. The breeze continued throughout the day with high temperatures getting into the high 60's and low 70's in the afternoon.

Work during the day focused on removing the silt fence installed below each of the Removal Area at the beginning of the project. In some locations, the silt fence looked very similar to when it had been installed on June 23 to 25 at the beginning of the project. In other locations, runoff the project sites filled the upstream face of the silt fence to overtopping with deposited material. Removal of the silt fence from the areas with little sediment deposition, the silt fence was first unclipped for the tee posts followed by the removal of the tail of the fence and fabric out of the trench and laying the fence and fabric on the ground. Once on the ground, the fence and fabric were rolled into loose rolls and wired so they would not unroll. Removal of the silt fence from sites where sediment had deposited upstream of the installation, the material against the fence and fabric was pushed away from the fence with the skid steer loader followed by the process used for the silt fence with little sediment deposition. Once the fence and fabric were rolled and tied, the skid steer was used to remove the tee posts using a chain and bracket fabricated in the contractors shop over the weekend. The removed posts were placed in the bucket of the skid steer loader and the arrangement made quick work of the post removal. Once the posts were removed, the trenches were tracked over to compact the loose dirt on the top of the trench back into the trench as backfill. During the day, the rolls of fence and fabric were taken down to the lower staging area. Once all of the rolls were at the staging area, the skid steer loader loaded them onto a trailer to haul off the job site.

After all of the rolls of fabric and fence were removed from the job site, all of the remaining tools and equipment brought onto the job site were removed by the contractor. After this task was completed, the contractor, from his perspective, had completed all contract work. The percent complete on the daily report shows 95% complete as the additional 5% is for any punchlist items found during the final review and approval site visit by the Forest Service COR on Wednesday.

29. SIGNATURE	30. TITLE	31. ADDTL SPACE NEEDED ☒
Thomas W Burnstad	Senior Civil Engineer	See photograph log below.

RILEY PASS PHOTOGRAPH LOG
OCTOBER 5, 2020



Trench remaining after silt fence removal below RA A1



Deposited sediment upstream of silt fence in draw below RA A1



Reclamation of lower access road to Removal Area A1



Reclamation of lower access road to Removal Area A1



Reclamation of lower access road to Removal Area A1



Reclamation of lower access road to Removal Area A1

RILEY PASS PHOTOGRAPH LOG
OCTOBER 5, 2020



Rolling of removed silt fence below Removal Area A11



Silt fence off tee posts below Removal Area A14/15



Removal of fence posts for silt fence below RA A14/15



Rolling silt fence and removing fence posts below RA A14/15



Loading rolled sections of silt fence onto trailer for removal from job site



Last rolls of silt fence being loaded onto trailer for removal from job site

APPENDIX D – CERTIFIED PAYROLL

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 1

FOR WEEK ENDING: 06/26/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M	T	W	TH	F	S	SN	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O					3.00			3.00									
			S		11.00	11.00	10.50	7.50			40.0(									
Eric Atkins 4216	0	Project Supervisor	O					3.00			3.00	$36.00	$1,068.00	$81.70	$35.00				$116.70	$951.30
			S		11.00	11.00	10.50	7.50			40.0(	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O					3.00			3.00	$33.03	$979.89	$74.96	$0.00				$74.96	$904.93
			S		11.00	11.00	10.50	7.50			40.0(	22.02								
Shayde Brengle 6430	0	Laborer Group 1	O									$33.03	$715.65	$74.97	$73.00				$147.97	$567.68
			S		11.00	11.00	10.50				32.5(	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$175.00	$13.39	$0.00				$13.39	$161.61
			S			2.00	5.00				7.00	25.00								
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 6/29/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

23 day of June, 2020, and ending the 26 day of June, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 2

FOR WEEK ENDING: 06/26/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE	M	T	W	TH	F	S	SN	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
					29	30	1	2	3	4	5										
				HOURS WORKED EACH DAY																	
Hunter Kalisiak 5615	0	Owner/Operator	O					6.00				6.00									
			S		11.50	11.50	11.50	5.50				40.00									
Eric Atkins 4216	0	Project Supervisor	O					6.00				6.00	$36.00	$1,176.00	$89.97	$46.00				$135.97	$1,040.03
			S		11.50	11.50	11.50	5.50				40.00	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O					6.00				6.00	$33.03	$1,078.98	$82.55	$0.00				$82.55	$996.43
			S		11.50	11.50	11.50	5.50				40.00	22.02								
Shayde Brengle 6430	0	Laborer Group 1	O										$33.03	$154.14	$11.80	$0.00				$11.80	$142.34
			S		1.00		6.00					7.00	22.02								
Beth Kalisiak 8111	0	Quality Manager	O										$37.50	$200.00	$15.30	$0.00				$15.30	$184.70
			S		1.00	1.00	6.00					8.00	25.00								
Mycah Atkins 0101	0	Summer Intern	O										$16.20	$86.40	$6.61	$0.00				$6.61	$79.79
			S		1.00	1.00	6.00					8.00	10.80								
			O																		
			S																		
			O																		
			S																		

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 7/6/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by Young Gun Construction LLC (Contractor or Subcontractor) on the Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the 29 day of June, 2020, and ending the 3 day of July, 2020, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said Young Gun Construction LLC (Contractor or Subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 3

FOR WEEK ENDING: 06/26/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				6	7	8	9	10	11	12										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O					8.00			8.00									
			S	10.50	10.50	5.00	10.00	4.00			40.0(									
Eric Atkins 4216	0	Project Supervisor	O					8.00			8.00	$36.00	$1,248.00	$95.48	$53.00				$148.48	$1,099.52
			S	10.50	10.50	5.00	10.00	4.00			40.0(	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O					5.00			5.00	$33.03	$1,045.95	$80.02	$0.00				$80.02	$965.93
			S	10.50	10.50	5.00	7.00	7.00			40.0(	22.02								
Shayde Brengle 6430	0	Laborer Group 1	O									$33.03	$484.44	$37.07	$17.00				$54.07	$430.37
			S	1.00	5.00	5.00		11.00			22.0(	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$275.00	$21.04	$0.00				$21.04	$253.96
			S	1.00	5.00	5.00					11.0(	25.00								
Mycah Atkins 0101	0	Summer Intern	O									$16.20	$118.80	$9.09	$0.00				$9.09	$109.71
			S	1.00	5.00	5.00					11.0(	10.80								
			O																	
			S																	
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

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(over)

Date 7/13/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

6 day of July, 2020, and ending the 10 day of July, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 4

FOR WEEK ENDING: 07/19/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				13	14	15	16	17	18	19										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				8.00	12.00			20.00									
			S	12.00	12.00	12.00	4.00				40.00									
Eric Atkins 4216	0	Project Supervisor	O				8.00	12.00			20.00	$36.00	$1,680.00	$128.52	$105.00				$233.52	$1,446.48
			S	12.00	12.00	12.00	4.00				40.00	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				7.00	11.50			18.50	$33.03	$1,491.86	$114.12	$21.00				$135.12	$1,356.74
			S	11.50	12.00	12.00	4.50				40.00	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 3	O				7.50	12.00			19.50	$33.03	$1,524.89	$134.77	$166.00				$300.77	$1,224.12
			S	12.00	11.50	12.00	4.50				40.00	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Mycah Atkins 0101	0	Summer Intern	O									$16.20	$54.00	$4.14	$0.00				$4.14	$49.86
			S	1.00	1.00	1.00	1.00	1.00			5.00	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				8.00	12.00			20.00	$35.69	$1,665.30	$130.15	$105.00				$235.15	$1,430.15
			S	12.00	12.00	12.00	4.00				40.00	23.79								
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

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(over)

Date 7/20/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

13 day of July, 2020, and ending the 17 day of July, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 5

FOR WEEK ENDING: 07/26/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				20	21	22	23	24	25	26										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				6.00	8.00			14.0(									
			S	12.00	12.00	12.00	4.00				40.0(									
Eric Atkins 4216	0	Project Supervisor	O				6.00	12.00			18.0(	$36.00	$1,608.00	$123.02	$96.00				$219.02	$1,388.98
			S	12.00	12.00	12.00	4.00				40.0(	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				5.00	12.00			17.0(	$33.03	$1,442.31	$110.33	$16.00				$126.33	$1,315.98
			S	12.00	12.00	11.50	4.50				40.0(	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 3	O				5.50	11.50			17.0(	$33.03	$1,442.31	$110.35	$128.00				$238.35	$1,203.96
			S	12.00	12.00	12.00	4.00				40.0(	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Mycah Atkins 0101	0	Summer Intern	O									$16.20	$54.00	$4.14	$0.00				$4.14	$49.86
			S	1.00	1.00	1.00	1.00	1.00			5.00	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				6.00	12.00			18.0(	$35.69	$1,593.93	$121.94	$64.00				$185.94	$1,407.99
			S	12.00	12.00	12.00	4.00				40.0(	23.79								
Kevin Ploszaj 8158	0	Power Equipment Operator Group 3	O				4.00	12.00			16.0(	$33.03	$1,409.28	$107.80	$144.00				$251.80	$1,157.48
			S	12.00	12.00	11.00	5.00				40.0(	22.02								

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 7/27/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

20 day of July, 2020, and ending the 24 day of July, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐	ADDRESS	OMB No.:1235-0008 Expires: 04/30/2021
Young Gun Construction LLC	10609 South Cave Road, Ludlow, SD 57755	

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
6	08/02/2020	Riley Pass Bluff A Reclamation	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE M 27	T 28	W 29	TH 30	F 31	S 1	SN 2	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				10.00	9.50			19.50									
			S	12.00	13.00	12.00	3.00				40.00									
Eric Atkins 4216	0	Project Supervisor	O				10.00	9.50			19.50	$36.00	$1,662.00	$127.13	$103.00				$230.13	$1,431.87
			S	12.00	13.00	12.00	3.00				40.00	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				8.50				8.50	$33.03	$1,161.56	$88.86	$0.00				$88.86	$1,072.70
			S	12.00	11.50	12.00	4.50				40.00	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 3	O				7.50	9.50			17.00	$33.03	$1,442.31	$110.33	$128.00				$238.33	$1,203.98
			S	12.00	12.00	12.00	4.00				40.00	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Mycah Atkins 0101	0	Summer Intern	O									$16.20	$54.00	$4.13	$0.00				$4.13	$49.87
			S	1.00	1.00	1.00	1.00	1.00			5.00	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				8.00	9.50			17.50	$35.69	$1,576.09	$120.59	$62.00				$182.59	$1,393.50
			S	12.00	12.00	12.00	4.00				40.00	23.79								
Jason Yearout 0144	2	Power Equipment Operator Group 3	O				8.00	9.50			17.50	$33.03	$1,458.83	$119.11	$77.00				$196.11	$1,262.72
			S	12.00	12.00	12.00	4.00				40.00	22.02								

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 6

FOR WEEK ENDING: 08/02/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 27	T 28	W 29	TH 30	F 31	S 1	SN 2	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
Ryan Foust 9278	1	Power Equipment Operator Group 3	O				10.00	9.50			19.50	$33.03	$1,524.89	$30.98	$50.00				$80.98	$1,443.91
			S	12.00	13.00	12.00	3.00				40.00	22.02								
	0		O																	
			S																	
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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(over)

Date 8/3/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

27 day of July, 2020, and ending the 31 day of July, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 7

FOR WEEK ENDING: 08/09/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				3	4	5	6	7	8	9	HOURS WORKED EACH DAY									
Hunter Kalisiak 5615	0	Owner/Operator	O				6.00	7.00			13.00									
			S	12.00	12.00	12.00	4.00				40.00									
Eric Atkins 4216	0	Project Supervisor	O				6.00	7.00			13.00	$36.00	$1,428.00	$109.24	$74.00				$183.24	$1,244.76
			S	12.00	12.00	12.00	4.00				40.00	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				5.50	7.00			12.50	$33.03	$1,293.68	$98.97	$10.00				$108.97	$1,184.71
			S	12.00	11.50	12.00	4.50				40.00	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 3	O									$33.03	$814.74	$62.32	$53.00				$115.32	$699.42
			S	12.00	12.00	12.00	1.00				37.00	22.02								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Mycah Atkins 0101	0	Summer Intern	O									$16.20	$10.80	$0.83	$0.00				$0.83	$9.97
			S	1.00							1.00	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				6.00				6.00	$35.69	$1,165.71	$89.18	$21.00				$110.18	$1,055.53
			S	12.00	11.50	12.00	4.50				40.00	23.79								
Jason Yearout 0144	2	Power Equipment Operator Group 3	O									$33.03	$440.40	$35.96	$0.00				$35.96	$404.44
			S				10.00	10.00			20.00	22.02								

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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U.S. Department of Labor
Wage and Hour Division

PAYROLL

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 6

FOR WEEK ENDING: 08/02/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				27	28	29	30	31	1	2										
				HOURS WORKED EACH DAY																
Ryan Foust 9278	1	Power Equipment Operator Group 3	O									$33.03	$781.71	$59.80	$66.00				$125.80	$655.91
			S	12.25	11.75	11.50					35.50	22.02								
	0		O																	
			S																	
			O																	
			S																	
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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(over)

Date 8/10/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

3 day of August, 2020, and ending the 7 day of August, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 9

FOR WEEK ENDING: 08/23/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE	M	T	W	TH	F	S	SN	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
					17	18	19	20	21	22	23										
				HOURS WORKED EACH DAY																	
Hunter Kalisiak 5615	0	Owner/Operator	O					4.00	11.00			15.00									
			S		8.00	12.00	12.00	8.00				40.00									
Eric Atkins 4216	0	Project Supervisor	O					4.00	11.00			15.00	$36.00	$1,500.00							
			S		8.00	12.00	12.00	8.00				40.00	24.00		$114.75	$83.00				$197.75	$1,302.25
Dave Nash 9749	5	Power Equipment Operator Group 3	O					4.00	11.00			15.00	$33.03	$1,376.25							
			S		8.00	12.00	12.00	8.00				40.00	22.02		$105.27	$9.00				$114.27	$1,261.98
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O					4.00	11.00			15.00	$35.69	$1,486.95							
			S		8.00	12.00	12.00	8.00				40.00	23.79		$113.75	$133.00				$246.75	$1,240.20
Beth Kalisiak 8111	0	Quality Manager	O										$37.50	$100.00							
			S		1.00	1.00	1.00	1.00				4.00	25.00		$7.65	$0.00				$7.65	$92.35
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O										$16.20	$345.60							
			S		8.00		12.00	12.00				32.00	10.80		$53.90	$23.00				$76.90	$268.70
Mick Welch 0201	0	Power Equipment Operator Group 4	O					4.00	11.00			15.00	$35.69	$1,486.88							
			S		8.00	12.00	12.00	8.00				40.00	23.79		$113.75	$53.00				$166.75	$1,320.13
Jason Yearout 0144	2	Power Equipment Operator Group 4	O					4.00	11.00			15.00	$35.69	$1,486.95							
			S		8.00	12.00	12.00	8.00				40.00	23.79		$112.35	$68.00				$180.35	$1,306.60

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 9

FOR WEEK ENDING: 08/23/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 17	T 18	W 19	TH 20	F 21	S 22	SN 23	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Ryan Foust 9278	1	Power Equipment Operator Group 3	O									$33.03	$759.69	$47.50	$50.00				$97.50	$662.19
			S			12.00	12.00	10.50			34.50	22.02								
			O																	
			S																	
			O																	
			S																	
			O																	
			S																	
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 8/24/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

17 day of August, 2020, and ending the 21 day of August, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 10

FOR WEEK ENDING: 08/30/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 17	T 18	W 19	TH 20	F 21	S 22	SN 23	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				8.00	12.00			20.0(									
			S	12.00	12.00	12.00	4.00				40.0(									
Eric Atkins 4216	0	Project Supervisor	O				8.00	12.00			20.0(	$36.00	$1,680.00	$128.52	$105.00				$233.52	$1,446.48
			S	12.00	12.00	12.00	4.00				40.0(	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				5.00	12.00			17.0(	$33.03	$1,442.31	$110.33	$16.00				$126.33	$1,315.98
			S	12.00	12.00	10.50	5.50				40.0(	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O				5.50				5.50	$35.69	$1,147.90	$81.28	$83.00				$164.28	$983.62
			S	12.00	12.00	10.50	5.50				40.0(	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O				9.50	12.00			21.5(	$16.20	$780.30	$121.71	$126.00				$247.71	$532.59
			S	12.00	12.00	12.00	4.00				40.0(	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				7.00	12.00			19.0(	$35.69	$1,629.62	$124.67	$68.00				$192.67	$1,436.95
			S	12.00	12.00	12.00	4.00				40.0(	23.79								
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 8/31/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

24 day of August, 2020, and ending the 28 day of August, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 11

FOR WEEK ENDING: 09/06/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 31	T 1	W 2	TH 3	F 4	S 5	SN 6	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				8.00	12.00			20.00									
			S	12.00	12.00	12.00	4.00				40.00									
Eric Atkins 4216	0	Project Supervisor	O				8.00	12.00			20.00	$36.00	$1,680.00	$128.52	$105.00				$233.52	$1,446.48
			S	12.00	12.00	12.00	4.00				40.00	24.00								
Dave Nash 9749	5	Power Equipment Operator Group 3	O				8.00	10.50			18.50	$33.03	$1,491.86	$114.12	$21.00				$135.12	$1,356.74
			S	12.00	12.00	12.00	4.00				40.00	22.02								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O									$35.69	$832.65	$58.96	$48.00				$106.96	$725.69
			S			12.00	12.00	11.00			35.00	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O				8.00	10.50			18.50	$16.20	$731.70	$114.12	$114.00				$228.12	$503.58
			S	12.00	12.00	12.00	4.00				40.00	10.80								
Mick Welch 0201	0	Power Equipment Operator Group 4	O				8.00	10.00			18.00	$35.69	$1,593.93	$121.95	$64.00				$185.95	$1,407.98
			S	12.00	12.00	12.00	4.00				40.00	23.79								
Jason Yearout 0144	2	Power Equipment Operator Group 4	O				8.00	10.00			18.00	$35.69	$1,594.02	$120.44	$79.00				$199.44	$1,394.58
			S	12.00	12.00	12.00	4.00				40.00	23.79								

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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(over)

Date 9/8/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

31 day of August, 2020, and ending the 4 day of September, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 12

FOR WEEK ENDING: 09/13/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				7	8	9	10	11	12	13										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O					6.00			6.00									
			S		12.00	12.00	12.00	4.00			40.0(									
Dave Nash 9749	5	Project Supervisor	O					5.00			5.00	$35.69	$1,130.05	$86.46	$0.00				$86.46	$1,043.59
			S		12.00	11.50	11.50	5.00			40.0(	23.79								
Nathan Wagner 6552	2	Power Equipment Operator Group 4	O					5.00			5.00	$35.69	$1,130.05	$86.44	$18.00				$104.44	$1,025.61
			S		12.00	11.50	11.50	5.00			40.0(	23.79								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O					5.00			5.00	$35.69	$1,130.05	$80.01	$81.00				$161.01	$969.04
			S		12.00	11.50	11.50	5.00			40.0(	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$75.00	$5.74	$0.00				$5.74	$69.26
			S		1.00	1.00	1.00				3.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O									$33.03	$770.70	$58.96	$29.00				$87.96	$682.74
			S		12.00	12.00	11.00				35.0(	22.02								
Mick Welch 0201	0	Power Equipment Operator Group 3	O					6.00			6.00	$35.69	$1,165.71	$89.18	$21.00				$110.18	$1,055.53
			S		12.00	12.00	12.00	4.00			40.0(	23.79								
Jason Yearout 0144	2	Power Equipment Operator Group 3	O									$35.69	$570.96	$43.68	$0.00				$43.68	$527.28
			S			12.00	12.00				24.00	23.79								

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 9/14/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

7 day of September, 2020, and ending the 11 day of September, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 13

FOR WEEK ENDING: 09/20/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				14	15	16	17	18	19	20										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				8.00				8.00									
			S	12.00	12.00	12.00	4.00				40.0(									
Dave Nash 9749	5	Project Supervisor	O				5.00	10.50			15.5(	$35.69	$1,504.80							
			S	11.50	11.50	11.50	5.50				40.0(	23.79		$115.12	$22.00				$137.12	$1,367.68
Nathan Wagner 6552	2	Power Equipment Operator Group 4	O				4.50	10.50			15.0(	$35.69	$1,486.95							
			S	11.50	11.50	11.00	6.00				40.0(	23.79		$113.75	$53.00				$166.75	$1,320.20
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O					4.00			4.00	$35.69	$1,094.36							
			S	11.50	11.50		10.50	6.50			40.0(	23.79		$77.49	$77.00				$154.49	$939.87
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00							
			S	1.00	1.00	1.00	1.00				4.00	25.00		$7.65	$0.00				$7.65	$92.35
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O				6.00				6.00	$33.03	$1,078.98							
			S	12.00	12.00	11.00	5.00				40.0(	22.02		$82.55	$65.00				$147.55	$931.43
Mick Welch 0201	0	Power Equipment Operator Group 3	O				8.00	10.50			18.5(	$35.69	$1,611.77							
			S	12.00	12.00	12.00	4.00				40.0(	23.79		$123.31	$66.00				$189.31	$1,422.46
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 9/21/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

14 day of September, 2020, and ending the 18 day of September, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 14

FOR WEEK ENDING: 09/28/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 21	T 22	W 23	TH 24	F 25	S 26	SN 27	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				3.50				3.50									
			S	12.00	12.00	12.00	4.00				40.0(									
Dave Nash 9749	5	Project Supervisor	O									$35.69	$939.71	$71.90	$0.00				$71.90	$867.81
			S	11.00	10.50	10.50	7.50				39.5(	23.79								
Nathan Wagner 6552	2	Power Equipment Operator Group 4	O									$35.69	$511.49	$36.23	$0.00				$36.23	$475.26
			S	11.00	10.50						21.5(	23.79								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O									$35.69	$237.90	$16.85	$0.00				$16.85	$221.05
			S				10.00				10.0(	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O				3.00				3.00	$33.03	$979.89	$74.96	$53.00				$127.96	$851.93
			S	11.00	11.00	11.00	7.00				40.0(	22.02								
Mick Welch 0201	0	Power Equipment Operator Group 3	O				2.00				2.00	$35.69	$1,022.97	$78.27	$7.00				$85.27	$937.70
			S	11.00	10.00	11.00	8.00				40.0(	23.79								
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 9/28/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

21 day of September, 2020, and ending the 25 day of September, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 15

FOR WEEK ENDING: 10/04/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				M	T	W	TH	F	S	SN				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				28	29	30	1	2	3	4										
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O				5.00	6.00			11.00									
			S	11.00	12.00	11.00	6.00				40.00									
Dave Nash 9749	5	Project Supervisor	O				3.50	6.00			9.50	$35.69	$1,290.66	$71.90	$0.00				$71.90	$1,218.76
			S	10.50	11.50	10.50	7.50				40.00	23.79								
Mick Welch 0201	0	Power Equipment Operator Group 3	O				3.00	6.00			9.00	$35.69	$1,272.81	$36.23	$0.00				$36.23	$1,236.58
			S	10.50	11.00	10.50	8.00				40.00	23.79								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O									$35.69	$416.33	$13.66	$0.00				$13.66	$402.67
			S				11.50	6.00			17.50	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$100.00	$7.65	$0.00				$7.65	$92.35
			S	1.00	1.00	1.00	1.00				4.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O				4.00				4.00	$33.03	$1,012.92	$74.96	$53.00				$127.96	$884.96
			S	11.00	11.00	11.00	7.00				40.00	22.02								
			O																	
			S																	
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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(over)

Date 10/05/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

Young Gun Construction LLC (Contractor or Subcontractor) on the

Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the

28 day of September, 2020, and ending the 2 day of October, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

Young Gun Construction LLC (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	Beth Kalisiak

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☑ OR SUBCONTRACTOR ☐: Young Gun Construction LLC

ADDRESS: 10609 South Cave Road, Ludlow, SD 57755

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.: 16

FOR WEEK ENDING: 10/12/2020

PROJECT AND LOCATION: Riley Pass Bluff A Reclamation

PROJECT OR CONTRACT NO.: 12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: M 5	T 6	W 7	TH 8	F 9	S 10	SN 11	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
Hunter Kalisiak 5615	0	Owner/Operator	O																	
			S	2.00							2.00									
Dave Nash 9749	5	Project Supervisor	O									$35.69	$142.74	$10.92	$0.00				$10.92	$131.82
			S	6.00							6.00	23.79								
Mick Welch 0201	0	Power Equipment Operator Group 3	O									$35.69	$142.74	$10.92	$0.00				$10.92	$131.82
			S	6.00							6.00	23.79								
Shayde Brengle 6430	0	Power Equipment Operator Group 4	O									$35.69	$142.74	$10.11	$0.00				$10.11	$132.63
			S	6.00							6.00	23.79								
Beth Kalisiak 8111	0	Quality Manager	O									$37.50	$25.00	$1.91	$0.00				$1.91	$23.09
			S	1.00							1.00	25.00								
Jae Stenerson 8322	0	Power Equipment Operator Group 3	O									$33.03	$363.33	$27.79	$0.00				$27.79	$335.54
			S	6.00			10.50				16.5(	22.02								
			O																	
			S																	
			O																	
			S																	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 10/12/2020

I, Beth Kalisiak (Name of Signatory Party) Bookkeeper (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by Young Gun Construction LLC (Contractor or Subcontractor) on the Riley Pass Bluff A Reclamation (Building or Work); that during the payroll period commencing on the 5 day of September, 2020, and ending the 9 day of October, 2020, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said Young Gun Construction LLC (Contractor or Subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☑ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
Beth Kalisiak, Bookkeeper	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	OMB No.:1235-0008 Expires: 04/30/2021
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
1	06/27/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE	S 21	M 22	T 23	W 24	TH 25	F 26	S 27	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																	
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O										$39.75	$530.00							
			S				10.00	10.00				20.00	26.50								$530.00
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Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 06/29/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

22 day of JUNE, 2020, and ending the 27 day of JUNE, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

OMB No.:1235-0008
Expires: 04/30/2021

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	2	06/27/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 28	M 29	T 30	W 01	TH 02	F 03	S 04	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O									$39.75								
			S			0.00	0.00					26.50								
			O																	
			S																	
			O																	
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Public Burden Statement

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(over)

Date 07/06/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

28 day of JUNE, 2020, and ending the 4 day of JUly, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

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U.S. Department of Labor
Wage and Hour Division

PAYROLL

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U.S. Wage and Hour Division
Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	OMB No.:1235-0008 Expires: 04/30/2021
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
3	07/11/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 5 / M 6 / T 7 / W 8 / TH 9 / F 10 / S 11 — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O			$39.75	$702.25							$702.25
			S	8.50 / 10.00 / 8.00	26.50	26.50								
			O											
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

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(over)

Date 07/17/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

5 day of JULY, 2020, and ending the 11 day of JULY, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

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U.S. Department of Labor
Wage and Hour Division

PAYROLL

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑
BROSZ ENGINEERING, INC.

ADDRESS BOX 357, BOWMAN, ND 58623

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
4	07/25/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 19	M 20	T 21	W 22	TH 23	F 24	S 25	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
				HOURS WORKED EACH DAY																
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O									$39.75	$265.00							$265.00
			S			10.00					10.00	26.50	$265.00							
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(over)

Date 07/30/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

19 day of JULY, 2020, and ending the 25 day of JULY, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division
Rev. Dec. 2008

OMB No.:1235-0008
Expires: 04/30/2021

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	5	08/01/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE	S	M	T	W	TH	F	S	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
					26	27	28	29	30	31	1										
				HOURS WORKED EACH DAY																	
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O							7.50		7.50	$39.75	$298.13							$298.13
			S										26.50								
			O																		
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 08/12/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

26 day of JULY, 2020, and ending the 1 day of AUGUST, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑
BROSZ ENGINEERING, INC.

ADDRESS BOX 357, BOWMAN, ND 58623

OMB No.:1235-0008
Expires: 04/30/2021

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
6	08/01/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 2	M 3	T 4	W 5	TH 6	F 7	S 8 (HOURS WORKED EACH DAY)	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O									$39.75	$159.00							$159.00
			S		6.00						6.00	26.50	$159.00							
			O																	
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Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 08/12/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the 2 day of AUGUST, 2020, and ending the 8 day of AUGUST, 2020, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division

Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	OMB No.:1235-0008 Expires: 04/30/2021
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
7	08/01/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS						(9) NET WAGES PAID FOR WEEK
				S	M	T	W	TH	F	S				FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	
				16	17	18	19	20	21	22										
				HOURS WORKED EACH DAY																
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O					12.00			12.00	$39.75	$477.00							$477.00
			S									26.50								
			O																	
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date 08/16/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

16 day of AUGUST, 2020, and ending the 22 day of AUGUST, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

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U.S. Wage and Hour Division
Rev. Dec. 2008

OMB No.:1235-0008
Expires: 04/30/2021

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	8	09/12/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 6	M 7	T 8	W 9	TH 10	F 11	S 12 — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O									$39.75	$225.25							$225.25
			S			8.50					8.50	26.50								
			O																	
			S																	
			O																	
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Public Burden Statement

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(over)

Date 09/28/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

6 day of SEPTEMBER, 2020, and ending the 12 day of SEPTEMBER, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	Danette Loder

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U.S. Department of Labor
Wage and Hour Division

PAYROLL

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U.S. Wage and Hour Division
Rev. Dec. 2008

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☑	ADDRESS	OMB No.:1235-0008 Expires: 04/30/2021
BROSZ ENGINEERING, INC.	BOX 357, BOWMAN, ND 58623	

PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION	PROJECT OR CONTRACT NO.
9	09/12/2020	RILEY PASS BLUFF A RECLAMATION	12035520C0001

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE: S 13	M 14	T 15	W 16	TH 17	F 18	S 19 — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
MICHAEL BUZALSKY 5865	1	SURVEYOR I	O					3.50			5.50	$39.75	$231.88							$231.88
			S					0.50			0.50	26.50								
			O																	
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			O																	
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Public Burden Statement

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(over)

Date 09/28/2020

I, DANETTE LODER (Name of Signatory Party) SECRETARY (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) on the

RILEY PASS BLUFF A RECLAMATION (Building or Work); that during the payroll period commencing on the

13 day of SEPTEMBER, 2020, and ending the 19 day of SEPTEMBER, 2020,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

BROSZ ENGINEERING, INC. (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE
DANETTE LODER, SECRETARY	

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

APPENDIX E – MODIFICATIONS

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00001	See Block 16C	See Schedule	

6. ISSUED BY CODE 0355

USDA FOREST SERVICE
BILLINGS OFFICE
5001 SOUTHGATE DR STE 2
BILLINGS MT 59101

7. ADMINISTERED BY *(If other than Item 6)* CODE 0343

USDA FOREST SERVICE
R1 REGIONAL OFFICE
26 FORT MISSOULA ROAD
MISSOULA MT 59804

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

YOUNG GUN CONSTRUCTION LLC
10544 TUFTE RD
1103695027
LUDLOW SD 57755-5014

CODE 1103695027# FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. 12035520C0001

10B. DATED *(SEE ITEM 13)* 06/02/2020

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
FS00.ZZ.....0156NFXF2R19.2540... Net Increase: $90,850.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	FAR 52.243-4
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

12035520C0001, Riley Pass Bluff A Reclamation

Modification P00001, Borrow Area Changes

SEE CONTINUATION PAGE

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Hunter Kalisiak, Owner	CHAD B. SANTONE
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED 7/27/2020
16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED 07/27/2020

NAME OF OFFEROR OR CONTRACTOR
YOUNG GUN CONSTRUCTION LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: USDA FOREST SERVICE BILLINGS OFFICE 5001 SOUTHGATE DR STE 2 BILLINGS MT 59101 Agency Code: FS00 Budget Yr Start: ZZ SHC: 0156NFXF2R19 BOC: 2540 Period of Performance: 06/02/2020 to 11/03/2020 Change Item 0001 to read as follows(amount shown is the total amount):				
0001	2020 Bluff A Riley Pass See Section B-1 Schedule of Items Requisition No: 1009834, 993276				889,582.85

SF30 BLOCK 14 CONTINUATION PAGE

It has been determined necessary and in the best interest of the government to incorporate required borrow site changes into the contract. Accordingly, the contract is modified as follows.

A. SUMMARY OF CONTRACT CHANGES

1. Contract Line Item 0001 is changed to read

   FROM:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 993276……..…$798,732.85

   TO:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 993276……..…$889,582.85

B. CONTRACT PERIOD OF PERFORMANCE

The contract completion date is changed from October 20, 2020 to November 03, 2020, an increase of 14 calendar days.

C. CONTRACT AWARD AMOUNT

The contract amount is changed from $798,732.85 to $889,582.85, an increase of $90,850.00.

D. LIST OF ATTACHMENTS:

1. Mod 1 Request for Proposal Scope

E. AWARD AND MODIFICATION AMOUNT SUMMARY

ACTION	CHANGE (+ / -)	BALANCE
Award	$ 798,732.85	$ 798,732.85
Modification P00001	$90,850.00	$889,582.85

Modification Request for Proposal 1

Item # 20452 Borrow Soil Excavation and Placement Compaction Method C

- Include the following. Change specification to allow reclaimed borrow area slopes no steeper than 3V:1H, and to allow an increase in the borrow area perimeter as staked by the Government. (Remove 10% maximum slope references in borrow area).
- Excavate the top 6" depth of borrow material and stockpile within the borrow area disturbance limits for placement on top of the regraded borrow site at the completion of the excavation; all other non-contaminated material within the borrow area limits will be utilized for reclamation of Bluff A and the borrow site.
- Sort through large rocks to maximize borrow. When the horizon of black contaminated soil is encountered, place back in hole, compact soil with excavator bucket and place approximately 18" of clean borrow over the top. The Contractor will attempt to stay above the contaminated layer.
- Material for cover soil will still conform to Section 713.01. Section 713-10 Paragraph (a) (2) Cover Soil Suitability, Soil Acidity (PH) changed to read 6.0-8.8.

Item No.	Description	Method of Measure	Unit	Estimated Quantity	Unit Price	Total
20452	Borrow Cover Soil Excavation and Placement, Compaction C	CQ	CY	15,100	$16.00	$241,600.00

Time Additional 2 weeks_____

Item Include Radium 226 Soil Test

- Contractor will test for Radium 226 in the borrow soil area.

Cost $250.00_____

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00002	See Block 16C	See Schedule	

6. ISSUED BY CODE 0355

USDA FOREST SERVICE
BILLINGS OFFICE
5001 SOUTHGATE DR STE 2
BILLINGS MT 59101

7. ADMINISTERED BY *(If other than Item 6)* CODE 0343

USDA FOREST SERVICE
R1 REGIONAL OFFICE
26 FORT MISSOULA ROAD
MISSOULA MT 59804

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

YOUNG GUN CONSTRUCTION LLC
10544 TUFTE RD
1103695027
LUDLOW SD 57755-5014

CODE 1103695027# FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. 12035520C0001

10B. DATED *(SEE ITEM 13)* 06/02/2020

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*
FS00.ZZ.....0156NFXF2R19.2540... Net Increase: $324,100.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	FAR 52.243-4
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

12035520C0001, Riley Pass Bluff A Reclamation

Modification P00002, Borrow Area & Misc. Changes

SEE CONTINUATION PAGE

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Hunter Kalisiak, Owner	CHAD B. SANTONE
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED 8/19/20
16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED 08/19/2020

NAME OF OFFEROR OR CONTRACTOR
YOUNG GUN CONSTRUCTION LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: USDA FOREST SERVICE BILLINGS OFFICE 5001 SOUTHGATE DR STE 2 BILLINGS MT 59101 Agency Code: FS00 Budget Yr Start: ZZ SHC: 0156NFXF2R19 BOC: 2540 Period of Performance: 06/02/2020 to 11/24/2020 Change Item 0001 to read as follows(amount shown is the total amount):				
0001	2020 Bluff A Riley Pass See Section B-1 Schedule of Items Requisition No: 1009834, 1013794, 993276				1,213,682.85

SF30 BLOCK 14 CONTINUATION PAGE

It has been determined necessary and in the best interest of the government to incorporate required borrow site changes into the contract. Accordingly, the contract is modified as follows.

A. SUMMARY OF CONTRACT CHANGES

1. Contract Line Item 0001 is changed to read

   FROM:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 993276……..…$889,582.85

   TO:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 1013794, 993276……..……..$1,213,682.85

B. CONTRACT PERIOD OF PERFORMANCE

The contract completion date is changed from November 03, 2020 to November 24, 2020, an increase of 21 calendar days.

C. CONTRACT AWARD AMOUNT

The contract amount is changed from $889,582.85 to $1,213,682.85, an increase of $324,100.00.

D. LIST OF ATTACHMENTS:

1. Modification 2 Request for Proposal Scope

E. AWARD AND MODIFICATION AMOUNT SUMMARY

ACTION	CHANGE (+ / -)	BALANCE
Award	$ 798,732.85	$ 798,732.85
Modification P00001	$90,850.00	$889,582.85
Modification P00002	$324,100.00	$1,213,682.85

Contract 12035520C0001
Riley Pass Bluff A Reclamation
Modification 02 Request for Proposal Scope

Item #20452 Borrow Cover Soil and Placement – The Contractor depleted the Government borrow source and only excavated approximately 2,800 cy that will be measured and paid at the $16 unit price after survey is completed. The Contractor shall provide a private borrow source to cover the remainder of the excavation areas and consolidation area. The private sources shall meet the contract specifications for borrow. The contractor shall use the existing routes for haul of the borrow soil. All contracts specifications are included with this item. Item will be measured and paid based on the actual quantity hauled and placed after a survey is completed. The estimated quantity will be increased about 5,000 cy to approximately 17,000 total cy.

Item Price (per yard) $33.00 Time 2 additional weeks

Item #20451 Subgrade Regrade, Compaction A – Contractor shall regrade areas as per direction in the field by the Government. Quantities will be surveyed and paid for on an actual quantity basis. Estimated quantity will be reduced to approximately 5,000 cy.

Item Price (per yard) $10.00 Time 1 additional week

Item #20450 Mine Waste Excavation and Consolidation Correction – A new surface will be provided to the contactor for correcting the surface irregularities on the consolidation area. No payment or adjustment for this item.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00003	See Block 16C	See Schedule	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
USDA FOREST SERVICE BILLINGS OFFICE 5001 SOUTHGATE DR STE 2 BILLINGS MT 59101	0355	USDA FOREST SERVICE R1 REGIONAL OFFICE 26 FORT MISSOULA ROAD MISSOULA MT 59804	0343

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

YOUNG GUN CONSTRUCTION LLC
10544 TUFTE RD
1103695027
LUDLOW SD 57755-5014

CODE 1103695027# FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO. 12035520C0001

10B. DATED *(SEE ITEM 13)* 06/02/2020

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)* Net Increase: $70,716.20
FS00.ZZ.....0156NFXF2R19.2540...

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	FAR 52.243-4
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

12035520C0001, Riley Pass Bluff A Reclamation

Modification P00003, Misc. Changes

SEE CONTINUATION PAGE

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
		CHAD B. SANTONE	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED

NAME OF OFFEROR OR CONTRACTOR
YOUNG GUN CONSTRUCTION LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: USDA FOREST SERVICE BILLINGS OFFICE 5001 SOUTHGATE DR STE 2 BILLINGS MT 59101 Agency Code: FS00 Budget Yr Start: ZZ SHC: 0156NFXF2R19 BOC: 2540 Period of Performance: 06/02/2020 to 11/24/2020 Change Item 0001 to read as follows(amount shown is the obligated amount):				
0001	2020 Bluff A Riley Pass See Section B-1 Schedule of Items Requisition No: 1009834, 1013794, 1015696, 993276				

SF30 BLOCK 14 CONTINUATION PAGE

It has been determined necessary and in the best interest of the government to incorporate required borrow site changes into the contract. Accordingly, the contract is modified as follows.

A. SUMMARY OF CONTRACT CHANGES

1. Contract Line Item 0001 is changed to read

   FROM:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 1013794, 993276… ……...$1,213,682.85

   TO:

   2020 Bluff A Riley Pass 889,582.85
   See Section B-1 Schedule of Items
   Requisition No: 1009834, 1013794, 1015696, 993276……..$1,284,399.05

B. CONTRACT PERIOD OF PERFORMANCE

The contract completion date remains unchanged at November 24, 2020.

C. CONTRACT AWARD AMOUNT

The contract amount is changed from $1,213,682.85 to $1,284,399.05, an increase of $70,716.20.

D. LIST OF ATTACHMENTS:

1. Modification P00003, Scope of Changes

E. AWARD AND MODIFICATION AMOUNT SUMMARY

ACTION	CHANGE (+ / -)	BALANCE
Award	$ 798,732.85	$ 798,732.85
Modification P00001	$90,850.00	$889,582.85
Modification P00002	$324,100.00	$1,213,682.85
Mod P00003	$70,716.20	$1,284,399.05

Riley Pass Bluff A Reclamation
Contract 12035520C0001
Modification P00003
Scope of Changes

A. Clarification of Mod 2 wording for 1 and 2 only. No change in price or amount.

1. **Item #20452 Borrow Cover Soil and Placement** – The Contractor depleted the Government borrow source and only excavated approximately 2,800 cy that will be measured and paid at the $16 unit price after survey is completed. The Contractor shall provide a private borrow source to cover the remainder of the excavation areas and consolidation area. The private sources shall meet the contract specifications for borrow. The contractor shall use the existing routes for haul of the borrow soil. All contracts specifications are included with this item. Item will be measured and paid based on the actual quantity hauled and placed after a survey is completed. The estimated quantity will be increased about 5,000 cy to approximately **17,300 total cy.**
2. **Item #20451 Subgrade Regrade, Compaction A** – Contractor shall regrade areas as per direction in the field by the Government. Quantities will be surveyed and paid for on an actual quantity basis. Estimated quantity will be reduced **BY** approximately 5,000 cy to a estimated total of 5,500 cy.

B. Item #15801 Water For Dust Control

Add an additional quantity of 400 (1,000 gallon loads) at the contract unit price of $50.00 per 1,000 gallons. **Total added for this line item is $20,000**.

C. Item #20450 Mine Waste Excavation and Consolidation

Contract surveyed amount was 17.090 cy. The contract amount was originally 20,715 cubic yards. This change in quantity falls outside the threshold for negotiating a new price. Young guns has proposed a price of $18.18 per cy for actual quantity. This would be an increase in price but a slight decrease in contract amount. New price at $18.18 per cy for 17,090 cy = $310,696.20. Previous bid price was $15.00 per cy for 20,715 cy = $310,725.00. **The net decrease of $28.80 for this line item.**

D. Daily Rate for Shut Down

The contractor has submitted a request for the following daily work suspension rate. The suspension was between Monday August 10th and Tuesday August 18th for a total of 7 working days. The suspension rate by the day is as follows.

2 Rented Haul Trucks $1,250/day
2 Rented Dozers $1,170/day
2 Rented Excavators $1,200/day
1 Rented Packer $180/day
1 Owned Excavator $400/day
1 Owned Dozer $300/day
1 Owned Water Truck $500/day
Rented PortaPotty $35/day
10 Employees $1,500/day
Total Daily Expenses: $6,535
Total increase for this item is $45,745.00

E. Item #62505 Mulching Hydraulic Method.

The Contractor agrees to use Bonded Fiber Matrix placed according to manufacturer's specifications on all slopes. The Bonded Fiber Matrix replaces using straw much with tackifier. **Increase in Price of $5,000 to a total of $25,001.20 for the line item.**

Total contract increase of $70,716.20.

APPENDIX F – PAY REQUEST SUMMARY

RILEY PASS BLUFF A RECLAMATION PROJECT

SUMMARY OF PROJECT BUDGET AND EXPENDITURES

ITEM NO.	DESCRIPTION	CONTRACT AMOUNT	INVOICE NO. 1 7/14/2020			INVOICE NO. 2 7/30/2020			INVOICE NO. 3 8/10/2020			INVOICE NO. 4 9/3/2020		
			QUANTITY	UNIT PRICE	TOTAL	QUANTITY	UNIT PRICE	TOTAL	QUANTITY	UNIT PRICE	TOTAL	QUANTITY	UNIT PRICE	TOTAL
15101	Mobilization	$ 40,000.00	0.50	$ 40,000.00	$ 20,000.00	0	$ 40,000.00	$ -	0	$ 40,000.00	$ -	0	$ 40,000.00	$ -
15201	Construction Surveying and Staking	$ 20,000.00	0.25	$ 20,000.00	$ 5,000.00	0.25	$ 20,000.00	$ 5,000.00	0.25	$ 20,000.00	$ 5,000.00	0	$ 20,000.00	$ -
15713	Soil Erosion and Pollution Control	$ 20,000.00	0.50	$ 20,000.00	$ 10,000.00	0	$ 20,000.00	$ -	0	$ 20,000.00	$ -	0	$ 20,000.00	$ -
15801	Watering for Dust Control	$ 36,000.00	0	$ 50.00	$ -	100	$ 50.00	$ 5,000.00	100	$ 50.00	$ 5,000.00	120	$ 50.00	$ 6,000.00
20102	Clearing and Grubbing	$ 10,000.60	5	$ 1,613.00	$ 8,065.00	0	$ 1,613.00	$ -	0	$ 1,613.00	$ -	1.2	$ 1,613.00	$ 1,935.60
20450	Mine Waste Excavation and Consolidation	$ 256,350.00	2357	$ 15.00	$ 35,355.00	9669	$ 15.00	$ 145,035.00	5063	$ 15.00	$ 75,945.00	0	$ 15.00	$ -
20450	Mine Waste Excavation and Consolidation	$ 54,346.20	0	$ 3.18	$ -	0	$ 3.18	$ -	0	$ 3.18	$ -	0	$ 3.18	$ -
20451	Subgrade Regrading	$ 55,000.00	0	$ 10.00	$ -	0	$ 10.00	$ -	0	$ 10.00	$ -	5500	$ 10.00	$ 55,000.00
20452	Borrow Cover Soil Excavation and Placement	$ 44,800.00	0	$ 10.00	$ -	0	$ 10.00	$ -	2441	$ 16.00	$ 39,056.00	359	$ 16.00	$ 5,744.00
20452	Borrow Cover Soil Excavation and Placement	$ 570,900.00	0	$ 33.00	$ -	0	$ 33.00	$ -	0	$ 33.00	$ -	7500	$ 33.00	$ 247,500.00
20453	Cover Soil Radon Testing	$ 250.00	0	$ -	$ -	0	$ -	$ -	1	$ 250.00	$ 250.00	0	$ -	$ -
20453	Final Grading	$ 40,000.85	0	$ 6,451.75	$ -	0	$ 6,451.75	$ -	0	$ 6,451.75	$ -	0	$ 6,451.75	$ -
62550	Compost	$ 26,002.80	0	$ 4,194.00	$ -	0	$ 4,194.00	$ -	0	$ 4,194.00	$ -	0	$ 4,194.00	$ -
62504	Seeding, Dry or Hydraulic Method	$ 20,001.20	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -
62505	Mulching, Dry or Hydraulic Method	$ 25,001.20	0	$ 4,032.45	$ -	0	$ 4,032.45	$ -	0	$ 4,032.45	$ -	0	$ 4,032.45	$ -
62508	Fertilizer, Dry Method	$ 20,001.20	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -
	Daily Rate for Project Shutdown	$ 45,745.00	0	$ 6,535.00	$ -	0	$ 6,535.00	$ -	0	$ 6,535.00	$ -	0	$ 6,535.00	$ -
	CONTRACT AMOUNT	$ 1,284,399.05	**INVOICE NO. 1 TOTAL**		$ 78,420.00	**INVOICE NO. 2 TOTAL**		$ 155,035.00	**INVOICE NO. 3 TOTAL**		$ 125,251.00	**INVOICE NO. 4 TOTAL**		$ 316,179.60

RILEY PASS BLUFF A RECLAMATION PROJECT
SUMMARY OF PROJECT BUDGET AND EXPENDITURES

ITEM NO.	DESCRIPTION	INVOICE NO. 5 9/4/2020 QUANTITY	UNIT PRICE	TOTAL	INVOICE NO. 6 9/21/2020 QUANTITY	UNIT PRICE	TOTAL	INVOICE NO. 7 10/8/2020 QUANTITY	UNIT PRICE	TOTAL	INVOICE NO. 8 XX/XX/2020 QUANTITY	UNIT PRICE	TOTAL	EXPENSES TO DATE	CONTRACT BALANCE	PERCENT SPENT
15101	Mobilization	0	$ 40,000.00	$ -	0.5	$ 40,000.00	$ 20,000.00		$ 40,000.00	$ -		$ 40,000.00	$ -	$ 40,000.00	$ -	100
15201	Construction Surveying and Staking	0	$ 20,000.00	$ -	0.25	$ 20,000.00	$ 5,000.00		$ 20,000.00	$ -		$ 20,000.00	$ -	$ 20,000.00	$ -	100
15713	Soil Erosion and Pollution Control	0	$ 20,000.00	$ -	0	$ 20,000.00	$ -	0.5	$ 20,000.00	$ 10,000.00		$ 20,000.00	$ -	$ 20,000.00	$ -	100
15801	Watering for Dust Control	100	$ 50.00	$ 5,000.00	300	$ 50.00	$ 15,000.00		$ 50.00	$ -		$ 50.00	$ -	$ 36,000.00	$ -	100
20102	Clearing and Grubbing	0	$ 1,613.00	$ -	0	$ 1,613.00	$ -		$ 1,613.00	$ -		$ 1,613.00	$ -	$ 10,000.60	$ -	100
20450	Mine Waste Excavation and Consolidation	1	$ 15.00	$ 15.00	0	$ 15.00	$ -		$ 15.00	$ -		$ 15.00	$ -	$ 256,350.00	$ -	100
20450	Mine Waste Excavation and Consolidation	17090	$ 3.18	$ 54,346.20	0	$ -	$ -		$ -	$ -		$ -	$ -	$ 54,346.20	$ -	100
20451	Subgrade Regrading	0	$ 10.00	$ -	0	$ 10.00	$ -		$ 10.00	$ -		$ 10.00	$ -	$ 55,000.00	$ -	100
20452	Borrow Cover Soil Excavation and Placement	0	$ 16.00	$ -	0	$ 16.00	$ -		$ 16.00	$ -		$ 16.00	$ -	$ 44,800.00	$ -	100
20452	Borrow Cover Soil Excavation and Placement	0	$ 33.00	$ -	9500	$ 33.00	$ 313,500.00		$ 33.00	$ -		$ 33.00	$ -	$ 561,000.00	$ 9,900.00	98
20453	Cover Soil Radon Testing	0	$ -	$ -	0	$ -	$ -		$ -	$ -		$ -	$ -	$ 250.00	$ -	100
20453	Final Grading	0	$ 6,451.75	$ -	5.5	$ 6,451.75	$ 35,484.63	0.7	$ 6,451.75	$ 4,516.23		$ 6,451.75	$ -	$ 40,000.85	$ -	100
62550	Compost	0	$ 4,194.00	$ -	5.5	$ 4,194.00	$ 23,067.00	0.7	$ 4,194.00	$ 2,935.80		$ 4,194.00	$ -	$ 26,002.80	$ -	100
62504	Seeding, Dry or Hydraulic Method	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	6.2	$ 3,226.00	$ 20,001.20		$ 3,226.00	$ -	$ 20,001.20	$ -	100
62505	Mulching, Dry or Hydraulic Method	0	$ 4,032.45	$ -	0	$ 4,032.45	$ -	6.2	$ 4,032.45	$ 25,001.20		$ 4,032.45	$ -	$ 25,001.20	$ 0.00	100
62508	Fertilizer, Dry Method	0	$ 3,226.00	$ -	0	$ 3,226.00	$ -	6.2	$ 3,226.00	$ 20,001.20		$ 3,226.00	$ -	$ 20,001.20	$ -	100
	Daily Rate for Propject Shutdown	7	$ 6,535.00	$ 45,745.00	0	$ 6,535.00	$ -		$ 6,535.00	$ -		$ 6,535.00	$ -	$ 45,745.00	$ -	100
		INVOICE NO. 5 TOTAL		$ 105,106.20	**INVOICE NO. 6 TOTAL**		$ 412,051.63	**INVOICE NO. 7 TOTAL**		$ 82,455.62	**INVOICE NO. 8 TOTAL**		$ -	**BALANCE DOWN** $ 1,274,499.05	$ 9,900.00	
														BALANCE ACROSS $ 1,274,499.05	$ 9,900.00	

RILEY PASS BLUFF A RECLAMATION PROJECT
SUMMARY OF PROJECT BUDGET AND EXPENDITURES

ITEM NO.	DESCRIPTION	PAY UNIT	ESTIMATED QUANTITY	UNIT PRICE	BID AMOUNT	MODIFICATION NO. 1			MODIFICATION NO. 2			MODIFICATION NO. 3		
						QUANTITY	UNIT PRICE	TOTAL	QUANTITY	UNIT PRICE	TOTAL	QUANTITY	UNIT PRICE	TOTAL
15101	Mobilization	LS	1	$ 40,000.00	$ 40,000.00			$ -			$ -			$ -
15201	Construction Surveying and Staking	LS	1	$ 20,000.00	$ 20,000.00			$ -			$ -			$ -
15713	Soil Erosion and Pollution Control	LS	1	$ 20,000.00	$ 20,000.00			$ -			$ -			$ -
15801	Watering for Dust Control	1000 Gal	320	$ 50.00	$ 16,000.00			$ -			$ -	400	$ 50.00	$ 20,000.00
20102	Clearing and Grubbing	Acre	6.2	$ 1,613.00	$ 10,000.60			$ -			$ -			$ -
20450	Mine Waste Excavation and Consolidation	CY	20,715	$ 15.00	$ 310,725.00			$ -			$ -	-3,625	15.00	$ (54,375.00)
20450	Mine Waste Excavation and Consolidation							$ -			$ -	17,090	3.18	$ 54,346.20
20451	Subgrade Regrading	CY	10,500	$ 10.00	$ 105,000.00			$ -	-5,000	$ 10.00	$ (50,000.00)			$ -
20452	Borrow Cover Soil Excavation and Placement	CY	15,100	$ 10.00	$ 151,000.00	15,100	$ 6.00	$ 90,600.00	-12,300	$ 16.00	$ (196,800.00)			$ -
20452	Borrow Cover Soil Excavation and Placement	CY			$ -			$ -	17,300	$ 33.00	$ 570,900.00			$ -
20453	Cover Soil Radon Testing	LS			$ -	1	$ 250.00	$ 250.00			$ -			$ -
20453	Final Grading	Acre	6.2	$ 6,451.75	$ 40,000.85			$ -			$ -			$ -
62550	Compost	Acre	6.2	$ 4,194.00	$ 26,002.80			$ -			$ -			$ -
62504	Seeding, Dry or Hydraulic Method	Acre	6.2	$ 3,226.00	$ 20,001.20			$ -			$ -			$ -
62505	Mulching, Dry or Hydraulic Method	Acre	6.2	$ 3,226.00	$ 20,001.20			$ -			$ -	1	$ 5,000.00	$ 5,000.00
62508	Fertilizer, Dry Method	Acre	6.2	$ 3,226.00	$ 20,001.20			$ -			$ -			$ -
	Daily Rate for Propject Shutdown											7	$ 6,535.00	$ 45,745.00
			ORIGINAL BID AMOUNT		$ 798,732.85	**MOD NO. 1 TOTAL**		$ 90,850.00	**MOD NO. 2 TOTAL**		$ 324,100.00	**MOD NO. 3 TOTAL**		$ 70,716.20

RILEY PASS BLUFF A RECLAMATION PROJECT

SUMMARY OF PROJECT BUDGET AND EXPENDITURES

ITEM NO.	DESCRIPTION	CONTRACT AMOUNT			
15101	Mobilization	$ 40,000.00			
15201	Construction Surveying and Staking	$ 20,000.00			
15713	Soil Erosion and Pollution Control	$ 20,000.00			
15801	Watering for Dust Control	$ 36,000.00			
20102	Clearing and Grubbing	$ 10,000.60			
20450	Mine Waste Excavation and Consolidation	$ 256,350.00			
20450	Mine Waste Excavation and Consolidation	$ 54,346.20			
20451	Subgrade Regrading	$ 55,000.00			
20452	Borrow Cover Soil Excavation and Placement	$ 44,800.00			
20452	Borrow Cover Soil Excavation and Placement	$ 570,900.00			
20453	Cover Soil Radon Testing	$ 250.00			
20453	Final Grading	$ 40,000.85			
62550	Compost	$ 26,002.80			
62504	Seeding, Dry or Hydraulic Method	$ 20,001.20			
62505	Mulching, Dry or Hydraulic Method	$ 25,001.20			
62508	Fertilizer, Dry Method	$ 20,001.20			
	Daily Rate for Project Shutdown	$ 45,745.00			
		TOTAL DOWN $ 1,284,399.05 **TOTAL ACROSS** $ 1,284,399.05			

BACKGROUND INFORMATION ON MODIFICATIONS

MODIFICATION NO	DATE	JUSTIFICATION	NOTES
1	7/27/2020	Additional cost associated with removing cover soil out of borrow site and provide additional Radon testing of soil	Increase in cubic yard cost of cover soil for the contractor to deal with all of the rocks and clay layers found in the borrow site after the clearing and grubbing had been completed. Cost per yard increased $6 . Also added an additional Radon test for $250 to analyze soil out of borrow site.
2	8/19/2020	Decrease volume of subgrade regrading due to site conditions, decrease cover soil volume out of borrow site due to lack of material and add volume of cover soil form private borrow source to make up difference	Subgrade regrading volume reduced from 10,500 cubic yards to 5500 cubic yards but still paid at the original $10 per cubic yard rate. Cover soil volume out of original borrow site reduced from 15,100 cubic yards to 2800 cubic yards to be paid at the revised rate of $16 per cubic yard. Added 17,300 cubic yards of cover soil from a private borrow site at a cost of $33 per cubic yard.
3	9/4/2020	Increase quantity of water for dust control on roads, decrease the contract quantity of Mine Waste Excavation, increase unit cost of mine waste excavation, add in contract line item for suspension of work and increase amount for hydraulic mulching to use Bonded Fiber Matrix.	Dust control water volume increased by 400 (1,000 gallon loads) at the original contract unit cost. Mine waste excavation volume was decreased from the original contract quantiy of 20,715 cubic yards to the surveyed volume of 17,090 cubic yards. Price per cubic yard of Mine Waste Excavation is increased $3.18 to a total of $18.18 per cubic yard. Increase was made to cover equipment fixed costs of contractor. A new contract line item was added for equipment costs and operator wages during the government ordered suspension of work. Total daily expense for equipment and wages equals $6,535.00. Mulching Hydraulic Method was incresed by $5,000.00 for the contractor to use Bonded Fiber Matrix in the revegetation mixture.

INVOICE NO	DATE	DESCRIPTION	NOTES
1	7/14/2020	Partial Payment No. 1	Mobilization paid 50% as allowed in contract. Surveying paid at 25% to cover survey of disturbance limits. Erosion control paid at 50% to cover initial installation of silt fences. Clearing and grubbing paid on 5 of 6.2 acres of Removal Area. Mine waste removal paid for removing 2357 cbic yards of material.
2	7/30/2020	Partial Payment No. 2	Surveying paid at 25% to cover survey after clearing and grubbing. Dust control watering paid for placing 100,000 gallons on haul roads to control dust. Mine waste removal paid for removing 9669 cbic yards of material.
3	8/10/2020	Partial Payment No. 3	Surveying paid at 25% to cover survey after excavation of mine waste. Dust control watering paid for placing 100,000 gallons on haul roads to control dust. Mine waste removal paid for removing 5063 cbic yards of material. Cover soil paid for delivering 2441 cubic yards of material to the removal sites at the revised cost. Radon testing was paid to complete the soil sample testing.
4	9/3/2020	Partial Payment No. 4	Dust control water paid 120,000 gallons to zero out original contract quantity. Clearing and grubbing paid 1.2 acres to zero out original contract quantity. Subgrade regrading paid for 5,500 cubic yards to zero out contract quantity modified by Contract Modification No. 2. Cover soil excavation and Placement paid for 359 cubic yards to zero out the contract quantity adjusted in Contract Modification No.2. Cover Soil Excavation and Placement paid for 7,500 cubic yards of the new contract quantity added in Contract Modification No. 2.
5	9/4/2020	Partial Payment No. 5	Dust control water paid 100,000 gallons of the new contract quantity added in Contract Modification No.3. Mine Waste Excavation paid 1 cubic yard to zero out the contract quantity modified by Contract Modification No.2. Mine Waste Excavation paid 17,090 cubic yards at the rate added to the contract in Contract Modification No. 3. Daily rate for equipment and operators paid for 7 days that the project was under a government ordered work suspension that was added in Contract Modification No. 3.
6	9/21/2020	Partial Payment No. 6	Mobilization paid 50% as allowed in contract. $0 remain for this Bid Item. Surveying paid at 25% to cover survey of final grading of cover soil. $0 remain for this Bid Item. Dust control watering paid for placing 300,000 gallons on haul roads to control dust. $0 remain for this Bid Item. Cover soil excavation and placement paid for 9500 cubic yards out of 9590 cubic yards remaining from Contract Mod #3. 5.5 acres of 6.2 acres of final grading paid. 5.5 acres of 6.2 acres of compost paid.
7	10/8/2020	Final Payment	Soil erosion and pollution control paid at 50% to cover cost of silt fence removal. $0 remain for this Bid Item. Final grading paid for final 0.7 acres. $0 remain for this Bid Item. Compost paid for final 0.7 acres. $0 remain for this Bid Item. 6.2 acres of 6.2 acres of Seeding paid. $0 remain for this Bid Item. 6.2 acres of 6.2 acres of mulching paid. $0 remain for this Bid Item. 6.2 acres of 6.2 acres of Fertilizer paid. $0 remain for this Bid Item. $9900 left in contract for cover soil resulted from not needing 300 cubic yards of cover soil at $33 per cubic yard.

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #1
Date: July 14, 2020

Item Number	Descriptioin	Pay Unit	Invoice #1 Quantity	Unit Price	Total
15101	Mobilization	LS	0.5	$40,000.00	$20,000.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.25	$20,000.00	$5,000.00
15713	Soil Erosion and Pollution Control	LS	0.50	$20,000.00	$10,000.00
15801	Watering for Dust Control	1000 gal	0	$50.00	$0.00
20102	Clearing and Grubbing	Acre	5.0	$1,613.00	$8,065.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	2357	$15.00	$35,355.00
20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$10.00	$0.00
20453	Final Grading	Acre	0	$6,451.75	$0.00
62550	Compost	Acre	0	$4,194.00	$0.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
				TOTAL (ALL ITEMS)	$78,420.00

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #2
Date: July 30, 2020

Item Number	Descriptioin	Pay Unit	Invoice #2 Quantity	Unit Price	Total
15101	Mobilization	LS	0	$40,000.00	$0.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.25	$20,000.00	$5,000.00
15713	Soil Erosion and Pollution Control	LS	0.00	$20,000.00	$0.00
15801	Watering for Dust Control	1000 gal	100	$50.00	$5,000.00
20102	Clearing and Grubbing	Acre	0.0	$1,613.00	$0.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	9669	$15.00	$145,035.00
20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$10.00	$0.00
20453	Final Grading	Acre	0	$6,451.75	$0.00
62550	Compost	Acre	0	$4,194.00	$0.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
				TOTAL (ALL ITEMS)	$155,035.00

Mod 1

Item Number	Descriptioin	Pay Unit	Invoice #2 Quantity	Unit Price	Total
20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$6.00	$0.00
20453	Radium 226 Test	LS	0	$250.00	$0.00
				TOTAL (ALL ITEMS)	$0.00

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #3
Date: August 10, 2020

Item Number	Descriptioin	Pay Unit	Invoice #3 Quantity	Unit Price	Total
15101	Mobilization	LS	0	$40,000.00	$0.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.25	$20,000.00	$5,000.00
15713	Soil Erosion and Pollution Control	LS	0.00	$20,000.00	$0.00
15801	Watering for Dust Control	1000 gal	100	$50.00	$5,000.00
20102	Clearing and Grubbing	Acre	0.0	$1,613.00	$0.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	5063	$15.00	$75,945.00
20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
Mod 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	2,441	$16.00	$39,056.00
20453	Final Grading	Acre	0	$6,451.75	$0.00
62550	Compost	Acre	0	$4,194.00	$0.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
Mod 20453	Radium 226 Test	LS	1	$250.00	$250.00
				TOTAL (ALL ITEMS)	$125,251.00

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #4
Date: September 3, 2020

Item Number	Descriptioin	Pay Unit	Invoice #4 Quantity	Unit Price	Total
15101	Mobilization	LS	0	$40,000.00	$0.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.00	$20,000.00	$0.00
15713	Soil Erosion and Pollution Control	LS	0.00	$20,000.00	$0.00
15801	Watering for Dust Control	1000 gal	120	$50.00	$6,000.00
20102	Clearing and Grubbing	Acre	1.2	$1,613.00	$1,935.60
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	0	$15.00	$0.00
Mod 02 20451	Subgrade Regrading, Compaction A	CY	5,500	$10.00	$55,000.00
Mod 01 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	359	$16.00	$5,744.00
Mod 02 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	7,500	$33.00	$247,500.00
20453	Final Grading	Acre	0	$6,451.75	$0.00
62550	Compost	Acre	0	$4,194.00	$0.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
Mod 20453	Radium 226 Test	LS	0	$250.00	$0.00
				TOTAL (ALL ITEMS)	$316,179.60

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #5
Date: September 4, 2020

Item Number	Descriptioin	Pay Unit	Invoice #5 Quantity	Unit Price	Total
15101	Mobilization	LS	0	$40,000.00	$0.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.00	$20,000.00	$0.00
15713	Soil Erosion and Pollution Control	LS	0.00	$20,000.00	$0.00
15801	Watering for Dust Control	1000 gal	100	$50.00	$5,000.00
20102	Clearing and Grubbing	Acre	0.0	$1,613.00	$0.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	1	$15.00	$15.00
Mod 3 20450	Mine Waste Excavation and Consolidation, Compaction A	CY	17090	$3.18	$54,346.20
Mod 02 20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
Mod 01 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$16.00	$0.00
Mod 02 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$33.00	$0.00
20453	Final Grading	Acre	0	$6,451.75	$0.00
62550	Compost	Acre	0	$4,194.00	$0.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
Mod 20453	Radium 226 Test	LS	0	$250.00	$0.00
Mod 03	Daily Rate for Shut Down	Day	7	$6,535.00	$45,745.00
				TOTAL (ALL ITEMS)	$105,106.20

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #6
Date: September 21, 2020

Item Number	Descriptioin	Pay Unit	Invoice #6 Quantity	Unit Price	Total
15101	Mobilization	LS	0.5	$40,000.00	$20,000.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.25	$20,000.00	$5,000.00
15713	Soil Erosion and Pollution Control	LS	0.00	$20,000.00	$0.00
15801	Watering for Dust Control	1000 gal	300	$50.00	$15,000.00
20102	Clearing and Grubbing	Acre	0.0	$1,613.00	$0.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	0	$15.00	$0.00
Mod 3 20450	Mine Waste Excavation and Consolidation, Compaction A	CY	0	$3.18	$0.00
Mod 02 20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
Mod 01 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$16.00	$0.00
Mod 02 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	9500	$33.00	$313,500.00
20453	Final Grading	Acre	5.5	$6,451.75	$35,484.63
62550	Compost	Acre	5.5	$4,194.00	$23,067.00
62504	Seeding Dry Method or Hydraulic Method	Acre	0	$3,226.00	$0.00
62505	Mulching, Dry or Hydraulic Method	Acre	0	$3,226.00	$0.00
62508	Fertilizer, Dry Method	Acre	0	$3,226.00	$0.00
Mod 20453	Radium 226 Test	LS	0	$250.00	$0.00
Mod 03	Daily Rate for Shut Down	Day	0	$6,535.00	$0.00
				TOTAL (ALL ITEMS)	$412,051.63

Project: Riley Pass Bluff A Reclamation
Project Number: 12035520C0001
DUNS: 003765902
Invoice #7
Date: October 8, 2020

Item Number	Descriptioin	Pay Unit	Invoice #7 Quantity	Unit Price	Total
15101	Mobilization	LS	0	$40,000.00	$0.00
15201	Construction Surveying and Staking, Method I Tolerance Precision Class C	LS	0.00	$20,000.00	$0.00
15713	Soil Erosion and Pollution Control	LS	0.50	$20,000.00	$10,000.00
15801	Watering for Dust Control	1000 gal	0	$50.00	$0.00
20102	Clearing and Grubbing	Acre	0.0	$1,613.00	$0.00
20450	Mine Waste Excavation and Consolidation, Compaction A	CY	0	$15.00	$0.00
Mod 3 20450	Mine Waste Excavation and Consolidation, Compaction A	CY	0	$3.18	$0.00
Mod 02 20451	Subgrade Regrading, Compaction A	CY	0	$10.00	$0.00
Mod 01 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$16.00	$0.00
Mod 02 20452	Borrow Cover Soil Excavation and Placement, Compaction C	CY	0	$33.00	$0.00
20453	Final Grading	Acre	0.7	$6,451.75	$4,516.23
62550	Compost	Acre	0.7	$4,194.00	$2,935.80
62504	Seeding Dry Method or Hydraulic Method	Acre	6.2	$3,226.00	$20,001.20
Mod 03 62505	Mulching, Dry or Hydraulic Method	Acre	6.2	$4,032.45	$25,001.20
62508	Fertilizer, Dry Method	Acre	6.2	$3,226.00	$20,001.20
Mod 20453	Radium 226 Test	LS	0	$250.00	$0.00
Mod 03	Daily Rate for Shut Down	Day	0	$6,535.00	$0.00
				TOTAL (ALL ITEMS)	$82,455.63

APPENDIX G – VERIFICATION SAMPLING SUPPORTING DOCUMENTATION

APPENDIX G1 – BLUFF A VERIFICATION SAMPLING PHOTOLOG

Riley Pass 2020

Bluff A Verification Sampling Photo Log

The following photos were taken during Riley Pass Waste verification sampling field work from Trip 1 (8/31/2020 to 9/2/2020) and Trip 2 (9/15/20 and 9/16/20).



PHOTOGRAPH 1

Date: 9/2/20

Direction: East

Description: Photo shows entrance to Bluff A haul road.



PHOTOGRAPH 2

Date: 9/2/20

Direction: South

Description: Photo shows field crew sampling grid A335.



PHOTOGRAPH 3

Date/Time: 9/2/20

Direction: Southeast

Description: Photo shows field staff performing verification sampling (XRF) at A335, with excavator and stockpile in background.



PHOTOGRAPH 4

Date: 9/2/20

Direction: Northeast

Description: Photo shows reclaimed area A-13 from below. This is part of survey unit SU-2.



PHOTOGRAPH 5

Date: 9/2/20

Direction: Southwest

Description: Photo shows same reclamation area from above looking towards the southwest.



PHOTOGRAPH 6

Date: 9/2/20

Direction: West

Description: Field crews mobilizing along haul road conducting post reclamation cover placement.



PHOTOGRAPH 7

Date: 9/2/20

Direction: North

Description: Photo shows field crew just above grid A378.



PHOTOGRAPH 8

Date: 9/2/20

Direction: West

Description: Photo shows grid A350.



PHOTOGRAPH 9

Date: 9/1/20

Direction: West

Description: Photo shows construction crews working the borrow area in the lower ranch lands below Riley Pass.



PHOTOGRAPH 10

Date: 9/2/20

Direction: North

Description: Photo shows grid A279.



Photograph 11

Date: 9/2/20

Direction: North

Description: Photo shows grid A266.



PHOTOGRAPH 12

Date: 9/2/20

Direction: Northeast

Description: Photo shows grid A242.



PHOTOGRAPH 13

Date/Time: 9/2/20

Direction: Northwest

Description: Photo of sampling grid location A273.



PHOTOGRAPH 14

Date: 9/2/20

Direction: Southeast

Description: Photo of sampling grid location A330.



PHOTOGRAPH 15

Date: 9/15/20

Location: Forest Service Trailer

Description: Conducting pre-survey background QC measurements for the gamma radiation survey.



PHOTOGRAPH 16

Date: 9/15/20

Location: Forest Service Trailer

Direction: West

Description: Conducting pre-survey cesium-137 source QC measurements for the gamma radiation survey.



PHOTOGRAPH 17

Date/Time:
9/15/20/16:00

Location: Bluff A grid 125

Direction: East

Description: Radium-226 sampling grid RA-A125-01 and RA-A125-01



Photograph 18
Date/Time:
9/15/2018/1615

Location: Bluff A grid 126

Description: Radium-226 sampling grid RA-A126-01



PHOTOGRAPH 19
Date/Time:
9/15/20/16:40

Location: Bluff A grid 1640

Description: Radium-226 sampling grid RA-A63-01



Photograph 20
Date/Time:
9/15/2020/17:00

Location: Bluff A grid 22

Description: Radium-226 sampling grid RA-A22-01



PHOTOGRAPH 21
Date/Time: 9/15/20/17:15

Location: Bluff A grid 13

Description: Radium-226 sampling grid RA-A13-01



Photograph 22
Date/Time: 9/15/20 17:30

Location: Bluff A grid 39

Description: Radium-226 sampling grid RA-A39-01



PHOTOGRAPH 23
Date/Time: 9/15/20

Location: Bluff A

Description:
Construction activities.



Photograph 24
Date/Time: 9/16/20

Location: Bluff A

Description: Tetra Tech field staff member Natalie Morrow conducting XRF field survey measurement in SU-1.



PHOTOGRAPH 25
Date/Time: 9/16/20

Location: Bluff A

Description:
Conducting hotspot removal/cover at Bluff A.



Photograph 26
Date/Time: 9/16/20

Location: Bluff A

Description: Some vehicles used at Bluff A.



Photograph 27
Date/Time: 9/16/20

Location: Bluff A

Direction: West

Description: Smokey conditions at Bluff A from wildfires in California and Colorado.

APPENDIX G2 – XRF FIELD SURVEY DATABASE

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
380	9/16/2020	1	45.85554424	-103.481277	5.03	2.25		9.5	
379	9/16/2020	2	45.85554352	-103.4811769	5.42	2.27		10.1	
378	9/16/2020	3	45.85556055	-103.4810553	5.44	2.34		10.2	
377	9/16/2020	4	45.855568	-103.4809257	4.58	2.20		8.7	
381	9/16/2020	5	45.85544091	-103.4815539	7	2		12.7	
382	9/16/2020	6	45.85544065	-103.4814321	5.9	2.2		11.0	
383	9/16/2020	7	45.85544743	-103.481292	5.1	2.3		9.6	
384	9/16/2020	8	45.85545589	-103.4811613	6.19	2.2		11.4	
385	9/16/2020	9	45.85545609	-103.4810404	4.6	2.2		8.7	
376	9/16/2020	10	45.85547008	-103.4809239	36.2	2.9		55.1	
392	9/16/2020	11	45.85534592	-103.4817651	32.4	2.7		49.9	
391	9/16/2020	12	45.85534415	-103.4816739	4.12	2.1		7.9	
369	9/16/2020	13	45.85535828	-103.4815547	6.49	2.17		11.9	YES
390	9/16/2020	14	45.85536617	-103.4814167	3.31	2.07		6.5	
388	9/16/2020	15	45.85537409	-103.4812805	5.62	2.21		10.5	
387	9/16/2020	16	45.85536699	-103.4811661	4.85	2.40		9.2	
386	9/16/2020	17	45.85536828	-103.4810297	4	2		8.2	
375	9/16/2020	18	45.85537766	-103.4809077	42.6	2.7		63.7	
393	9/16/2020	19	45.85525199	-103.4819956	20.0	2.3		32.5	
394	9/16/2020	20	45.85525517	-103.481913	3.13	3.1	YES	6.2	
395	9/16/2020	21	45.85527213	-103.4818103	35.0	2.8		53.4	
366	9/16/2020	22	45.85526378	-103.4816863	6.6	2.3		12.0	YES
396	9/16/2020	23	45.85527199	-103.4815457	5.7	2.3		10.6	
397	9/16/2020	24	45.85527076	-103.4814071	6.77	2.62		12.4	
398	9/16/2020	25	45.85527264	-103.4812793	46.56	2.93		68.9	
399	9/16/2020	26	45.85527056	-103.4811507	4.86	2.29		9.2	
400	9/16/2020	27	45.85528508	-103.4810294	15.14	2.48		25.3	
374	9/16/2020	28	45.85530121	-103.4809149	56.27	3.01		81.6	
409	9/16/2020	30	45.85512191	-103.4821739	4	2		7.6	
408	9/16/2020	31	45.85511082	-103.4820454	28.6	2.5		44.6	
407	9/16/2020	32	45.8551766	-103.4819752	3.4	3.4	YES	6.6	
406	9/16/2020	33	45.8551632	-103.4817934	4.18	2.3		8.0	
405	9/16/2020	34	45.85516083	-103.4816664	3.5	2.1		6.8	
404	9/16/2020	35	45.85516209	-103.4815483	7.3	2.2		13.2	
403	9/16/2020	36	45.85517927	-103.4814108	5.9	2.2		11.0	
402	9/16/2020	37	45.85518596	-103.4812807	3.63	2.18		7.1	
401	9/16/2020	38	45.85518974	-103.481168	39.22	2.87		59.1	
371	9/16/2020	39	45.85518596	-103.4810181	42.85	2.77		64.0	YES
373	9/16/2020	40	45.85521492	-103.4809116	42.57	2.8		63.6	
433	9/16/2020	41	45.85502455	-103.4825389	6.97	2.32		12.7	
434	9/16/2020	42	45.85501936	-103.4824413	7	2		12.4	
410	9/16/2020	43	45.8550341	-103.4822799	4.5	2.2		8.6	
411	9/16/2020	44	45.85505434	-103.4821873	4.3	2.3		8.2	
412	9/16/2020	45	45.85505609	-103.4820522	3.49	3.5	YES	6.8	
413	9/16/2020	46	45.85506143	-103.4819287	4.2	2.1		8.0	
414	9/16/2020	47	45.85507554	-103.4817935	4.0	2.2		7.8	
364	9/16/2020	48	45.85509024	-103.4816528	6.7	2.2		12.2	YES
415	9/16/2020	49	45.85508443	-103.4815248	7.19	2.2		13.0	
416	9/16/2020	50	45.85508828	-103.4814058	5.98	2.23		11.1	
417	9/16/2020	51	45.85508037	-103.4812469	8.29	2.25		14.8	
418	9/16/2020	52	45.85507539	-103.4811289	6.95	2.37		12.7	
419	9/16/2020	53	45.85509042	-103.4810335	13.45	2.3		22.8	
432	9/16/2020	54	45.85497969	-103.4825347	5.05	2.32		9.5	
431	9/16/2020	55	45.85494985	-103.4824294	7.84	2.46		14.1	
430	9/16/2020	56	45.85497304	-103.4822926	3.8	2.03		7.4	
429	9/16/2020	57	45.85497892	-103.4821777	7.06	2.22		12.8	
428	9/16/2020	58	45.85496316	-103.4820383	3.69	2.15		7.2	
427	9/16/2020	59	45.85497363	-103.4819167	3.33	2.19		6.6	
425	9/16/2020	60	45.85497589	-103.481779	3.13	3.13	YES	6.2	
424	9/16/2020	61	45.85498556	-103.481658	5.71	2.14		10.6	
423	9/16/2020	62	45.85500173	-103.4815276	6.47	2.2		11.9	
362	9/16/2020	63	45.85499033	-103.4814162	8.15	2.28		14.6	YES
422	9/16/2020	64	45.85500418	-103.4812544	5.94	2.23		11.0	
421	9/16/2020	65	45.8550048	-103.4811581	7.63	2.61		13.8	
420	9/16/2020	66	45.8550147	-103.4810182	5.03	2.17		9.5	
1765	9/24/2020	67	45.85487457	-103.4825407	6.52	2.42		12.0	
1766	9/24/2020	68	45.85488646	-103.4824186	10.6	2.52		18.4	
1767	9/24/2020	69	45.85488342	-103.4822827	11.15	2.7		19.3	
1768	9/24/2020	70	45.85488957	-103.4821524	11.4	2.63		19.7	
1769	9/24/2020	71	45.85489616	-103.4820457	28.88	2.49		45.0	
1770	9/24/2020	72	45.85489033	-103.4818899	7.05	2.43		12.8	
1771	9/24/2020	73	45.85490067	-103.4817664	38.43	2.9		58.1	
360	9/16/2020	74	45.85489119	-103.4816458	5.58	2.22		10.4	YES
1772	9/24/2020	75	45.85490763	-103.4815233	9.81	2.64		17.2	
1773	9/24/2020	76	45.8549049	-103.4813919	9.87	2.55		17.3	
1774	9/24/2020	77	45.85491453	-103.481265	11.25	2.6		19.4	
1775	9/24/2020	78	45.85491562	-103.4811362	10.5	2.63		18.3	

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
1776	9/24/2020	79	45.85492288	-103.4810332	10.42	2.53		18.2	
333	9/2/2020	80	45.85499364	-103.4789416	17.72	2.36		29.1	
334	9/2/2020	81	45.85499764	-103.4788069	15.5	2.26		25.9	
335	9/2/2020	82	45.8549935	-103.4786821	60.12	3.19		86.5	
1777	9/24/2020	83	45.85480666	-103.4825459	42.63	3.03		63.7	
1778	9/24/2020	84	45.85482662	-103.4824143	8.44	2.5		15.0	
1779	9/24/2020	85	45.85481495	-103.4822972	10.35	2.56		18.0	
1780	9/24/2020	86	45.85481211	-103.4821566	10.05	2.57		17.6	
1781	9/24/2020	87	45.85481244	-103.4820221	9.35	2.54		16.5	
1782	9/24/2020	88	45.85480759	-103.4818903	5.44	2.37		10.2	
483	9/16/2020	89	45.85482553	-103.4817645	5.25	2.2		9.9	
482	9/16/2020	90	45.85484697	-103.4816854	6.32	2.11		11.6	
481	9/16/2020	91	45.85484884	-103.4815143	7.12	2.35		12.9	
480	9/16/2020	92	45.85483452	-103.4813915	6.47	2.25		11.9	
479	9/16/2020	93	45.85483198	-103.481266	5.81	2.25		10.8	
478	9/16/2020	94	45.85482922	-103.4811282	7.51	2.35		13.6	
477	9/16/2020	95	45.85484127	-103.4810171	16.85	2.45		27.9	
1784	9/24/2020	96	45.85483816	-103.4803407	9.14	2.43		16.2	
1785	9/24/2020	97	45.85483948	-103.4802292	8.08	2.5		14.5	
1786	9/24/2020	98	45.85483276	-103.4801318	19.6	2.7		31.9	
332	9/2/2020	99	45.85489015	-103.4789348	13.31	2.18		22.6	
331	9/2/2020	100	45.85489444	-103.478819	16.75	2.46		27.7	
465	9/16/2020	102	45.85471056	-103.4823701	7.54	2.26		13.6	
466	9/16/2020	103	45.85471206	-103.4822727	7.24	2.37		13.1	
467	9/16/2020	104	45.85470608	-103.4821527	6.94	2.32		12.6	
468	9/16/2020	105	45.85471286	-103.4820305	8.4	2.33		15.0	
469	9/16/2020	106	45.85471473	-103.4818942	6.13	2.27		11.3	
470	9/16/2020	107	45.85473906	-103.481776	8.25	2.2		14.7	
471	9/16/2020	108	45.85473527	-103.4816272	6.12	2.28		11.3	
472	9/16/2020	109	45.85472979	-103.4814944	7.32	2.27		13.3	
473	9/16/2020	110	45.85475776	-103.4813866	7.37	2.44		13.3	
474	9/16/2020	111	45.85472261	-103.4812382	5.69	2.45		10.6	
475	9/16/2020	112	45.85473784	-103.4811369	6.91	2.57		12.6	
476	9/16/2020	113	45.8547399	-103.4810648	6.4	2.21		11.8	
1795	9/24/2020	114	45.85478177	-103.4803517	10.21	2.56		17.8	
1787	9/24/2020	115	45.85478318	-103.4802267	30.65	2.89		47.5	
1788	9/24/2020	116	45.85477911	-103.4800986	16.67	2.65		27.6	
1789	9/24/2020	117	45.85477002	-103.4799684	65.59	3.37		93.5	
327	9/2/2020	118	45.85474613	-103.479579	19.38	2.37		31.6	
329	9/2/2020	120	45.85480914	-103.4789285	17.38	2.41		28.6	
330	9/2/2020	121	45.85480739	-103.47881	24.7	2.74		39.2	
464	9/16/2020	123	45.85463284	-103.4822884	14.24	2.26		24.0	
463	9/16/2020	124	45.8546219	-103.4821389	5.5	2.52		10.3	
352	9/16/2020	125	45.85462738	-103.4820142	5.35	2.22		10.0	YES
358	9/16/2020	126	45.85462833	-103.4819024	8.99	2.34		15.9	YES
435	9/16/2020	127	45.85463032	-103.481776	6.16	2.29		11.4	
436	9/16/2020	128	45.85463679	-103.4816427	6.46	2.45		11.9	
437	9/16/2020	129	45.85464796	-103.4815008	7.42	2.49		13.4	
438	9/16/2020	130	45.85465268	-103.481374	7.52	2.33		13.6	
439	9/16/2020	131	45.85462048	-103.4812352	7.54	2.43		13.6	
440	9/16/2020	132	45.85464	-103.4811289	7.1	2.32		12.9	
441	9/16/2020	133	45.85465358	-103.4810482	27.35	2.64		42.9	
1790	9/24/2020	134	45.85467475	-103.4804634	29.14	2.79		45.4	
1791	9/24/2020	135	45.85467976	-103.4803236	17.22	2.63		28.4	
1792	9/24/2020	136	45.8546817	-103.4802128	6.73	2.32		12.3	
1793	9/24/2020	137	45.85467749	-103.4801026	18.95	2.61		30.9	
1794	9/24/2020	138	45.85466304	-103.4799779	63.77	4.12		91.2	
323	9/2/2020	139	45.85467822	-103.4797002	20.51	2.45		33.2	
324	9/2/2020	140	45.85467966	-103.479575	32.04	2.88		49.4	
325	9/2/2020	141	45.85468945	-103.4794531	21.94	2.47		35.2	
326	9/2/2020	142	45.85471034	-103.4793259	23.55	2.31		37.5	
328	9/2/2020	143	45.85473428	-103.4788401	41.28	3.66		61.9	
451	9/16/2020	144	45.85452713	-103.4821402	18.14	2.31		29.7	
450	9/16/2020	145	45.85454274	-103.4820175	8.32	2.29		14.9	
449	9/16/2020	146	45.85454161	-103.4818964	3.6	2.14		7.0	
448	9/16/2020	147	45.85455454	-103.4817665	4.01	2.26		7.8	
447	9/16/2020	148	45.85456616	-103.4816343	4.13	2.19		8.0	
168	9/1/2020	149	45.85464032	-103.4780311	10.75	2.27		18.7	
169	9/1/2020	150	45.8546479	-103.4778829	2.06	2.06	YES	4.3	
446	9/16/2020	151	45.85455465	-103.4815013	23.45	2.72		37.4	
445	9/16/2020	152	45.85455783	-103.4813816	5.05	2.5		9.5	
444	9/16/2020	153	45.85456426	-103.4812425	6.74	2.28		12.3	
443	9/16/2020	154	45.85456485	-103.4811204	8.88	2.35		15.7	
442	9/16/2020	155	45.85456776	-103.4809904	23.33	2.94		37.2	
1796	9/24/2020	156	45.85458736	-103.4804739	38.85	3.11		58.6	
1797	9/24/2020	157	45.85457846	-103.4803476	40.33	3.36		60.6	
1798	9/24/2020	158	45.85458664	-103.4802202	30.56	3.01		47.3	

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
1799	9/24/2020	159	45.85459037	-103.4800994	9.74	2.24		17.1	
1800	9/24/2020	160	45.85459364	-103.4799735	20.27	2.73		32.8	
1801	9/24/2020	161	45.8545657	-103.4798148	25.5	2.85		40.3	
322	9/2/2020	162	45.85459722	-103.4797056	25.62	2.55		40.5	
321	9/2/2020	163	45.85459665	-103.4795787	27.49	2.65		43.1	
320	9/2/2020	164	45.85459857	-103.4794497	29.9	2.85		46.4	
319	9/2/2020	165	45.854614	-103.4793155	26	2.55		41.0	
318	9/2/2020	166	45.85461849	-103.4791883	20.72	2.41		33.5	
317	9/2/2020	167	45.8546163	-103.4790639	21.22	2.48		34.2	
316	9/2/2020	168	45.85461631	-103.4789269	41.92	2.93		62.7	
452	9/16/2020	169	45.85446	-103.4817414	16.02	2.34		26.6	
453	9/16/2020	170	45.85446152	-103.4816337	5.43	1.67		10.2	
166	9/1/2020	171	45.85456848	-103.4780334	24.69	2.59		39.2	
289	9/2/2020	172	45.85458835	-103.4778941	29.86	2.65		46.4	YES
164	9/1/2020	173	45.85455746	-103.4777609	8.68	2.06		15.4	
454	9/16/2020	174	45.85447134	-103.4814858	27.6	2.52		43.2	
455	9/16/2020	175	45.85446474	-103.4813731	6.28	2.33		11.6	
456	9/16/2020	176	45.85446524	-103.4812472	7.96	2.33		14.3	
457	9/16/2020	177	45.85447788	-103.4811124	8.37	2.35		14.9	
458	9/16/2020	178	45.85448236	-103.4809882	18.26	2.42		29.9	
1802	9/24/2020	179	45.8544942	-103.4804713	7.61	2.61		13.7	
1803	9/24/2020	180	45.85450837	-103.4803417	30.8	3.04		47.7	
1804	9/24/2020	181	45.85450986	-103.480206	22.78	2.75		36.4	
1805	9/24/2020	182	45.85451295	-103.4800849	25.33	2.74		40.1	
1806	9/24/2020	183	45.85451042	-103.4799378	19.79	2.61		32.1	
1807	9/24/2020	184	45.85451165	-103.4798204	26.34	2.8		41.5	
0	9/1/2020	185	45.85451876	-103.4796929	24	0		38.2	
310	9/2/2020	186	45.85450531	-103.479558	26.44	2.63		41.6	
311	9/2/2020	187	45.85450512	-103.4794316	22.55	2.56		36.1	
312	9/2/2020	188	45.85450826	-103.4793065	18.91	2.4		30.9	
313	9/2/2020	189	45.85451243	-103.4791836	21.73	2.45		34.9	
314	9/2/2020	190	45.85451749	-103.4790506	25.04	2.54		39.6	
315	9/2/2020	191	45.85452074	-103.4789161	78.19	3.46		109.3	
167	9/1/2020	192	45.8545472	-103.4781611	14.76	2.1		24.8	
161	9/1/2020	193	45.85447701	-103.4780196	22.03	2.72		35.4	
162	9/1/2020	194	45.85449866	-103.4778933	27.82	2.65		43.5	
163	9/1/2020	195	45.8544797	-103.4777695	22.52	2.35		36.1	
462	9/16/2020	196	45.85438818	-103.4814818	8.63	2.08		15.3	
461	9/16/2020	197	45.85437859	-103.4813485	7.68	2.19		13.8	
460	9/16/2020	198	45.85438553	-103.481262	7.81	2.37		14.0	
459	9/16/2020	199	45.85438044	-103.4811047	20.31	2.28		32.9	
1808	9/24/2020	200	45.85442853	-103.4800693	20.62	2.55		33.3	
1809	9/24/2020	201	45.85441932	-103.4799359	23.03	2.74		36.8	
1810	9/24/2020	202	45.85443027	-103.4798072	25.99	2.84		41.0	
309	9/2/2020	203	45.8544208	-103.4796957	28.45	2.83		44.4	
293	9/2/2020	204	45.85441091	-103.4795626	25.36	2.56		40.1	YES
308	9/2/2020	205	45.85442516	-103.4794391	18.89	2.43		30.8	
307	9/2/2020	206	45.85442926	-103.4793092	17.96	2.35		29.5	
306	9/2/2020	207	45.85445203	-103.4791762	45.6	3		67.6	
291	9/2/2020	208	45.85442834	-103.4790439	20.73	2.42		33.5	YES
305	9/2/2020	209	45.85444186	-103.4789207	20.91	2.49		33.8	
304	9/2/2020	210	45.85444968	-103.4787849	66.37	3.63		94.5	
171	9/1/2020	212	45.85446089	-103.478393	3.42	1.52		6.7	
170	9/1/2020	213	45.85445445	-103.478274	25.39	2.64		40.1	
287	9/2/2020	214	45.8544644	-103.4781456	27.15	2.65		42.6	YES
159	9/1/2020	215	45.85438126	-103.4780145	21.75	2.36		35.0	
295	9/2/2020	216	45.85434408	-103.4796972	24.12	2.51		38.3	
296	9/2/2020	217	45.8543408	-103.479561	21.74	2.57		35.0	
298	9/2/2020	218	45.85433236	-103.4794444	26.64	2.58		41.9	
297	9/2/2020	219	45.85432088	-103.4792888	21.97	2.55		35.3	
299	9/2/2020	220	45.85434384	-103.4791577	23.07	2.6		36.9	
300	9/2/2020	221	45.85433928	-103.4790318	30.32	2.76		47.0	
301	9/2/2020	222	45.85435283	-103.4789036	24.07	2.57		38.3	
302	9/2/2020	223	45.85435258	-103.478784	21.84	2.45		35.1	
303	9/2/2020	224	45.85433199	-103.4786555	21.71	2.45		34.9	
156	9/1/2020	225	45.85437092	-103.4784068	27.86	2.66		43.6	
157	9/1/2020	226	45.85438053	-103.4782806	32.1	2.77		49.5	
158	9/1/2020	227	45.8543808	-103.4781436	26.99	2.62		42.4	
153	9/1/2020	228	45.85429301	-103.478007	20.33	2.52		32.9	
154	9/1/2020	229	45.85430377	-103.4778714	24.03	2.51		38.2	
155	9/1/2020	230	45.85427812	-103.4777564	9.51	1.69		16.7	
143	9/1/2020	231	45.85425533	-103.4791612	26.86	2.57		42.2	
144	9/1/2020	232	45.85425588	-103.479035	35.69	2.9		54.4	
145	9/1/2020	233	45.85425959	-103.4789095	18.76	2.45		30.7	
146	9/1/2020	234	45.85426769	-103.4787815	19.12	2.37		31.2	
147	9/1/2020	235	45.8542684	-103.4786521	20.53	2.46		33.2	
148	9/1/2020	236	45.85427308	-103.4785234	21.13	2.41		34.1	

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
149	9/1/2020	237	45.85427642	-103.4783953	22.17	2.94		35.6	
150	9/1/2020	238	45.85428123	-103.4782626	19.05	2.49		31.1	
151	9/1/2020	239	45.85428368	-103.4781341	23.26	2.43		37.1	
142	9/1/2020	240	45.85416841	-103.479159	34.43	2.83		52.7	
141	9/1/2020	241	45.85417391	-103.479021	16.53	2.33		27.4	
271	9/2/2020	242	45.85418318	-103.4789188	23	2.53		36.8	YES
139	9/1/2020	243	45.8541766	-103.4787618	24	2.66		38.2	
138	9/1/2020	244	45.85417817	-103.4786407	28.37	2.87		44.3	
137	9/1/2020	245	45.85419587	-103.4785094	19.23	2.48		31.3	
136	9/1/2020	246	45.85419269	-103.4783866	21.97	2.55		35.3	
135	9/1/2020	247	45.85419193	-103.4782556	21.55	2.52		34.7	
134	9/1/2020	248	45.85419752	-103.4781309	21.78	2.78		35.0	
133	9/1/2020	249	45.85420367	-103.4779978	24.09	2.5		38.3	
132	9/1/2020	250	45.85420801	-103.4778691	30.46	2.77		47.2	
131	9/1/2020	251	45.85421259	-103.4777448	34.79	2.78		53.1	
119	9/1/2020	252	45.85407854	-103.4791507	14.3	2.14		24.1	
266	9/2/2020	253	45.85408585	-103.4790144	20.48	2.49		33.1	
120	9/1/2020	254	45.85408528	-103.4788995	26.31	2.69		41.4	
121	9/1/2020	255	45.85409091	-103.4787678	28.03	2.62		43.8	
122	9/1/2020	256	45.85409345	-103.4786391	24.32	2.55		38.6	
123	9/1/2020	257	45.85409373	-103.4785082	29.29	2.69		45.6	
124	9/1/2020	258	45.8541025	-103.4783802	24.32	2.55		38.6	
125	9/1/2020	259	45.85410343	-103.4782529	23.16	2.72		37.0	
126	9/1/2020	260	45.85411687	-103.4781259	26.12	2.8		41.2	
127	9/1/2020	261	45.85412499	-103.4779901	26.79	2.65		42.1	
128	9/1/2020	262	45.85412022	-103.4778658	30.42	2.7		47.2	
129	9/1/2020	263	45.85412949	-103.4777435	29.12	2.68		45.4	
130	9/1/2020	264	45.85412775	-103.4776156	13.41	2.06		22.7	
30	9/1/2020	265	45.85398768	-103.479032	14.12	2.35		23.8	
269	9/2/2020	266	45.8540064	-103.4788748	28.42	2.7		44.4	YES
32	9/1/2020	267	45.85399912	-103.4787684	29.07	2.82		45.3	
33	9/1/2020	268	45.85400639	-103.4786473	25.64	2.57		40.5	
34	9/1/2020	269	45.85400389	-103.4785106	16.46	2.64		27.3	
35	9/1/2020	270	45.85401021	-103.4783887	19.92	2.41		32.3	
36	9/1/2020	271	45.85401215	-103.478247	18.15	2.34		29.8	
282	9/2/2020	272	45.85401895	-103.478143	17.09	2.3		28.2	
273	9/2/2020	273	45.85403704	-103.4779922	28.49	2.57		44.5	YES
38	9/1/2020	274	45.85402765	-103.4778679	34.36	2.88		52.6	
39	9/1/2020	275	45.85402651	-103.4777361	23.35	2		37.3	
40	9/1/2020	276	45.85403112	-103.4776174	15.89	2.13		26.4	
265	9/2/2020	277	45.8539032	-103.4790169	19.37	2.37		31.5	
51	9/1/2020	278	45.85390868	-103.4788829	22.9	2.59		36.6	
267	9/2/2020	279	45.85391429	-103.4787633	34.09	2.99		52.2	YES
48	9/1/2020	280	45.85391747	-103.478617	21.4	2.53		34.5	
46	9/1/2020	281	45.85391542	-103.4784977	28.19	2.56		44.1	
47	9/1/2020	282	45.85392116	-103.4783645	25.98	2.7		41.0	
45	9/1/2020	283	45.85392539	-103.4782455	13.09	2.43		22.2	
44	9/1/2020	284	45.8539269	-103.4781069	13.96	2.1		23.6	
43	9/1/2020	285	45.85393653	-103.4779873	25.54	2.62		40.3	
42	9/1/2020	286	45.85394326	-103.477855	28.83	2.69		44.9	
41	9/1/2020	287	45.85393887	-103.4777384	8.82	1.78		15.6	
52	9/1/2020	288	45.85381849	-103.4790162	19.22	2.15		31.3	
264	9/2/2020	289	45.85381963	-103.4788497	67.74	3.3		96.2	
53	9/1/2020	290	45.85381971	-103.4787549	22.7	2.44		36.3	
26	9/1/2020	291	45.85382368	-103.4786187	19.13	2.45		31.2	
55	9/1/2020	292	45.85382504	-103.4784993	18.95	2.38		30.9	
56	9/1/2020	293	45.85382932	-103.4783753	18.61	2.4		30.4	
57	9/1/2020	294	45.8538341	-103.4782415	13.31	2.05		22.6	
58	9/1/2020	295	45.85383978	-103.4781124	14.4	2.22		24.2	
59	9/1/2020	296	45.85384768	-103.4779841	35.82	2.82		54.5	
60	9/1/2020	297	45.85385102	-103.477855	26.59	2.63		41.8	
61	9/1/2020	298	45.85386801	-103.4777308	28.58	2.49		44.6	
70	9/1/2020	299	45.85373541	-103.4787489	17.91	2.37		29.4	
69	9/1/2020	300	45.85373992	-103.4786209	18.48	2.47		30.2	
68	9/1/2020	301	45.85373807	-103.4784964	20.15	2.39		32.7	
65	9/1/2020	302	45.85374695	-103.4783656	27.51	2.7		43.1	
66	9/1/2020	303	45.85374932	-103.4782358	22.57	2.25		36.1	
283	9/2/2020	304	45.85374886	-103.4781076	36.55	2.87		55.5	YES
64	9/1/2020	305	45.8537584	-103.4779765	47.18	3.02		69.7	
63	9/1/2020	306	45.85376405	-103.477852	32.87	2.79		50.5	
62	9/1/2020	307	45.85376634	-103.4777185	29.99	2.58		46.6	
72	9/1/2020	308	45.85363753	-103.4787413	16.8	2.32		27.8	
71	9/1/2020	309	45.85363713	-103.4786094	26.68	2.67		41.9	
73	9/1/2020	310	45.85364014	-103.4784911	25.22	2.67		39.9	
74	9/1/2020	311	45.85365206	-103.4783639	14.81	2.44		24.8	
75	9/1/2020	312	45.85364906	-103.4782203	26.75	2.34		42.0	
76	9/1/2020	313	45.85366075	-103.4781011	39.88	2.74		60.0	

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
77	9/1/2020	314	45.85366045	-103.4779712	80.55	3.49		112.3	
78	9/1/2020	315	45.85366684	-103.4778499	47.17	3		69.7	
79	9/1/2020	316	45.85367055	-103.4777048	10.91	1.7		18.9	
88	9/1/2020	317	45.85355146	-103.4788543	14.82	2.26		24.8	
87	9/1/2020	318	45.85355112	-103.4787216	17.6	2.35		29.0	
86	9/1/2020	319	45.85355619	-103.4786115	18.63	2.53		30.5	
84	9/1/2020	320	45.85355915	-103.4784858	31.14	2.71		48.1	
83	9/1/2020	321	45.85355986	-103.4783481	37.26	2.96		56.5	
82	9/1/2020	322	45.85357046	-103.4782101	15.16	1.96		25.4	
81	9/1/2020	323	45.85356928	-103.4780948	23.98	2.44		38.1	
204	9/2/2020	324	45.85340541	-103.480153	22.93	2.44		36.7	
205	9/2/2020	325	45.85342571	-103.4800293	39.79	2.97		59.9	
206	9/2/2020	326	45.85342514	-103.4798951	21.74	2.54		35.0	
89	9/1/2020	327	45.85346072	-103.4788615	17.48	2.34		28.8	
91	9/1/2020	328	45.85346331	-103.4787274	16.4	2.27		27.2	
92	9/1/2020	329	45.85347072	-103.4785987	30.95	2.77		47.9	
285	9/2/2020	330	45.85347169	-103.4784789	93.58	3.9		128.3	YES
93	9/1/2020	331	45.85347798	-103.4783456	28.63	2.7		44.7	
94	9/1/2020	332	45.85348019	-103.4782148	35.74	2.91		54.4	
95	9/1/2020	333	45.85348493	-103.4780907	35.5	2.87		54.1	
203	9/2/2020	334	45.85334181	-103.4801464	27.25	2.72		42.7	
201	9/2/2020	335	45.85332547	-103.4800085	15.53	2.3		25.9	YES
207	9/2/2020	336	45.85335043	-103.4798876	10.49	2.21		18.3	
90	9/1/2020	337	45.85337446	-103.4788494	16.46	2.34		27.3	
110	9/1/2020	338	45.85337781	-103.4787249	21.63	2.34		34.8	
109	9/1/2020	339	45.85338462	-103.4786048	39.39	2.91		59.4	
108	9/1/2020	340	45.85338475	-103.4784644	115.36	4.41		154.6	
107	9/1/2020	341	45.85338688	-103.4783441	31.43	2.72		48.5	
106	9/1/2020	342	45.85338799	-103.4782122	38.29	2.82		57.9	
105	9/1/2020	343	45.85340047	-103.4780825	68.06	3.33		96.6	
98	9/1/2020	344	45.85340531	-103.4778153	44.76	2.92		66.5	
97	9/1/2020	345	45.85340828	-103.4776822	41.38	2.83		62.0	
96	9/1/2020	346	45.85341081	-103.4775524	14.74	2.24		24.7	
211	9/2/2020	347	45.85319168	-103.4816783	18.49	2.39		30.3	
210	9/2/2020	348	45.85318555	-103.4815324	5.43	2.19		10.2	
209	9/2/2020	349	45.85319666	-103.4814126	7.04	2.29		12.8	
262	9/2/2020	350	45.85320547	-103.4813129	6.31	2.24		11.6	YES
208	9/2/2020	351	45.85320327	-103.4811607	32.96	2.75		50.6	
111	9/1/2020	352	45.85328289	-103.4788449	19.77	2.41		32.1	
112	9/1/2020	353	45.85329136	-103.4787132	15.31	2.27		25.6	
113	9/1/2020	354			41.69	2.98		62.4	
99	9/1/2020	355	45.8533139	-103.4778217	13.18	2.31		22.4	
100	9/1/2020	356	45.85332434	-103.4776852	24.46	2.63		38.8	
101	9/1/2020	357	45.85332271	-103.4775422	16.67	2.25		27.6	
212	9/2/2020	358	45.85311069	-103.4816776	28.91	2.57		45.1	
213	9/2/2020	359	45.85310416	-103.4815386	6.19	2.3		11.4	
214	9/2/2020	360	45.85310893	-103.4814127	5.11	2.16		9.6	
215	9/2/2020	361	45.85311312	-103.481285	4.59	2.19		8.7	
216	9/2/2020	362	45.85311658	-103.4811658	4.84	2.17		9.2	
116	9/1/2020	363	45.85319717	-103.4788401	19.93	2.36		32.3	
115	9/1/2020	364	45.85319362	-103.4787148	42.74	2.98		63.8	
114	9/1/2020	365	45.85320442	-103.4785829	60.75	3.26		87.3	
104	9/1/2020	366	45.85322782	-103.4778126	11.61	2.05		20.0	
103	9/1/2020	367	45.85322672	-103.4776853	31.21	2.73		48.2	
102	9/1/2020	368	45.85323586	-103.477555	19.57	2.36		31.8	
221	9/2/2020	369	45.85300645	-103.4816495	22.51	2.5		36.1	
220	9/2/2020	370	45.85302028	-103.4815202	6.42	2.07		11.8	
219	9/2/2020	371	45.85302888	-103.4814102	5.94	2.19		11.0	
218	9/2/2020	372	45.85303265	-103.4812649	4.42	2.06		8.5	
217	9/2/2020	373	45.85302485	-103.4811555	28.55	2.6		44.6	
227	9/2/2020	374	45.85297422	-103.4828151	9.97	1.93		17.5	
226	9/2/2020	375	45.8529885	-103.4826843	8.96	1.84		15.9	
225	9/2/2020	376	45.85298867	-103.4825613	14.74	2.19		24.7	
234	9/2/2020	377	45.85287605	-103.4828135	10.06	1.98		17.6	
235	9/2/2020	378	45.85288837	-103.4827096	30.84	3		47.7	YES
229	9/2/2020	379	45.85289322	-103.4825586	37.6	2.9		56.9	
230	9/2/2020	380	45.85288461	-103.4824665	14.77	2.21		24.8	
222	9/2/2020	381	45.85295375	-103.4815045	27.91	2.58		43.7	
223	9/2/2020	382	45.85293591	-103.4814002	144.44	4.49		188.9	
224	9/2/2020	383	45.85293014	-103.4812801	28.4	2.67		44.4	
245	9/2/2020	384	45.85278626	-103.482799	10.76	2.11		18.7	
233	9/2/2020	385	45.85280013	-103.4826906	39.59	2.98		59.6	
232	9/2/2020	386	45.85280537	-103.4825414	28.74	2.59		44.8	
231	9/2/2020	387	45.85282444	-103.4824551	36.44	2.81		55.4	
246	9/2/2020	388	45.85269851	-103.4827881	6.68	1.76		12.2	
247	9/2/2020	389	45.85270774	-103.482665	36.69	2.85		55.7	
248	9/2/2020	390	45.85270431	-103.4825483	24.14	2.71		38.4	

XRF Reading Number	Date	Grid Number	Latitude *WGS84	Longitude *WGS84	XRF Arsenic Result (ppm)	XRF Arsenic Error (ppm)	Less than Limit of Detection (Y/N)	Laboratory Converted Result (mg/kg)	Soil Sample (Y/N)
251	9/2/2020	392	45.85260288	-103.4828067	42.4	2.95		63.4	
250	9/2/2020	393	45.85260828	-103.4826583	34.26	2.72		52.4	
249	9/2/2020	394	45.85262175	-103.4825512	19.87	2.41		32.3	
252	9/2/2020	395	45.85251942	-103.482922	19.07	2.28		31.1	
253	9/2/2020	396	45.85253067	-103.4827927	43.46	2.99		64.8	
254	9/2/2020	397	45.85253705	-103.4826636	39.84	2.89		60.0	
255	9/2/2020	398	45.85253992	-103.4825584	27.02	2.61		42.4	
259	9/2/2020	399	45.85243883	-103.4830515	19.65	2.44		31.9	
258	9/2/2020	400	45.85244147	-103.4829125	21.55	2.43		34.7	
257	9/2/2020	401	45.85243481	-103.4827758	30.37	2.62		47.1	
256	9/2/2020	402	45.8524406	-103.4826479	19.13	2.36		31.2	
260	9/2/2020	403	45.85235538	-103.4830222	12.8	1.86		21.8	
261	9/2/2020	404	45.8523537	-103.4829139	20.91	2.41		33.8	

APPENDIX G3 – LABORATORY REPORTS

Tuesday, October 13, 2020

Aaron Orechwa
Tetra Tech, Inc.
3801 Automation Way, Suite 100
Fort Collins, CO 80525

Re: ALS Workorder: 2009195
Project Name: Riley Pass Bluff A
Project Number: 117-8343014

Dear Mr. Orechwa:

Fourteen soil samples were received from Tetra Tech, Inc., on 9/9/2020. The samples were scheduled for the following analysis:

Metals

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Katie M. OBrien
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

2009195

Metals:
The samples were analyzed following SW-846, 3rd Edition procedures. Analysis by ICPMS followed method 6020B and the current revision of SOP 827.

All acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2009195
Client Name: Tetra Tech, Inc.
Client Project Name: Riley Pass Bluff A
Client Project Number: 117-8343014
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
AS-A335-01	2009195-1		SOIL	02-Sep-20	9:00
AS-A335-02	2009195-2		SOIL	02-Sep-20	9:00
AS-A378-01	2009195-3		SOIL	02-Sep-20	11:00
AS-A350-01	2009195-4		SOIL	02-Sep-20	11:55
AS-A279-01	2009195-5		SOIL	02-Sep-20	13:14
AS-A266-01	2009195-6		SOIL	02-Sep-20	13:17
AS-A242-01	2009195-7		SOIL	02-Sep-20	13:35
AS-A273-01	2009195-8		SOIL	02-Sep-20	13:50
AS-A304-01	2009195-9		SOIL	02-Sep-20	14:05
AS-A330-01	2009195-10		SOIL	02-Sep-20	14:13
AS-A214-01	2009195-11		SOIL	02-Sep-20	14:35
AS-A172-01	2009195-12		SOIL	02-Sep-20	14:45
AS-A208-01	2009195-13		SOIL	02-Sep-20	15:00
AS-A204-01	2009195-14		SOIL	02-Sep-20	15:10

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER #
2009195

TURNAROUND TIME		SAMPLER	AO	PAGE	1 of 2
SITE ID				DISPOSAL	BY LAB or RETURN
EDD FORMAT				PARAMETER/METHOD REQUEST FOR ANALYSIS	
PURCHASE ORDER				A	3050 / 6020
BILL TO COMPANY	Same			B	
INVOICE ATTN TO				C	
ADDRESS				D	
CITY / STATE / ZIP				E	
PHONE				F	
FAX				G	
E-MAIL				H	
				I	
				J	

PROJECT NAME	Riley Pass Bluff A
PROJECT No.	117-8343014
COMPANY NAME	Tetra Tech Inc.
SEND REPORT TO	Aaron Orechwa
ADDRESS	3801 Automation Way Ste 100
CITY / STATE / ZIP	Fort Collins, CO 80525
PHONE	970-420-9395
FAX	
E-MAIL	aaron.orechwa@tetratech.com

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
1	AS-A335-01	Soil	9/2/20	0900	NA	NA	NA	X										
2	AS-A335-02			0900				X										
3	AS-A378-01			1100				X										
4	AS-A350-01			1155				X										
5	AS-A279-01			1314				X										
6	AS-A266-01			1317				X										
7	AS-A242-01			1335				X										
8	AS-A273-01			1350				X										
9	AS-A304-01			1405				X										
10	AS-A330-01			1413				X										
11	AS-A214-01			1435				X										
12	AS-A172-01			1445				X										

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
Arsenic Samples 1 of 2 Please return coolers to TT; Aaron will retrieve	Summary (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) LEVEL IV (Std QC + forms + raw)

PRESERVATION KEY: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Aaron Orechwa	9/9/20	1530
RECEIVED BY		Tyler Mosser	9/9/20	1530
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER #
2009145

TURNAROUND TIME		SAMPLER	AO	PAGE	2 of 2
SITE ID				DISPOSAL	BY LAB or RETURN
EDD FORMAT				PARAMETER/METHOD REQUEST FOR ANALYSIS	
PURCHASE ORDER				A	3050 / 6020
BILL TO COMPANY	Same			B	
INVOICE ATTN TO				C	
ADDRESS				D	
CITY / STATE / ZIP				E	
PHONE				F	
FAX				G	
E-MAIL				H	
				I	
				J	

PROJECT NAME	Riley Pass Bluff A
PROJECT No.	117-8343014
COMPANY NAME	Tetra Tech Inc.
SEND REPORT TO	Aaron Orechwa
ADDRESS	3801 Automation Way
CITY / STATE / ZIP	Fort Collins, CO 80525
PHONE	970-420-9395
FAX	
E-MAIL	aaron.orechwa@tetratech.com

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
13	AS-A208-01	SOIL	9/2/20	1500	NA	NA	NA	X										
14	AS-A204-01	↓	↓	1510	↓	↓	↓	X										

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
Arsenic Samples 2 of 2 Please return coolers to Aaron; he will retrieve	Summary (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) LEVEL IV (Std QC + forms + raw)

PRESERVATION KEY	1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Aaron Orechwa	9/9/20	1530
RECEIVED BY		Tyler Mosser	9/9/20	1530
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID: Tetra Tech FC Workorder No: 2009195

Project Manager: KMO Initials: TM Date: 9/10/20

1. Are airbills / shipping documents present and/or removable?	☑ Drop Off:	☐ YES	☐ NO	
2. Are custody seals on **shipping** containers intact?	☑ NONE	☐ YES	☐ NO*	
3. Are custody seals on **sample** containers intact?	☑ NONE	☐ YES	☐ NO*	
4. Is there a COC (chain-of-custody) present?		☑ YES	☐ NO*	
5. Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		☑ YES	☐ NO*	
6. Are short-hold samples present?		☐ YES	☑ NO	
7. Are all samples within holding times for the requested analyses?		☑ YES	☐ NO*	
8. Were all sample containers received intact? (not broken or leaking)		☑ YES	☐ NO*	
9. Is there sufficient sample for the requested analyses?		☑ YES	☐ NO*	
10. Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		☑ YES	☐ NO*	
11. Are all aqueous samples preserved correctly, if required?	☑ N/A	☐ YES	☐ NO*	
12. Were unpreserved samples pH checked, if required?	☑ N/A	☐ YES	☐ NO	
13. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm in diameter?	☑ N/A	☐ YES	☐ NO	
14. Were the samples shipped on ice?		☐ YES	☑ NO	
15. Were cooler temperatures measured at 0.1 - 6.0°C? IR gun used*: ☐ #3 ☐ #5	☐ Rad Only	☐ YES	☑ NO	

Cooler #: 1

Temperature (°C): amb

# of custody seals on cooler: 0

External mR/hr reading: -

Background mR/hr reading: 11

Were external mR/hr readings ≤ two times background and within DOT acceptance criteria? (If no, see Form 008) ☑ N/A ☐ YES ☐ NO

* Please provide details below for 'NO' responses in gray boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

All client bottle ID's vs ALS lab ID's double-checked by: TM

If applicable, was the client contacted? ☐ YES ☐ N/A Contact Name Date:

Project Manager Signature / Date: 9/11/20

Form 201r30.xls
(06/04/2020)

+IR Gun #3, VWR SN 170647571
+IR Gun #5, VWR SN 192272629

886833

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A335-01	**Lab ID:**	2009195-1
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 09:00	**Percent Moisture:**	6.6

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**21**		**0.2**	**MG/KG**	10	0.049	10/13/2020 04:59

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A335-02	**Lab ID:**	2009195-2
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 09:00	**Percent Moisture:**	6.3

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**26**		**0.2**	**MG/KG**	10	0.05	10/13/2020 05:17

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A378-01	**Lab ID:**	2009195-3
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 11:00	**Percent Moisture:**	6.1

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**45**		**0.21**	**MG/KG**	10	0.051	10/13/2020 05:20

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A350-01	**Lab ID:**	2009195-4
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 11:55	**Percent Moisture:**	13.3

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**5.8**		**0.23**	**MG/KG**	10	0.055	10/13/2020 05:23

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A279-01	**Lab ID:**	2009195-5
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:14	**Percent Moisture:**	3.2

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**33**		**0.19**	**MG/KG**	10	0.047	10/13/2020 05:37

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A266-01	**Lab ID:**	2009195-6
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:17	**Percent Moisture:**	2.4

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**33**		**0.2**	**MG/KG**	10	0.049	10/13/2020 05:40

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A242-01	**Lab ID:**	2009195-7
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:35	**Percent Moisture:**	5.6

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**24**		**0.2**	**MG/KG**	10	0.049	10/13/2020 05:43

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A273-01	**Lab ID:**	2009195-8
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:50	**Percent Moisture:**	5.0

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**51**		**0.21**	**MG/KG**	10	0.051	10/13/2020 05:46

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A304-01	**Lab ID:**	2009195-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:05	**Percent Moisture:**	2.7

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**41**		**0.2**	**MG/KG**	10	0.048	10/13/2020 05:49

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A330-01	**Lab ID:**	2009195-10
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:13	**Percent Moisture:**	8.2

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**86**		**0.21**	**MG/KG**	10	0.051	10/13/2020 05:52

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A214-01	**Lab ID:**	2009195-11
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:35	**Percent Moisture:**	9.1

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**31**		**0.21**	**MG/KG**	10	0.052	10/13/2020 05:55

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A172-01	**Lab ID:**	2009195-12
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:45	**Percent Moisture:**	4.5

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**30**		**0.2**	**MG/KG**	10	0.05	10/13/2020 05:58

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A208-01	**Lab ID:**	2009195-13
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:00	**Percent Moisture:**	5.9

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**24**		**0.2**	**MG/KG**	10	0.049	10/13/2020 06:01

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A204-01	**Lab ID:**	2009195-14
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:10	**Percent Moisture:**	2.8

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/8/2020**		PrepBy: **JML**
ARSENIC	**26**		**0.2**	**MG/KG**	10	0.05	10/13/2020 06:04

Client:	Tetra Tech, Inc.	**Date:**	*13-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009195
Sample ID:	AS-A204-01	**Lab ID:**	2009195-14
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:10	**Percent Moisture:**	2.8

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC
U or ND - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit
M - Requested MDC not met.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits
NC - Not Calculated for duplicate results less than 5 times MDC
B - Analyte concentration greater than MDC.
B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
U or ND - Indicates that the compound was analyzed for but not detected.
E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
M - Duplicate injection precision was not met.
N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
* - Duplicate analysis (relative percent difference) not within control limits.
S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.
B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
E - Analyte concentration exceeds the upper level of the calibration range.
J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
A - A tentatively identified compound is a suspected aldol-condensation product.
X - The analyte was diluted below an accurate quantitation level.
* - The spike recovery is equal to or outside the control criteria used.
+ - The relative percent difference (RPD) equals or exceeds the control criteria.
G - A pattern resembling gasoline was detected in this sample.
D - A pattern resembling diesel was detected in this sample.
M - A pattern resembling motor oil was detected in this sample.
C - A pattern resembling crude oil was detected in this sample.
4 - A pattern resembling JP-4 was detected in this sample.
5 - A pattern resembling JP-5 was detected in this sample.
H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS -- Fort Collins

Client: Tetra Tech, Inc.

Work Order: 2009195

Project: 117-8343014 Riley Pass Bluff A

Date: *10/13/2020 1:00*

QC BATCH REPORT

Batch ID: **IP201008-1-1** Instrument ID **ICPMS2** Method: **SW6020**

LCS Sample ID: **IM201008-1** Units: **MG/KG** Analysis Date: **10/13/2020 04:53**

Client ID: Run ID: **IM201012-10A4** Prep Date: **10/8/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	10.4	0.2	10		104	80-120				20	

MB Sample ID: **IP201008-1** Units: **MG/KG** Analysis Date: **10/13/2020 04:50**

Client ID: Run ID: **IM201012-10A4** Prep Date: **10/8/2020** DF: **10**

Analyte	Result	ReportLimit	MDL	Qual
ARSENIC	ND	0.2	0.049	

MS Sample ID: **2009195-1** Units: **MG/KG** Analysis Date: **10/13/2020 05:05**

Client ID: **AS-A335-01** Run ID: **IM201012-10A4** Prep Date: **10/8/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	30.3	0.2	9.99	21	92	75-125				20	

MSD Sample ID: **2009195-1** Units: **MG/KG** Analysis Date: **10/13/2020 05:08**

Client ID: **AS-A335-01** Run ID: **IM201012-10A4** Prep Date: **10/8/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	32	0.199	9.95	21	110	75-125		30.3	6	20	

The following samples were analyzed in this batch:

2009195-1	2009195-2	2009195-3
2009195-4	2009195-5	2009195-6
2009195-7	2009195-8	2009195-9
2009195-10	2009195-11	2009195-12
2009195-13	2009195-14	

Tuesday, October 20, 2020

Aaron Orechwa
Tetra Tech, Inc.
3801 Automation Way, Suite 100
Fort Collins, CO 80525

Re: ALS Workorder: 2009417
Project Name: Riley Pass Bluff A (II)
Project Number: 117-8343014

Dear Mr. Orechwa:

Nine soil samples were received from Tetra Tech, Inc., on 9/21/2020. The samples were scheduled for the following analysis:

Metals

The results for these analyses are contained in the enclosed reports.

This report was originally submitted on October 17, 2020. The report has been revised to change the units reported.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Katie M. OBrien
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

2009417

Metals:
The samples were analyzed following SW-846, 3rd Edition procedures. Analysis by ICPMS followed method 6020B and the current revision of SOP 827.

All acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2009417
Client Name: Tetra Tech, Inc.
Client Project Name: Riley Pass Bluff A (II)
Client Project Number: 117-8343014
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
AS-A125-01	2009417-1		SOIL	16-Sep-20	10:00
AS-A125-02	2009417-2		SOIL	16-Sep-20	10:00
AS-A126-01	2009417-3		SOIL	16-Sep-20	10:10
AS-A74-01	2009417-4		SOIL	16-Sep-20	10:15
AS-A63-01	2009417-5		SOIL	16-Sep-20	10:25
AS-A48-01	2009417-6		SOIL	16-Sep-20	10:30
AS-A22-01	2009417-7		SOIL	16-Sep-20	10:35
AS-A13-01	2009417-8		SOIL	16-Sep-20	10:40
AS-A39-01	2009417-9		SOIL	16-Sep-20	10:45

2886833

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.
Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER # **#2009417 #**

TURNAROUND TIME		SAMPLER	AO	PAGE	1 of 1
PROJECT NAME	RILEY PASS BLUFF A (II)	SITE ID		DISPOSAL	BY LAB or RETURN
PROJECT No.	117-8343014	EDD FORMAT		PARAMETER/METHOD REQUEST FOR ANALYSIS	
		PURCHASE ORDER		A	3050/6020
COMPANY NAME	Tetra Tech Inc.	BILL TO COMPANY	Same	B	
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO		C	
ADDRESS	3801 Automation Way Suite 100	ADDRESS		D	
CITY / STATE / ZIP	Fort Collins, CO 80525	CITY / STATE / ZIP		E	
PHONE	(970) 420-9395	PHONE		F	
FAX		FAX		G	
E-MAIL	aaron.orechwa@tetratech.com	E-MAIL		H	
				I	
				J	

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
1	AS-A125-01	Soil	9/16/20	10:00	NA	NA	NA	X										
2	AS-A125-02	↓	↓	10:00	↓	↓	↓	X										
3	AS-A126-01			10:10				X										
4	AS-A74-01			10:15				X										
5	AS-A63-01			10:25				X										
6	AS-A48-01			10:30				X										
7	AS-A22-01			10:35				X										
8	AS-A13-01			10:40				X										
9	AS-A39-01	↓	↓	10:45	↓	↓	↓	X										

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
Arsenic Samples Please return coolers to Tt; Aaron will retrieve 2009383	Summary (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) LEVEL IV (Std QC + forms + raw)
PRESERVATION KEY: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other	

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Tyler Benner	09/21/20	14:20
RECEIVED BY		EMILY LYONS	SEP 21 2020	1600
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID: Tetra Tech Workorder No: 2009417

Project Manager: KMO Initials: ERL Date: 09.21.20

1. Are airbills / shipping documents present and/or removable?	☑ Drop Off	☐ YES	☐ NO	
2. Are custody seals on **shipping** containers intact?	☐ NONE	☑ YES	☐ NO*	
3. Are custody seals on **sample** containers intact?	☑ NONE	☐ YES	☐ NO*	
4. Is there a COC (chain-of-custody) present?		☑ YES	☐ NO*	
5. Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		☑ YES	☐ NO*	
6. Are short-hold samples present?		☐ YES	☑ NO	
7. Are all samples within holding times for the requested analyses?		☑ YES	☐ NO*	
8. Were all sample containers received intact? (not broken or leaking)		☑ YES	☐ NO*	
9. Is there sufficient sample for the requested analyses?		☑ YES	☐ NO*	
10. Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		☑ YES	☐ NO*	
11. Are all aqueous samples preserved correctly, if required?	☑ N/A	☐ YES	☐ NO*	
12. Were unpreserved samples pH checked, if required?	☑ N/A	☐ YES	☐ NO	
13. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm in diameter?	☑ N/A	☐ YES	☐ NO	
14. Were the samples shipped on ice?		☐ YES	☑ NO	
15. Were cooler temperatures measured at 0.1 - 6.0°C? IR gun used+: ☐ #3 ☐ #5	☐ Rad Only	☐ YES	☑ NO	

Cooler #: 1

Temperature (°C): Amb

# of custody seals on cooler: 1

External mR/hr reading: N/A

Background mR/hr reading: 10

Were external mR/hr readings ≤ two times background and within DOT acceptance criteria? (If no, see Form 008) ☑ N/A ☐ YES ☐ NO

* Please provide details below for 'NO' responses in gray boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

All client bottle ID's vs ALS lab ID's double-checked by: ERL

If applicable, was the client contacted? ☐ YES ☐ NA Contact Name: Date:

Project Manager Signature / Date: 9/23/20

Form 201r30.xls
(06/04/2020)

+IR Gun #3, VWR SN 170647571
+IR Gun #5, VWR SN 192272629

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A125-01	**Lab ID:**	2009417-1
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:00	**Percent Moisture:**	10.7

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**6.2**		**0.21**	**MG/KG**	10	0.051	10/15/2020 21:44

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A125-02	**Lab ID:**	2009417-2
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:00	**Percent Moisture:**	8.8

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**6.4**		**0.2**	**MG/KG**	10	0.05	10/15/2020 22:02

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A126-01	**Lab ID:**	2009417-3
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:10	**Percent Moisture:**	8.2

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**7.4**		**0.21**	**MG/KG**	10	0.053	10/15/2020 22:05

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A74-01	**Lab ID:**	2009417-4
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:15	**Percent Moisture:**	8.8

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**7.2**		**0.21**	**MG/KG**	10	0.051	10/15/2020 22:20

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A63-01	**Lab ID:**	2009417-5
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:25	**Percent Moisture:**	4.5

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**8.1**		**0.21**	**MG/KG**	10	0.051	10/15/2020 22:23

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A48-01	**Lab ID:**	2009417-6
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:30	**Percent Moisture:**	8.0

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**7.1**		**0.21**	**MG/KG**	10	0.051	10/15/2020 22:26

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A22-01	**Lab ID:**	2009417-7
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:35	**Percent Moisture:**	7.3

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**6.6**		**0.21**	**MG/KG**	10	0.052	10/15/2020 22:29

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A13-01	**Lab ID:**	2009417-8
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:40	**Percent Moisture:**	7.4

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**6.3**		**0.2**	**MG/KG**	10	0.05	10/15/2020 22:32

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A39-01	**Lab ID:**	2009417-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:45	**Percent Moisture:**	9.9

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
ICPMS METALS			**SW6020**		Prep Date: **10/13/2020**		PrepBy: **JML**
ARSENIC	**85**		**0.22**	**MG/KG**	10	0.053	10/15/2020 22:34

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009417
Sample ID:	AS-A39-01	**Lab ID:**	2009417-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/16/2020 10:45	**Percent Moisture:**	9.9

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
# - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
G - Sample density differs by more than 15% of LCS density.
D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS -- Fort Collins

Client: Tetra Tech, Inc.

Work Order: 2009417

Project: 117-8343014 Riley Pass Bluff A (II)

Date: *10/20/2020 8:43*

QC BATCH REPORT

Batch ID: **IP201013-3-3** Instrument ID **ICPMS2** Method: **SW6020**

LCS Sample ID: **IM201013-3** Units: **MG/KG** Analysis Date: **10/15/2020 21:35**

Client ID: Run ID: **IM201015-10A9** Prep Date: **10/13/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	9.86	0.2	10		99	80-120				20	

MB Sample ID: **IP201013-3** Units: **MG/KG** Analysis Date: **10/15/2020 21:32**

Client ID: Run ID: **IM201015-10A9** Prep Date: **10/13/2020** DF: **10**

Analyte	Result	ReportLimit	MDL	Qual
ARSENIC	ND	0.2	0.049	

MS Sample ID: **2009417-1** Units: **MG/KG** Analysis Date: **10/15/2020 21:50**

Client ID: **AS-A125-01** Run ID: **IM201015-10A9** Prep Date: **10/13/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	16.2	0.208	10.4	6.2	96	75-125				20	

MSD Sample ID: **2009417-1** Units: **MG/KG** Analysis Date: **10/15/2020 21:53**

Client ID: **AS-A125-01** Run ID: **IM201015-10A9** Prep Date: **10/13/2020** DF: **10**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref	RPD	RPD Limit	Qual
ARSENIC	16.2	0.209	10.4	6.2	96	75-125		16.2	0	20	

The following samples were analyzed in this batch:

2009417-1	2009417-2	2009417-3
2009417-4	2009417-5	2009417-6
2009417-7	2009417-8	2009417-9

Wednesday, October 07, 2020

Aaron Orechwa
Tetra Tech, Inc.
3801 Automation Way, Suite 100
Fort Collins, CO 80525

Re: ALS Workorder: 2009201
Project Name: Riley Pass Bluff A
Project Number: 117-8343014

Dear Mr. Orechwa:

Fourteen soil samples were received from Tetra Tech, Inc., on 9/9/2020. The samples were scheduled for the following analysis:

Gamma Spectroscopy

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Katie M. OBrien
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

2009201

Gamma Spectroscopy:
The samples were analyzed for the presence of gamma emitting radionuclides according to the current revision of SOP 713.

These samples were prepared according to the current revision of SOP 739. The samples were sealed in steel cans and stored for at least 21 days prior to analysis.

All acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2009201
Client Name: Tetra Tech, Inc.
Client Project Name: Riley Pass Bluff A
Client Project Number: 117-8343014
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
RA-A335-01	2009201-1		SOIL	02-Sep-20	9:00
RA-A335-02	2009201-2		SOIL	02-Sep-20	9:00
RA-A350-01	2009201-3		SOIL	02-Sep-20	10:45
RA-A378-01	2009201-4		SOIL	02-Sep-20	11:00
RA-A279-01	2009201-5		SOIL	02-Sep-20	11:50
RA-A266-01	2009201-6		SOIL	02-Sep-20	12:00
RA-A242-01	2009201-7		SOIL	02-Sep-20	12:40
RA-A273-01	2009201-8		SOIL	02-Sep-20	13:00
RA-A304-01	2009201-9		SOIL	02-Sep-20	13:20
RA-A330-01	2009201-10		SOIL	02-Sep-20	13:35
RA-A214-01	2009201-11		SOIL	02-Sep-20	14:35
RA-A172-01	2009201-12		SOIL	02-Sep-20	14:45
RA-A208-01	2009201-13		SOIL	02-Sep-20	15:00
RA-A204-01	2009201-14		SOIL	02-Sep-20	15:10

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER #
2009201

TURNAROUND TIME		SAMPLER	AO	PAGE	1 of 2
				DISPOSAL	BY LAB or RETURN

				PARAMETER/METHOD REQUEST FOR ANALYSIS	
PROJECT NAME	Riley Pass Bluff A	SITE ID			
PROJECT No.	117-8343014	EDD FORMAT			
		PURCHASE ORDER		A	901.1
COMPANY NAME	TetraTech Inc.	BILL TO COMPANY	Same	B	
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO		C	
ADDRESS	3801 Automation Way Ste. 100	ADDRESS		D	
CITY / STATE / ZIP	Fort Collins, CO 80525	CITY / STATE / ZIP		E	
PHONE	970-420-9395	PHONE		F	
FAX		FAX		G	
E-MAIL	aaron.orechwa@tetratech.com	E-MAIL		H	
				I	
				J	

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
1	RA-A335-01	SOIL	9/2/20	0900	NA	NA	NA	X										
2	RA-A335-02			0900				X										
3	RA-A350-01			1045				X										
4	RA-A378-01			1100				X										
5	RA-A279-01			1150				X										
6	RA-A266-01			1200				X										
7	RA-A242-01			1240				X										
8	RA-A273-01			1300				X										
9	RA-A304-01			1320				X										
10	RA-A330-01			1335				X										
11	RA-A214-01			1435				X										
12	RA-A172-01			1445				X										

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
RA-226 samples by E901.1 1 of 2	Summary (Standard QC)
Please add K-40 if no extra gamma spec.	LEVEL II (Standard QC)
21 day in growth; modified E901.1	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw)
PRESERVATION KEY: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other	

amb

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Aaron Orechwa	9/9/20	1530
RECEIVED BY		Tyler Mosser	9/9/20	1530
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER #	
	2009201

TURNAROUND TIME		SAMPLER	AO	PAGE	2 of 2
				DISPOSAL	BY LAB or RETURN

PROJECT NAME	Riley Pass Bluff A	SITE ID		PARAMETER/METHOD REQUEST FOR ANALYSIS	
PROJECT No.	117-8343014	EDD FORMAT			
		PURCHASE ORDER		A	901.1
COMPANY NAME	Tetra Tech Inc.	BILL TO COMPANY	Same	B	
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO		C	
ADDRESS	3801 Automation Way Ste 100	ADDRESS		D	
CITY / STATE / ZIP	Fort Collins, CO 80525	CITY / STATE / ZIP		E	
PHONE	970-420-9395	PHONE		F	
FAX		FAX		G	
E-MAIL	aaron.orechwa@tetratech.com	E-MAIL		H	
				I	
				J	

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
13	RA-A208-01	SOIL	9/2/20	1500	NA	NA	NA	X										
14	RA-A204-01	↓	↓	1510	↓	↓	↓	X										

*Time Zone (Circle): EST CST (MST) PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
RA-226 samples by E901.1 2 of 2 Please add K-40 if no extra cost. 21 day ingrowth; modified E901.1; Ramia	Summary (Standard QC)
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw)

amb

PRESERVATION KEY	1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Aaron Orechwa	9/9/20	1530
RECEIVED BY		Tyler Mosser	9/9/20	1530
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID: Tetra Tech FC Workorder No: 2009201

Project Manager: KMO Initials: TM Date: 9/10/20

1. Are airbills / shipping documents present and/or removable?	☑ Drop Off	☐ YES	☐ NO	
2. Are custody seals on **shipping** containers intact?	☑ NONE	☐ YES	☐ NO*	
3. Are custody seals on **sample** containers intact?	☑ NONE	☐ YES	☐ NO*	
4. Is there a COC (chain-of-custody) present?		☑ YES	☐ NO*	
5. Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		☑ YES	☐ NO*	
6. Are short-hold samples present?		☐ YES	☑ NO	
7. Are all samples within holding times for the requested analyses?		☑ YES	☐ NO*	
8. Were all sample containers received intact? (not broken or leaking)		☑ YES	☐ NO*	
9. Is there sufficient sample for the requested analyses?		☑ YES	☐ NO*	
10. Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		☑ YES	☐ NO*	
11. Are all aqueous samples preserved correctly, if required?	☑ N/A	☐ YES	☐ NO*	
12. Were unpreserved samples pH checked, if required?	☑ N/A	☐ YES	☐ NO	
13. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm in diameter?	☑ N/A	☐ YES	☐ NO	
14. Were the samples shipped on ice?		☐ YES	☑ NO	
15. Were cooler temperatures measured at 0.1 - 6.0°C? IR gun used*: ☐ #3 ☐ #5	☑ Rad Only	☐ YES	☑ NO	

Cooler #: 1

Temperature (°C): amb

# of custody seals on cooler: 0

External mR/hr reading: -

Background mR/hr reading: 11

Were external mR/hr readings ≤ two times background and within DOT acceptance criteria? (If no, see Form 008) ☑ N/A ☐ YES ☐ NO

* Please provide details below for 'NO' responses in gray boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

All client bottle ID's vs ALS lab ID's double-checked by: TM

If applicable, was the client contacted? ☐ YES ☐ N/A Contact Name Date:

Project Manager Signature / Date: 9/11/20

Form 201r30.xls
(06/04/2020)

+IR Gun #3, VWR SN 170647571
+IR Gun #5, VWR SN 192272629

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A335-01	**Lab ID:**	2009201-1
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 09:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**14.4 (+/- 2.9)**		**1.7**	**pCi/g**	NA	10/5/2020 07:56
Ra-226	**3.77 (+/- 0.52)**		**0.29**	**pCi/g**	NA	10/5/2020 07:56

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A335-02	**Lab ID:**	2009201-2
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 09:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**12.1 (+/- 2.9)**		**2**	**pCi/g**	NA	10/5/2020 08:27
Ra-226	**2.98 (+/- 0.47)**		**0.45**	**pCi/g**	NA	10/5/2020 08:27

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A350-01	**Lab ID:**	2009201-3
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 10:45	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**13.3 (+/- 2.8)**		**1.8**	**pCi/g**	NA	10/5/2020 08:32
Ra-226	**4.04 (+/- 0.56)**		**0.38**	**pCi/g**	NA	10/5/2020 08:32

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A378-01	**Lab ID:**	2009201-4
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 11:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**13.3 (+/- 3.4)**		**2.4**	**pCi/g**	NA	10/5/2020 09:13
Ra-226	**1.28 (+/- 0.31)**		**0.5**	**pCi/g**	NA	10/5/2020 09:13

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A279-01	**Lab ID:**	2009201-5
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 11:50	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**13.2 (+/- 3)**		**2**	**pCi/g**	NA	10/5/2020 09:13
Ra-226	**4.83 (+/- 0.68)**		**0.49**	**pCi/g**	NA	10/5/2020 09:13

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A266-01	**Lab ID:**	2009201-6
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 12:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**12.8 (+/- 2.9)**		**2.3**	**pCi/g**	NA	10/5/2020 09:13
Ra-226	**4.73 (+/- 0.65)**		**0.41**	**pCi/g**	NA	10/5/2020 09:13

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A242-01	**Lab ID:**	2009201-7
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 12:40	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**12.3 (+/- 3.3)**		**2.8**	**pCi/g**	NA	10/5/2020 10:03
Ra-226	**4.1 (+/- 0.61)**		**0.49**	**pCi/g**	NA	10/5/2020 10:03

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A273-01	**Lab ID:**	2009201-8
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**16.5 (+/- 3.4)**		**2**	**pCi/g**	NA	10/5/2020 10:03
Ra-226	**2.9 (+/- 0.45)**		**0.44**	**pCi/g**	NA	10/5/2020 10:03

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A304-01	**Lab ID:**	2009201-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:20	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**18.2 (+/- 3.7)**		**1.7**	**pCi/g**	NA	10/5/2020 10:03
Ra-226	**1.36 (+/- 0.29)**		**0.46**	**pCi/g**	NA	10/5/2020 10:03

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A330-01	**Lab ID:**	2009201-10
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 13:35	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**15.7 (+/- 3.4)**		**2.1**	**pCi/g**	NA	10/5/2020 10:03
Ra-226	**2.8 (+/- 0.44)**		**0.44**	**pCi/g**	NA	10/5/2020 10:03

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A214-01	**Lab ID:**	2009201-11
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:35	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**13.6 (+/- 3.4)**		**2.5**	**pCi/g**	NA	10/5/2020 10:03
Ra-226	**5.56 (+/- 0.79)**		**0.51**	**pCi/g**	NA	10/5/2020 10:03

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A172-01	**Lab ID:**	2009201-12
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 14:45	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**12.7 (+/- 3.4)**		**2.8**	**pCi/g**	NA	10/5/2020 10:49
Ra-226	**4.91 (+/- 0.72)**		**0.57**	**pCi/g**	NA	10/5/2020 10:49

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A208-01	**Lab ID:**	2009201-13
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**13.4 (+/- 2.8)**		**1.5**	**pCi/g**	NA	10/5/2020 10:49
Ra-226	**3.99 (+/- 0.56)**		**0.41**	**pCi/g**	NA	10/5/2020 10:49

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A204-01	**Lab ID:**	2009201-14
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:10	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/12/2020**		PrepBy: **JXH**
K-40	**14.9 (+/- 3.4)**		**2.2**	**pCi/g**	NA	10/5/2020 10:49
Ra-226	**4.39 (+/- 0.64)**		**0.49**	**pCi/g**	NA	10/5/2020 10:49

Client:	Tetra Tech, Inc.	**Date:**	*07-Oct-20*
Project:	117-8343014 Riley Pass Bluff A	**Work Order:**	2009201
Sample ID:	RA-A204-01	**Lab ID:**	2009201-14
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/2/2020 15:10	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.

- Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.

G - Sample density differs by more than 15% of LCS density.

D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

ALS -- Fort Collins

Client: Tetra Tech, Inc.

Work Order: 2009201

Project: 117-8343014 Riley Pass Bluff A

Date: *10/7/2020 3:16:*

QC BATCH REPORT

Batch ID: **GS200912-1-1** Instrument ID **GAMMA** Method: **Gamma Spectroscopy Results**

DUP Sample ID: **2009201-1** Units: **pCi/g** Analysis Date: **10/5/2020 08:27**

Client ID: **RA-A335-01** Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
K-40	15.4 (+/- 3.3)	2.4						14.4	0.2	2.1	

LCS Sample ID: **GS200912-1** Units: **pCi/g** Analysis Date: **10/5/2020 11:36**

Client ID: Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Am-241	448 (+/- 54)	15	463.3		96.6	85-115					P
Co-60	208 (+/- 24)	1	204.2		102	85-115					P
Cs-137	180 (+/- 21)	1	176.1		102	85-115					P

MB Sample ID: **GS200912-1** Units: **pCi/g** Analysis Date: **10/5/2020 11:36**

Client ID: Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
K-40	-0.42 (+/- 0.58)	1.38									U

The following samples were analyzed in this batch:

2009201-1	2009201-2	2009201-3
2009201-4	2009201-5	2009201-6
2009201-7	2009201-8	2009201-9
2009201-10	2009201-11	2009201-12
2009201-13	2009201-14	

Client: Tetra Tech, Inc.
Work Order: 2009201
Project: 117-8343014 Riley Pass Bluff A

QC BATCH REPORT

Batch ID: **GS200912-1-2** Instrument ID **GAMMA** Method: **Gamma Spectroscopy Results**

DUP Sample ID: **2009201-1** Units: **pCi/g** Analysis Date: **10/5/2020 08:27**
Client ID: **RA-A335-01** Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	3.65 (+/- 0.52)	0.42						3.77	0.2	2.1	

LCS Sample ID: **GS200912-1A** Units: **pCi/g** Analysis Date: **10/5/2020 11:36**
Client ID: Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	455 (+/- 53)	3	467.8		97.3	85-115					P,M3

MB Sample ID: **GS200912-1** Units: **pCi/g** Analysis Date: **10/5/2020 11:36**
Client ID: Run ID: **GS200912-1A** Prep Date: **9/12/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	0.08 (+/- 0.14)	0.23									U

The following samples were analyzed in this batch:

2009201-1	2009201-2	2009201-3
2009201-4	2009201-5	2009201-6
2009201-7	2009201-8	2009201-9
2009201-10	2009201-11	2009201-12
2009201-13	2009201-14	

Tuesday, October 20, 2020

Aaron Orechwa
Tetra Tech, Inc.
3801 Automation Way, Suite 100
Fort Collins, CO 80525

Re: ALS Workorder: 2009416
Project Name: Riley Pass Bluff A (II)
Project Number: 117-8343014

Dear Mr. Orechwa:

Nine soil samples were received from Tetra Tech, Inc., on 9/21/2020. The samples were scheduled for the following analysis:

Gamma Spectroscopy

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Katie M. OBrien
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
PJ-LA (DoD ELAP/ISO 170250)	95377
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280

2009416

Gamma Spectroscopy:

The samples were analyzed for the presence of gamma emitting radionuclides according to the current revision of SOP 713.

These samples were prepared according to the current revision of SOP 739. The samples were sealed in steel cans and stored for at least 21 days prior to analysis.

All acceptance criteria were met.

ADDRESS 225 Commerce Drive, Fort Collins Colorado 80524 USA | PHONE +1 970 490 1511 | FAX +1 970 490 1522
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2009416
Client Name: Tetra Tech, Inc.
Client Project Name: Riley Pass Bluff A (II)
Client Project Number: 117-8343014
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
RA-A125-01	2009416-1		SOIL	15-Sep-20	16:00
RA-A125-02	2009416-2		SOIL	15-Sep-20	16:00
RA-A126-01	2009416-3		SOIL	15-Sep-20	16:15
RA-A74-01	2009416-4		SOIL	15-Sep-20	16:20
RA-A63-01	2009416-5		SOIL	15-Sep-20	16:40
RA-A48-01	2009416-6		SOIL	15-Sep-20	16:50
RA-A22-01	2009416-7		SOIL	15-Sep-20	17:00
RA-A13-01	2009416-8		SOIL	15-Sep-20	17:15
RA-A39-01	2009416-9		SOIL	15-Sep-20	17:30

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER # #2009415 6 # (9/22/20)

TURNAROUND TIME		SAMPLER	AO	PAGE	1 of 1
SITE ID				DISPOSAL	BY LAB or RETURN
EDD FORMAT				PARAMETER/METHOD REQUEST FOR ANALYSIS	
PURCHASE ORDER				A	901.1 (Ra-226)
BILL TO COMPANY	same			B	
INVOICE ATTN TO				C	
ADDRESS				D	
CITY / STATE / ZIP				E	
PHONE				F	
FAX				G	
E-MAIL				H	
				I	
				J	

PROJECT NAME	RILEY PASS Bluff A (II)
PROJECT No.	117-8343014
COMPANY NAME	Tetra Tech Inc.
SEND REPORT TO	Aaron Orechwa
ADDRESS	3801 Automation Way S1.100
CITY / STATE / ZIP	Fort Collins, CO 80525
PHONE	(970) 420-9345
FAX	
E-MAIL	aaron.orechwa@tetratech.com

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
1	RA-A125-01	Soil	9/15/20	16:00	NA	NA	NA	X										
2	RA-A125-02			16:00				X										
3	RA-A126-01			16:15				X										
4	RA-A74-01			16:20				X										
5	RA-A63-01			16:40				X										
6	RA-A48-01			16:50				X										
7	RA-A22-01			17:00				X										
8	RA-A13-01			17:15				X										
9	RA-A39-01	↓	↓	17:30	↓	↓	↓	X										

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

NOTES	REPORT LEVEL / QC REQUIRED
RA-226 samples by E901.1	Summary (Standard QC)
Please add K-40 if no extra cost	LEVEL II (Standard QC)
30 day ingrowth; modified E901.1	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw

PRESERVATION KEY: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

Form 202r9

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Tyler Benner	9/21/20	14:20
RECEIVED BY		EMILY LYONS	SEP 21 2020	1600
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client Name/ID: Tetra Tech Workorder No: 2009416

Project Manager: KMO Initials: ERL Date: 09.21.20

1. Are airbills / shipping documents present and/or removable?	☑ Drop Off	☐ YES	☐ NO	
2. Are custody seals on **shipping** containers intact?	☐ NONE	☑ YES	☐ NO*	
3. Are custody seals on **sample** containers intact?	☑ NONE	☐ YES	☐ NO*	
4. Is there a COC (chain-of-custody) present?		☑ YES	☐ NO*	
5. Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		☑ YES	☐ NO*	
6. Are short-hold samples present?		☐ YES	☑ NO	
7. Are all samples within holding times for the requested analyses?		☑ YES	☐ NO*	
8. Were all sample containers received intact? (not broken or leaking)		☑ YES	☐ NO*	
9. Is there sufficient sample for the requested analyses?		☑ YES	☐ NO*	
10. Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		☑ YES	☐ NO*	
11. Are all aqueous samples preserved correctly, if required?	☑ N/A	☐ YES	☐ NO*	
12. Were unpreserved samples pH checked, if required?	☑ N/A	☐ YES	☐ NO	
13. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm in diameter?	☑ N/A	☐ YES	☐ NO	
14. Were the samples shipped on ice?		☐ YES	☑ NO	
15. Were cooler temperatures measured at 0.1 - 6.0°C? IR gun used*: ☐ #3 ☐ #5	☑ Rad Only	☐ YES	☐ NO	

Cooler #: 1

Temperature (°C): Amb

# of custody seals on cooler: 1

External mR/hr reading: N/A

Background mR/hr reading: 10

Were external mR/hr readings ≤ two times background and within DOT acceptance criteria? (If no, see Form 008) ☑ N/A ☐ YES ☐ NO

* Please provide details below for 'NO' responses in gray boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

All client bottle ID's vs ALS lab ID's double-checked by: ERL

If applicable, was the client contacted? ☐ YES ☐ NA Contact Name: Date:

Project Manager Signature / Date: 9/22/20

Form 201r30.xls
(06/04/2020)

+IR Gun #3, VWR SN 170647571
+IR Gun #5, VWR SN 192272629

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A125-01	**Lab ID:**	2009416-1
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**15.8 (+/- 3.8)**		**2.9**	**pCi/g**	NA	10/15/2020 08:03
Ra-226	**1.76 (+/- 0.36)**		**0.43**	**pCi/g**	NA	10/15/2020 08:03

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A125-02	**Lab ID:**	2009416-2
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**14.8 (+/- 3.2)**		**1.8**	**pCi/g**	NA	10/15/2020 08:03
Ra-226	**1.53 (+/- 0.31)**		**0.42**	**pCi/g**	NA	10/15/2020 08:03

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A126-01	**Lab ID:**	2009416-3
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:15	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**16.4 (+/- 3.5)**		**2.2**	**pCi/g**	NA	10/15/2020 08:03
Ra-226	**2.19 (+/- 0.38)**		**0.43**	**pCi/g**	NA	10/15/2020 08:03

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A74-01	**Lab ID:**	2009416-4
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:20	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**14.9 (+/- 3.8)**		**2.8**	**pCi/g**	NA	10/15/2020 08:03
Ra-226	**1.6 (+/- 0.35)**		**0.54**	**pCi/g**	NA	10/15/2020 08:03

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A63-01	**Lab ID:**	2009416-5
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:40	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**15.3 (+/- 3.8)**		**2.9**	**pCi/g**	NA	10/15/2020 08:43
Ra-226	**4.47 (+/- 0.66)**		**0.49**	**pCi/g**	NA	10/15/2020 08:43

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A48-01	**Lab ID:**	2009416-6
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 16:50	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**17.2 (+/- 3.6)**		**1.7**	**pCi/g**	NA	10/15/2020 09:22
Ra-226	**1.59 (+/- 0.31)**		**0.42**	**pCi/g**	NA	10/15/2020 09:22

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A22-01	**Lab ID:**	2009416-7
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 17:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**13.3 (+/- 3)**		**2**	**pCi/g**	NA	10/15/2020 08:43
Ra-226	**1.8 (+/- 0.33)**		**0.43**	**pCi/g**	NA	10/15/2020 08:43

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A13-01	**Lab ID:**	2009416-8
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 17:15	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results		**SOP 713**		Prep Date: **9/23/2020**		PrepBy: **JXH**
K-40	**16.1 (+/- 3.8)**		**2.3**	**pCi/g**	NA	10/15/2020 08:43
Ra-226	**1.41 (+/- 0.33)**		**0.47**	**pCi/g**	NA	10/15/2020 08:43

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A39-01	**Lab ID:**	2009416-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 17:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results			**SOP 713**		Prep Date: **9/23/2020**	PrepBy: **JXH**
K-40	**13.7 (+/- 3.7)**	G	**3**	**pCi/g**	NA	10/15/2020 09:22
Ra-226	**6.55 (+/- 0.92)**	G	**0.6**	**pCi/g**	NA	10/15/2020 09:22

Client:	Tetra Tech, Inc.	**Date:**	*20-Oct-20*
Project:	117-8343014 Riley Pass Bluff A (II)	**Work Order:**	2009416
Sample ID:	RA-A39-01	**Lab ID:**	2009416-9
Legal Location:		**Matrix:**	SOIL
Collection Date:	9/15/2020 17:30	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.

- Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.

G - Sample density differs by more than 15% of LCS density.

D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

QC BATCH REPORT

Batch ID: **GS200923-1-1** Instrument ID **GAMMA** Method: **Gamma Spectroscopy Results**

DUP Sample ID: **2009416-1** Units: **pCi/g** Analysis Date: **10/15/2020 08:43**

Client ID: **RA-A125-01** Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
K-40	15.7 (+/- 3.4)	2						15.8	0.01	2.1	

LCS Sample ID: **GS200923-1** Units: **pCi/g** Analysis Date: **10/15/2020 09:22**

Client ID: Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Am-241	466 (+/- 56)	12	463.3		101	85-115					P
Co-60	210 (+/- 25)	1	203.5		103	85-115					P
Cs-137	188 (+/- 22)	1	176		107	85-115					P

MB Sample ID: **GS200923-1** Units: **pCi/g** Analysis Date: **10/15/2020 09:22**

Client ID: Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
K-40	0.38 (+/- 0.96)	1.71									U

The following samples were analyzed in this batch:

2009416-1	2009416-2	2009416-3
2009416-4	2009416-5	2009416-6
2009416-7	2009416-8	2009416-9

Client: Tetra Tech, Inc.
Work Order: 2009416
Project: 117-8343014 Riley Pass Bluff A (II)

QC BATCH REPORT

Batch ID: **GS200923-1-2** Instrument ID **GAMMA** Method: **Gamma Spectroscopy Results**

DUP Sample ID: **2009416-1** Units: **pCi/g** Analysis Date: **10/15/2020 08:43**
Client ID: **RA-A125-01** Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	1.96 (+/- 0.36)	0.46						1.76	0.4	2.1	

LCS Sample ID: **GS200923-1A** Units: **pCi/g** Analysis Date: **10/15/2020 10:01**
Client ID: Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	465 (+/- 54)	3	467.8		99.4	85-115					P,M3

MB Sample ID: **GS200923-1** Units: **pCi/g** Analysis Date: **10/15/2020 09:22**
Client ID: Run ID: **GS200923-1A** Prep Date: **9/23/2020** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	0.11 (+/- 0.15)	0.25									U

The following samples were analyzed in this batch:

2009416-1	2009416-2	2009416-3
2009416-4	2009416-5	2009416-6
2009416-7	2009416-8	2009416-9

APPENDIX G4 – FIELD LOGBOOKS AND FIELD FORMS

RILEY PASS FIELD NOTEBOOK
2020

Rite in the Rain®
ALL-WEATHER
WORKSITE
LEVEL
№ 1515

1/11/20. Worksite: RILEY PASS Date: 8/31/20

LEFT FT COLLINS 0700 MT

ARRIVE USFS JOB TRAILER 1400 MT

met w/ TOM

SET QC STATION AT USFS JOB TRAILER

COLLECTED INITAL SET OF READINGS FOR PROJECT USING GREEN MEGA

	FS	BG	Source (S-13) μR/hr
1	12	14	32
2	13	12	30
3	12	13	32
4	14	13	28
5	14	13	31
6	13	14	29
7	13	14	31
8	14	13	30
9	11	14	34
10	14	13	31

BASELINE QC

THESE UNITS ARE USED FOR DURATION OF BLUFF A VERIFICATION WORK.

ONLY GREEN DETECTOR WAS USED ON 8/31 SO PRE-QC TAKEN

END OF ENTRIES FOR PAGE

Rite in the Rain

Worksite: Riley Pass Date: 8/31

GREEN S/N

	PRE FS	PRE BG	PRE Source	POST FS	POST BG	POST Source
1	14	12	31	13	15	31
2	14	14	33	14	14	30
3	12	14	34	12	13	30
4	13	15	30	13	12	33
5	15	13	30	12	14	30
6	13	14	34	13	12	33
7	14	13	31	12	14	31
8	12	14	32	14	15	33
9	14	14	30	14	12	31
10	16	13	32	13	14	30

ARRIVED ONSITE @ 1500
SAFETY MTG
AARON AUSTIN
SHANE TOM
SCANNED W/ GREEN ; 2 FILES
FILES 083120-050550-1
083120-033001
QC-POST @ 1700
HOTEL @ 1800
END OF ENTRIES
FOR 8/31

Worksite: 9/1/20 Riley Pass Date:

LEFT HOTEL 0700
ARRIVE TRAILER 0730
PERFORMED XRF + GAMMA QC
NOTE: NO INSITU PLATE PROVIDED NEEDED TO DO BAG STUDY
PAE FOR GREEN

	FS	BG	Cs-137
1	12	14	33
2	14	13	30
3	12	14	30
4	12	13	33
5	13	11	31
6	13	12	31
7	13	14	30
8	15	12	30
9	13	13	31
10	14	15	33

LEFT TRAILER @ 0900
ARRIVED @ SU-3 / SU-4 0910
SAFETY MEETING
END OF FIELD ENTRIES FOR PAE

Rite in the Rain

Worksite: Riley Pass Date: 9/1/20

0930 Began verification work

Scan SU-3, SU-4 and portions of SU-2
XFF'd SU-3, SU-4

1630 met w/contractor to discuss 5 exceedance grids for gamma and 1 exceedance point for arsenic.

USFS (Dave Shimmek) agreed we should address these grids by placing cover

Post QC - Green

BG	Cs-137	PS
13	33	13
12	30	14
14	34	13
13	33	13
13	33	13
15	31	14
13	32	12
15	33	12
13	29	14
14	31	13

Left site 1730
Hotel 1830

End of entries for 9/1/20

Worksite: Riley Pass Date: 9/2/20

Leave Hotel 0700
Arrive Trailhead 0730

XRF/Gamma QC

Green Unit QC 0745

BG	Cs-137	PS
14	33	13
12	30	14
13	31	15
15	37	14
13	30 32	13
13	29	14
12	31	13 15
13	33	13
14	30	13
13		

- XRF RCRA standard and data check
- Discuss plan of attack
- Safety meeting

Left trailer @ 0830
Arrive on site SU-2 0845

End of entries for page

Rite in the Rain

Worksite: RILEY PASS Date: 9/2/20

6900

Collect soil sample at GRID A335

DUPLICATE ✓ ARSENIC ✓ RA-226 ✓

PHOTO ✓ AS-A335-01 + -02

RA-A335-01 + -02

AD scanned SU-2 (SOUTH) completed at 1070

AUSTIN/SHANE CONDUCTED XRF ON SU-2 (SOUTH)

SU-2 SOIL SAMPLING

GRID	TIME RA	AS
350	1045	1155

RA-A350-01 Note: 4 soil types

AS-A350-01

378 1100 1700

RA-A378-01

AS-A378-01

NOTE Naturally elevated Arsenic found in SU-2 (SOUTH-MIDDLE) DOWNGRADIENT OF CLEARING AREA

END OF ENTRIES FOR PAGE

Worksite: RILEY PASS Date: 9/2/20

SOIL SAMPLING AT SU-3/SU-4

GRID	TIME RA	AS
279	1150	1314

RA-A279-01

AS-A279-01

GRID	RA	AS
266	1200	1317

RA-A266-01

AS-A266-01

GRID	RA	AS
242	1240	1335

RA-A242-01

AS-A242-01

GRID	RA	AS
273	1300	1350

RA-A273-01 Mixed; native + recleaned

AS-A273-01

END OF ENTRIES FOR PAGE

Rite in the Rain

Worksite: RILEY PASS Date: 9/2/20

time

GRID	RA	AS
304	1320	1405

RA - A304-01
AS - A304-01

GRID	RA	AS
330	1335	1413

RA - A330-01
AS - A330-01

GRID	RA	AS
356		

~~RA - A356-01~~
~~AS - A356-01~~
Eliminated due to extra sample

SU-4 soil sample completed

END OF ENTRIES FOR PAGE

Worksite: RILEY PASS Date: 9/2/20

BEGIN SU-4

GRID	RA	AS	
172	~~1495~~ 1445	~~1495~~ 1445	both 1445

RA - A172-01
AS - A172-01

GRID	RA	AS	
214	~~1445~~ 1435	~~1445~~ 1435	both 1435

RA - A214-01
AS - A214-01

GRID	RA	AS
208	1500	1500

RA - A208-01
AS - A208-01

GRID	RA	AS
204	1510	1510

RA - A204-01
AS - A204-01

END OF FIELD ENTRIES FOR PAGE

Rite in the Rain

Worksite: Riley Pass Date: 9/2/20

Completed soil sampling for trip 1

* Conducted removal action at various grids requiring attention.
* Photo/video documented process.
* Created new scan file for post removal scanning

1645

Post QC @ trailer (Green)

BG	Cs-137	FS
13	31	13
15	32	15
14	29	14
13	33	12
13	31	14
14	34	15
13	33	13
15	31	13
14	33	13
14	30	14

Worksite: Riley Pass Date: 9/2/20

Summary of data files & type:
Name of files in Rad Scene

8/31/20

083120 - 050550-1
083120 - 033300-1
characterization/verification data

9/1/20

090120 - 093713-1
characterization/verification data

9/2/20

090220-091922-1 919 am	File is corrupt no data
090220-092506-1 1107 am	Characterization/verification SU-2, SU-3, SU-4
090220-041735-1 434 pm	Post Removal Action cover grids

Above files represent data files for Bluff A Trip 1 project

End of field entries for page

Rite in the Rain

Worksite: Riley Pass Date: 9/2/20

LEFT TRAILER AT 1645 TO BLUFF J TO CONDUCT SUPPLEMENTAL SOIL SAMPLING AT GRID "J14".

NOTE, PREVIOUSLY THIS GRID WAS SCANNED + SAMPLED W/ HIGH RA-226 FOUND AT 117 pCi/g. THERE FELT USES, WAS INTERESTED IN RESAMPLING GRID TO SEE IF IT WAS ACCURATE.

TEAM ARRIVED AT BLUFF J AT 1730 MT. TEAM TOOK PHOTOS, SCANNED, AND SAMPLED GRID.

SOIL SAMPLES:
RA-J14 RERUN -01 PRIMARY
RA-J14 RERUN -02 DUPLICATE

ST: 1750
FILE: 090220-054948-1 BLUFF J
PHOTOS ON AO's PHONE

LEFT SITE

Worksite: Riley_Pass Date: 9/3/20

TRAVEL DAY FROM NORTH DAKOTA TO FORT COLLINS
LEFT 0800
ARRIVE 1600

FIELD POST-PREP ON 9/3/20 & 9/4/20

END OF FIELD ENTRIES RA
FIELD TRIP #1



Rite in the Rain

Worksite: RILEY PASS. Date: 9/15/20

SEPTEMBER 15, 2020 TUESDAY

- AARON LEFT FT COLLINS, CO @ 0600 (FIELD PREP 0500-0600)
- ARRIVED @ RILEY PASS USFS TRAILHEAD @ 1445

Weather 90°F SUNNY, SMOKE IN AIR LOW VISIBILITY

- Met w/ TT engineer Tom Bumstead to get update on site conditions.
- Held safety meeting & covid update

Performed GAMMA QC @ 1500

S/N: GREEN from TRIP 1

QC Checks (μR/hr)

BG	Cs-137	FS
14	33	14
15	31	13
12	30	15
12	32	14
14	32	14
12	30	13
13	30	13
12	32	14
14	33	14
12	31	15

END OF ENTRIES FOR PAGE 1

Worksite: RILEY PASS Date: 9/15/20

AARON met w/ FS, TT, & young guns

- BEGAN soil sampling / gamma scanning

NOTE: XRF team was not present so only RA-226 samples will be collected on 9/15/20.

GRID	Date	Sample Time	Dup?
A125	9/15/20	1600	yes
	"RA-125-01" & "RA-125-02"		
A126	9/15/20	1615	No
	"RA-A126-01"		
A74	9/15/20	1620	NO
	"RA-A74-01"		
A63	"RA-A63-01"	1640	NO
A48	9/15/20	1650	NO
	"RA-A48-01"		
A22	9/15/20	1700	NO
	"RA-A22-01"		
A13	9/15/20	1715	No
	"RA-A13-01"		
A39	9/15/20	1730	NO

LEFT SITE @ 1745 to TRAILHD

END OF ENTRIES | NEXT PAGE

Rite in the Rain

Worksite: RILEY PASS Date: 9/15/20

ARRIVED @ JOB TRAILER 1830

PERFORMED POST CALIBRATION CHECKS

QC Checks (μR/hr)

BG	Cs-137	FS
15	31	14
14	31	12
15	37	14
13	31	16
12	34	13
13	28	15
12	33	12
12	30	15
15	33	13
14	29	14

LEFT SITE 1845

ARRIVED BOWMAN 1930

END OF FIELD ENTRIES FOR 9/15/20

Worksite: RILEY PASS Date: 9/16/20

LEFT BOWMAN 0630 Sunny, Smoky 70° F

ARRIVED @ TRAILER 0750

PERFORM XRF & Gamma QC

Health & Safety Meeting

QC Checks (MR/hr)

BG	Cs-137	FS
11	31	15
12	32	13
13	32	14
13	30	14
13	30	14
12	28	13
13	30	13
12	31	12
13	28	14
13	31	12

FF personell: A. Orechia
Natalie
Shore

END OF ENTRIES FOR PAGE

Rite in the Rain.

Worksite: Riley Pass Date: 9/16/2

Performed Gamma Surveys & XRF Fld survey at remaining areas of Bluff A. (SU-1)

0900-1550 XRF surveys

@ 1550 XRF malfunctioned
Collected soil samples by hand
@ grids:
88, 87, 86, 85, 84, 83, 67, 68
69, 70, 71, 72, 73, 75, 76, 77
78, 79, 137, 138, 156, 157
158, 159, 160, 161, 179, 180
181, 182, 183, 184, 200, 201
202, 96, 97, 98, 114, 115,
116, 117, 134, 135, 136

Following completion of XRF survey Performed Remedial Action Survey @ 1809 & 1826; went back to Trip 1 hot spot 1830.

Finished Field work @ 1845

— — — — — — —

End of Entries
For Page 1

Worksite: Riley Pass Date: 9/16/2

Arrive @ Trailer 1900
Perform Final QC

QC Checks (µR/hr)

BG	FS	Cs-137
14	13	34
13	12	32
13	14	27
12	12	30
12	16	31
12	13	32
14	14	30
12	12	31
12	13	33
13	13	29

Left site Arrive Barrow 1945

— — — — — — —

End of Entries
For 9/16/26

Rite in the Rain

Worksite: Riley Pass Date: 9/17

Left Bozeman 0500 MT

Arrive Fort Collins 1700 MT

End of Entries

for 9/17/20



XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
291	9-1-2020	9:25	No	19						Reading #26
265		0936	No	14						R-30, NATIVE SOIL
266		0942	N	28						R-31
267		0943	N	29						R-32
268		0945	N	26						R-33
269		0947	N	16						R-34
270		0950	N	20						R-35
271		0951	N	18						R-36
273		0954	Y	29						R-37, ROCKS NEARBY ~8' S
274		0956	N	34						R-38

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
275	9/1/20	0958	N	23						R-39 NATIVE
276		1000	N	16						R-40 NATIVE
287		1001	N	9						R-41 NATIVE
286		1004	N	29						R-42
285		1006	N	25						R-43
284		1007	N	14						R-44 NATIVE
283		1009	N	13						R-45
282		1014 ~~1016~~	N	~~19~~ 26						~~R-38~~ ~~R-46~~ R-47
281		1012	N	28						R-46
280		1016	N	21						R-48

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XRF Field Form
Riley Pass

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Tetra Tech ID:
Sampling team:
XRF Color:

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Weather:

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279	9/1/20	1019	N	27						R-49
278		1022	N	23						R-51
288		1024	N	19						R-52 NATIVE
290		1027	N	23						R-53
291		1030	N	17						R-54
292		1032	N	19						R-55
293		1034	N	19						R-56
294		1036	N	13						R-57 NATIVE
295		1037	N	14						R-58 NATIVE
296		1039	N	36						R-59

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Riley Pass

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XRF Color:

Date:
Weather:

Page No.:
GPS Color:

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Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
297	9/1/20	1041	N	27						R-60
298		1043	N	29						R-61 NATIVE
307		1045	N	30						R-62
306		1046	N	33						R-63
305		1048	N	47						R-64
303		~~1054~~ ~~1056~~	N	~~210~~ 23						~~R-65~~ R-66
302		1052	N	28						R-65
301		1056	N	20						R-68
300		1058	N	18						R-69
299		1100	N	18						R-70

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XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
308	9/1/20	1110 ~~1107~~	N	1.7						~~R-71~~ R-72
309		1108	N	27						R-71
310		1111	N	25						R-73
311		1113	N	15						R-74
312		1115	N	27						R-75, NATIVE
313		1117	N	40						R-76
* 314		1119	N	81						R-77
315		1121	N	47						R-78
316		1122	N	11						R-79
323		1127	N	24						R-81 NATIVE

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
322	9/1/20	1130	N	15						R-B2, NATIVE
321		1132	N	37						R-B3
320		1134	N	31						R-B4
319		1136	N	19						R-B6
318		1138	N	48						R-B7
317		1145	N	15						R-B8
327		1246	N	17						R-B9
337		1248	N	16						R-90
328		1250	N	16						R-91
329		1252	N	31						R-92

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
331	9/1/20	1258	N	29						R-93
332		1257	N	36						R-94
333		1289	N	36						R-95
346		1301	N	15						R-96
345		1303	N	41						R-97
344		1305	N	45						R-98
355		1307	N	13						R-99
356		1309	N	24						R-100
357		1311	N	17						R-101, NATIVE
368		1313	N	20						R-102, NATIVE

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
367	9/1/20	1345	N	31						R-103
366	9/1/20	1317	N	12						R-104
343		1324	N	68						~~R-105~~ R-105, NATIVE
342		1328	N	38						R-106
341		1326	N	31						R-107
340		1328	N	115						R-108
339		1330	N	39						R-109
338		1332	N	~~130~~ 22						R-110
352		1335	N	20						R-111
353		1338	N	15						R-112

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
354	9/1/20	1340	N	42						R-113
365		1342	N	61						R-114, NATIVE
364		1344	N	43						R-115
363		1346	Y	20						R-116, MOVED PAVE TO ROCKS, NATIVE
252		1434	N	14						R-119
254		1438	N	26						R-120
256		1440	N	28						R-121
250		1442	N	24						R-122
257		1445	N	29						R-123
258		1448	N	24						R-124

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
259	9/1/20	1451	N	23						~~R-125~~ R-125
260		1453	N	26						~~R-125~~ R-126
261		1455	N	27						R-127
262		1457	N	~~26~~30						~~R-128~~ R-128
263		1500	N	29						R-129
264		1501	N	13						R-130
251		1503	N	35						R-131
250		1505	N	30						R-132
249		1507	N	24						R-133
248		1509	N	22						R-134

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
247	9/1/20	1012	N	22						R-135
246		1514	N	22						R-136
245		1226	N	19						R-137
244		1228	N	28						R-138
243		1230	N	24						R-139
242		1232	N	22						R-140
241		1233	N	17						R-141
240		1535	N	34						R-142
231		1537	N	27						R-143
232		1539	N	36						R-143, N

Notes to field team:
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XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
233	9/1/20	1542	N	19						R-145
234		1544	N	19						R-146
235		1546	N	21					—	R-147
236		1547	N	25						R-148
237		1549	N	22					"	R-149
238		1552	N	19						R-150
239		1554	N	23						R-151
228 ~~240~~		1556	N	~~23~~ 20						~~DUP 2~~ R-153
229		1604	N	24						R-154
230		16	Y	10						R-155, NATIVE MOVED N DUE TO BLUFF EDGE

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
225	9/1/20	1626	N	28						R-156
226		1628	N	32						R-157
227		1630	N	27						R-158
215		1636 ~~1634~~	N	22						R-159
214		1637	N	25						R-160
193		1639	N	22						R-161
194		1641	Y	28						R-162, MOVED DUE TO CLIFF EDGE
195		1643	N	23						R-163, NATIVE
173		1645	Y	9						R-164, MOVE BOULDER
172		1647	N	22						R-165

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
171	9/1/20	1650	N	25						R-166
192	9/1/20	1652	N	~~140~~ 15						R-167
149		1654	N	11						R-168
150		1658	N	<2.1						R-169
213		1702	N	25						R-170
212		1704	N	3						R-171 ~~R-172~~, NATIVE
335	9/2/20	0912	N	15	17	Y	RA-A335-01 As-A335-01	Y		R-201 CUT OFF GRID @ CLIFF
335x	9/2/20	0914	N	17	-	Y	RA-A335-02 As-A335-02	Y	RA-A335-02 AS-A335-02	R-202 DUPLICATE READINGS
334		0933	Y	27			~~R~~			R-203, MOVED DUE TO CLIFF EDGE
324		0936	Y	23						R-204. MOVED DUE TO EQUIP

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
325	9/2/20	0938	N	40						R-205
326	"	0940	N	~~40~~ 22						R-206
336	"	0941	N	10						R-207, NATIVE
351	"	0947	N	33						R-208
349	"	0950	N	7						R-209
348	"	0951	N	5						R-210
347	"	0953	N	18						R-211
358	"	0955	N	29						R-212
359	"	0957	N	6						R-213
360	"	1000	N	5						R-214

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
361	9/2/20	1001	N	5						R-215
362		1003	N	5						R-216
373		1005	N	29						R-217, NATIVE
372		1007	N	4						R-218
371		1009	N	6						R-219
370		1011	N	6						R-220
369		1013	N	23						R-221, NATIVE
381		1015	Y	28						R-222, NATIVE, MOVED DUE TO BOULDER
382		1017	N	145						R-223, NATIVE
383		1019	N	28						R-224, NATIVE

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
376	9/2/20	1028	N	15						R-225
375	"	1033	N	9						R-226, NATIVE
374		1035	N	10						R-227, NATIVE
378		1037	N	39						R-228
379		1040 ~~1038~~	N	38						R-229
380		1043	Y	15						R-230; MOVED DUE TO VEGITATION
387		1046	Y	36						R-231; MOVED DUE TO EDGE OF BLUFF/VEG
386		1049	N	29						R-232
385		1050	N	40						R-233
377		1053	N	10						R-234

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
1* 378RS	9/2/20	1055	N	31	30 ~~1045~~	Y	RA-A378-01 AS-A378-01	N		R-235 ~~+ R-236~~ PRECISION 7 COLLECTED 237-243
384		~~1058~~ 1109	N	11						R-245
388		1113	N	7						R-246
389		1114	N	37						R-247
390		1116	N	24						R-248
391		1119	N	20						R-249
393		1121	N	34						R-250
392		1123	N	42						R-251
395		1125	N	19						R-252
396		1127	N	43						R-253

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
397	9/2/20	1130	N	40						R-254
398		1133	X N/O	27						R-255, NATIVE MOVED DUE TO JEEP/ROADWAY
402		1135	N	19						R-256, NATIVE
401		1137	N	30						R-257
400		1139	N	22						R-258
399		1141	N	20						R-259
403		1143	N	13						R-260, NATIVE
404		~~1150~~ 1145	N	21						R-261
350		1153	Y	6	6	Y	AS-A350-01 RA-A350-01	N		R-262 MOVED DUE TO ROADWAY R-263

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
289	9/2/20	1258	Y	68						R-264, MOVED DUE TO BOULDER
277		1301	N	19						R-265
253		1304	N	20						R-266
279RS		1308/1309	N	34	27	Y	RA-A279-01 AS-A279-01	N		R-267 R-268
266RS		1315/1316	N	29	32	Y	RA-A266-01 AS-A266-01	N		R-269 ~~R-270~~ R-270
242RS		1333/1334	N	23	21	Y	AS-A242-01 RA-A242-01	N		R-271 R-272
273RS		1339/1340	N	~~300~~ 28	~~030~~ 31	Y	AS-A273-01 RA-A273-01	N		R-273 PRECISION SHOT TRIPOINTS 275-281 R-274
272		1354	N	17						R-282
304		1402/1403	N	37	43	Y	~~AS-A304-01~~ RA-A304-01	N		R-283 R-284
330		1409/140	N	94		Y	AS-A330-01 ~~AS~~RA-A330-01	N		R-285 R-286

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
214 RS	9/2/20	1433/1434	N	27	27	Y	RA-A214-01 AS-A214-01	N		R-287 R-288
172 RS		1441/1442	N	30	30	Y	RA-A172-01 AS-A172-01	N		R-289 R-290
208		1500/1501	N	21	19	Y	AS-A208-01 RA-A208-01	N		R-291 R-292
204		1507/1508	N	25	25	Y	AS-A204-01 RA-A204-01	N		R-293 R 294
216 ~~1610~~		1525	N	24						R-295
217 ~~1550~~		1531	N	22						R-296
218		1543 ~~1557~~	N	27 ~~28~~						~~R-296~~ ~~R-297~~ R-298
219		1641	N	22						~~R-298~~ 297
220		1647	N	23						R-299
221		1649	N	30						R-30

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
222	9/2/20	1557	N	24						R-301
223		1553	N	22						R-302
224		1555	N	22						R-303, MOVED DUE TO BOULDER
210		1557	N	66						R-304
209		1559	N	21						R-305
207		1601	N	45						R-306
206		1603	N	18						R-307
205		1605	N	19						R-308
203		1606	N	28						R-309
185		1608	N	24						R-310

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TETRA TECH



XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
186	9/2/20	1611	N	26						R-310
187		1613	N	22						R-311
188		1616	N	19						R-312
189		1618	N	22						R-313
190		1619	N	25						R-314
191		1621	N	78						R-315
168		~~1624~~ 1625	N	42						R-316, NATIVE
167		1627	N	21						R-317
166		1629	N	21						R-318
165		1631	N	26						R-319

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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
164	9/2/20	1633	N	30						R-320
163		1635	N	27						R-321
162		1636	N	26						R-322
139		1640	N	21						R-323
140		1641	N	32						R-324
141		1643	N	22						R-325
142		1645	N	24						R-326, NATIVE
118		~~1648~~	Y	19						R-327, MOVED DUE TO VEG/BLUFF EDGE
143		1653	Y	41						R-328, NATIVE MOVED DUE TO VEG
120		1655	N	17						R-329

Notes to field team:
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TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.:
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
121	9/2/20	1657	~~Y~~ N	25						R-330
100		1700 ~~1658~~	N	17						R-331
99		1701	N	13						R-332, NATIVE
80		1703	N	18						R-333
81		1705	N	16						R-334
82		1707	N	60						R-335

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TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AD, NM
XRF Color:

Date: 9/15/20
Weather: 65°F cloudy
Page No.: 1
GPS Color: Black

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
125	9/15/20	0955	NO	5	8	Yes	AS-A125-01	Yes	AS-A125-02	Reading NO: 352 Duplicate, Precision, Sample
126	9/15/20	1006	NO	9	7	Yes	AS-A126-01	No		No. 358 Had to restart GPS No. 359
74	9/15/20	1015	NO	5 (360?)	6 (361) ,8	Yes	AS-A74-01	No		No. 360 → Issue? ST: 1015 Shot 3 times No. 361
63		1021	YES	8	9	Yes	AS-A63-01	NO		No. 362 No. 363
48		1027	Yes	7	9	Yes	AS-A48-01	No		No. 364 ST: 1030 No. 365
22		1031	Yes	7	9	Yes	AS-A22-01	NO		No. 366 ST: 1035 No. 367
13		1037	NO	6	6	Yes	AS-A13-01	NO		No. 369 ST: 1040 No. 370
39		1042	YES	43	45	Yes	AS-A39-01	NO		No. 371 ST: 1045 — Native Soil No. 372 outside rec zone

Notes to field team:
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*Select metals TBD in field, note the metal on logsheet.

NOTE: No 368 accidental misfire

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AO, NH
XRF Color:

Date: 9/16/20
Weather: 65°F partly cloudy no wind
Page No.: 2
GPS Color: BLACK

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
40	9/16/20	1050	Yes	43	N/A	NO	N/A	N/A	N/A	Reading No: 373 Native, near rocks
28		1052	Yes	56						No. 374 Native, mix, disturbed
18		1054	NO	43						No. 375 Cover, organic, mix
10		1056	Yes	36						No. 376
4		1057	Yes	5						No. 377
3		1059	Yes	5						No. 378
2		1101	NO	5						No. 379
1		1102	NO	5						Adjusted to rec body No. 380
5		1104	NO	7						No. 381 Boundry of rec zone
6		1105	NO	6						No. 382

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AJ, NM
XRF Color:

Date: 9/16/20
Weather:

Page No.: 3
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
7	9/16/20	1107	NO	5	N/A	NO	N/A	N/A	N/A	NO. 383
8		1108	NO	6						No 384
9		1111	NO	5						No. 385
17		1113	NO	4						No. 386
16		1115	NO	5						No 387
15		1116	NO	6						No. 388
14		1118	NO	3						NO. 390
12		1121	NO	4						NO. 391
11		1124	NO	32						NO. 392
19		1130	YES	20						NO. 393 Shifted to edge of fence

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

NO. 389 MISFIRE

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AO, NM
XRF Color:

Date: 9/16/20
Weather: 75°F Partly cloudy

Page No.: 4
GPS Color: 4

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
20	9/16/20	1138	Yes	<LOD 3.1	N/A	NO	N/A	N/A	N/A	NO. 394
21		1135	Yes	35						NO. 395 ; Near rock pile rec zone body
23		1134	Yes	6						NO, 396
24		1139	NO	7						NO. 397
25		1141	NO	47						NO. 398 Body of mixing into Creek
26		1143	NO	5						No. 399
27		1145	Yes	15						No. 400
38		1147	NO	39						NO. 401
39		1149	Yes	4						NO. 402
36		1150	NO	6						NO. 403

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLOCK A VERIFICATION
Tetra Tech ID:
Sampling team: NO, NM
XRF Color:

Date: 9/16/20
Weather: 75° F
Page No.: 5
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
35	9/16/20	1152	NO	7	N/A	NO	N/A	NA	N/A	NO. 404
34		1154	NO	3						NO. 405
33		1156	NO	4						NO. 406
32		1158	NO	<LOD (3.4)						NO. 407
31		1200	NO	29						NO. 408 IN NON-DETECTION CI intermixed
30		1202	YES							NO. 409 Shifted above first NOT IN ZONE
29	→			→	ELIMINATED	→			→	
41		1251	YES	7						Shifted to pile; NO. 433!
42		1253	YES	7						NO. 434
43		1205	~~YES~~ NO	5						NO. 410

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AD / NM
XRF Color:

Date: 9/16/20
Weather: 70°F
Page No.: 6
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
44	9/16/20	1207	NO	4	NO	NO	N/A	N/A	N/A	NO. 411
45		1208	NO	< LOD (3.5)						NO. 412
46		1211	NO	4						NO. 413
47		1213	NO	4						NO. 414
49		1215	NO	7						NO. 415
50		1216	NO	6						NO. 416
51		1218	~~Yes~~	8						NO. 417
52		1220	Yes	7						NO. 418
53		1222	Yes	13						NO. 419
66		1224	NO	5						NO. 420

shifted to rec zone

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF 4 VERIFICATION
Tetra Tech ID:
Sampling team: MD/NM
XRF Color:

Date: 9/16/20
Weather: 70°F
Page No.: 7
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
65	9/16/20	1226	Yes	[?] 7	NO	NO	N/A	N/A	N/A	NO. 421
64	9/16/20	1228	Yes	6						NO. 422
62		1231	Yes	6						NO. 423
61		1233	Yes	6						NO. 424
60		1235	Yes	<LOD 3.1						NO. 425
59		~~1238~~ 1238	NO	3						NO. 426
58		1240	Yes	4						NO. 427; Base of rocks NO. 428
57		1243	NO	7						NO. 429
56		1245	NO							NO. 430
55		1247	NO	8						NO. 431 error labeled as "54"

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team:
XRF Color:

Date: 9/16/20
Weather:
Page No.: 8
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
54	9/16/20	1249	Yes	5	ND	NO	N/A	N/A	N/A	Edge of reclamation NO. 432
127		1410	NO	6						NO. 435
128		1414	NO	6						NO. 436
129		1415	NO	7						NO. 437
130		1416	NO	8						NO. 438
131		1418	Yes (cliff)	8						Adjusted due to cliff NO. 439
132		1419	NO	7						NO. 440
133		1421	Yes (edge)	27						NO. 441 Adjusted to edge of rec zone + vegetation
155		1422	NO	23						NO. 442
154		1424	NO	9						NO. 443

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.: 9
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
153	9/16/20	1425	NO	7	N/A	NO	N/A	N/A	N/A	NO. 444
152		1426	NO	5						NO. 445
151		1428	NO	23						446
169 ~~150~~		1439	NO	16						NO. 452 undisturbed, native
TU – ~~149~~		1440	NO	5						NO. 451 SAM
148		1430	Yes	4						447 NO.
149		1431	NO	4						NO. 448
146		1433	NO	4						NO. 449
145		1434	NO	8						NO. 450
144		1436	NO	18						NO. 451

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AO, NM
XRF Color:

Date: 9/16/20
Weather:
Page No.: 10
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
174	9/16/20	1441	NO	28	NO	NO	N/A	N/A	N/A	NO, 454
175		1443	NO	6						NO. 455
176		1444	NO	8						NO. 456
177		1445	NO	8						NO. 457
178		1447	NO	18						NO. 458
199		1449	NO	20						NO, 459
198		1450	Yes	8						NO, 460 Adjusted to edge of rec zone
197		1452	NO	8						NO. 461
196		1453	NO	9						NO. 462 native, undisturbed
124		1457	NO	6						NO. 463

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team: AD NM
XRF Color:

Date: 9/16/20
Weather: -

Page No.: 1 1
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
123	9/16/20	1501	Yes	14 (?)	NO	NO	N/A	N/A	N/A	NO. 464
102		1502	Yes (Goodrx)	8						NO. 465 adjusted to edge
103		1504	Yes	7						NO. 466
104		1505	NO	7						NO. 467
105		1507	NO	8						NO. 468
106		1509	NO	6						NO. 469
107		1510	NO	8						NO. 470 steep grade
108		1512	NO	6						NO. 471
109		1514	YES	7						NO. 472
110		1516	Yes	7						NO. 473 adjusted due to steep grade

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

XRF Field Form
Riley Pass

Site Name: Bluff A VERIFICATION
Tetra Tech ID:
Sampling team: AO, NM
XRF Color:

Date: 9/16/20
Weather:

Page No.:
GPS Color: 12

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
111	9/16/20	1518	Yes	6	NO	NO	N/A	N/A	N/A	NO. 474 (Steep)
112		1520	No	7						NO. 475
113		1521	Yes	6						NO. 476 Adjusted to edge
95		1523	NO	16(?)						NO. 477 Native, vegetated, undisturbed
94		1526	NO	8						NO. 478 Steep grade
93		1527	NO	6						NO. 479
92		1529	NO	6						NO. 480
91		1531	Yes (cliff)	7						NO. 481
90		1535	Yes (cliff)	6						NO. 482
89		1538	NO	5						NO. 483

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

SOIL SAMPLES FOR XRF CAL

XRF Field Form
Riley Pass

BLUFF A VERIFICATION

Site Name:
Tetra Tech ID:
Sampling team: AO, NM
XRF Color:

Date: 9/16/20
Weather:

Page No.: 13
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
88	9/16/20	1550	NO	<LOD	NA	NO	NA	NA	NA	NO. 486 Soil sample : 1649
87										NO. 487 Soil sample : 1650
86										ST: 1651
85										ST: 1652
84										ST: 1653
83										ST: 1654
67										ST: 1655
68										ST: 1656
69										ST: 1657
70										ST: 1658

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

ISSUES 486, 487 (reading No.'s)
489 "Test" experiment - indicated High Ni, Co, high As LLD; reset, system check

system check

res 1654
36.2

TETRA TECH

Soil Samples for XRF LAB

XRF Field Form
Riley Pass

Site Name: BLUFF A VERIFICATION
Tetra Tech ID:
Sampling team:
XRF Color:

Date: 9/16/21
Weather:
Page No.: 14
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
71										ST: 1658 soil native in rocks
72										ST: 1659
73										ST: 1700
75										ST: 1701
76										ST: 1707
77										ST: 1702
78										ST: 1703
79										ST: 1704

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

Double checked soil samples @ 1708; completed A1; moved on to 27 samples at A2/A3

TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.: 16
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
137										ST: 1731
138										ST: 1732
156										ST: 1728
157										ST: 1727
158										ST: 1726
159										ST: 1726
160										ST: 1725
161										ST: 1725
179										1719 ST:
180										1718 ST:

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.: 17
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
181										ST; 1718
182										ST; 1720
183										ST: 1721
184										ST: 1721
200										ST: 1723
201										ST; 1723
202										ST: 1722

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes section and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

TETRA TECH

XRF Field Form
Riley Pass

Site Name:
Tetra Tech ID:
Sampling team:
XRF Color:

Date:
Weather:

Page No.: 15
GPS Color:

Example Sample ID:
Example Duplicate ID:

XRF Sample ID	Date (M/D/Y)	Time (MST)	Adjusted Location by >1 ft? (Yes or No)	Metal Concentration* (In Situ XRF Measurement, ppm)	Duplicate Metal Concentration (In Situ XRF Measurement, ppm)	Lab Sample Collected? (Yes or No)	Lab Sample ID	Lab Sample Duplicate Collected? (Yes or No)	Duplicate ID	Notes
96										1737 ST:
97										1738 ST.
98										1738 shifted
114										ST: 1736
115										ST: 1736
116										ST. 1735
117										ST. 1734
134										ST: 1729
135										ST: 1729
136										ST: 1730

Notes to field team:
If the location of an in situ XRF measurement is adjusted by more than 1 foot, make a note of the direction of the adjustment in the notes seciton and record new coordinates in the GPS.
If a grid cannot be accessed, make a note and describe the reason.
XRF confirmation samples are collected with in situ XRF measurements.
XRF confirmation samples are collected from 0" to 3" bgs.
*Select metals TBD in field, note the metal on logsheet.

Duplicate Checked Soil Sample @ 1742

Completed XRF soil samples @ 1745

TETRA TECH

Removal Action @ 1745 ⟶

APPENDIX G5 – PROUCL OUTPUT FILES

	A	B	C	D	E	F	G	H	I	J	K	L
1					**Sample Sizes for Single Sample Sign Test**							
2					**Based on Specified Values of Decision Parameters/DQOs (Data Quality Objectives)**							
3				Date/Time of Computation	11/30/2020 4:08:04 PM							
4				User Selected Options								
5				False Rejection Rate [Alpha]	0.05							
6				False Acceptance Rate [Beta]	0.05							
7				Width of Gray Region [Delta]	103.5							
8				Estimate of Standard Deviation	23.6							
9												
10					Approximate Minimum Sample Size							
11				One Sided Alternative Hypothesis	11							
12				Two Sided Alternative Hypothesis	13							

One Sample Sign Test for Uncensored Full Data Sets without NDs

User Selected Options	
Date/Time of Computation	ProUCL 5.111/28/2020 4:57:12 PM
From File	In_SITU_XRF_As_Conv_ProUCL.xls
Full Precision	OFF
Confidence Coefficient	95%
Substantial Difference	0.000
Action Level	142.000
Selected Null Hypothesis	Median <= Action Level (Form 1)
Alternative Hypothesis	Median > the Action Level

SU1

One Sample Sign Test

Raw Statistics

Number of Valid Observations	103
Number of Distinct Observations	95
Minimum	6.216
Maximum	81.56
Mean	18.29
Median	12.36
SD	16.62
SE of Mean	1.637
Number Above Action Level	0
Number Equal Action Level	0
Number Below Action Level	103

H0: Sample Median <= 142 (Form 1)

Large Sample Z Test Statistic	-10.15
P-Value	1

Conclusion with Alpha = 0.05

Do Not Reject H0 at the specified level of significance (0.05), Conclude Median <= 142

P-Value > Alpha (0.05)

One Sample Sign Test for Uncensored Full Data Sets without NDs

User Selected Options	
Date/Time of Computation	ProUCL 5.111/28/2020 4:59:03 PM
From File	In_SITU_XRF_As_Conv_ProUCL.xls
Full Precision	OFF
Confidence Coefficient	95%
Substantial Difference	0.000
Action Level	142.000
Selected Null Hypothesis	Median <= Action Level (Form 1)
Alternative Hypothesis	Median > the Action Level

SU2

One Sample Sign Test

Raw Statistics

Number of Valid Observations	110
Number of Distinct Observations	109
Minimum	7.042
Maximum	188.9
Mean	31.51
Median	30.09
SD	23.6
SE of Mean	2.25
Number Above Action Level	1
Number Equal Action Level	0
Number Below Action Level	109

H0: Sample Median <= 142 (Form 1)

Large Sample Z Test Statistic	-10.3
P-Value	1

Conclusion with Alpha = 0.05

Do Not Reject H0 at the specified level of significance (0.05), Conclude Median <= 142

P-Value > Alpha (0.05)

One Sample Sign Test for Uncensored Full Data Sets without NDs

User Selected Options	
Date/Time of Computation	ProUCL 5.111/28/2020 4:59:31 PM
From File	In_SITU_XRF_As_Conv_ProUCL.xls
Full Precision	OFF
Confidence Coefficient	95%
Substantial Difference	0.000
Action Level	142.000
Selected Null Hypothesis	Median <= Action Level (Form 1)
Alternative Hypothesis	Median > the Action Level

SU3

One Sample Sign Test

Raw Statistics

Number of Valid Observations	97
Number of Distinct Observations	94
Minimum	4.282
Maximum	109.3
Mean	38.9
Median	37.12
SD	14.43
SE of Mean	1.465
Number Above Action Level	0
Number Equal Action Level	0
Number Below Action Level	97

H0: Sample Median <= 142 (Form 1)

Large Sample Z Test Statistic	-9.849
P-Value	1

Conclusion with Alpha = 0.05

Do Not Reject H0 at the specified level of significance (0.05), Conclude Median <= 142

P-Value > Alpha (0.05)

One Sample Sign Test for Uncensored Full Data Sets without NDs

User Selected Options	
Date/Time of Computation	ProUCL 5.111/28/2020 5:00:05 PM
From File	In_SITU_XRF_As_Conv_ProUCL.xls
Full Precision	OFF
Confidence Coefficient	95%
Substantial Difference	0.000
Action Level	142.000
Selected Null Hypothesis	Median <= Action Level (Form 1)
Alternative Hypothesis	Median > the Action Level

SU4

One Sample Sign Test

Raw Statistics

Number of Valid Observations	88
Number of Distinct Observations	87
Minimum	15.65
Maximum	154.6
Mean	43.83
Median	38.49
SD	23.36
SE of Mean	2.49
Number Above Action Level	1
Number Equal Action Level	0
Number Below Action Level	87

H0: Sample Median <= 142 (Form 1)

Large Sample Z Test Statistic	-9.168
P-Value	1

Conclusion with Alpha = 0.05

Do Not Reject H0 at the specified level of significance (0.05), Conclude Median <= 142

P-Value > Alpha (0.05)

	A	B	C	D	E	F	G	H	I	J	K	L
1				**Sample Size for Estimation of Mean**								
2				**Based on Specified Values of Decision Parameters/DQOs (Data Quality Objectives)**								
3			Date/Time of Computation	11/30/2020 4:29:32 PM								
4			User Selected Options									
5			Confidence Coefficient	95%								
6			Allowable Error Margin	14.2								
7			Estimate of Standard Deviation	23.8								
8												
9					Approximate Minimum Sample Size							
10			95% Confidence Coefficient		13							

UCL Statistics for Uncensored Full Data Sets		
User Selected Options		
Date/Time of Computation	ProUCL 5.111/30/2020 4:34:32 PM	
From File	Arsenic Lab.xls	
Full Precision	OFF	
Confidence Coefficient	95%	
Number of Bootstrap Operations	2000	

Bluff A Lab Arsenic

General Statistics

Total Number of Observations	21	Number of Distinct Observations	19
		Number of Missing Observations	0
Minimum	5.8	Mean	27.84
Maximum	86	Median	24
SD	23.81	Std. Error of Mean	5.195
Coefficient of Variation	0.855	Skewness	1.346

Normal GOF Test

Shapiro Wilk Test Statistic	0.824	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.908	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.177	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.188	Data appear Normal at 5% Significance Level

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	36.8	95% Adjusted-CLT UCL (Chen-1995)	38.02
		95% Modified-t UCL (Johnson-1978)	37.06

Gamma GOF Test

A-D Test Statistic	0.838	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.758	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.214	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.193	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.511	k star (bias corrected MLE)	1.327
Theta hat (MLE)	18.42	Theta star (bias corrected MLE)	20.98
nu hat (MLE)	63.48	nu star (bias corrected)	55.75
MLE Mean (bias corrected)	27.84	MLE Sd (bias corrected)	24.17
		Approximate Chi Square Value (0.05)	39.59
Adjusted Level of Significance	0.0383	Adjusted Chi Square Value	38.54

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	39.21	95% Adjusted Gamma UCL (use when n<50)	40.27

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.887	**Shapiro Wilk Lognormal GOF Test**

53	5% Shapiro Wilk Critical Value					0.908	Data Not Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic					0.211	**Lilliefors Lognormal GOF Test**					
55	5% Lilliefors Critical Value					0.188	Data Not Lognormal at 5% Significance Level					
56	**Data Not Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					1.758	Mean of logged Data					2.961
60	Maximum of Logged Data					4.454	SD of logged Data					0.912
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					48.2	90% Chebyshev (MVUE) UCL					47.32
64	95% Chebyshev (MVUE) UCL					55.85	97.5% Chebyshev (MVUE) UCL					67.69
65	99% Chebyshev (MVUE) UCL					90.94						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					36.39	95% Jackknife UCL					36.8
72	95% Standard Bootstrap UCL					36.19	95% Bootstrap-t UCL					39.75
73	95% Hall's Bootstrap UCL					42.44	95% Percentile Bootstrap UCL					36.66
74	95% BCA Bootstrap UCL					37.9						
75	90% Chebyshev(Mean, Sd) UCL					43.43	95% Chebyshev(Mean, Sd) UCL					50.49
76	97.5% Chebyshev(Mean, Sd) UCL					60.28	99% Chebyshev(Mean, Sd) UCL					79.53
77												
78	**Suggested UCL to Use**											
79	95% Student's-t UCL					36.8						
80												
81	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
82	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
83												
84	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
85	Recommendations are based upon data size, data distribution, and skewness.											
86	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
88												

APPENDIX G6 – INSTRUMENT CALIBRATION DOCUMENTATION

Environmental Restoration Group, Inc.
8809 Washington NE, Ste. 150
Albuquerque, NM 87113

ph: 505.298.4224
fax: 505.797-1404
web: www.ERGOffice.com

EQUIPMENT PACKING SLIP

Company Name: Tetra Tech

Contact Name:

Contact Telephone:

Order Number: 4439

P.O. or Reference Number: 103IG7069

Date Ordered: 8/20/2020

Date Shipped: 8/28/2020

Date of Delivery: 8/28/2020

Shipping Method:

Shipping Number: ERG FedEx Number

Ship To Information:

Tetra Tech

Billing Address:

Tetra Tech - CO
Accounts Payable
3801 Automation Way
Ste 100
Fort Collins, CO 80525

Equipment Enclosed:

Instrument	*Serial Number*	*Tested*
Ludlum 3000	25020045	☐
Ludlum 3000	25018636	☐
Ludlum 44-10	PR355763	☐
Ludlum 44-10	PR295014	☐
Juniper Geode	248673	☐
Juniper Geode	213577	☐
Juniper Mesa2	187292	☐
Juniper Mesa2	230413	☐

Special Instructions:

None

Order continued on next page

Environmental Restoration Group, Inc.
8809 Washington NE, Ste. 150
Albuquerque, NM 87113

ph: 505.298.4224
fax: 505.797-1404
web: www.ERGOffice.com

EQUIPMENT PACKING SLIP

Order Number: 4439

Note:
(a) By accepting and using ERG rental equipment, the Renter indemnifies and holds harmless ERG against any and all claims, actions, proceedings, costs, expenses, damages, and liabilities (including attorney's fees and costs) arising out of Renter's use of equipment.

www.ludlums.com

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
501 Oak Street
325-235-5494
Sweetwater, TX 79556, U.S.A.

ilac-MRA A2LA ACCREDITED CERT # 4084.01

Customer ERG ORDER NO. 20383839/497671

Mfg. Ludlum Measurements, Inc. Model 3000 Serial No. 25020045

Mfg. Ludlum Measurements, Inc. Model 44-10 Serial No. PR295014

Cal. Date 24-Aug-20 Cal Due Date 24-Aug-21 Cal. Interval 1 Year Meterface 44-10 R

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 72 °F RH 47 % Alt 707.4 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☑ Other-See comments

☑ Mechanical ck. ☐ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☐ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 4.4 VDC
☑ Calibrated in accordance with LMI SOP 14.8 ☑ Calibrated in accordance with LMI SOP 14.9

Instrument Volt Set 900 V Input Sens. 10 mV Det. Oper. 900 V at 10 mV Threshold Dial Ratio = mV

☑ HV Readout (2 points) Ref./Inst. 600 / 595 V Ref./Inst. 1300 / 1306 V

COMMENTS:

Deadtime: 5.7 µSec
Calibration Constant: 534 e+8
Primary Units: R/hr
Primary Units Alarm 1: 500 µR/hr
Primary Units Alarm 2: 500 µR/hr
Secondary Units: cpm
Secondary Units Alarm 1: 5 kcpm
Secondary Units Alarm 2: 5 kcpm
Firmware: 49835N30

Overload checked but not set.
Pulser calibration RATEMETER READOUT performed without deadtime.
Pulser calibration SCALER READOUT reflects 6 second count.
Calibrated using 5' C-cable.
Unable to take as found readings on range due to first time calibration using 44-10.

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING	RANGE MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING
Digital	5 mR/hr	N/A	5.00 mR/hr				
Digital	1 mR/hr		1.02				
	800 µR/hr		817 µR/hr				
	200 µR/hr		197				

Range(s) Calibrated Electronically

Multimeter uncertainty within 1.3% of reading, Gamma uncertainty within 5.0% of reading, Neutron uncertainty within 7.0% of reading, Count rate uncertainty within 5.4% of reading

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING
Digital Readout	800K cpm	800 kcpm	800 kcpm	Scaler	800K cpm	80.0K	80.0K
	200K cpm	200	200		200K cpm	20.0K	20.0K
	80K cpm	80.0	80.0		80K cpm	8.00K	8.00K
	20K cpm	20.0	20.0		20K cpm	2.00K	2.00K
	8K cpm	8.00	8.00		8K cpm	800	800
	2K cpm	2.00	2.00		2K cpm	200	200
	800 cpm	800 cpm	800 cpm		800 cpm	80	80
	200 cpm	201	201		200 cpm	20	20

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques.
All pass/fail determinations are based on the manufacturer's specifications without considering uncertainty factors.
Measurement results represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k=2.
The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323AB-2013

ISO/IEC 17025:2017(E)
State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: Cs-137 S/N: ☐ 059 ☐ 2171CP ☐ 2261CP ☐ 720 ☐ 734 ☐ 781 ☐ 1131 ☐ 1616 ☐ 1696 ☐ 1909 ☐ 1916CP ☐ 2324/2521
☐ 5717CO ☐ 5719CO ☐ 60646 ☐ 70897 ☐ 73410 ☐ E552 ☐ G112 ☑ 2168CP ☐ S-394 ☐ S-1054 ☐ T10081 ☐ T10082 Neutron Am-241 Be ☐ T-304 Ra-226 ☐ Y982
☐ E551 ☐ 5105 ☐ CSV280

☐ Alpha S/N ☐ Beta S/N ☑ Other Am241(~0.66µCi)

☑ m 500 S/N 251106 ☐ Oscilloscope S/N ☑ Multimeter S/N 15060230

Calibrator James McBeth James McBeth Title Calibrator Date 24AUG20

QC'd By Title Final QC Date 24 Aug 20

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Order #: 20383839/497671
Customer: ERG
Detector: 44-10 **Serial No.:** PR295014
Instrument: Model 3000 **Serial No.:** 25020045
BKG Time: 6
Distance: Surface
Selected HV: 900
Date: Monday, August 24, 2020
Notes: Performed using 5' C-cable.
Signature: James McBeth

Channel(s)

Name	Threshold
Channel 1	10 mV

Source(s)

Name	ID	Activity	Time	Type
Am241		0.66 µCi	6	γ

High Voltage	Background	Am241
	Reading	Reading
700	445	7,222
750	488	10,170
800	503	11,570
850	511	12,047
- 900	524	12,089
950	498	12,150
1,000	493	12,352
1,050	490	12,195
1,100	629	12,399
1,150	3,440	15,096

Ludlum Device Parameters

Product: Model 3000
Serial Number: 25020045
8/24/2020 2:29:48 PM

Device

Device Firmware	5LC-N30.4382
Device Model	Model 3000
Device Serial Number	25020045
Device Real Time Clock Day	24
Device Real Time Clock Hour	14
Device Real Time Clock Minutes	29
Device Real Time Clock Month	8
Device Real Time Clock Seconds	41
Device Real Time Clock Year	2020
Device Real Time Clock Day of the Week	6
Device Backlight Threshold	0
Device Sleep	0
Device Dual Level Audio Setting	0
Device R to Sv Ratio	0.0106
Device Log Button	0
Device Backlight Threshold Low Turn On	40
Device Backlight Threshold Low Turn Off	120
Device Backlight Threshold High Turn On	17
Device Backlight Threshold High Turn Off	100
Device Backlight On	0
Device Count Display Mode	0
Device Count Audio Mode	0
Device Rate Reset Button	0
Device Setup Protect	Normal
Device Auxiliary Enabled	1
Device Auxiliary Mode	5
Device Auxiliary Auto Power Down	0
Device Auxiliary Write Protect	0
Device Auxiliary Encryption Enabled	0
Device Area Monitor enabled	0
Device Auxiliary Enabled	0
Device Auxiliary 375-Ethernet-Mode Port	0
Device Auxiliary AutoMode Interval	1
Device Button Handle RateMap 1	1
Device Button Handle RateMap 2	31
Device Button Handle RateMap 3	31
Device Button Handle CntMap 1	1
Device Button Handle CntMap 2	31
Device Button Handle CntMap 3	31
Device Battery Voltage	5.974
Device 1 Channel 1 RawCnt	2106

Device Calibration

Device Calibration High Voltage Slope	42
Device Calibration High Voltage Offset	-55
Device Calibration Channel [1] Pulse Threshold Offset	2

Detector 1

Detector [1] Serial Number	PR295014
Detector [1] Model	44-10
Detector [1] High Voltage	900
Detector [1] Overload	100
Detector [1] Count Time	60
Detector [1] Operation Mode	0
Detector [1] Auto Response Rate	0
Detector [1] Response Time	0
Detector [1] Audio Sigma	0
Detector [1] Enabled	0
Detector [1] Unit [1] Rate Unit Type	R/h
Detector [1] Unit [1] Rate Min Exponet	-6
Detector [1] Unit [1] Rate Max Value	0.007
Detector [1] Unit [1] Scaler Unit Type	R
Detector [1] Unit [1] Scaler Min Exponet	-6
Detector [1] Unit [1] Rate Alarm [1]	0.0005
Detector [1] Unit [1] Rate Alarm [2]	0.0005
Detector [1] Unit [1] Scaler Alarm [1]	0
Detector [1] Unit [1] Scaler Alarm [2]	0
Detector [1] Unit 1 Rate Unit Type	0
Detector [1] Unit 1 Rate Min Range	0
Detector [1] Unit 1 Rate Min Decimal Point	0
Detector [1] Unit 1 Rate Max Value	0
Detector [1] Unit 1 Rate Max Range	0
Detector [1] Unit 1 Rate Max Decimal Point	0
Detector [1] Unit 1 Rate Alarm Value	0
Detector [1] Unit 1 Rate Alarm Range	0
Detector [1] Unit 1 Rate Alarm Decimal Point	0
Detector [1] Unit 1 Scaler Unit Type	0
Detector [1] Unit 1 Scaler Min Range	0
Detector [1] Unit 1 Scaler Min Decimal Point	0
Detector [1] Unit 1 Scaler Alarm Value	0
Detector [1] Unit 1 Scaler Alarm Range	0
Detector [1] Unit 1 Scaler Alarm Decimal Point	0
Detector [1] Unit [2] Rate Unit Type	cpm
Detector [1] Unit [2] Rate Min Exponet	0
Detector [1] Unit [2] Rate Max Value	999000
Detector [1] Unit [2] Scaler Unit Type	counts
Detector [1] Unit [2] Scaler Min Exponet	0
Detector [1] Unit [2] Rate Alarm [1]	5000
Detector [1] Unit [2] Rate Alarm [2]	5000
Detector [1] Unit [2] Scaler Alarm [1]	0
Detector [1] Unit [2] Scaler Alarm [2]	0
Detector [1] Channel [1] Pulse Threshold	10
Detector [1] Channel [1] Dead Time Correction	5.7
Detector [1] Channel [1] Dead Time Correction 2	0
Detector [1] Channel [1] Loss of Count Time	60
Detector [1] Channel [1] Calibration Constant	5.34E+10
Detector [1] Channel [1] Calibration Constant Exponent	0
Detector [1] Channel [1] Efficiency 4pi	15
Detector 1 Channel 1 CPSOffset	0

Advanced Test Equipment Rentals
The Knowledge. The Equipment. The Solution.

CALIBRATION CERTIFICATE

ATEC Asset ID
20454

Work Order
2019002647

Certificate Number: 2019002647-Rev3

Asset ID	**20454**	**Calibration Date**	**8/20/2019**
Manufacturer	**Thermo Fischer Scientific (Niton)**	**Due Date**	**12/20/2020**
Model Number	**THER-XL3T-700S-GOLDD-PKG01**	**Temperature C°**	**23**
Serial Number	**101749**	**Humidity**	**41**
Description	**Handheld XRF Analyzer w/50kV Miniature X-Ray Tube Excitation Source, GOLDD,**	**Procedure**	**Rev. Revision**

Customer Name: Advanced Test Equipment Corporation
Customer Address: 10401 Roselle St San Diego , CA 92121
Comments: Calibration performed by an Authorized Subcontractor.

This Calibration is traceable to the International System of Units (SI), through National Metrology Institutes (NIST, PTB, NRC, NPL, etc.), ratiometric techniques, or natural physical constants. This certificate applies only to the item identified and shall not be reproduced other than in full, without the specific written approval of Advanced Test Equipment Corporation (ATEC). The calibration has been completed in accordance with ATEC's Active Use Calibration System. This calibration conforms to the requirements of ISO/IEC 17025:2017 and ANSI/NCSL Z540-1-1994 (R2002). In the attached measurement results, deviation may be expressed with units, Measured Value (MV) - Nominal Value (NV) or as a proportion of the nominal value ((MV-NV)/NV), expressed without units with a scalar multiplier such as % (0.01), or as a ratio of the units (mA/A, ÂµV/V, etc.) Descriptions such as ÂµA/A, ÂµV/V, and others, where used to annotate results or column headings are the preferred replacements for what was historically labeled as ppm or parts-per-million and described the results in that column, unless otherwise noted by units symbols. Where applicable, the expanded uncertainty of measurement at time of test is given in the following pages. They are calculated in accordance with the method described in the ISO Guide to the Expression of Uncertainty in Measurement (GUM). The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k, such that the confidence level approximates 95%. This Calibration certificate may contain data that is not covered by the A2LA Scope of Accreditation. Unaccredited material, where applicable is indicated by an asterisk (*) or confined to clearly marked sections. A binary decision rule, utilizing simple acceptance, and simple rejection criteria is used for the determination of compliance. When compliance statements are present, they are reported without factoring in the effects of uncertainty and comply with the guidelines established by ASME B89.7.3.1-2001 (R2011) as follows: The acceptance zone is defined as: less than or equal to the high limit, and/or greater than or equal to the low limit. The rejection zones are defined as greater than the high limit and/or less than the low limit. Single Measurement results in the acceptance zone are identified as in-tolerance. Single measurement results in the rejection zone are identified as out-of-tolerance (OOT). When all measurement results are in the acceptance zone for repeated measurements, for the same characteristic, the test is identified as in-tolerance. For repeated characteristic measurements, a single measurement result in the rejection zone, will cause the test to be identified as out-of-tolerance (OOT).

Standards Used

Model	Manufacturer	Serial	Asset ID	Due Date

No standards recorded

Calibrated by: Lawrenze Lucero

Approved by: Javier Estrada

APPENDIX G7 – DATA VALIDATION REPORT

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Riley Pass	**Project No.**	103IG7303
Data Reviewer (signature and date)	 11/24/2020	**Laboratory/ Report No.**	ALS – Fort Collins, CO/2009195
Analyses	Arsenic by SW-846 Method 6020B		
Samples	Fourteen soil samples, including one field duplicate sample		
Field Duplicates	AS-A335-01/AS-A335-02		

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017) data validation guidance document, as well as the above referenced method.

OVERALL EVALUATION:

No rejection or qualification of data was required for this data package. The data can be used as reported by the laboratory.

Data completeness:

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blank:

Within Criteria	Exceedance/Notes
Y	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Within Criteria	Exceedance/Notes
Y	

Field Duplicate:

Within Criteria	Exceedance/Notes
Y	

Laboratory Control Sample (LCS):

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	10x: arsenic for all samples

Analyte quantitation and MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RILEY PASS
ALS REPORT NO. 2009195

Sample Name	Analyte	Lab_Result	Lab_Qual	MDL	PQL	Units	Val Result	Val_Qual
AS-A172-01	ARSENIC	30		0.05	0.2	MG/KG	30	
AS-A204-01	ARSENIC	26		0.05	0.2	MG/KG	26	
AS-A208-01	ARSENIC	24		0.049	0.2	MG/KG	24	
AS-A214-01	ARSENIC	31		0.052	0.21	MG/KG	31	
AS-A242-01	ARSENIC	24		0.049	0.2	MG/KG	24	
AS-A266-01	ARSENIC	33		0.049	0.2	MG/KG	33	
AS-A273-01	ARSENIC	51		0.051	0.21	MG/KG	51	
AS-A279-01	ARSENIC	33		0.047	0.19	MG/KG	33	
AS-A304-01	ARSENIC	41		0.048	0.2	MG/KG	41	
AS-A330-01	ARSENIC	86		0.051	0.21	MG/KG	86	
AS-A335-01	ARSENIC	21		0.049	0.2	MG/KG	21	
AS-A335-02	ARSENIC	26		0.05	0.2	MG/KG	26	
AS-A350-01	ARSENIC	5.8		0.055	0.23	MG/KG	5.8	
AS-A378-01	ARSENIC	45		0.051	0.21	MG/KG	45	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Riley Pass	**Project No.**	103IG7303
Data Reviewer (signature and date)	 11/24/2020	**Laboratory/ Report No.**	ALS – Fort Collins, CO/2009201
Analyses	Potassium-40 and radium-226 by EPA Method 901.1/ALS SOP 713		
Samples	Fourteen soil samples, including one field duplicate sample		
Field Duplicates	RA-A335-01/RA-A335-02		

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017) data validation guidance document, the NRC *MARLAP* (July 2004) document, and ALS Environmental *SOP 713 Rev. 15* (November 2019) and *SOP 715 Rev. 19* (February 2019), as well as the above referenced method.

OVERALL EVALUATION:

No rejection or qualification of data was required for this data package. The data can be used as reported by the laboratory.

Data completeness:

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blank:

Within Criteria	Exceedance/Notes
Y	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Laboratory Duplicate:

Within Criteria	Exceedance/Notes
Y	

Field Duplicate:

Within Criteria	Exceedance/Notes
Y	

Laboratory Control Sample (LCS):

Within Criteria	Exceedance/Notes
Y	

Required Detection Limits (RDLs):

Within Criteria	Exceedance/Notes
Y	No specific limits were required for this project.

Negative Sample Results:

Within Criteria	Exceedance/Notes
NA	

Sample Uncertainty:

Within Criteria	Exceedance/Notes
Y	All sample-specific uncertainties were reasonable based on professional judgment. Uncertainty was less than 30% for all values above the MDC. No data qualification was needed.

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RILEY PASS
ALS REPORT NO. 2009201

Sample Name	Analyte	Lab_Result	TPU	Lab_Qual	MDC	PQL	Units	Val Result	Val_TPU	Val_Qual
RA-A172-01	K-40	12.7	3.4		2.8	2.8	pCi/g	12.7	3.4	
RA-A172-01	Ra-226	4.91	0.72		0.57	0.57	pCi/g	4.91	0.72	
RA-A204-01	K-40	14.9	3.4		2.2	2.2	pCi/g	14.9	3.4	
RA-A204-01	Ra-226	4.39	0.64		0.49	0.49	pCi/g	4.39	0.64	
RA-A208-01	K-40	13.4	2.8		1.5	1.5	pCi/g	13.4	2.8	
RA-A208-01	Ra-226	3.99	0.56		0.41	0.41	pCi/g	3.99	0.56	
RA-A214-01	K-40	13.6	3.4		2.5	2.5	pCi/g	13.6	3.4	
RA-A214-01	Ra-226	5.56	0.79		0.51	0.51	pCi/g	5.56	0.79	
RA-A242-01	K-40	12.3	3.3		2.8	2.8	pCi/g	12.3	3.3	
RA-A242-01	Ra-226	4.1	0.61		0.49	0.49	pCi/g	4.1	0.61	
RA-A266-01	K-40	12.8	2.9		2.3	2.3	pCi/g	12.8	2.9	
RA-A266-01	Ra-226	4.73	0.65		0.41	0.41	pCi/g	4.73	0.65	
RA-A273-01	K-40	16.5	3.4		2	2	pCi/g	16.5	3.4	
RA-A273-01	Ra-226	2.9	0.45		0.44	0.44	pCi/g	2.9	0.45	
RA-A279-01	K-40	13.2	3		2	2	pCi/g	13.2	3	
RA-A279-01	Ra-226	4.83	0.68		0.49	0.49	pCi/g	4.83	0.68	
RA-A304-01	K-40	18.2	3.7		1.7	1.7	pCi/g	18.2	3.7	
RA-A304-01	Ra-226	1.36	0.29		0.46	0.46	pCi/g	1.36	0.29	
RA-A330-01	K-40	15.7	3.4		2.1	2.1	pCi/g	15.7	3.4	
RA-A330-01	Ra-226	2.8	0.44		0.44	0.44	pCi/g	2.8	0.44	
RA-A335-01	K-40	14.4	2.9		1.7	1.7	pCi/g	14.4	2.9	
RA-A335-01	Ra-226	3.77	0.52		0.29	0.29	pCi/g	3.77	0.52	
RA-A335-02	K-40	12.1	2.9		2	2	pCi/g	12.1	2.9	
RA-A335-02	Ra-226	2.98	0.47		0.45	0.45	pCi/g	2.98	0.47	
RA-A350-01	K-40	13.3	2.8		1.8	1.8	pCi/g	13.3	2.8	
RA-A350-01	Ra-226	4.04	0.56		0.38	0.38	pCi/g	4.04	0.56	
RA-A378-01	K-40	13.3	3.4		2.4	2.4	pCi/g	13.3	3.4	
RA-A378-01	Ra-226	1.28	0.31		0.5	0.5	pCi/g	1.28	0.31	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Riley Pass	**Project No.**	103IG7303
Data Reviewer (signature and date)	 11/24/2020	**Laboratory/ Report No.**	ALS – Fort Collins, CO/2009202
Analyses	Potassium-40 and radium-226 by EPA Method 901.1/ALS SOP 713		
Samples	Two soil samples, including one field duplicate sample		
Field Duplicates	RA-J14RERUN-01/RA-J14RERUN-02		

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017) data validation guidance document, the NRC *MARLAP* (July 2004) document, and ALS Environmental *SOP 713 Rev. 15* (November 2019) and *SOP 715 Rev. 19* (February 2019), as well as the above referenced method.

OVERALL EVALUATION:

No rejection of data was required for this data package. The data can be used with the qualifications indicated in this checklist.

Data completeness:

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The laboratory indicated that both sample densities differed by more than 15 percent of the laboratory control sample density (flagged G by laboratory). Both results for these samples were qualified as estimated (flagged J).

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Method blank:

Within Criteria	Exceedance/Notes
Y	

Laboratory Duplicate:

Within Criteria	Exceedance/Notes
Y	

Field Duplicate:

Within Criteria	Exceedance/Notes
Y	

Laboratory Control Sample (LCS):

Within Criteria	Exceedance/Notes
Y	

Required Detection Limits (RDLs):

Within Criteria	Exceedance/Notes
N	Although no specific limits were required for this project, the laboratory indicated that the requested minimum detectable concentration (MDC) was not met for radium-226 for both samples (flagged M3 by laboratory). However, the reported activity was greater than the reported MDC. No qualifications were applied.

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Negative Sample Results:

Within Criteria	Exceedance/Notes
NA	

Sample Uncertainty:

Within Criteria	Exceedance/Notes
N	RA-J14RERUN-01: The TPU for K-40 was greater than 50 percent of the sample result; therefore, the associated result was qualified as estimated (flagged J).

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RILEY PASS
ALS REPORT NO. 2009202

Sample Name	Analyte	Lab Result	TPU	Lab_Qual	MDC	PQL	Units	Val Result	Val_TPU	Val_Qual
RA-J14RERUN-01	K-40	7.6	3.9	G	5.7	5.7	pCi/g	7.6	3.9	J
RA-J14RERUN-01	Ra-226	106	13	M3,G	1	1	pCi/g	106	13	J
RA-J14RERUN-02	K-40	11.6	3.4	G	4.1	4.1	pCi/g	11.6	3.4	J
RA-J14RERUN-02	Ra-226	101	12	M3,G	1	1	pCi/g	101	12	J

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Riley Pass	**Project No.**	103IG7303
Data Reviewer (signature and date)	 11/24/2020	**Laboratory/ Report No.**	ALS – Fort Collins, CO/2009416
Analyses	Potassium-40 and radium-226 by EPA Method 901.1/ALS SOP 713		
Samples	Nine soil samples, including one field duplicate sample		
Field Duplicates	RA-A125-01/RA-A125-02		

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017) data validation guidance document, the NRC *MARLAP* (July 2004) document, and ALS Environmental *SOP 713 Rev. 15* (November 2019) and *SOP 715 Rev. 19* (February 2019), as well as the above referenced method.

OVERALL EVALUATION:

No rejection of data was required for this data package. The data can be used with the qualifications indicated in this checklist.

Data completeness:

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The laboratory indicated that the sample density for RA-A39-01 differed by more than 15 percent of the laboratory control sample density (flagged G by laboratory). Both results for this sample were qualified as estimated (flagged J).

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Method blank:

Within Criteria	Exceedance/Notes
Y	

Laboratory Duplicate:

Within Criteria	Exceedance/Notes
Y	

Field Duplicate:

Within Criteria	Exceedance/Notes
Y	

Laboratory Control Sample (LCS):

Within Criteria	Exceedance/Notes
Y	

Required Detection Limits (RDLs):

Within Criteria	Exceedance/Notes
Y	No specific limits were required for this project.

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Negative Sample Results:

Within Criteria	Exceedance/Notes
NA	

Sample Uncertainty:

Within Criteria	Exceedance/Notes
Y	All sample-specific uncertainties were reasonable based on professional judgment. Uncertainty was less than 30% for all values above the MDC. No data qualification was needed.

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RILEY PASS
ALS REPORT NO. 2009416

Sample Name	Analyte	Lab_Result	TPU	Lab_Qual	MDC	PQL	Units	Val_Result	Val_TPU	Val_Qual
RA-A13-01	K-40	16.1	3.8		2.3	2.3	pCi/g	16.1	3.8	
RA-A13-01	Ra-226	1.41	0.33		0.47	0.47	pCi/g	1.41	0.33	
RA-A22-01	K-40	13.3	3		2	2	pCi/g	13.3	3	
RA-A22-01	Ra-226	1.8	0.33		0.43	0.43	pCi/g	1.8	0.33	
RA-A39-01	K-40	13.7	3.7	G	3	3	pCi/g	13.7	3.7	J
RA-A39-01	Ra-226	6.55	0.92	G	0.6	0.6	pCi/g	6.55	0.92	J
RA-A48-01	K-40	17.2	3.6		1.7	1.7	pCi/g	17.2	3.6	
RA-A48-01	Ra-226	1.59	0.31		0.42	0.42	pCi/g	1.59	0.31	
RA-A63-01	K-40	15.3	3.8		2.9	2.9	pCi/g	15.3	3.8	
RA-A63-01	Ra-226	4.47	0.66		0.49	0.49	pCi/g	4.47	0.66	
RA-A74-01	K-40	14.9	3.8		2.8	2.8	pCi/g	14.9	3.8	
RA-A74-01	Ra-226	1.6	0.35		0.54	0.54	pCi/g	1.6	0.35	
RA-A125-01	K-40	15.8	3.8		2.9	2.9	pCi/g	15.8	3.8	
RA-A125-01	Ra-226	1.76	0.36		0.43	0.43	pCi/g	1.76	0.36	
RA-A125-02	K-40	14.8	3.2		1.8	1.8	pCi/g	14.8	3.2	
RA-A125-02	Ra-226	1.53	0.31		0.42	0.42	pCi/g	1.53	0.31	
RA-A126-01	K-40	16.4	3.5		2.2	2.2	pCi/g	16.4	3.5	
RA-A126-01	Ra-226	2.19	0.38		0.43	0.43	pCi/g	2.19	0.38	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Site Name	Riley Pass	**Project No.**	103IG7303
Data Reviewer (signature and date)	 11/24/2020	**Laboratory/ Report No.**	ALS – Fort Collins, CO/2009417
Analyses	Arsenic by SW-846 Method 6020B		
Samples	Nine soil samples, including one field duplicate sample		
Field Duplicates	AS-A125-01/AS-A125-02		

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review* (January 2017) data validation guidance document, as well as the above referenced method.

OVERALL EVALUATION:

No rejection or qualification of data was required for this data package. The data can be used as reported by the laboratory.

Data completeness:

Within Criteria	Exceedance/Notes
Y	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blank:

Within Criteria	Exceedance/Notes
Y	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Matrix Spike/Matrix Spike Duplicate (MS/MSD):

Within Criteria	Exceedance/Notes
Y	

Field Duplicate:

Within Criteria	Exceedance/Notes
Y	

Laboratory Control Sample (LCS):

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	10x: arsenic for all samples

Analyte quantitation and MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	

TETRA TECH

DATA VALIDATION CHECKLIST – STAGE 2A

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RILEY PASS
ALS REPORT NO. 2009147

Sample Name	Analyte	Lab_Result	Lab_Qual	MDL	PQL	Units	Val Result	Val_Qual
AS-A13-01	ARSENIC	6.3		0.05	0.2	MG/KG	6.3	
AS-A22-01	ARSENIC	6.6		0.052	0.21	MG/KG	6.6	
AS-A39-01	ARSENIC	85		0.053	0.22	MG/KG	85	
AS-A48-01	ARSENIC	7.1		0.051	0.21	MG/KG	7.1	
AS-A63-01	ARSENIC	8.1		0.051	0.21	MG/KG	8.1	
AS-A74-01	ARSENIC	7.2		0.051	0.21	MG/KG	7.2	
AS-A125-01	ARSENIC	6.2		0.051	0.21	MG/KG	6.2	
AS-A125-02	ARSENIC	6.4		0.05	0.2	MG/KG	6.4	
AS-A126-01	ARSENIC	7.4		0.053	0.21	MG/KG	7.4	